



2017-2022

Spatial Development Framework



Consolidate Report

Draft

June 2017



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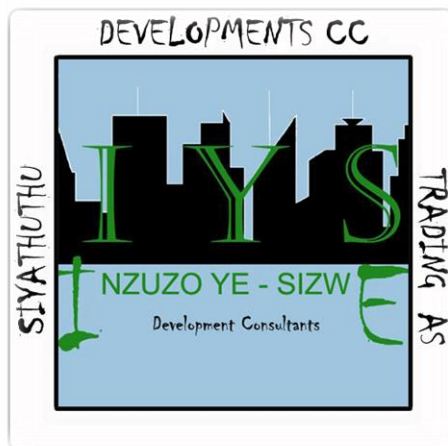
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PREPARED BY



SUBMITTED BY: INZUZO YE-SIZWE DEVELOPMENT CONSULTANTS

**52 Langenhoven Road
Napierville, Pietermaritzburg
3201**

CONTACT PERSON: MXOLISI NDLOVU

[Tel : 033 345 2529]

[Cell : 082 093 7304]

[Fax : 086 212 1701]

[E-mail : mxolisi@inzuzoyesizwe.co.za]

[Website : www.inzuzoyesizwe.co.za]

1. INTRODUCTION

1.1 BACKGROUND

Ray Nkonyeni SDF is intended, in part, to comply with Section 26(e) of the Municipal Systems Act, Act No. 32 of 2000) as well as Chapter 4, Part E of the Spatial Planning and Land Use Management Act, which requires a municipality to prepare and adopt an SDF as a component of its Integrated Development Plan (IDP). Most importantly, the SDF is intended to facilitate the development of a spatial structure that promotes integrated development and enables an efficient delivery of services. It will give direction to future planning and development within the RNM.

The Constitution of the Republic of South Africa, (Act No. 108 of 1996) confers to municipalities major developmental responsibilities intended to improve quality of life people residing and/or working within a municipality's area of jurisdiction. An SDF therefore, forms part of the systems and procedures at the disposal of the municipality to perform on its developmental mandate and facilitate removal of spatial remnants of the apartheid past. The main purpose of the SDF is to guide the form and location of future spatial development within Ray Nkonyeni. It is a legislative requirement and has a legal status. In summary, the SDF has the following benefits:

- ❖ Facilitates decision making with regard to the location of service delivery projects and guides public and private sector investment;
- ❖ It strengthens democracy and spatial transformation and facilitates effective use of scarce land resources;
- ❖ It promotes intergovernmental coordination on spatial issues and serves as a framework for the development of detailed Land Use Management Scheme (LUMS).
- ❖ Other key defining features of Ray Nkonyeni Municipality includes the following:

- ❖ It covers an area of approximately 72km of coastline, comprising of 20 swimming beaches.
- ❖ It extends 60 kilometers inland covering a vast rural area under the leadership of nine traditional councils.
- ❖ Ray Nkonyeni is the most concentrated economic hub within Ugu district municipality with the main economic sectors being tourism and agriculture with some manufacturing occurring in Port Shepstone.
- ❖ Port Shepstone is the major economic hub in the south coast and serves as the administrative centre for both Ray Nkonyeni and Ugu District.
- ❖ It serves as an external regional commercial centre for most of the areas around the northern Eastern Cape area.

1.2 RAY NKONYENI LOCAL MUNICIPALITY

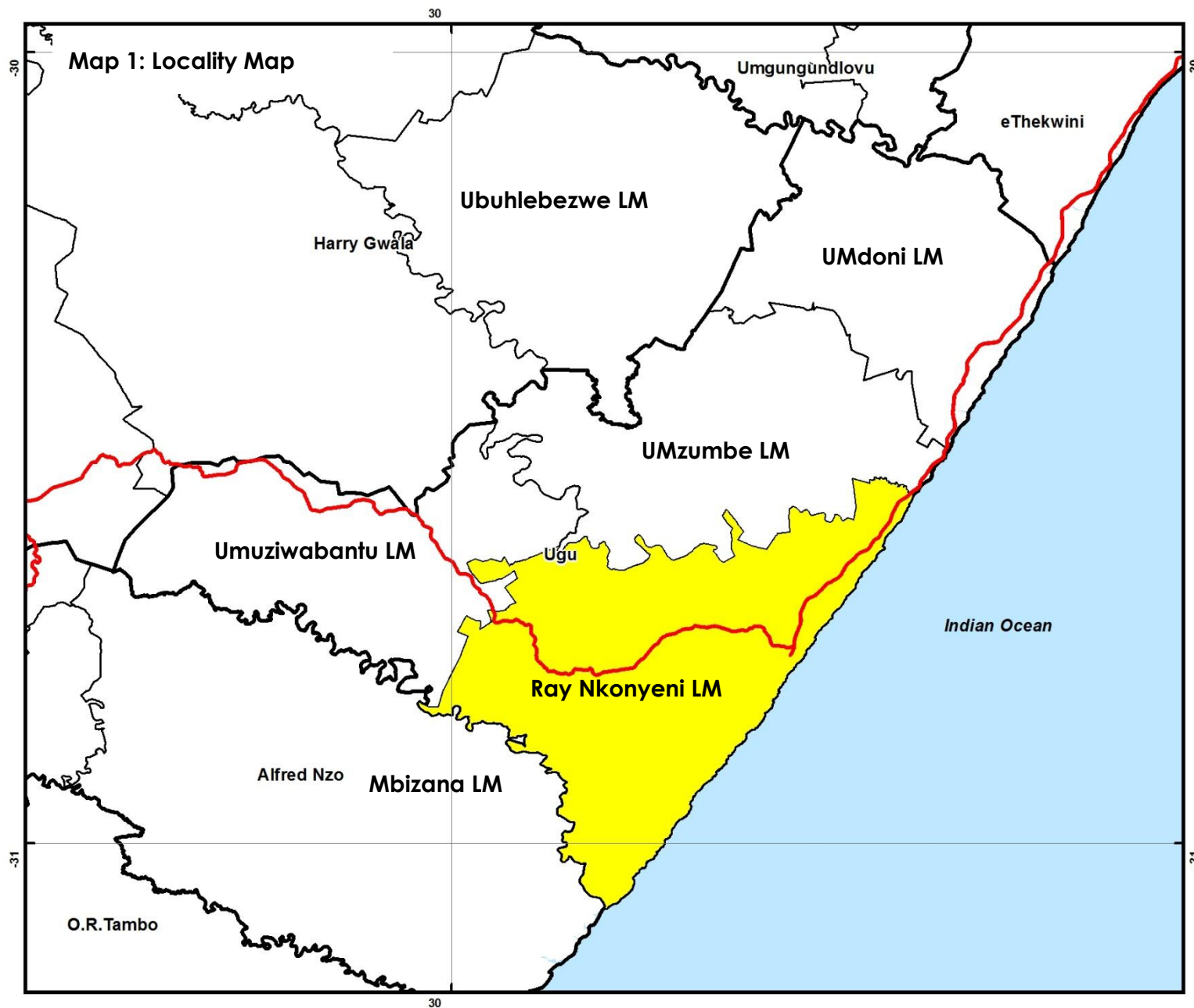
Ray Nkonyeni is a newly established Local Municipality which emerged as a result of the merger between the former Hibiscus Coast and Ezingolweni Local Municipalities. It is a category B municipality and falls within Ugu District Municipality. It is commonly referred to as South Coast given its geographical location in relation to the southern coastal part of KwaZulu-Natal. The municipality has its administrative seat in Port Shepstone and Ezingolweni Town. It stretches along the coastal strip from Hibberdene to Port Edward covering 67km and about 60km into the interior primarily via N2 to Eastern Cape. The Indian Ocean borders the Eastern part of the municipality, while on the Southern part runs Umtamvuna River which is the boundary between KZN and the Eastern Cape.

Umzumbe Municipality borders the northern part, UMuziwabantu Municipality is on its north-eastern boundary and Mbizana Municipality is on the southern part. The municipality covers approximately 1594 km² in geographic area. The spatial location of the Municipality is an advantage as the N2 runs through it ensuring accessibility and linkage with both

Ethekwini and the Eastern Cape. The main features of the local economy are tourism, commercial, agriculture and some limited manufacturing. Other economic activities include services, fishing, and craft. Though limited and more still needs to be done, however, there is some concerted effort to support SMME's and have recently supported establishment of their association. Through its Extended Public Works Programme (EPWP), the municipality provides gap job opportunities to many unskilled especially young people and this is implemented mainly through its infrastructure development and services programme. Ray Nkonyeni Municipality consist of 36 wards and eleven town centres which are:

- ⊗ Hibberdene;
- ⊗ Port Shepstone;
- ⊗ Shelly Beach;
- ⊗ Uvongo;
- ⊗ Sea Park;
- ⊗ Margate;
- ⊗ Ramsgate;
- ⊗ Munster;
- ⊗ South Broom;
- ⊗ Port Edward; and
- ⊗ Ezingolweni.

The inland of the municipality are mainly rural with farmlands and tribal areas. The farms are under private ownership while the tribal council areas are largely under the ownership of Ingonyama Trust Board. These traditional council areas are KwaXolo, KwaNzimakwe, KwaNdwalane, KwaMadlala, KwaMavundla, Lushaba, Vukuzithathe, Nkumbini and Qiniselani-Manyuswa. These areas are managed by the traditional chiefs (Amakhosi) who are assisted by Izinduna (Headman). Traditional land allocation practices prevalent within these areas create new dynamics in terms of the administration of this land.



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Locality

Economic Development, Tourism and Planning Spatial Planning Unit
666 Crescent Avenue
Uvongo 4270
Tel: 039 315 9240
Date: 2017

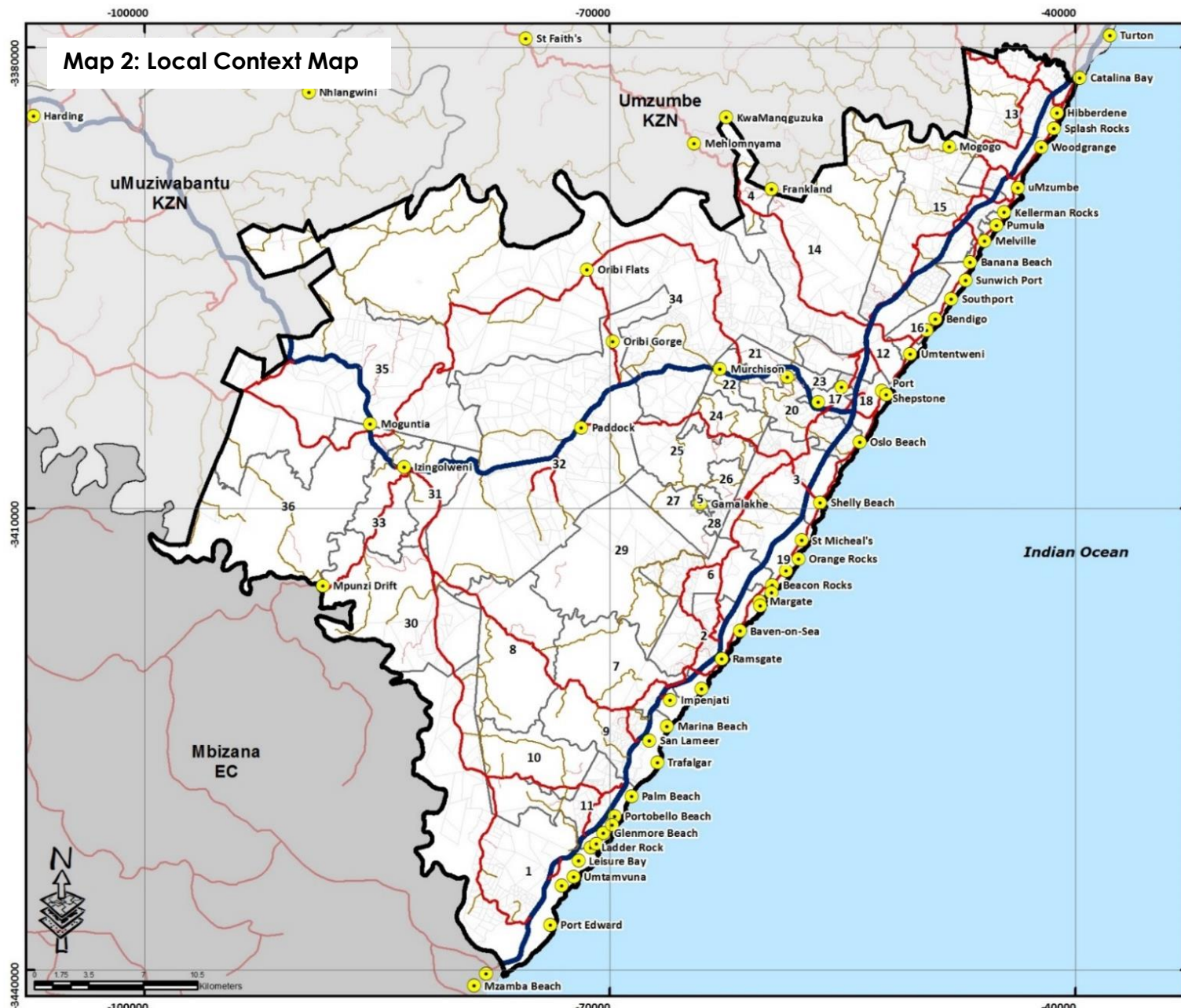
Legend

- National Roads
- LM Boundary
- District Municipalities
- Local Municipalities



0 2.75 5.5 11 16.5 22
Kilometers

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MBB
Stats: STATSSA
Agric Land Cover: DAG
Environmental Data: KZN Wildlife 2016
Land Reform: DRDLR
Cadastral: KZN SGO



**Spatial Development
Framework 2017/2022**

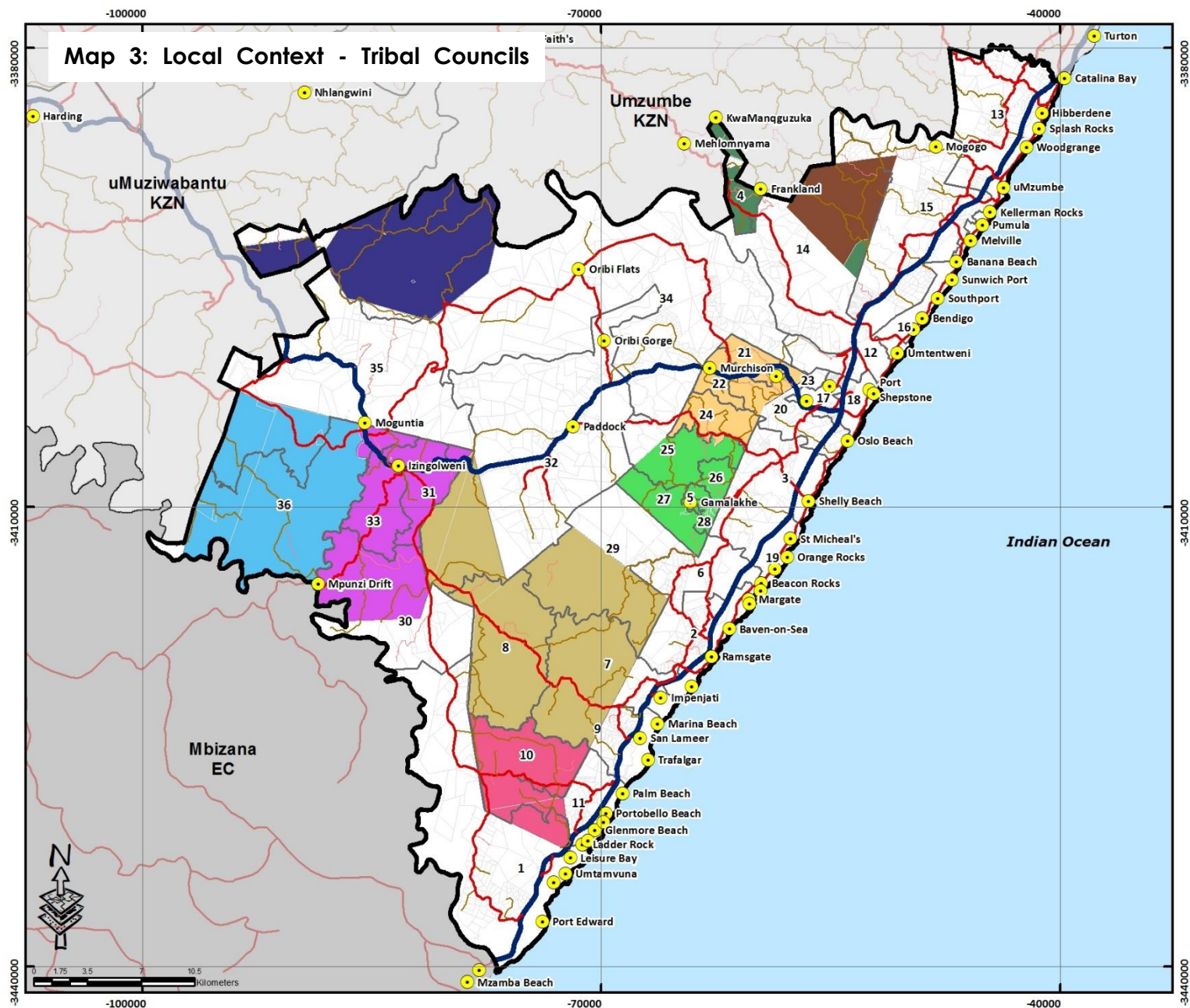
Local Context

Economic Development, Tourism
and Planning Spatial Planning Unit
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Uvongo 4270
Tel: 039 315 9240
Date: 2017

Legend

- Places
- LM Boundary
- Local Municipalities
- National Road
- Provincial Road
- District Road
- Local Road
- Wards
- Farm Cadastral

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Stats: STATSSA
Agric Land Cover: DAG
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Land Reform: DRDLR
Cadastral: KZN SGO



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Traditional Authorities

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Date: 2017

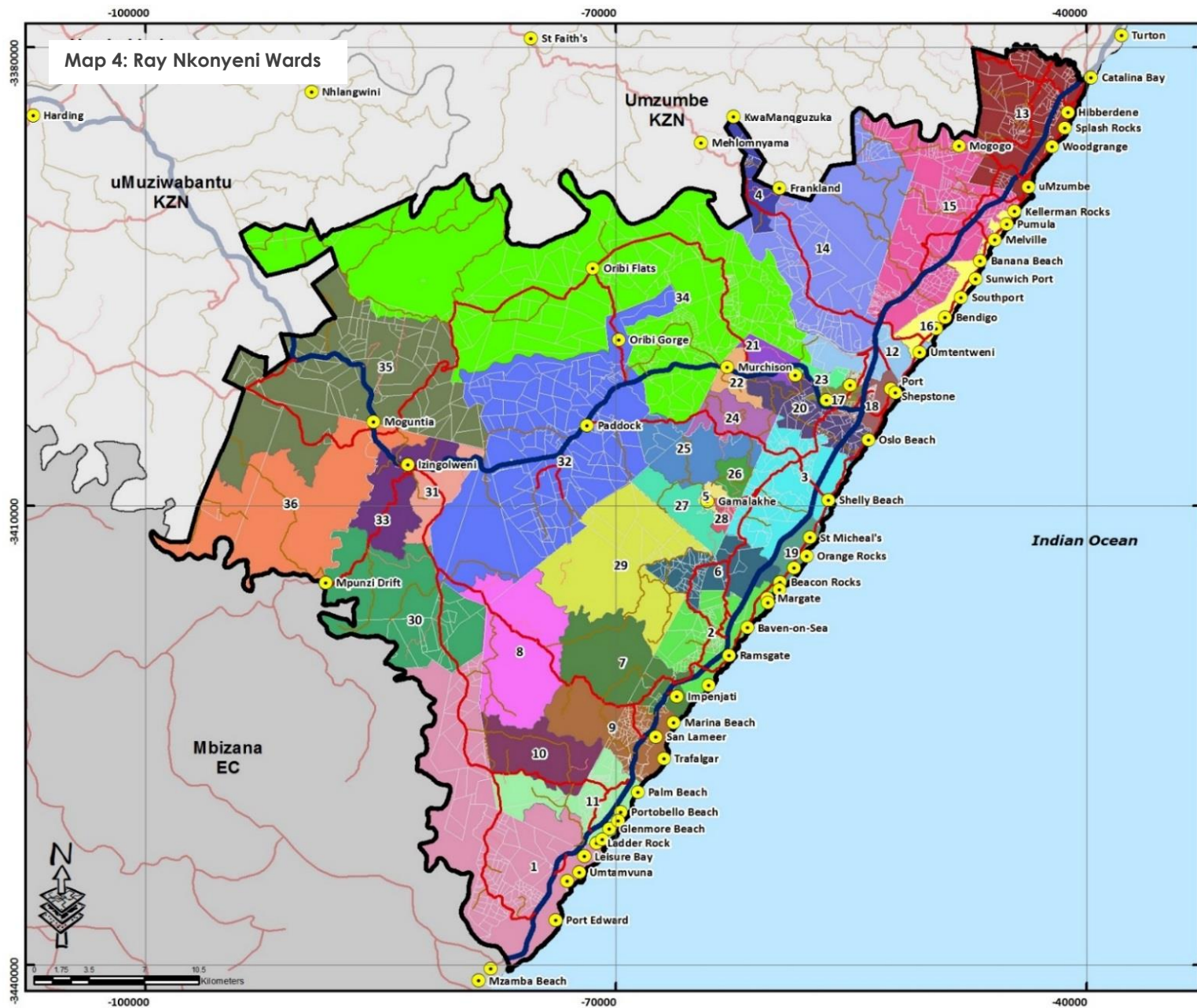
Legend

- Places
- ▬ LM Boundary
- ▬ Local Municipalities
- ▬ National Road
- ▬ Provincial Road
- ▬ District Road
- ▬ Local Road
- ▬ Wards
- ▬ Farm Cadastral

Traditional Authorities

- INSIMBINI
- LUSHABA
- MADLALA
- MVUNDLA
- NKUMBINI
- NZIMAKWE
- QINSELANI - MANYUSWA
- VUKUZITHATE
- XOLO

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Stats: STATSSA
Agric Land Cover: DAG
Environmental Data: KZN Wildlife 2016
Land Reform: DRDLR
Cadastral: KZN SGO



RAY NKONYENI
MUNICIPALITY
"The Game-changer of South Coast Development"

Spatial Development Framework 2017/2022

Wards

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Date: 2017

Legend

- Places
- LM Boundary
- Local Municipalities
- National Road
- Provincial Road
- District Road
- Local Road
- Farm Cadastral

WardNo

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	36

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Stats: STATSSA
Agric Land Cover: DAG
Environmental Data: KZN Wildlife 2016
Land Reform: DRDLR
Cadastral: KZN SGO

2. POLICY CONTEXT

Figure 1: Policy Context and Legislation



2.1 SPATIAL POLICY AND LEGISLATIVE CONTEXT

Since the introduction of the democratic dispensation in South Africa, the notion of spatial planning, given effect in the form of spatial development plans and spatial targeting, has gained momentum. This is the case in all spheres of government. This followed the realization by national government that the rural areas such as Ray Nkonyeni need attention in terms of development and proper management. Due to a failure by apartheid government to provide a relatively habitable environment in

rural areas. In fact, much attention was paid on insensitive controls that were blended with the promotion of racial discriminatory laws that oppressed the majority of the rural population through Betterment Planning and Group Areas Act No 41 of 1950. At a national level, this focus first emerged within the context of the Reconstruction and Development Programme (RDP) and was given statutory emphasis through the Development Facilitation Act (DFA). Spatial targeting was first built into the

Integrated Sustainable Development Strategy (ISRDP) which identified 13 nodal areas. The National Spatial Development Plan (NSDP) was introduced in the early 2000s and has had a profound impact in terms of spatial planning at a national level. It has since been replaced by the National Development Plan 'Vision 2030' (NDP).

The NDP is now widely acclaimed as a blue print of the country in terms of development. On 6 May 2011, the Department of Rural Development and Land Reform published the Draft Spatial Planning and Land Use Management Bill for public comment. This was passed into law and ascended as legislation in August 2013 (Spatial Planning and Land Use Management Act No 16 of 2013 – SPLUMA). It replaced the Development Facilitation Act No 67 of 1995, Removal of Restrictions Act No 84 of 1967, the Physical Planning Act No 88 of 1967 and other laws. SPLUMA provides, inter alia, for a uniform, effective, efficient and integrated regulatory framework for spatial planning, land use and land use management in a manner that promotes the principles of co-operative government and public interest.

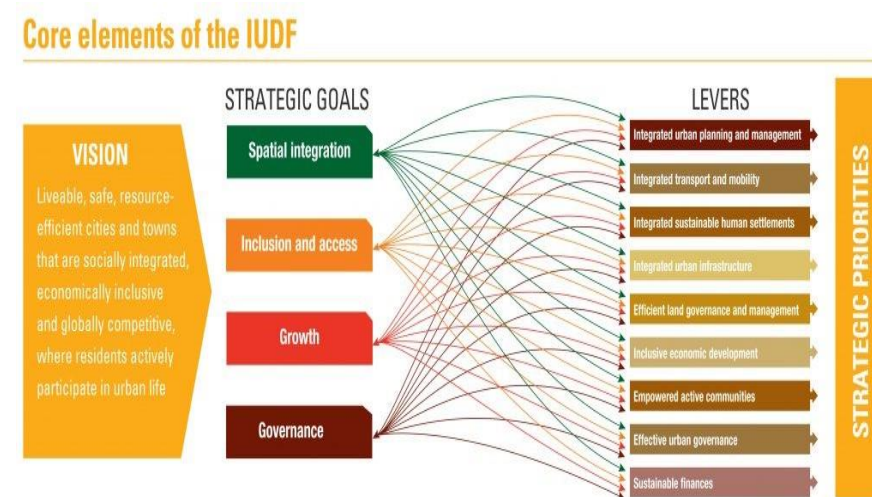
It provides for and determines development principles, compulsory norms and standards for land use management, promotes sustainable and efficient use of land. SPLUMA's overarching goal is to fulfil the constitutional mandate by spatially addressing the inequalities manifested in unsustainable settlement pattern which was inherited by the democratic government. SPLUMA also recommends the preparation of norms and standards which provide in-depth knowledge of land use, allocation and practices within the country. This will promote consistency and uniformity in processes and decision making within rural areas.

The Integrated Urban Development Framework (IUDF) is a policy initiative coordinated by the Department of Cooperative Governance and

Traditional Affairs (COGTA). The IUDF seeks to foster a shared understanding across government and society about how best to manage urbanisation and achieve the goals of economic development, job creation and improved living conditions for the people.

Whereas the National Industrial Participation (NIP) Programme is a programme that seeks to leverage economic benefits and support the development of South African industry by effectively utilizing the instrument of government procurement. Operation Phakisa (OP) is aimed at growing and implementing an overarching integrated ocean governance framework for sustainable growth of ocean economy that will maximise socioeconomic benefits while ensuring adequate ocean environmental protection and other sectors. Its focused on four areas: Oil and Gas Exploration (OG), Marine Transport and Manufacturing (MTM), Aquaculture, and Maritime Protection and Governance.

Figure 2: Core Elements of the Integrated Urban Development Framework



OP is in line with the goals outlined in the National Development Plan, to promote economic growth and to boost job creation. Efforts are made to ensure that all Operation Phakisa: Oceans Economy initiatives are prioritised and resourced accordingly. The Marine Phakisa concluded that the oceans have the potential to contribute up to 177 billion rand to GDP. For Ray Nkonyeni, it will impact positively since the sea is their primary blood of economy. South Africa adopted a set of global goals for international impact to end poverty, protect the planet, and ensure prosperity for all as part of a new sustainable development agenda. Each goal has specific targets to be achieved over the next 15 years, the 2030 Agenda for Sustainable Development;

- ❖ End poverty in all its forms everywhere;
- ❖ End hunger, achieve food security and adequate nutrition for all, and promote sustainable agriculture;
- ❖ Attain healthy life for all at all ages;
- ❖ Provide equitable and inclusive quality education and life-long learning opportunities for all;
- ❖ Attain gender equality, empower women and girls everywhere;
- ❖ Secure water and sanitation for all for a sustainable world;
- ❖ Ensure access to affordable, sustainable, and reliable modern energy services for all.
- ❖ Promote strong, inclusive and sustainable economic growth and decent work for all;
- ❖ Promote sustainable industrialization;
- ❖ Reduce inequality within and among countries;
- ❖ Build inclusive, safe and sustainable cities and human settlements;
- ❖ Promote sustainable consumption and production patterns;
- ❖ Promote actions at all levels to address climate change;
- ❖ Attain conservation and sustainable use of marine resources, oceans and seas;
- ❖ Protect and restore terrestrial ecosystems and halt all biodiversity loss
- ❖ Achieve peaceful and inclusive societies, rule of law, effective and capable institutions; and

- ❖ Strengthen and enhance the means of implementation and global partnership for sustainable development.

The White Paper sets out South Africa's climate change response strategy to achieve the National Climate Change Response Objectives. These include effectively managing inevitable climate change impacts through interventions that build and sustain South Africa's social, economic, environmental resilience, emergency response capacity and make a fair contribution to the global effort. The efforts intends to stabilise greenhouse gas (GHG) concentrations in the atmosphere at a level that avoids dangerous anthropogenic interference with the climate system within a timeframe that enables economic, social and environmental development to proceed in a sustainable custom. This should be done in a manner that is consistent with the outlined principles, approach, which is structured around the strategic priorities such as risk reduction and management; mitigation actions with significant outcomes; sectoral responses; policy and regulatory alignment; informed decision making and planning; integrated planning; technology research, development and innovation; facilitated behaviour change; behaviour change through choice; and resource mobilisation. Local governments approach to climate change still exhibits various gaps that are preventing them from being particularly effective or innovative in actively dealing with climate change.

Ugu District, the need exists for operative municipal level policies and mechanisms that address the challenges and opportunities posed by climate change. However, the district has expressed various commitment initiatives in support Climate Change Respose. The rest of the policy and legislative framework in KwaZulu-Natal is shown in Figure above. The local government strategies such as the Spatial Development Framework are developed within the broader framework of these policy intents.

2.2 IMPLICATIONS FOR RAY NKONYENI SDF

The following implications can be drawn:

- ⊗ Ray Nkonyeni does not appear prominently on the NDP. However, there are notable projects which are identified by NDP within the area. These are the development of N2 Toll Road, R61 and revitalization of the rail infrastructure.
- ⊗ Ray Nkonyeni Municipality is characterized by a number of intrinsic environmental qualities which needs to be enhanced and maintained as such it is important to comply with all environmental laws such as the National Environmental Management Act No. 107 of 1998 (NEMA).
- ⊗ The new PDGS identified Hibberdene, Port Shepstone, Margate/ Uvongo and Port Edward are identified as the Value Adding Areas.
- ⊗ The coastal strip as the economic support area and Ezingolweni as Agricultural Investment and some parts of the inland as the social investment areas.
- ⊗ Ray Nkonyeni is the main economic hub of Ugu District, as such there is eighteen nodes within Ray Nkonyeni that have been identified by the district SDF.
- ⊗ According to the IUDF, a municipality with over 45 000 people is considered as an urban municipality. Ray Nkonyeni has over 100 000 urban population which implies that it is a medium size urban municipality. IUDF proposes an urban growth and management model premised on compact and connected cities and towns. The urban municipalities are advised to stick to the agreed integrated plans whereby decision-makers must stick to the developed long-term plans instead of continuously changing the plans when those in office change. The short-term goals include strengthening rural and urban linkages, controlling urban sprawl, sustainable human settlements through accelerating informal settlements upgrade and creation of livable and safe human settlements.
- ⊗ Ugu Climate Change Response has made several suggestions regarding how municipalities should respond to climate change. The responses are categorized in terms of municipal infrastructure, water

resources, Terrestrial Biodiversity, Disaster Management, Agriculture, Tourism, Energy, Public Health and Economy. The most important responses in the context of the SDF are map vulnerable areas (flood lines, etc.) and implementation of development bans in highly vulnerable zones. The additional suggestions are relocation of existing development from areas of high risk (wetlands, flood risk etc.), vulnerability mapping and related management plans, protect and increase existing ecosystems services buffering against climate change impacts. Monitor and control alien plants and pests; improve buffers (ground coverage) to protect against increased runoff from more intense storms.

- ⊗ Operation Phakisa's mandate in terms of the ocean economy suggests that the role of government should be to reducing illegal and unregulated activities in the ocean space and Reducing human health and environmental risks to pollution with results by 2017.

3. CROSS-BORDER ALIGNMENT ISSUES

“Cadastral boundaries do not necessarily conform to the characteristics of land, the natural environment, residential activities, economic activities and natural phenomena traverse’s municipal, provincial and international boundaries. All municipalities do not possess the required resources to provide services to communities e.g. water. Hence the aim of this objective is to ensure that spatial planning is aligned to allow government organisations to take advantage of comparative advantages offered within an area. This also refers to cross boundary provision of services such as education facilities, which can be utilised by communities residing in two municipalities. This allows for cost effective provision of services and is applicable to the provision of civil services, social services and economic opportunities. Alignment of initiatives will also prevent conflicting initiatives and land uses to be implemented on opposite sides of a boundary i.e. mining activities versus tourism due to pristine natural environment.” (KwaZulu-Natal PGDS, 2011, p131 – 132)

As per the National and Provincial policies and legislation (MSA-S26 (d), MSA Regs S2 (4) (h), municipalities are required to provide a clear indication of how the SDF is aligned with the planning of neighbouring municipalities. Ray Nkonyeni Local Municipality has a mandate to ensure that its IDP is in compliance with the planning legislation and policies to give effect to the development of an SDF as spatial representation of the IDP. The municipal SDF, in turn, directs and guides strategic investments that are developmental and beneficial within Ugu District Municipality and across neighbouring district municipalities as well as local municipalities.

It is further reiterated that Ray Nkonyeni Local Municipality forms an integral part of a larger system of local governance and regional economy. It also influences development in the adjoining regions. Cross-border planning issues have become more prevalent and significant. The focus is on strategic or shared development issues that would benefit from a joint approach, and engaging with the relevant neighbouring authorities to explore joint operational potential. This section is thus intended to ensure that there is no disharmony between proposals that are suggested by Ray

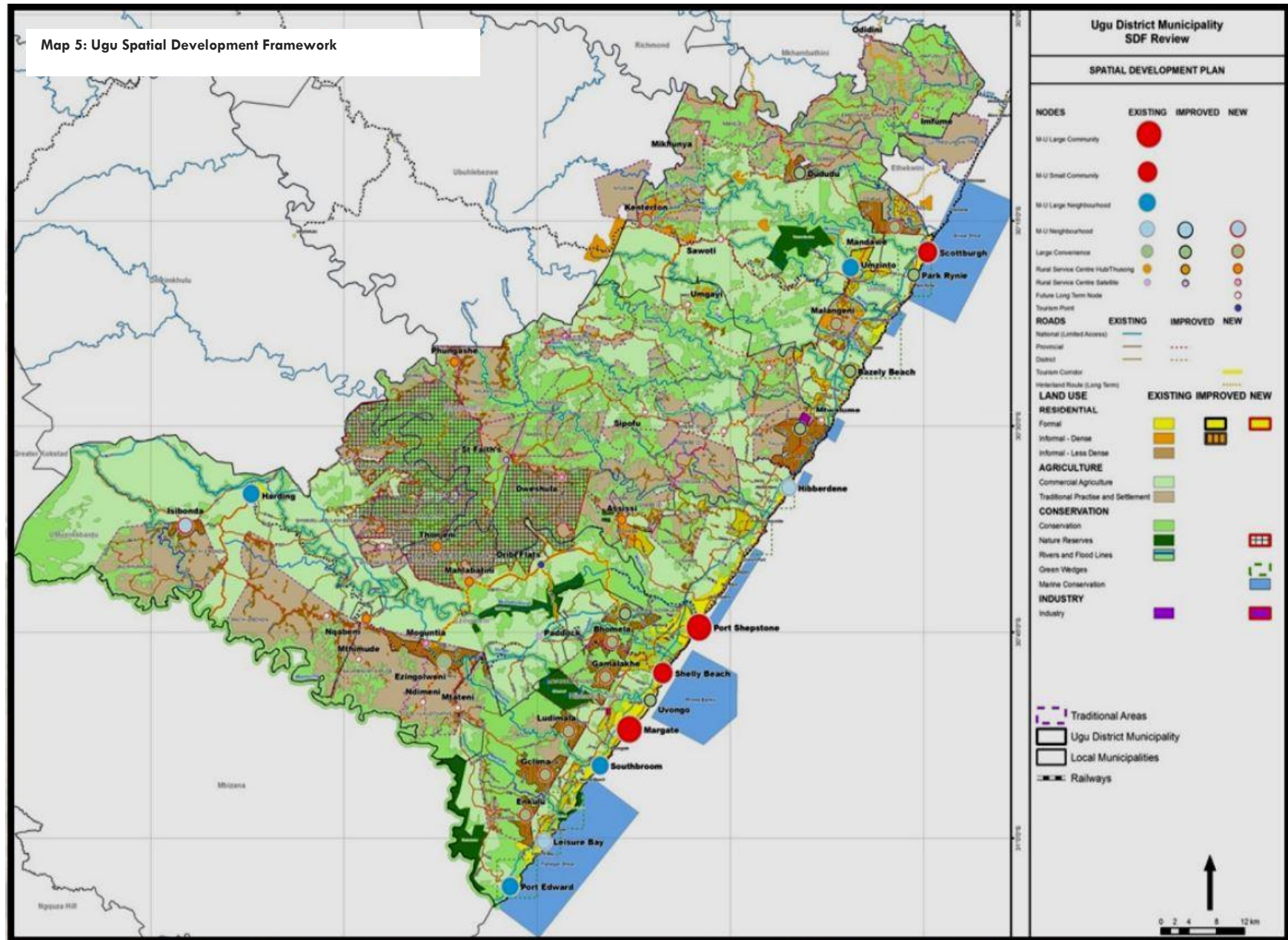
Nkonyeni Local Municipality’s Spatial Development Framework and its neighbouring municipalities as Ray Nkonyeni Local Municipality is the economic powerhouse of Ugu District.

3.1 UGU DISTRICT SDF

Ray Nkonyeni is an economic powerhouse of Ugu District Municipality. The latter has developed an SDF as part of their IDP. Ideally, the district SDF should provide a framework for the formulation of local municipality, deal with cross-boundary issues and spatial implications of the exclusive powers and functions of the district municipality. As such , any inconsistencies in the spatial planning process between the two entities should be eliminated and a greater coordination promoted. The Ugu SDF identifies a hierarchy of nodes within Ray Nkonyeni and make a district perspective on these, as follows:

- ✦ Community Level Multi-Use Nodes – Port Shepstone, Margate and Shelly Beach;
- ✦ Neighbourhood Level Multi-Use Nodes – Ramsgate and Port Edward;
- ✦ Small Neighbourhood Level Multi-Use Nodes – Hibberdene and Uvongo;
- ✦ Large Local Convenience Clusters to be upgraded – Ezingolweni, Murchison and Gamalakhe;
- ✦ New Large Local Convenience Clusters – Xolo TC, Gcilinga
- ✦ Satellite Rural Service Centre – Paddock;
- ✦ New Long-Term Nodes – Qinisela Manyuswa, Vukuzithathe, Msinsini and Xolo TC; and
- ✦ Tourism Point – Oribi Flat.

Map 5: Ugu Spatial Development Framework

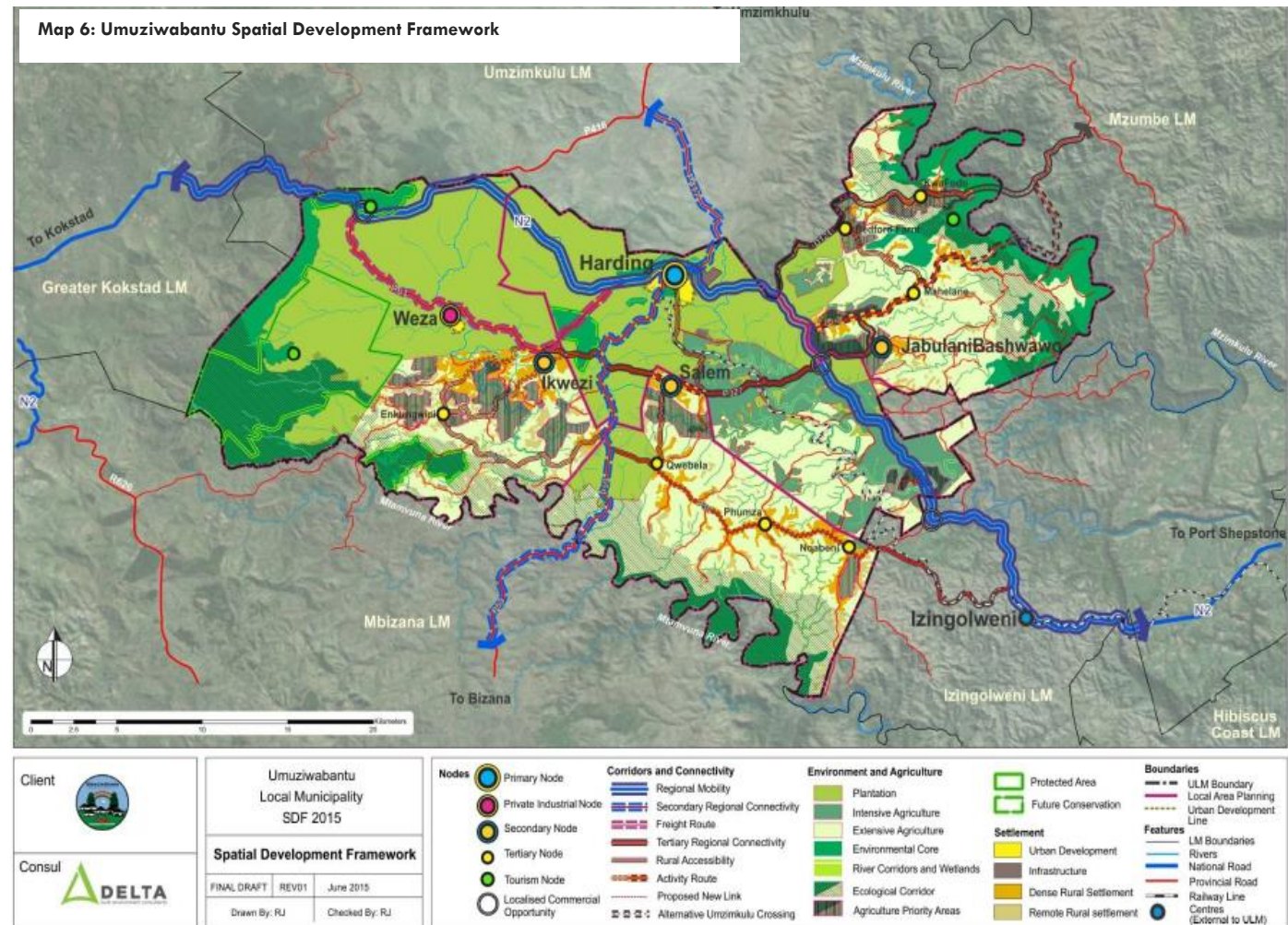


3.2 NEIGHBOURING LOCAL MUNICIPALITIES

3.2.1 UMUZIWABANTU LOCAL SDF

The following alignment issues between Ray Nkonyeni and Umuziwabantu will need to be taken into consideration: -

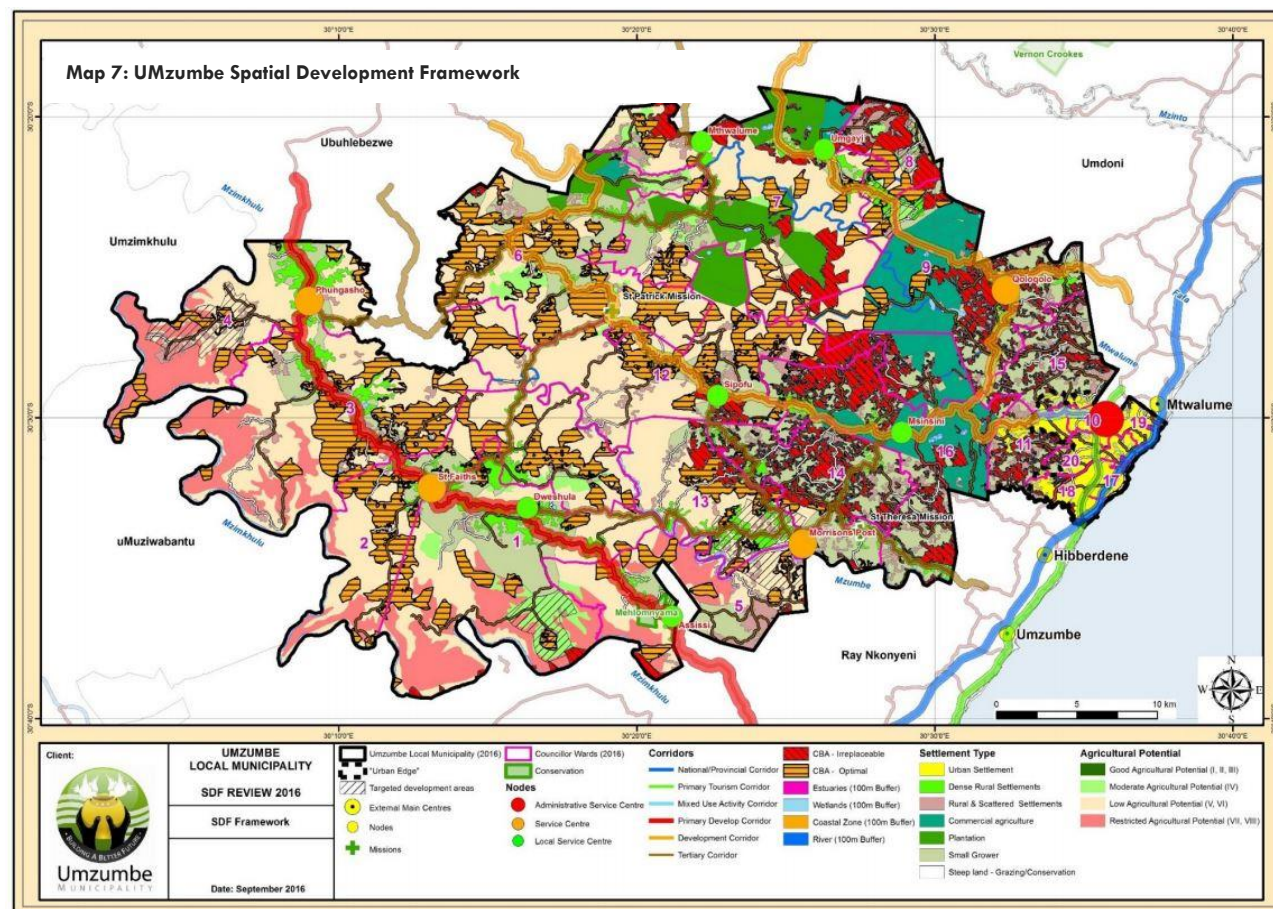
- ✦ **Regional Mobility:** Umuziwabantu SDF identifies the N2 which traverses both Municipalities. This serves as both the activity and economic corridor for the three municipalities.
- ✦ **Existing Agriculture:** Umuziwabantu Municipality identifies the opportunity for agriculture which borders the municipality. This aspect is being acknowledged on both Ray Nkonyeni and Umuziwabantu.
- ✦ **Environmental Conservation:** there is also environmental conservation uses bordering the Umuziwabantu Local Municipality which should be considered.
- ✦ **Dense Rural Settlements:** Umuziwabantu Municipality has identified dominant dense rural settlements which should be considered. This will require alignment in terms of infrastructure and basic services provision in the future.



3.2.2 UMZUMBE LOCAL SDF

Umzumbe Municipality is located on the north-east of Ray Nkonyeni Municipality. It is a predominantly a rural municipality which is also considered to be a peripheral to the economy of Ray Nkonyeni Municipality. The key alignment issues include the following:

- ✦ The N2 route linking both municipalities is identified as a primary corridor.
- ✦ Primary east-west corridors link the coast to St Faiths in Umzumbe LM. This takes on the form of the P68, which connects St Faiths, Dweshula and Assissi in Umzumbe, to Port Shepstone. In addition, the P286 (which forms an important route through the central part of Umzumbe to the north) connects Msinsini in Umzumbe to Hibberdene in Ray Nkonyeni.
- ✦ Specific attention should be drawn to the proper management of the coastal strip and associated development along the coast. The linkage and coordination of tourism activities along the coastal tourism is also a matter of importance.
- ✦ The urban part of Umzumbe is Mtwalume which stretches all the way down to the Hibberdene urban area in Ray Nkonyeni. This may pose conflict with Ray Nkonyeni spatial landscape because the adjoining settlements are very different between this part of the boundary.
- ✦ The other bordering areas have identified small growers (subsistence agriculture), biodiversity priority 1 areas and rural settlements. These will need to be harmonized with the areas that are found within the cross border of Ray Nkonyeni.



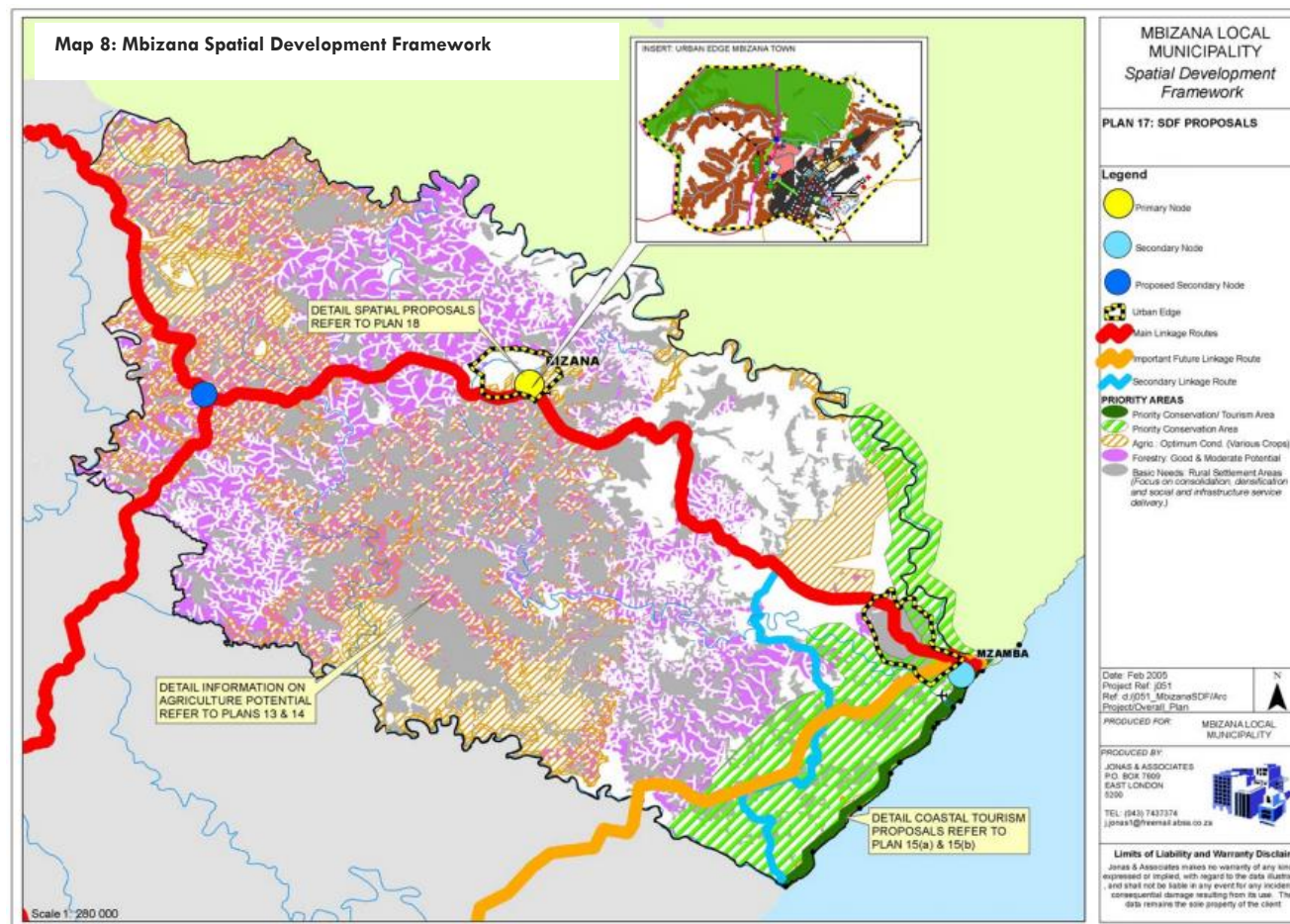
3.2.3 MBIZANA LOCAL SDF

Mbizana Local Municipality is predominantly rural and comprises of Bizana town as a centre. It is one of the areas that heavily depend on Ray Nkonyeni for the agglomeration of commercial and social facilities which are found within it. These include the nearby Port Edward and Port Shepstone. Mbizana Municipality exists within the administrative boundaries of Alfred Nzo District Municipality, Eastern Cape Province. According to the income leakage study that was undertaken by Alfred Nzo District Municipality a number of rural areas and small towns within the northern Eastern Cape depend on Ray Nkonyeni LM for commercial services.

This study noted a number of municipalities under Alfred Nzo that depend on Ray Nkonyeni LM for retail purposes these include; Umzimvubu, Tabankulu and Mbizana Local Municipalities. Bearing in mind that

these areas share the physical boundaries, the following are the key issues for alignment and harmonization at a spatial planning point of view: -

- ✿ Priority conservation areas – Both municipalities share the declared nature reserve which is Umtamvuna. The SDF for Mbizana has recognized the importance of conservation within the area that covers the Umtamvuna area.
- ✿ Agricultural optimal condition – Mbizana also identified agricultural opportunities within the border of this municipality and Ray Nkonyeni.
- ✿ Important future linkage road – Mbizana SDF.



- ✿ Identified the proposed N2 toll road that will connect Ray Nkonyeni within Eastern Cape as an important future linkage road. This route is currently known as R61 and it is very important for both municipalities as it plays a key role for linking KwaZulu-Natal and Eastern Cape Provinces.

corridors traversing the municipalities, particularly Ray Nkonyeni, Ezingoleni and Umzumbe Municipalities.

3.3 IMPLICATIONS FOR RAY NKONYENI SDF

Ray Nkonyeni forms part of a larger system of local governance and regional economy; it is influenced and also influences development in the neighbouring areas. Cross-border planning issues have become more prevalent and significant. The focus is on strategic or shared development issues that would benefit from a joint approach, and engaging with the relevant neighbouring authorities to explore joint working potential. The implications can be drawn as follows:

- ✿ Most SDF's identify the N2 as a National/ Provincial Corridor, which is an important link to major economic areas. Opportunities exist to locate mixed use developments at key road intersections along the N2.
- ✿ Some of the municipalities are located along the coast which is biodiversity corridor, and are thus subject of a common coastal management initiatives managed at a District level.
- ✿ There are massive opportunities to extend the coastal tourism from Ray Nkonyeni to Umzumbe on the north and Mbizana towards the south with beach related activities being the major products and services.
- ✿ Greater Port Shepstone is a Regional Economic Hub of the southern KwaZulu-Natal. All the municipalities that share the borders with it are dependent on as a service centre.
- ✿ Most Municipalities identifies areas for agricultural activity and environmental conservation which should be taken into consideration during development. Development within the municipality should not pose any adverse impacts on the environment or agricultural activity or vice versa.
- ✿ Tourism plays a significant role in the economic growth of the municipalities which also strengthens the role of the development

4. RAY NKONYENI WITHIN THE REGIONAL CONTEXT

4.1 INFLUENCE OF RAY NKONYENI ON EASTERN CAPE



Source: <https://www.welt-atlas.de> 06 June 2017

Ray Nkonyeni (particularly Port Shepstone) is a regional service centre that also provide services to the northern Eastern Cape. The strategic location of Ray Nkonyeni Municipal area in relation to the province of Eastern Cape implies that there may be trading activities that take place between these two areas. These areas exists with a number of small towns and the individuals within these areas commute to Port Shepstone for retail and commercial services which are not found within their areas.

4.2 UGU CATCHMENT

Ray Nkonyeni is the main catchment area with the highest population threshold and a service centre Ugu DM. The majority of the municipalities within Ugu District are mainly rural with limited commercial and business activities within it. The commercial centres outside of Ray Nkonyeni are very

small and these include Scottsburg, Harding and Umzinto. These centres cannot cater for all the social and commercial needs for the area as the result there is a huge dependency of Ray Nkonyeni for most of the services that are not found within these areas.

4.3 ROLE OF N2 AND R61

The N2 and R61 provide primary north-south linkages. The N2 also links Port Shepstone with Kokstad as an east-west linkage. It is regarded as a generator for growth, particularly between Port Shepstone and Harding. Development along the coast has grafted along the N2 due to the routes national significance. N2 links Ray Nkonyeni with Scottsburg, Durban airport and the Metropolitan area of eThekweni to the North. Spatial penetration of economic growth to the west of the N2 and R61 remains weak, with the exception of Marburg. In the future both urbanization and economic growth are likely to focus on the N2, interchanges, and growth inland of this is unlikely on any scale. The N2 can be seen as the main contributor of the organic growth and development within the Ray Nkonyeni Municipality.

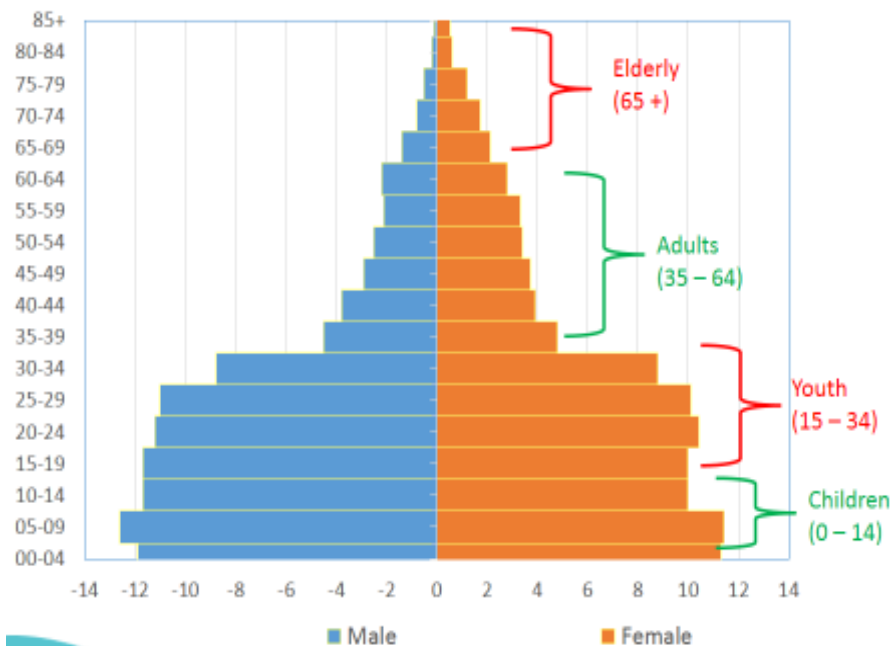
4.4 RAY NKONYENI AND COASTAL ECONOMY

Ray Nkonyeni is home to a number of coastal towns, estuaries and blue flag status beaches. It is a success story in terms of coastal tourism within the province of KwaZulu-Natal as it has gained a lot of popularity of the years.

5. SPACE ECONOMY

5.1 SIZE AND STRUCTURE OF THE LOCAL POPULATION

Figure 3: Size and Structure of the Local Population



Source: Statistics SA – Community Survey 2016

Ray Nkonyeni has a total population of 348 553 which has substantially increased over the years. RNM has the highest population concentration within the Ugu DM. The dominance of Ray Nkonyeni in terms of population is due to its role as an economic hub of the district which also attracts the

labour force. Population breakdown by racial groups, is generally representative of the trend in rural KwaZulu-Natal where African population group represents more than 91% in the Ugu District and 82% in the Ray Nkonyeni Municipality.

5.2 SIZE AND STRUCTURE OF THE LOCAL ECONOMY

Ray Nkonyeni Municipal Area has a Gross Domestic Product (GDP) which is estimated at R 7 958 100 000.00 and it accounts to 64.7% of the GDP for Ugu District Municipality which is estimated at R12 520 000 000.00. There is a an imbalance grouping of the primary, secondary and tertiary sectors within the municipal area which can be elaborated as follows:

5.2.1 PRIMARY SECTOR

The primary sector of the economy makes direct use of natural resources. This includes commercial and subsistence farming. Commercial agriculture is the second largest sector with RNM. The most significant shift in the economic profile of the municipality has been the decline of the primary sector giving way to the tertiary sector that is now the leading sector. This is due to recent reports outlining that agriculture has declined to a point where KZN as a whole has become effectively a net importer of agricultural products. This has affected the municipality in terms of its GDP. This clearly points to the diminishing agricultural production and food security. Commodities that are directly linked to the primary sector commodities, i.e. timber manufacturing are experiencing decline. Food, beverages and tobacco are the biggest contributors of employment in

manufacturing in the province. The range of agricultural products points to the great agricultural potential of this region, attributed to good climate conditions, soil potential and the entrepreneurial spirit of the people. Some of the outstanding features of the agricultural sector at RNM especially along the coastal belt:

- ❖ A fifth of all bananas eaten in South Africa are produced here;
- ❖ Sugar cane growing and milling has taken place in the region since the 1890s;
- ❖ A range of niche market products, such as cut flowers, nuts and vegetables are also produced here;
- ❖ Livestock farming and poultry farming are extensive together with crocodile breeding; and,
- ❖ Timber farming sector produces Pine, Gum and wattle which are processed by some saw mills.

Subsistence Agriculture within the municipality involves small farmers who grow vegetables, dry beans, sweet potatoes and amadumbe. Most of the produce is for home consumption and is mainly practised in the hinterland of the municipality. Small sugar cane growers (SSG) farmers in the hinterland face a number of challenges which includes amongst others, steep topography, no irrigation systems, less mechanisation, poor yields and lack of financial back up. RNM soils are shallow, and this limits plantation as most products need deep soil to enable good growth.

A majority of black farmers do not have codes for their yields at the sugar mills and rely on big sugar cane growers and this has proved to be a failure. Some Black farmers have leased their land for sugar cane growing but end up with next to nothing in terms of profit. With the current political climate regarding land issues, land ownership and land rights commercial farming is negatively affected. If people are uncertain of their rights, they simply stop to invest in land. The pending closure of the Umzimkulu Mill will increase the input costs, as delivery distances to the Sezela mill will increase

on average fourfold putting more financial pressure on the inland farming community, as well as on welfare grants that will be needed to counter the loss in income when the mill closes down.

There is an Agri-Park which is proposed within Ezingoleni area. This is considered important for the agricultural sector. The Department of Rural Development and Land Reform defined an Agri-park as 'a networked innovation system of agro-production, processing, logistics, marketing, training and extension services, located in a District Municipality. As a network it enables a market-driven combination and integration of various agricultural activities and rural transformation services'. The Department further stated that the Agri-park comprises three distinct but interrelated basic components which are:

- ❖ The Farmer Production Support Unit (FPSU) - a rural small-holder farmer outreach and capacity building unit that links with farmers and markets. The FPSU does primary collection, some storage, some processing for the local market, and extension services including mechanisation;
- ❖ The Agri-hub (AH) - a production, equipment hire, processing, packaging, logistics, innovation and training unit;
- ❖ The Rural Urban Market Centre (RUMC). The RUMC has three main purposes;
- ❖ Linking and contracting rural, urban and international markets through contracts;
- ❖ Acts as a holding-facility, releasing produce to urban markets based on seasonal trends; and
- ❖ Provides market intelligence and information feedback, to the AH and FPSU, using latest Information and communication technologies.

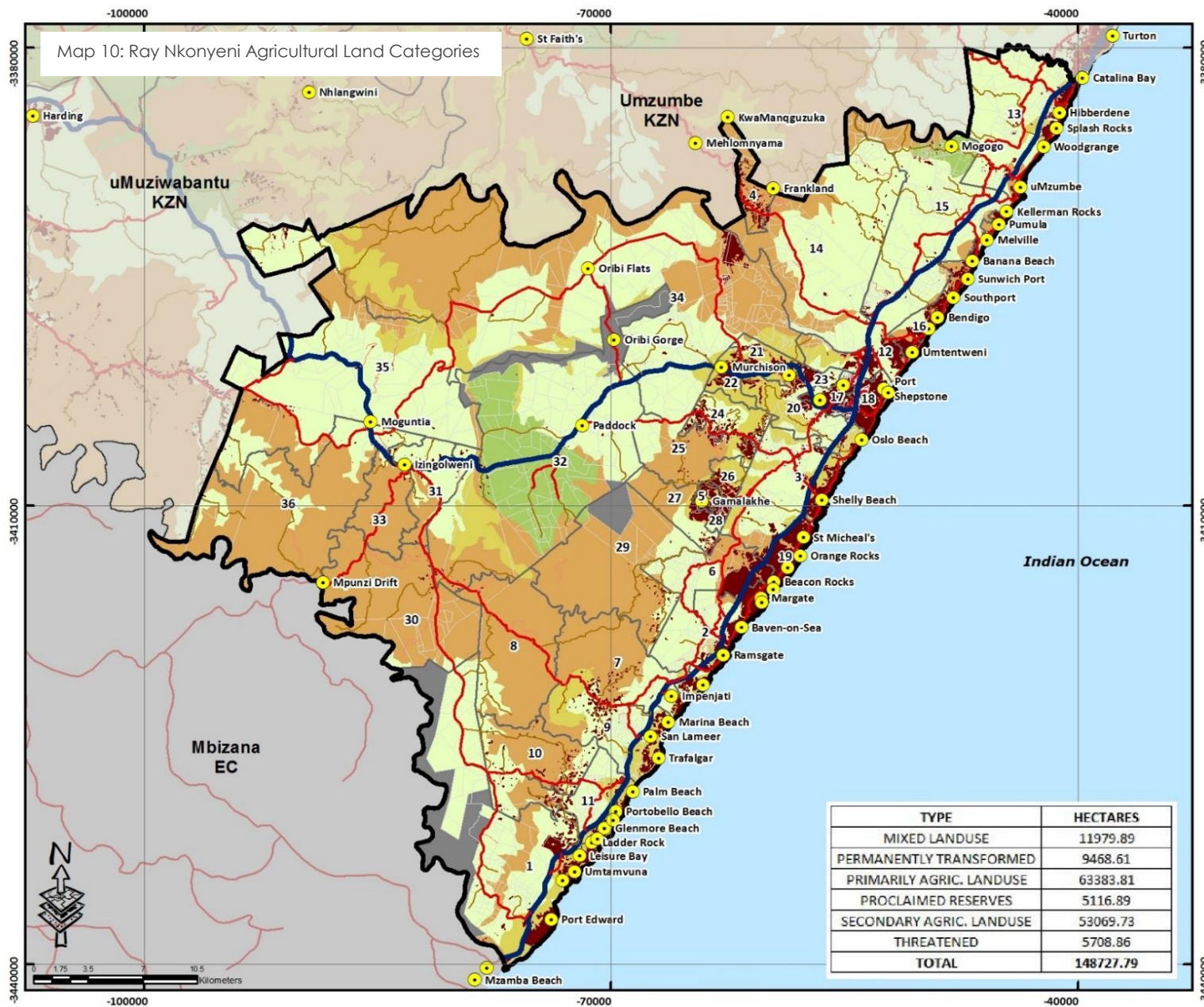
The guiding principles that have been adopted by the Department in terms of identification of Agri-Parks are:

- ❖ One Agri-Park per District Municipality;
- ❖ Agri-parks must be farmer controlled;

- ⊗ Agri-parks must be the catalyst around which rural industrialization will take place;
- ⊗ Agri-parks must be supported by government (10 years) to ensure economic sustainability;
- ⊗ Strengthen partnership between government and private sector stakeholders to ensure increased access to services (water, energy, transport) and production on the one hand, while developing existing and create new markets to strengthen and expand value-chains on the other;
- ⊗ Maximise benefit to existing state land with agricultural potential in the provinces, where possible;
- ⊗ Maximise access to markets to all farmers, with a bias to emerging farmers and rural communities;
- ⊗ Maximise the use of high value agricultural land (high production capability);
- ⊗ Maximise use of existing agro-processing, bulk and logistics infrastructure, including having availability of water, energy and roads; and
- ⊗ Support growing-towns and revitalization of rural towns, in terms of high economic growth, high population growth over past 10 years and promote rural urban linkages.

Figure 4: Agri-Hub Facilities





**Spatial Development
Framework 2017/2022**

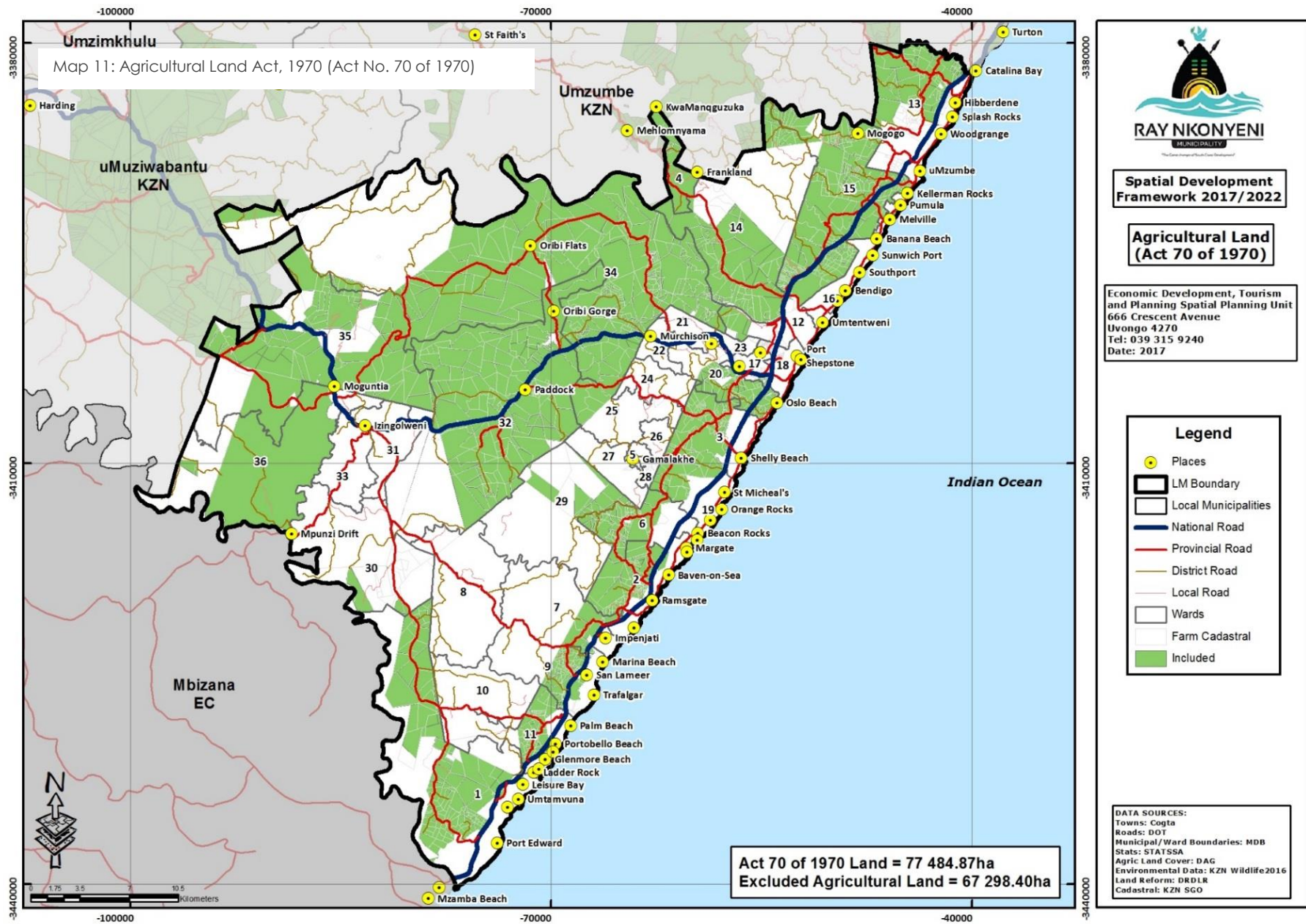
Agricultural Land Categories

Economic Development, Tourism
and Planning Spatial Planning Unit
666 Crescent Avenue
Uvongo 4270
Tel: 039 315 9240
Date: 2017

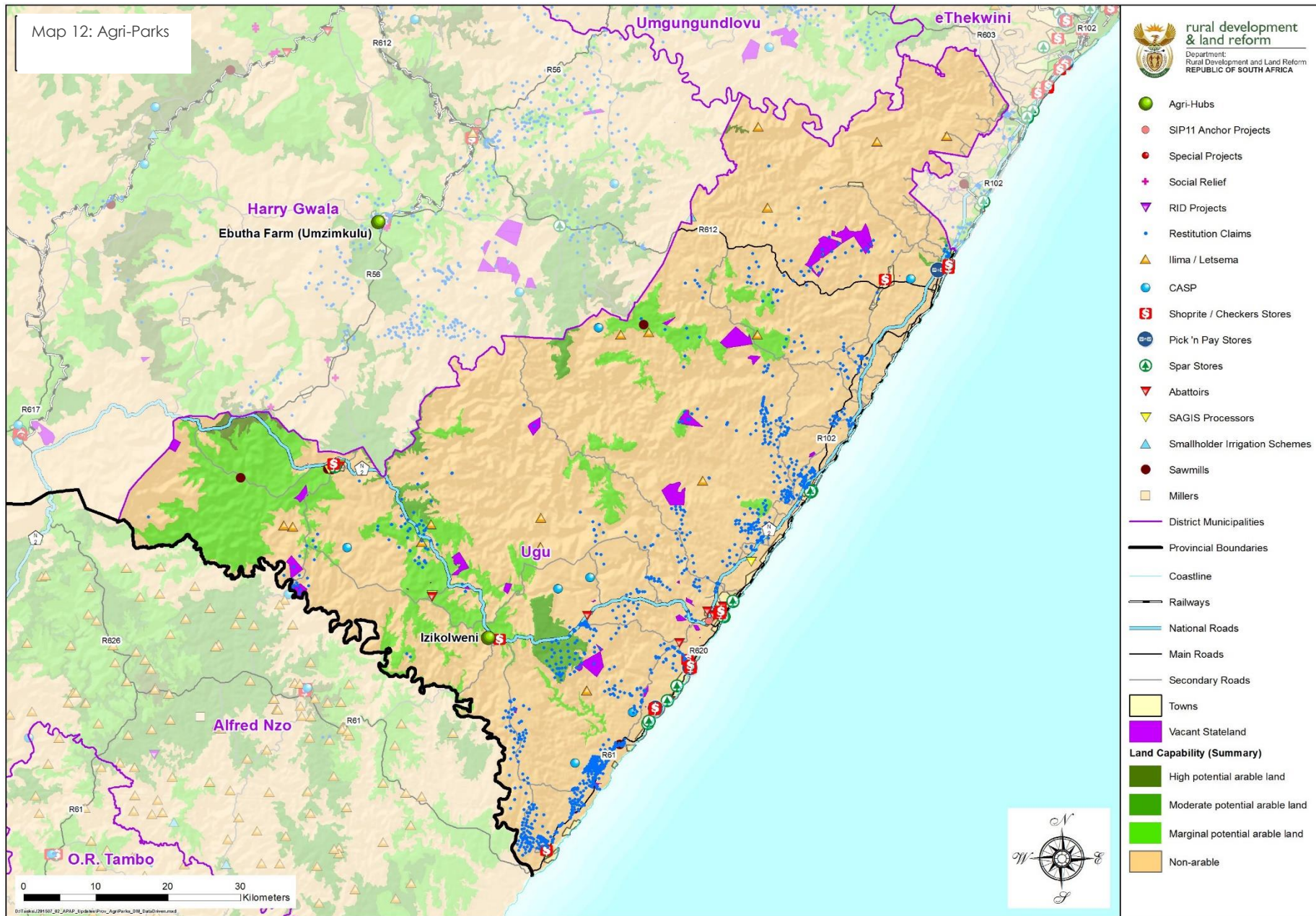
Legend

- Places
- ▬ LM Boundary
- ▬ Local Municipalities
- ▬ National Road
- ▬ Provincial Road
- ▬ District Road
- ▬ Local Road
- ▬ Wards
- ▬ Farm Cadastral
- B: THREATENED
- C: PRIMARY AGRIC. LAND
- D: SECONDARY AGRIC. LAND
- E: MIXED AGRIC. LAND
- PERMANENTLY TRANSFORMED
- PROCLAIMED RESERVES

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Stats: STATSSA
Agric Land Cover: DAG
Environmental Data: KZN Wildlife 2016
Land Reform: DRDLR
Cadastral: KZN SGO



Map 12: Agri-Parks



5.2.2 SECONDARY SECTOR

The secondary sector produces manufactured goods. The manufacturing industries that aggregate, pack, package, purify or process the raw materials. Manufacturing businesses within the municipality are located in the Port Shepstone/ Marburg industrial area. It is important to note that a third of the manufacturing businesses also relate to Margate suggesting that this area should receive some prominence in terms of future industrial sector planning. It is further reported that this sector is limited to the coastal strip and primarily the Marburg and Margate areas. It is not envisaged that the formal large scale manufacturing sector will expand into the rural areas (although development at Izotsha would provide easier access to job opportunities to the rural workforce). Majority of the firms, with the exception of larger clothing and textile and timber related industries, are small (75%) and produce only for the local market. Less than a quarter of firms targets international markets. Most of these firms are concentrated along the coastal strip, primarily the Marburg and Margate areas.

Table 1: Major Manufacturing Industries in Ray Nkonyeni

AREA BASIC	DESCRIPTION	TYPE OF INDUSTRY
Marburg Industrial	This is the only major industrial zone in the District. It has been developed on the N2 to the south-west of the Port Shepstone CBD. Over the years, it has extended on what is referred to as Izotsha. The land is not flat, but the topography is reasonable for industrial development. A large variety of manufacturing and service sector businesses are located in the area.	Most industrial sectors are represented in the area. Furniture, textile and clothing and food seem to dominate. Sizes range from small service industries to major plants.
Margate Quarry Industry	The industrial area is located close to the entrance to the NPC Quarry immediately to the west of the N2 as you approach the Margate turnoff from Durban. The area is separated from neighbouring developments either by the N2 or vacant land.	The number of concrete block, brick and moulded concrete block manufacturers benefiting from the location in relation to the Quarry.
Margate Airport Industrial	This industrial area is located on the northern end of the runway of the Margate airport. It is located on relatively flat land. The area is home to only a handful of industries.	Construction related and furniture manufacturing firms are located in the area.

The following key challenges are identified within the municipal manufacturing sector:-

- ❖ Manufacturing business are limited to only the coastal strip;
- ❖ Lack of available developed land to locate and establish modern industries;
- ❖ There is limited impact on regional developments;
- ❖ Manufacturing activity within the inland rural areas of the municipality is invariably limited;
- ❖ There is less than a quarter of firms targets international markets; and
- ❖ It is not envisaged that the formal large scale manufacturing sector will expand into the rural areas.

5.2.3 TERTIARY SECTOR

The tertiary sector or service sector is the third of the three economic sectors of the three-sector theory. The tertiary sector of industry involves the provision of services to other businesses as well as final consumers. Services may involve the transport, distribution, sale of goods from producer to a consumer, as may happen in wholesaling and retailing, or may involve the provision of a service, such as tourism, accommodation, catering, entertainment, communication, finance, insurance, real estate, business services, community, social, personnel services and general government. Tourism is one of the key economic drivers in the municipality. The entire coastline of the South Coast is a primary attraction and the Tourism KwaZulu-Natal website lists not fewer than 29 beaches for this part of the Province. The Oribi Gorge on the north-eastern part of the municipality provides better organized, marketed and committed products. Margate is the main tourist attraction in the municipality (37%) and is characterised by holiday resorts, accommodating more holidaymakers than residents. The town is also the economic centre for the strip of coastline almost completely made up of accommodation, holiday homes and tourist-related establishments. The regional airport is also located in Margate. Other tourist attraction towns in the Municipality include Shelly Beach (19%),

Ramsgate (23%) and Uvongo (21%). These towns feature a wide range of tourist -oriented businesses, including restaurants, bars, clubs, movie houses, golf courses, clothing shops, museums, and various types of accommodations. According to Ugu South Coast Tourism, 2015 the demand in terms of occupancies seasons. Statistics reveal that spring season account for 70, 8%, Summer 84.9%, Autumn 79, 0% and Winter 72.2%. In average 77% account for peak holiday periods.

5.3 SMME AND CO-OPERATIVES

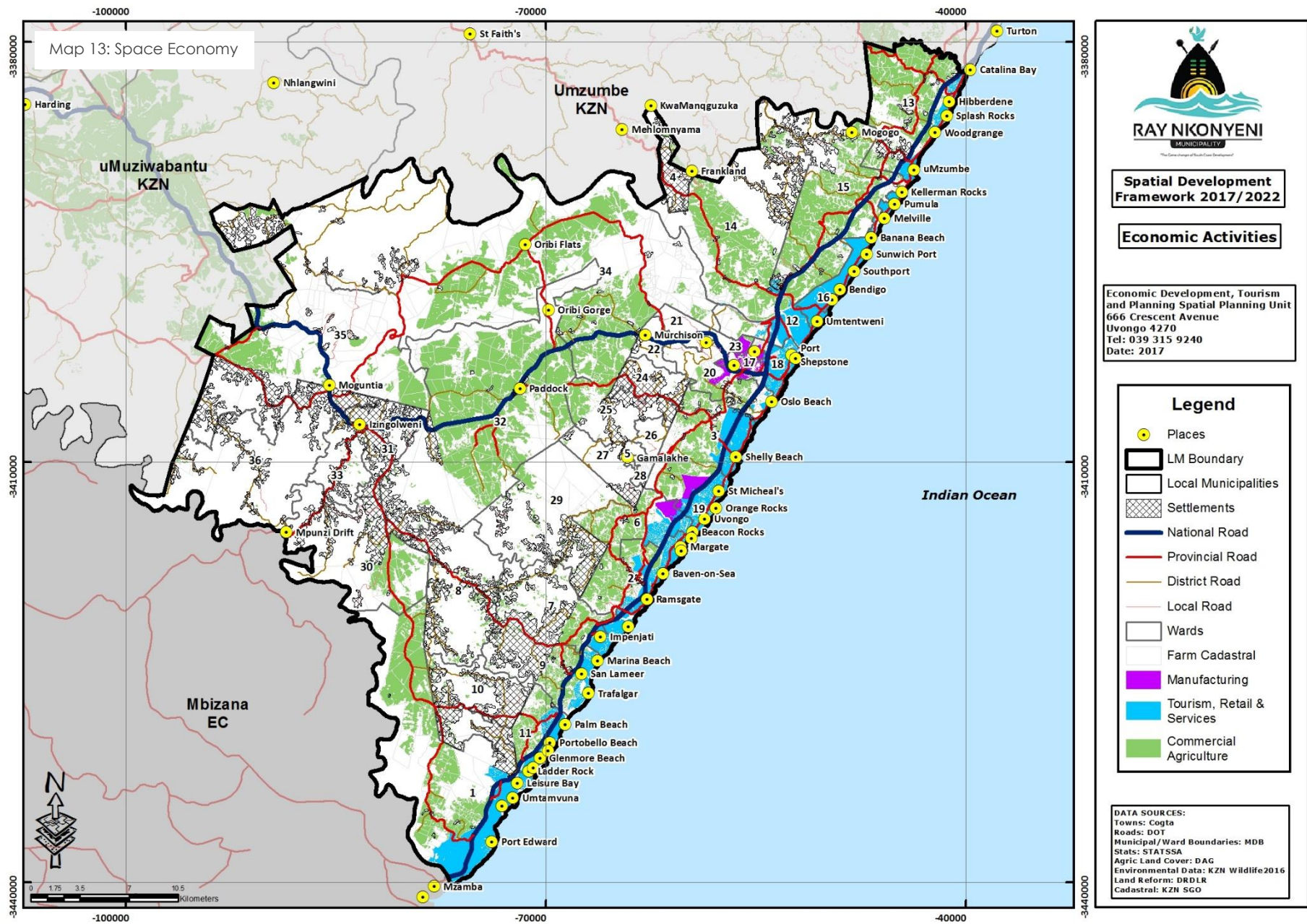
SMMEs sector is recognized nationally and world-wide as a major player in economic development and growth especially for the developing world. The SMMEs sector represents an important component of the economy of the Ray Nkonyeni Municipality and plays a major role in the job creation, economic growth and poverty alleviation. As per the UGu District Growth and Development Strategy, 2012; the informal economy contributes 6% of employment and the figure is steadily growing. One of the strategic objectives put forward by the Ugu DGDS, 2012 is to “ensure effective assistance and support to SMME’s, Cooperatives and Informal Trading”. It is highlighted that SMMEs, Cooperatives and Informal Trading have the dual benefit of creating employment and distributing wealth and are key in expanding the key productive sectors. In addition, in order to ensure effective assistance and support to these structure, the following interventions should be put to place:-

- ❖ Implementing an SMME support strategy, improving access to markets, supporting small-scale mining and farming including processing and creating linkages to commercial businesses,
- ❖ Provision of Nguni cattle;
- ❖ Implementation of the provincial livestock improvement project, and
- ❖ Developing SMME incubators and mentorship programmes.

5.4 POVERTY ASSESSMENT

The experience of poverty is multi-dimensional. While the inability to access income remains one of the most obvious expressions of poverty, definitions of poverty typically refer to the absence of capital such as land, access to natural resources, or to the importance of social, intellectual capital and even the climate of democracy as well as security necessary to enhance the capabilities of the poor and excluded. Further, there is an additional institutional dimension of poverty that recognises that the poorest in the nation are those who are unable to access state assistance designed to provide a social safety net because of institutional failure. Poverty is located across the full range of settlement types from deep rural areas to inner cities. It is thus the concern of all municipalities.

In as much as the municipality is ranked number one amongst the other four local municipalities in uGu District in terms of economic services, poverty is still high. This is due to unemployment which is also attributed by the fact that many people lack the necessary expertise to be employed. Many people on the other hand are employed in the informal sector with very low wages yet they have many members in the family to support. An important indicator of poverty is the number of households with an income below the Minimum Living Level (MML). According to surveys conducted at Ray Nkonyeni, the Municipality has a total of 83 843 households of which 21 552 (26%) do not have any form of income. These households depend on grants and can be classified as indigents who are most probably falling on the poverty datum line.



6. INFRASTRUCTURE ASSESSMENT

6.1 BULK WATER

6.1.1 BULK WATER INFRASTRUCTURE

The water supply zones in the municipality are defined as below however a further analysis is still required where a number of interconnections exist to allow certain areas to be supplied from more than one bulk supply source. Ugu District Water Services Development Plan (WSDP) was prepared in 2008 and as such is due for review. The water supply to the District is derived from dams, rivers, ground water and bulk purchases from Umgeni Water. The northern coastal strip (i.e. Craigburn, Umzinto and Umtwalume) is serviced by potable water purchased in bulk by Ugu from Umgeni Water. The southern coastal strip is serviced by water extracted from a number of rivers and dams which is then treated at several of treatment plants owned by Ugu before being distributed. This plan noted that the major infrastructure for water that exists within Ugu District includes:

- ⊕ Dams 4;
- ⊕ Pipelines 3 896 km (estimate);
- ⊕ Reservoirs 150;
- ⊕ Pump Stations 120;
- ⊕ WTW 16; and
- ⊕ WWTW 10.

The current water resource capacity is estimated at 1094.85 ML which is broken down as follows:

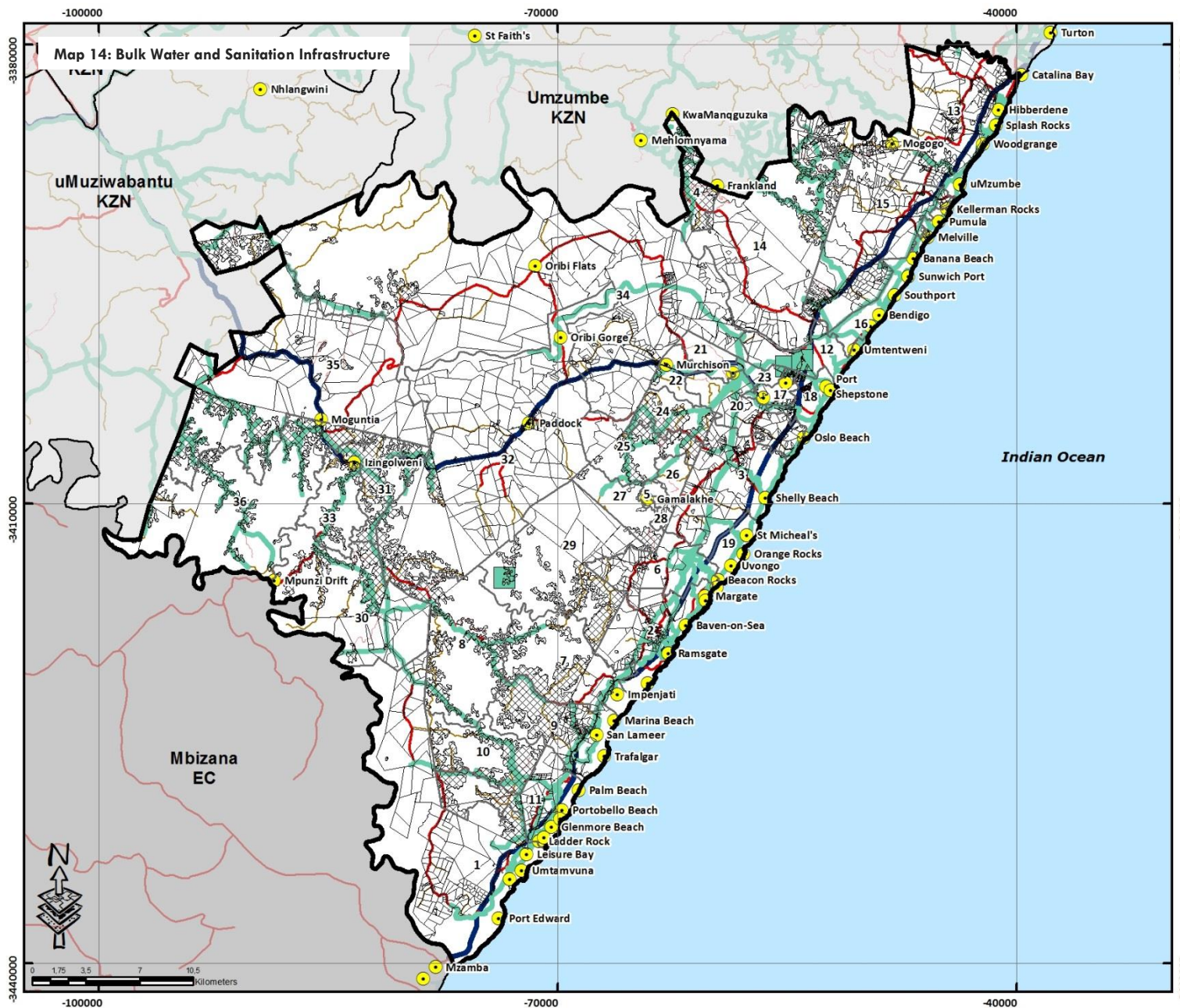
- ⊕ Mzimkulu 693.3 ML;
- ⊕ Mthamvuna 200.75 ML;
- ⊕ Mzinto 127.80 ML; and

- ⊕ Umtwalume 73.00 ML.

This water infrastructure was developed to serve settlement knitted together along the coast. The recent development growth requires the strengthening of the system to replace the old pipe systems and increasing capacity of water treatment plants to meet demand. The systems within Ray Nkonyeni that needs strengthening are as follow:

- ⊕ UMzimkhulu water augmentation project;
- ⊕ Mtwalume bulk water project;
- ⊕ South Coast Bulk pipeline;
- ⊕ Umtamvuna bulk water project;
- ⊕ Port Edward and Ezingoleni; and
- ⊕ Rural Water Supply.

Ugu WSDP indicated that the rivers within the District Municipality have sufficient surplus flow to cater for the water demands for the foreseeable future. However some of the infrastructure needs to be upgraded to cater for the demand. The aging infrastructure and rising demands have resulted in Ugu District Municipality embarking on the Non-Revenue Water management programme to reduce water losses and new water project to meet the demand. The Umzimkhulu augmentation and South Coast bulk pipeline are now at implementation stage with other programmes provided for in the next year's indigents.



Spatial Development Framework 2017/2022

Bulk Water Infrastructure

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Uvongo 4270
Tel: 039 315 9240
Date: 2017

- Legend**
- LM Boundary
 - Local Municipalities
 - Wards
 - Farm Cadastral
 - Places
 - Settlements
 - Bulk Infrastructure
 - Bulk Pipelines
 - National Road
 - Provincial Road
 - District Road
 - Local Road

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Stats: STATSSA
Agric Land Cover: DAG
Environmental Data: KZN Wildlife 2016
Land Reform: DRDLR
Cadastral: KZN SGO

6.1.2 AREAS THAT LACK ACCESS TO WATER

The number of households without access to water is estimated at 10 873 which makes up 13% of the population within Ray Nkonyeni Municipality. The municipality noted that there are still backlogs in terms of clean water provision to some areas in rural areas. The wards with the biggest water backlog is ward 8, 15, 29, 30, 31, 32, 34 and 35. The other wards with hardship in terms of water access are ward 4, 27, 33 and 36. These households use spring, dam and rivers as sources of water and are prone to a number of water borne diseases. The Municipality has also made provision of water tankers to supply water to those communities with little or no access to water.

6.2 BULK SEWERAGE

6.2.1 BULK SEWER INFRASTRUCTURE

The provision of sanitation services is also the responsibility of Ugu District. This includes the delivery of bulk sanitation infrastructure such as the waste water treatment plants. Most of the treatment plant facilities are owned and managed by the Ugu District Municipality other treatment plants are privately owned and managed. There are several pump stations in the reticulated areas whilst waste water treatment plants are generally located inland of the coastal strip.

Ugu Water Services Development Plan estimates that R 2, 1 billion is required to meet the waterborne sanitation backlog between Sezela, Umtentweni, Southbroom and Port Edward. Approximately R0.9 billion of capital is required to meet the more densely populated areas including the

strip from Port Shepstone to Ramsgate, Gamalakhe and Harding. The densely populated areas should be clearly identified and proper town planning be implemented to speed up township establishments. According to the Water Services Development Plan (WSDP), the District Municipality does have a full waterborne sanitation Master plan. A plan to refurbish infrastructure in the urban coastal strip-sanitation and development of water borne sewage to minimize ground water sources pollution is in place. Loan funding was secured for the implementation of the water borne sanitation project in the coastal strip. This included the areas running from Port Edward in the south to Scottsburg in the north. The investigation undertaken to develop a Sanitation Master Plan has revealed that to connect all properties along the Ugu District coastline, a sum of R1.2 billion in investment is required (as at 2006).

This estimation includes reticulation and purification costs, but excludes new green field developments. High-risk areas that are prone to ecological disasters have also been identified and these would have to be prioritized for implementation. These areas are: Shelly Beach to Margate, Mbango valley, Mtentweni, Mellville, Pennington, Park Rynie, and Scottsburg. Taking into consideration the environmental considerations and the financial viability and sustainability of the schemes, sewerage schemes that have been prioritised are Shelly Beach to Margate, Pennington, Scottsburg and Mtentweni.

The District Municipality has taken the decision that low cost housing within the urban area will be developed with full waterborne sanitation. The existing sewerage reticulation, pump stations and treatment works infrastructure was assessed in 2004/2005 to be in need of refurbishment requiring R120 Million. To date a total of R 30 Million has been invested in this area resulting in a number of the beaches retaining their Blue Flag

status. The water borne sanitation programme was assessed and a master plan developed for the whole district. The first phase of prioritise areas will be undertaken in the next two years against a R100m loan facility.

6.2.2 AREAS THAT LACK ACCESS TO SANITATION

Approximately 14 493 households do not have access to sanitation facilities within the appropriate standards. This makes up 17% of the total population within Ray Nkonyeni Municipality. Ward 8 and 15 have the highest sanitation backlogs. These are followed by ward 3, 6, 7 and 34.

6.3 BULK ELECTRICITY

6.3.1 BULK ELECTRICITY INFRASTRUCTURE

The current reticulation network in Ray Nkonyeni Municipal area as indicated in map shows areas already electrified and the location of the bulk electricity infrastructure. It is no surprise that the bulk electricity infrastructure is concentrated in areas that have the highest population densities which is mainly along the coastal strip as well as Murchison, Ezingolweni and Oribi George. There are also a number of HV and MV cables that originate from these substations which distribute electricity within different parts of the municipal area. This is further supported by the MV stations. The electricity network is constrained, with future load requirements in Port Shepstone and the surrounding areas increasing rapidly as a result of new office and commercial developments that are taking place in the area. New customer applications and new developments within the Port Shepstone distribution areas require electricity supply: additional capacity requirements are up to 10MVA. Eskom Port

Shepstone substation has no capacity to accommodate any additional load as the 1X20MVA transformer is already loaded above its transformer rating.

The municipality will construct a new full specification 132/11KV, 2x40MVA at Port Shepstone substation at a new site/location. The long-term benefits is that the municipality can take supply from Eskom at 132kV: of which benefits are in terms of lower tariffs, asset ownership and project implementation time frames can be quicker than Eskom. The municipality will also construct a cable feed from Marburg Switching Station at an estimated cost of up to R 15 million.

This option is the recommended network upgrade option as a short-term, immediate solution. It can address the municipality's immediate power constraints in the Port Shepstone CBD. It will make 5MVA available from the Eskom Marburg substation, to meet the forecasted load requirement in the short-term. Estimated project implementation is 6 to 12 months.

6.3.2 AREAS THAT LACK ACCESS TO ELECTRICITY

Survey shows that 89,5% of the municipality's population has access to electricity. Some rural communities still require infrastructure connection and there is an infill backlog. The major challenge regarding electricity backlog is the capacity constraints from Eskom. Major substations are currently been upgraded to increase the supply capacity. New infrastructure development and extension put pressure on the existing infrastructure and supply capacity. Wards with the largest concentration of backlogs are 8, 15 and 34.

6.4 REFUSE REMOVAL AND LANDFILL SITE

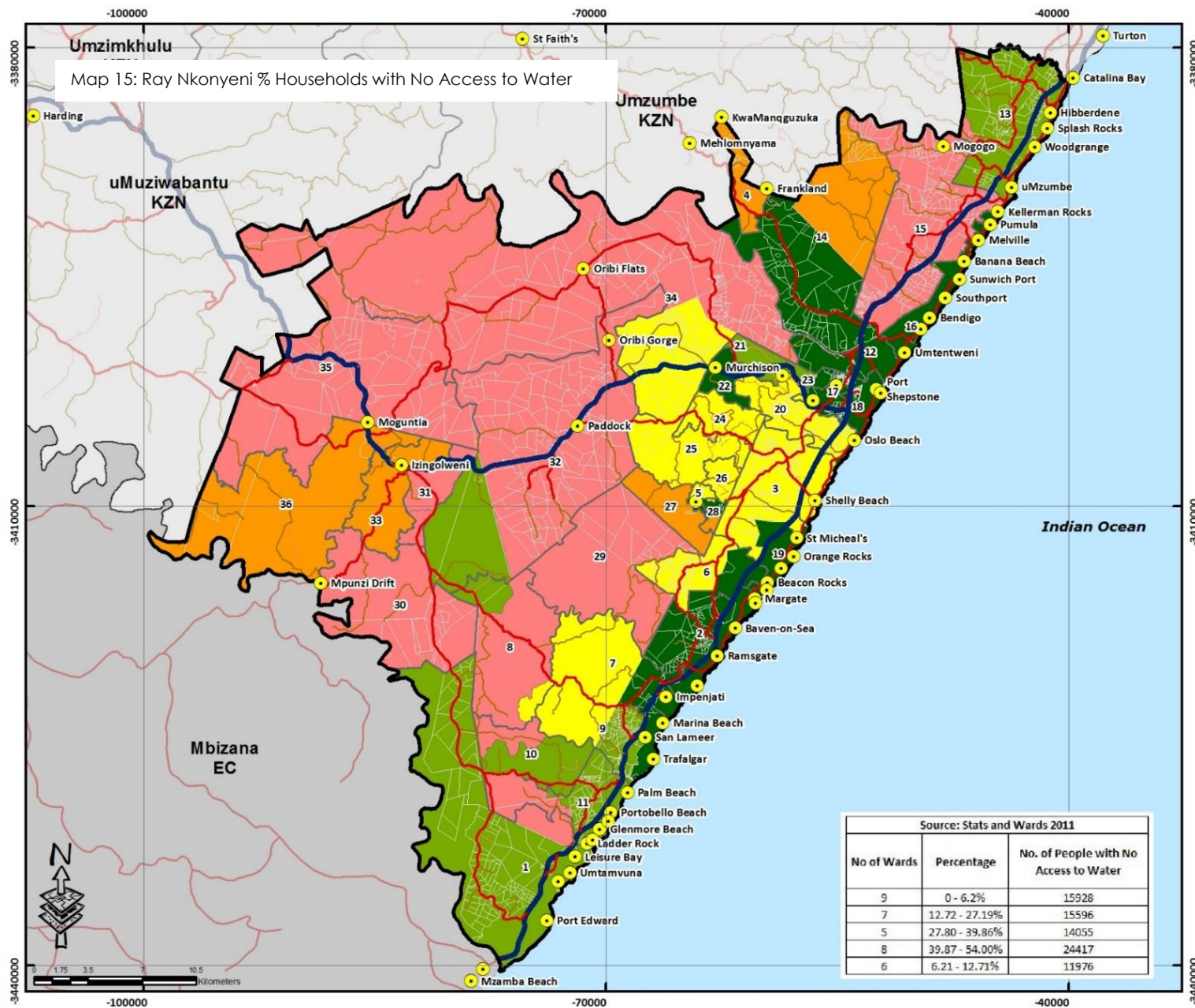
The waste collection zones are Hibberdene, Port Shepstone, Margate, Ezingolweni, Sea Park, Port Edward, Sunwhich Port, South Port and other coastal settlements. There are two unregistered landfill sites within the municipality and these sites are located at Umtentweni and Hibberdene. A closure permit should be issued for the New Bolton waste site, quantify waste dumped at the waste site and it should be noted that illegal dumping is an ongoing problem at New Bolton. The Outland's waste site is reaching its capacity and waste records of quantities and composition are not taken.

There should be a designated site for recycling purposes. Ray Nkonyeni Municipality is also expected to develop a Waste Management Plan which will guide the municipality in terms of the management of waste in accordance with waste related legislations. These legislations include NEMA, Department of Water Affairs: Minimum Requirements for Waste Management, DEAT: National Waste Management Strategy 1999, White Paper on Integrated Pollution and Waste Management, Waste Management No 59 of 2008, KwaZulu-Natal Waste Management Policy and other relevant policies.

6.5 TELECOMMUNICATION

According to Ugu SDF, telecommunication services within the area are provided by Telkom and all licensed cellular phone companies in the country. Telecommunication infrastructure remains one of the major challenges in all the municipal areas, information on infrastructure is difficult to access from the various service providers due to competition. In formal urban settlements majority of the people have access to Telkom services. In rural areas the majority of people rely on cellular phones. Some key issues

faced by the Municipality access to telecommunication service, infrastructure information and a lack of co-ordinated planning to meet the district's needs.



Spatial Development Framework 2017/ 2022

% Households with No Access to Water

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Date: 2017

Legend

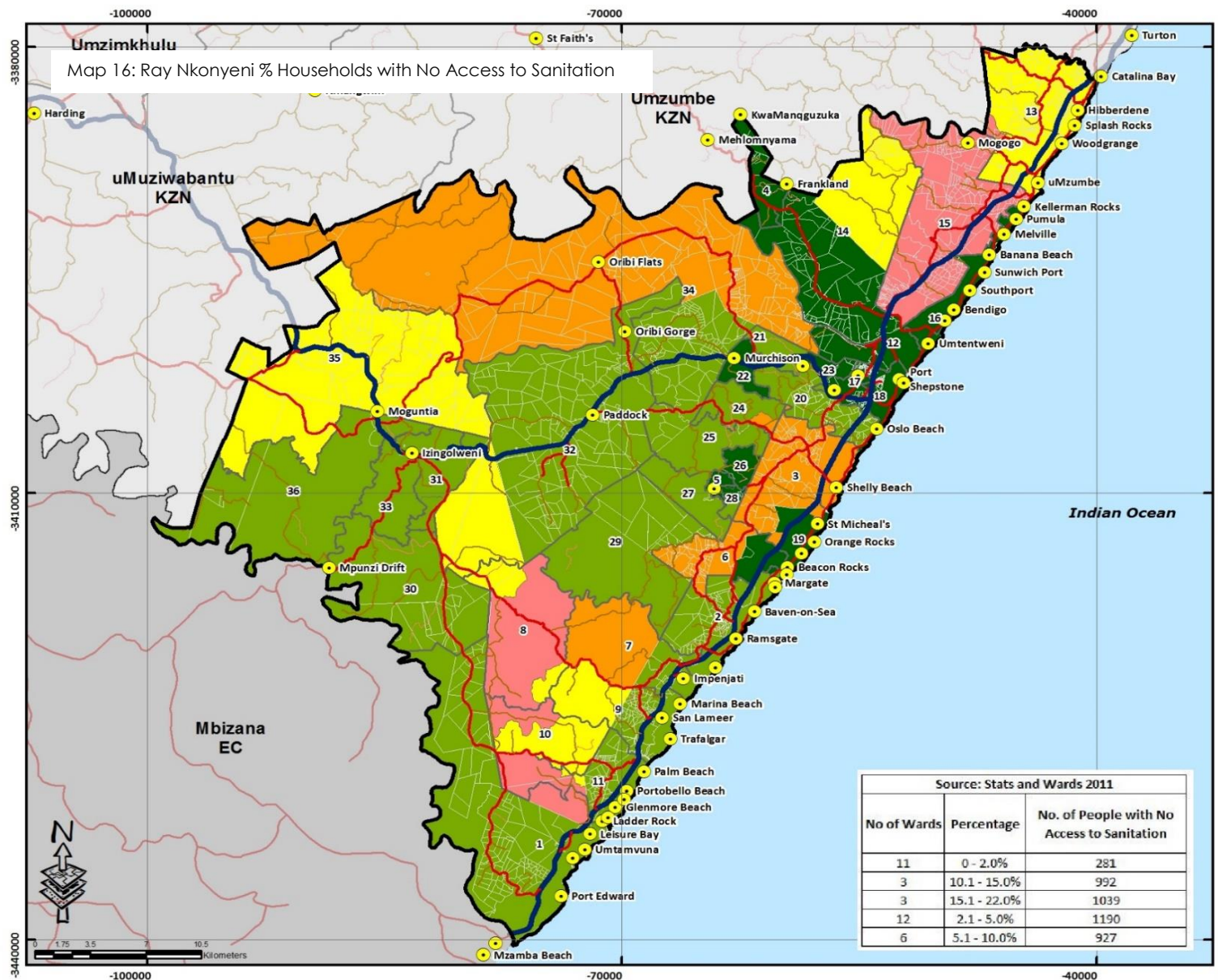
- Places
- LM Boundary
- Local Municipalities
- National Road
- Provincial Road
- District Road
- Local Road
- Wards
- Farm Cadastral

Water Access

% HH with No Access to Water

- 0.45 - 6.20
- 6.21 - 12.71
- 12.72 - 27.19
- 27.20 - 39.86
- 39.87 - 53.69

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/ Ward Boundaries: MDB
Stats: STATSSA
Agric Land Cover: DAG
Environmental Data: KZN Wildlife 2016
Land Reform: DRDLR
Cadastral: KZN SGO



**Spatial Development
Framework 2017/2022**

**% Households with
No Access to Sanitation**

Economic Development, Tourism
and Planning Spatial Planning Unit
666 Crescent Avenue
Uvongo 4270
Tel: 039 315 9240
Date: 2017

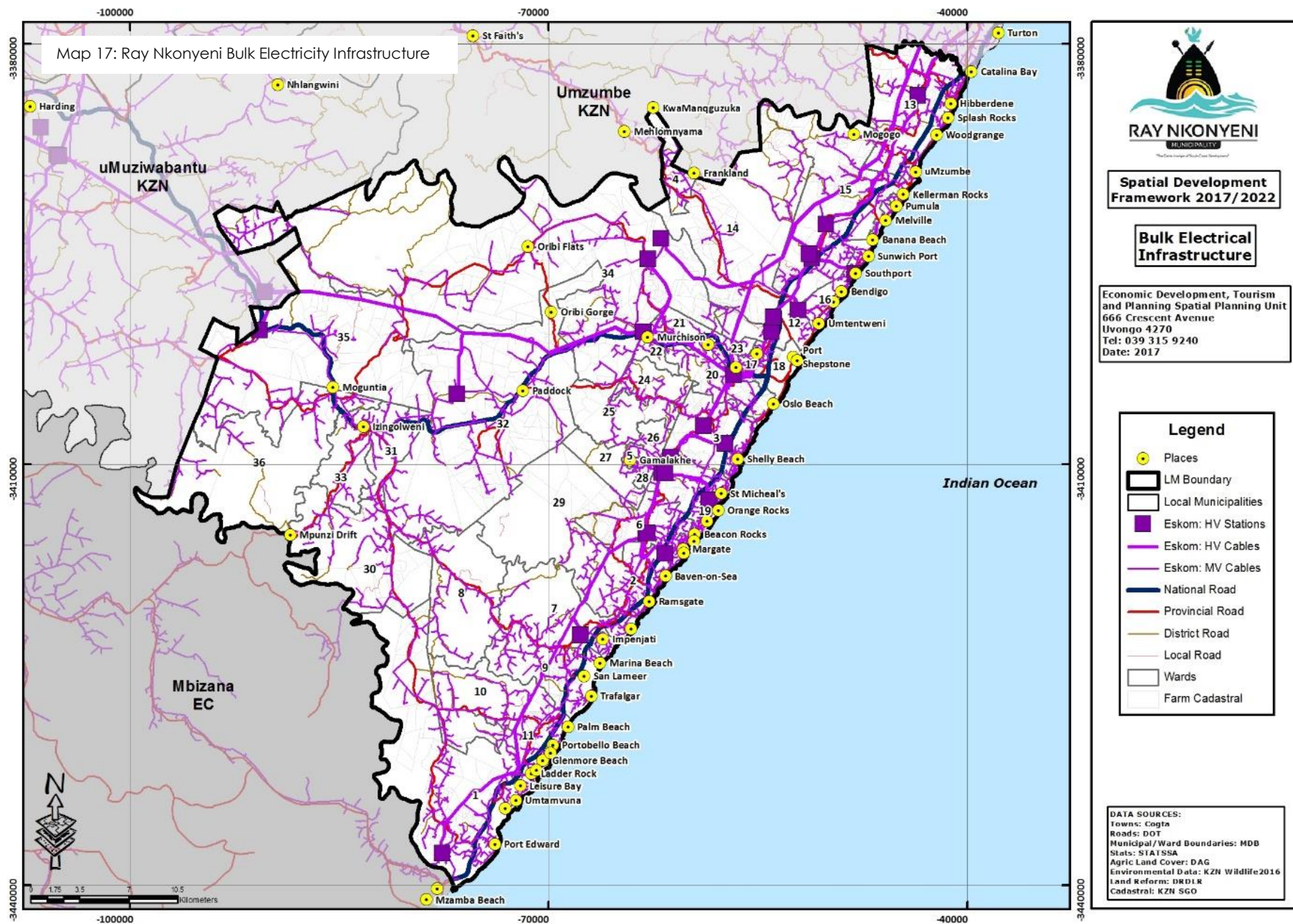
Legend

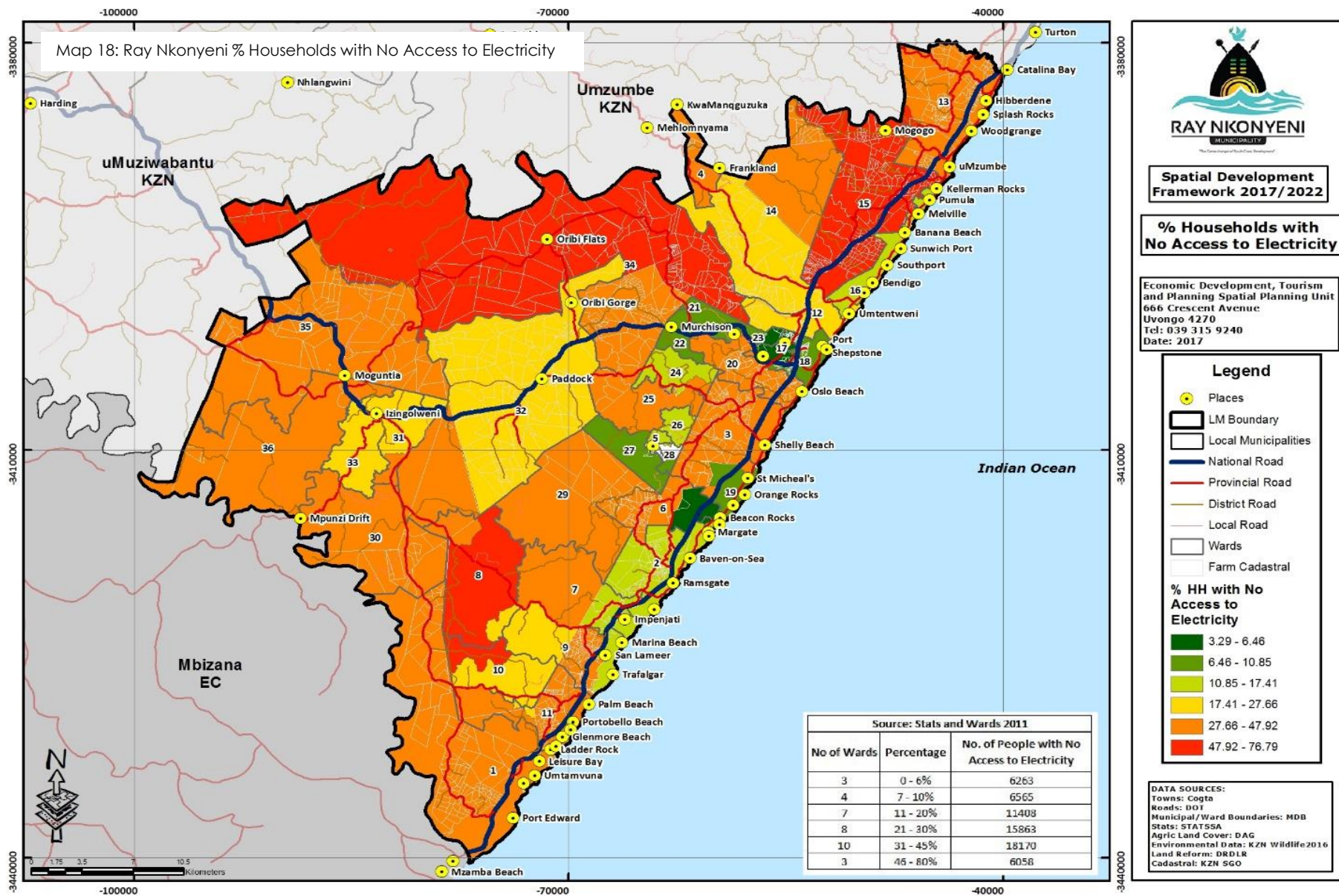
- Places
- ▭ LM Boundary
- ▭ Local Municipalities
- ▬ National Road
- ▬ Provincial Road
- ▬ District Road
- ▬ Local Road
- ▭ Wards
- ▭ Farm Cadastral

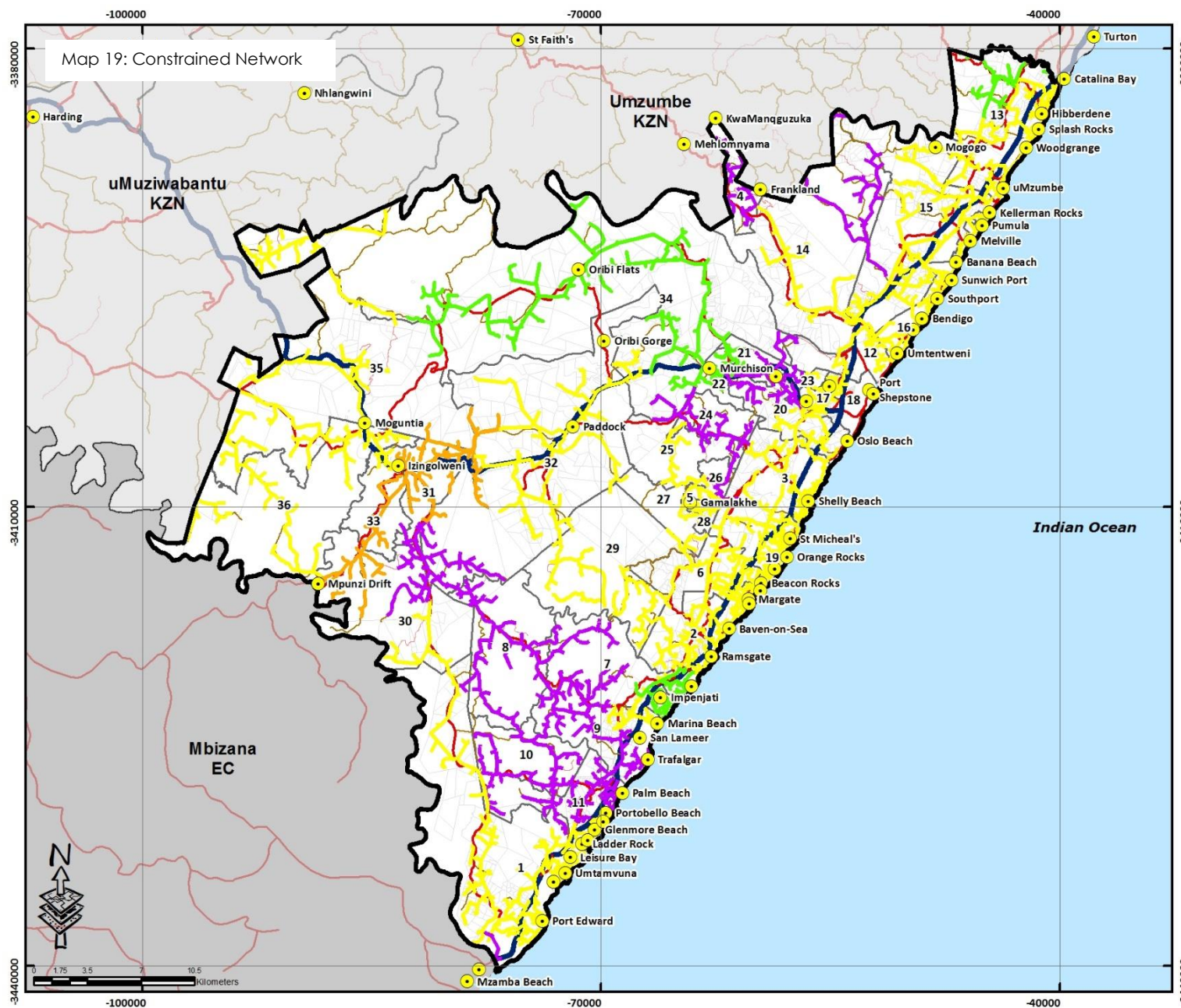
% HH with No Access to Toilets

- 0.01 - 2.00
- 2.01 - 5.00
- 5.01 - 10.00
- 10.01 - 15.00
- 15.01 - 22.00

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Stats: STATSSA
Agric Land Cover: DAG
Environmental Data: KZN Wildlife 2016
Land Reform: DRDLR
Cadastral: KZN SGO







Spatial Development Framework 2017/2022

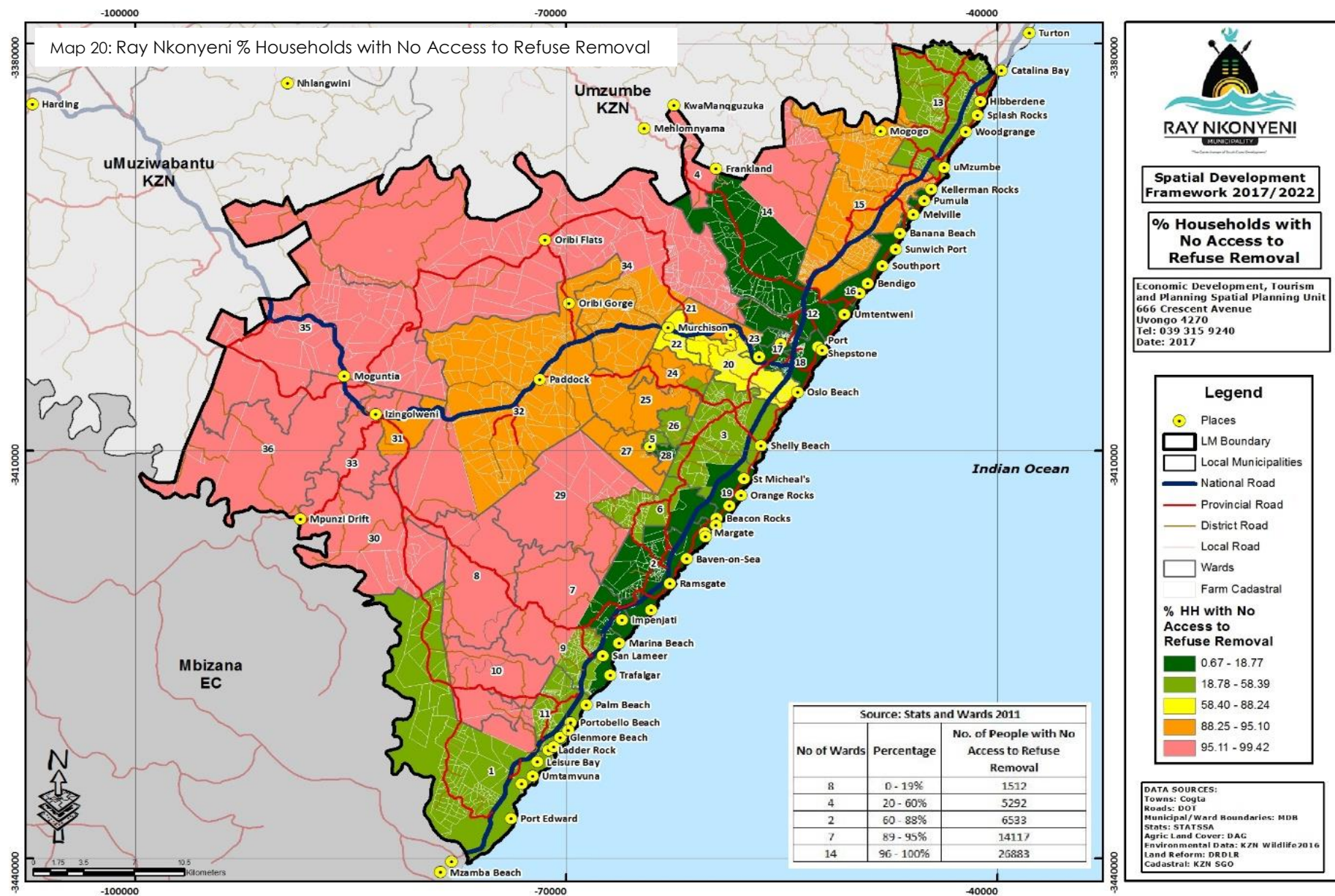
Bulk Electrical Constraints

Economic Development, Tourism and Planning Spatial Planning Unit
666 Crescent Avenue
Uvongo 4270
Tel: 039 315 9240
Date: 2017

Legend

- Places
- LM Boundary
- Local Municipalities
- Constrained Networks 2017**
 - Constrained
 - Not Constrained
 - Not Yet Evaluated
 - Slightly Constrained
- National Road
- Provincial Road
- District Road
- Local Road
- Wards
- Farm Cadastral

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Stats: STATSSA
Agric Land Cover: DAG
Environmental Data: KZN Wildlife 2016
Land Reform: DRDLR
Cadastral: KZN SGO



7. PUBLIC FACILITIES

7.1 HEALTH

There are seven (7) mobile clinics, twenty (20) fixed clinics, one (1) Community Health Center (CHC) at Gamalakhe, two (2) government hospitals and two (2) private hospitals. According to the Planning Standards introduced by KZN Planning and Development Commission, 5 500 households needs to be provided with a clinic while 10 000 households needs to be provided with the CHC and a hospital is provided as per sub-region. This suggests that the area is provided with more clinics than what the standards warrant (13 clinics), a backlog of seven (7) CHC is then noted and Hospitals are well provided. The IDP noted that although the area has enough clinics, the influx of people from the Eastern Cape and other municipalities creates an impression that there are backlogs. It should be noted also that on daily basis there is a high number of people visiting clinics that are in urban areas for convenience purposes, but this results in more work for the nurses. Entabeni clinic functions as a maternal etic unit (specializes in normal deliveries). The District has made many attempts at improving the health status of its population. The most number of clinics are found in Ray Nkonyeni Municipality, which also consists of three 24 hour clinics in Gcilima and Ntabeni. The utilisation rate in Ray Nkonyeni is the highest in the district at three.

7.2 SCHOOLS

The educational facilities to be fairly spread amongst different parts of the municipal area. Ironically the well-developed coastal urban strip does not

boost with lots of facilities as the rural hinterlands of the municipality. There are 85 primary schools and 42 Secondary Schools within Ray Nkonyeni. The KwaZulu-Natal Draft Norms and Standards suggests that primary schools should be accessible within 1,5km while secondary schools are within a 2km traveling distance. The population catchment threshold differs on the basis on the density requirements whereby the lowest density settlements can be provided with a Micro Primary School for every 60 households while the population catchment which warrants the small Secondary School is 200 households. What becomes evident from the application of this requirement is that some of the coastal settlements do not have access to schools within the required distance. The areas that are also not within ease of access to schools includes Oribi Flats and Paddock.

7.3 SAFETY AND SECURITY

There are nine police stations within Ray Nkonyeni Municipality. These are located in Port Shepstone, Port Edward, Ramsgate, Gamalakhe, Mellville, Hibberdene, Ezingolweni, Paddock and Margate. The provincial planning standards suggests that a population 50 000 people needs to be provided with one Police Station at a radius of 10km. There are few areas that this radius does not reach and these include parts of ward 8, 9, 10 and 35.

7.4 CEMETERIES

The municipality has five cemeteries namely Oslo Beach Cemetery, Port Shepstone Cemetery, KwaNositha Cemetery and Margate Cemetery. There is also a private Cemetery at Izotsha. The majority of the rural population

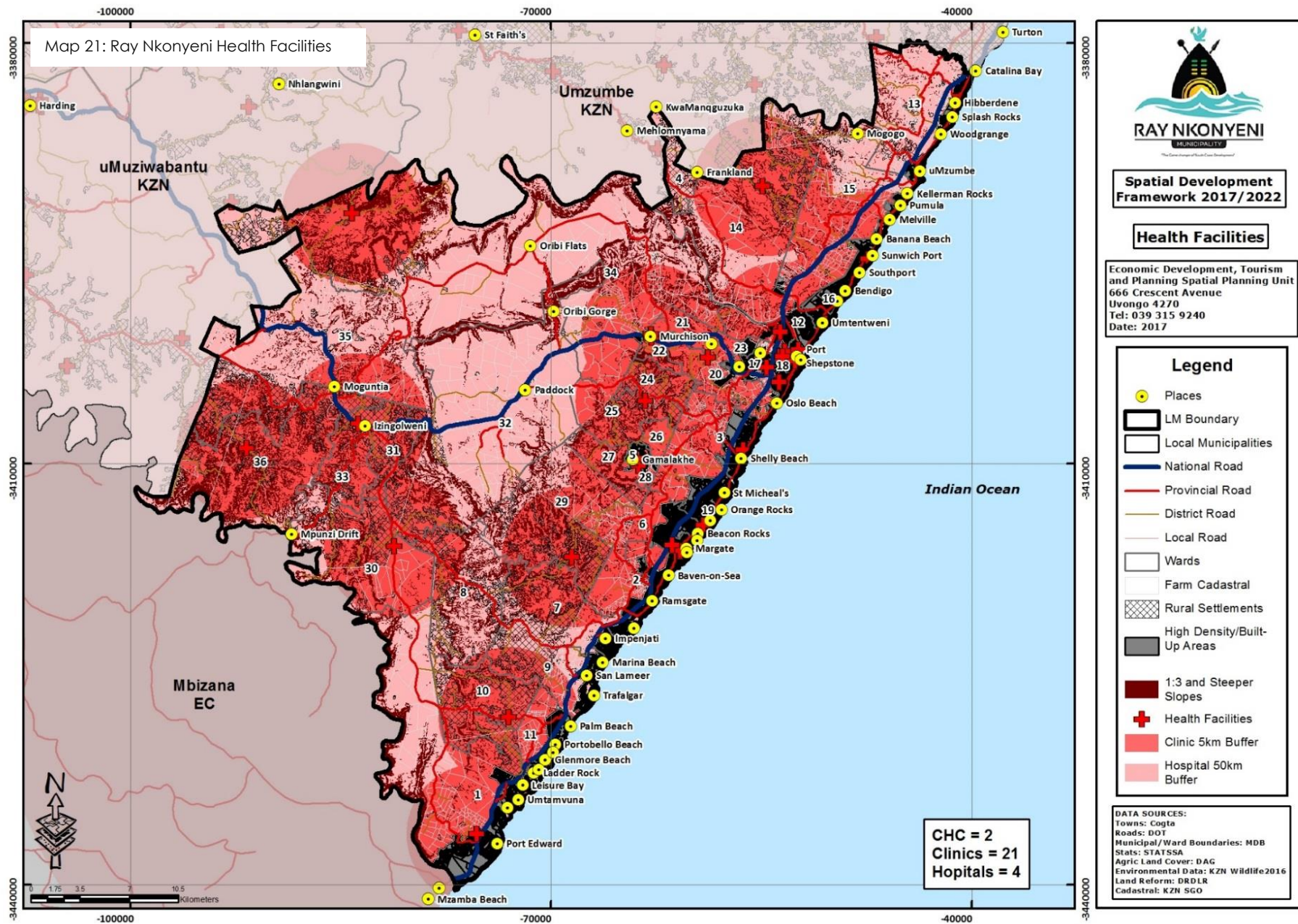
in use traditional burial practices whereby the deceased family members are buried on-site.

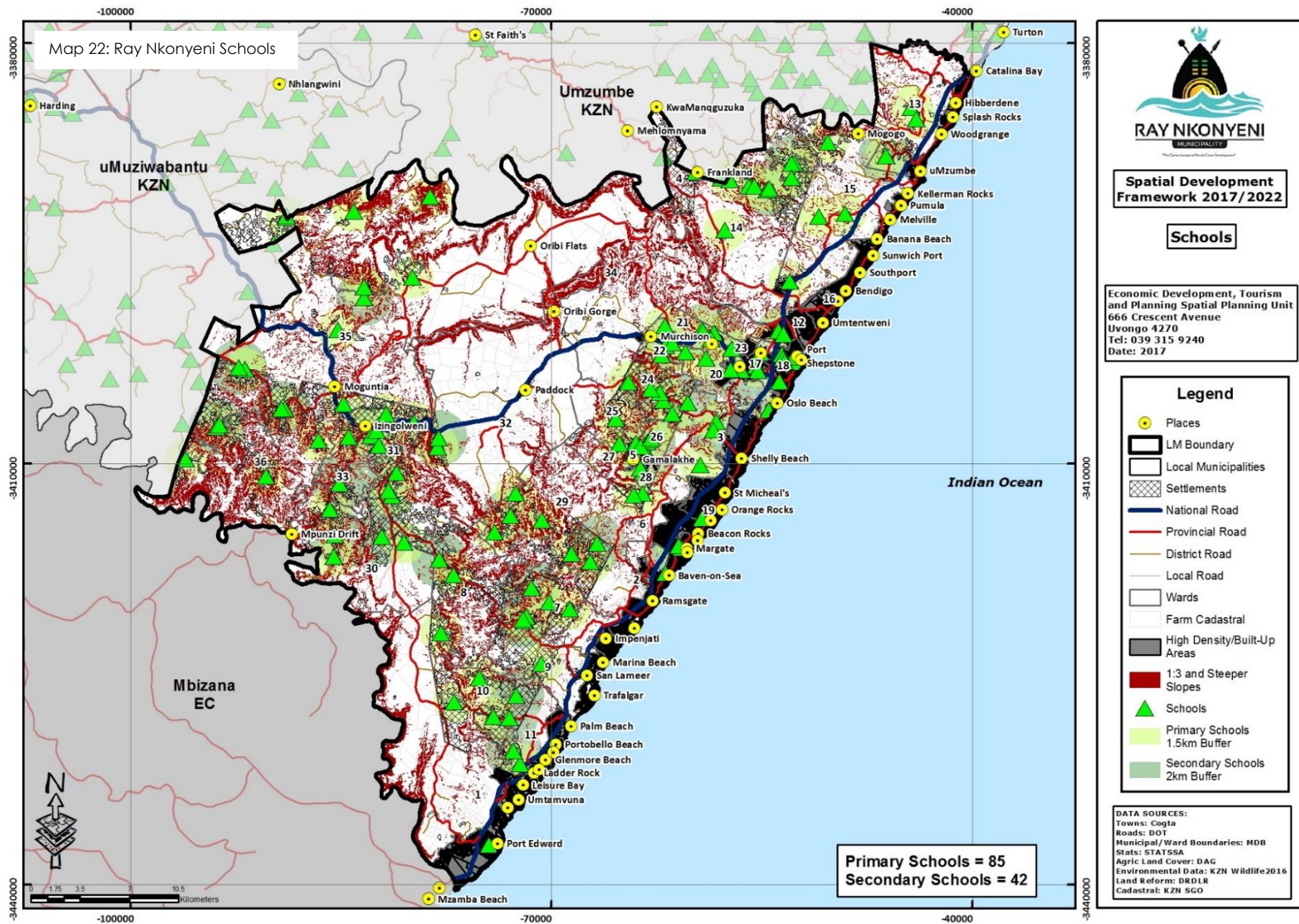
7.5 THUSONG CENTRE AND COMMUNITY HALLS

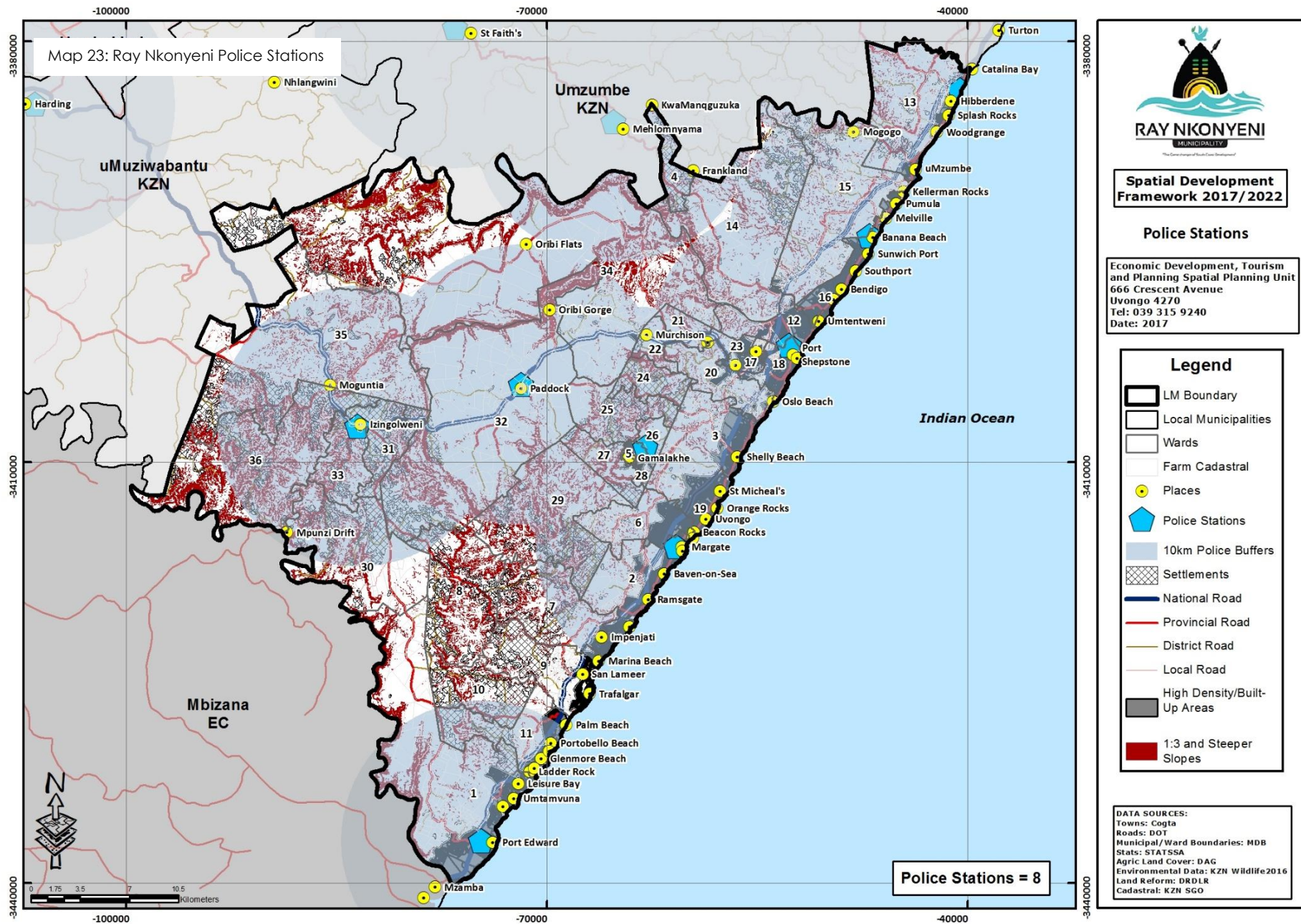
There are ten Thusong Centres within Ray Nkonyeni which are located in KwaNzimakwe (Thongazi), Nyandezulu, KwaMadlala, KwaXolo (Gcilima), Mpunzi, Ndunu, Ndimeni, Maguntia, Maryland and Mlozane. There are sixteen (16) community halls that are found within the traditional council areas such as KwaMavundla (2), KwaXolo (4), KwaLushaba (2), KwaNdwalane (1) and KwaNzimakwe (1), Woyisane, Mbeni, Cele, Nkulu and Ezingolweni. An application of the Kwazulu-Natal Draft Norms and Standards to community halls, suggests that one hall is required for 5 000 people within a 30 minute walking time or 1.5km walking distance. Considering the rural population, this suggests a need for reveal that approximately 41 community halls are required. As such, it would seem that there are backlogs of fifteen (15) facilities.

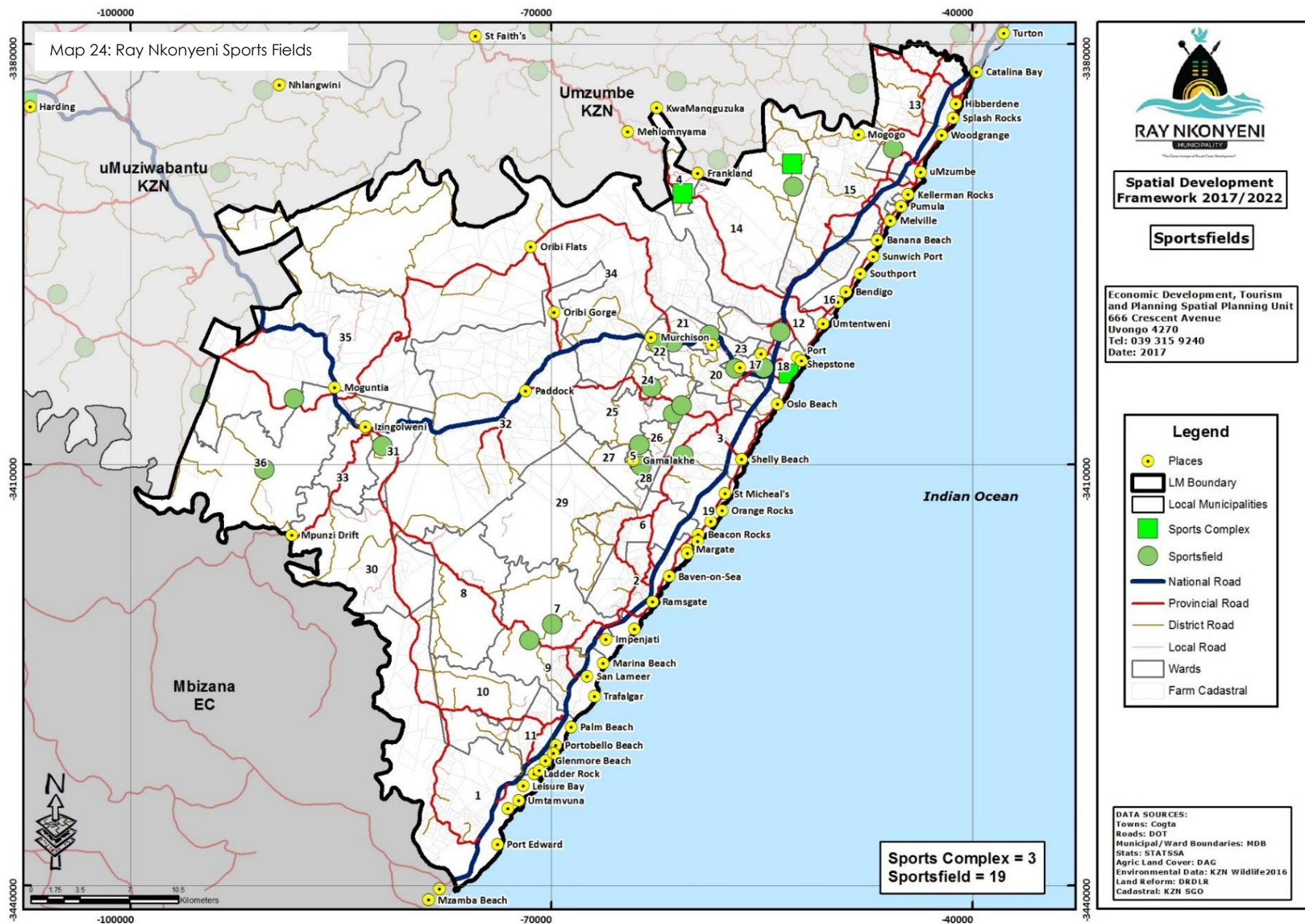
7.6 SPORTS AND RECREATION

There are approximately 35 sport fields, 4 sport complex and 17 parks within Ray Nkonyeni Municipal Area. The municipality administers most of these sport facilities. The application of planning standards indicates that at least one sport complex is required per 50 000 people and therefore the area can be considered to be well provided with these facilities. Recreational facilities form an important aspect within a community. It provides a place for physical activity, as well as a space for social functions where people can gather and interact.









8. SPATIAL ANALYSIS

8.1 SETTLEMENT TYPOLOGIES

Ray Nkonyeni Local Municipality has a diversity of settlements given the fact that it entails urban and rural character while it is also within a very active tourism region. These broad characteristics implies that over the years the area has evolved with a need to provide formal urban settlements for different income groups within the area, while the rural population has also made means providing themselves with settlement in a traditional way and the private sector developers has responded to the demands for tourism/ holiday accommodation. The settlement typologies that have been created as a result are as follows:

8.1.1 COASTAL HOLIDAY SETTLEMENTS

Ray Nkonyeni boasts with a number of holiday homes that are located along the coastal strip. These presents built up areas which are developed in a 'state of the art' level. These include most of the coastal areas located along Marine Drive, Ocean Drive and Finnis Road such as Uvongo Beach, Manaba Beach, Ramsgate Beach, Oslo Beach and Shelly Beach. The location of these settlement areas has capitalized on the most aesthetic prime coastal land which is boosting tourism within the area. These settlements are characterised with a high density which is evidenced from the medium to high rise buildings with large window overlooking the Indian Ocean. There are also a number of commercial and entertainment activities that are found within and between these settlements.

8.1.2 COASTAL URBAN SETTLEMENTS

There are a number of urban settlements that are located along the coast which are not tourists related. These include the suburban areas of Port Shepstone, Marburg, Margate, Port Edward, Sunwhich Port, Hibberdene etc. The coastal urban settlements are mostly located along N2 and R61. These are developed into towns due to the high level of visibility and accessibility.

8.1.3 FORMAL INLAND SETTLEMENTS

The other urban areas that are located within the inland and these are Gamalakhe Township and Merlewood. The inland urban settlements tend to be mainly residential areas with limited commercial activities within these.

8.1.4 PERI-URBAN SETTLEMENTS

The most notable peri-urban settlements are Ezingolweni, Murchison, Fairview and Louisiana are peri-urban settlements that exist within the area. Fairview and Louisiana are located between the urban areas and traditional council areas. Fairview is located within close proximity to Hibberdene. Louisiana is located adjacent to N2 within close proximity to Sea Park. It is a rather small settlement that mainly involves a group of houses and homesteads that have been built around the farming areas.

8.1.5 RURAL SETTLEMENTS

The majority of traditional settlements that are located within Ingonyama Trust land are nucleated and densely populated. These settlements include the following:

- ⊗ KwaXolo i.e. Gcilinga, Enkulu and Duzane;
- ⊗ KwaNdwalane/ Nsimbini i.e. Murchison Flats, Boboyi, Madakane and Nyandezulu;
- ⊗ Vukuzithathe i.e. Izingolweni; and
- ⊗ KwaMavundla i.e. Thafeni and Nsangwini.

This pattern is mainly motivated by the location of these settlements within the main roads. These include N2 to Ezinqoleni and other provincial routes. There are few discrete and isolated villages which are:

- ⊗ KwaXolo i.e. Dumezulu, Thulawayeka, Mbecuka and Nkampungini;
- ⊗ KwaMadlala i.e. Sentombi, Cabhane and Mambili;
- ⊗ Oribi Flats, Paddock, Bhosiki etc; and
- ⊗ KwaLushaba i.e. Mgolobi.

These settlements are deeply rural with unique features such that each homestead has more than one dwelling, cattle kraal or chicken coop, home burial and on-site disposal pit. These are the practices that have persisted for a long time within the rural environment but are prohibited within the urban areas.

8.1.6 INFORMAL SETTLEMENTS

There are four informal settlement areas which are Bhobhoyi (1100 households), Louisiana (1000 households), Masinenge (542 households) and Mkholumbe (1600 households). These settlements are located in the inland areas of the municipal area with only Masinenege Informal Settlements located within the Coastal Town of Margate. Informal Settlement Upgrade

projects are currently underway in the eradication and upgrading of the informal settlements.

8.2 SETTLEMENT DENSITY

8.2.1 HIGH DENSITY URBAN SETTLEMENTS

The urban settlements have the highest density. The areas that are leading include the main notable towns such as Port Shepstone, Margate, Port Edward, Hibberdene, Gamalakhe, Ezingolweni and coastal towns. This is due to the existence of flats and other high rise buildings. Each household occupy less than 1 ha within these areas.

8.2.2 DENSELY POPULATED RURAL SETTLEMENTS

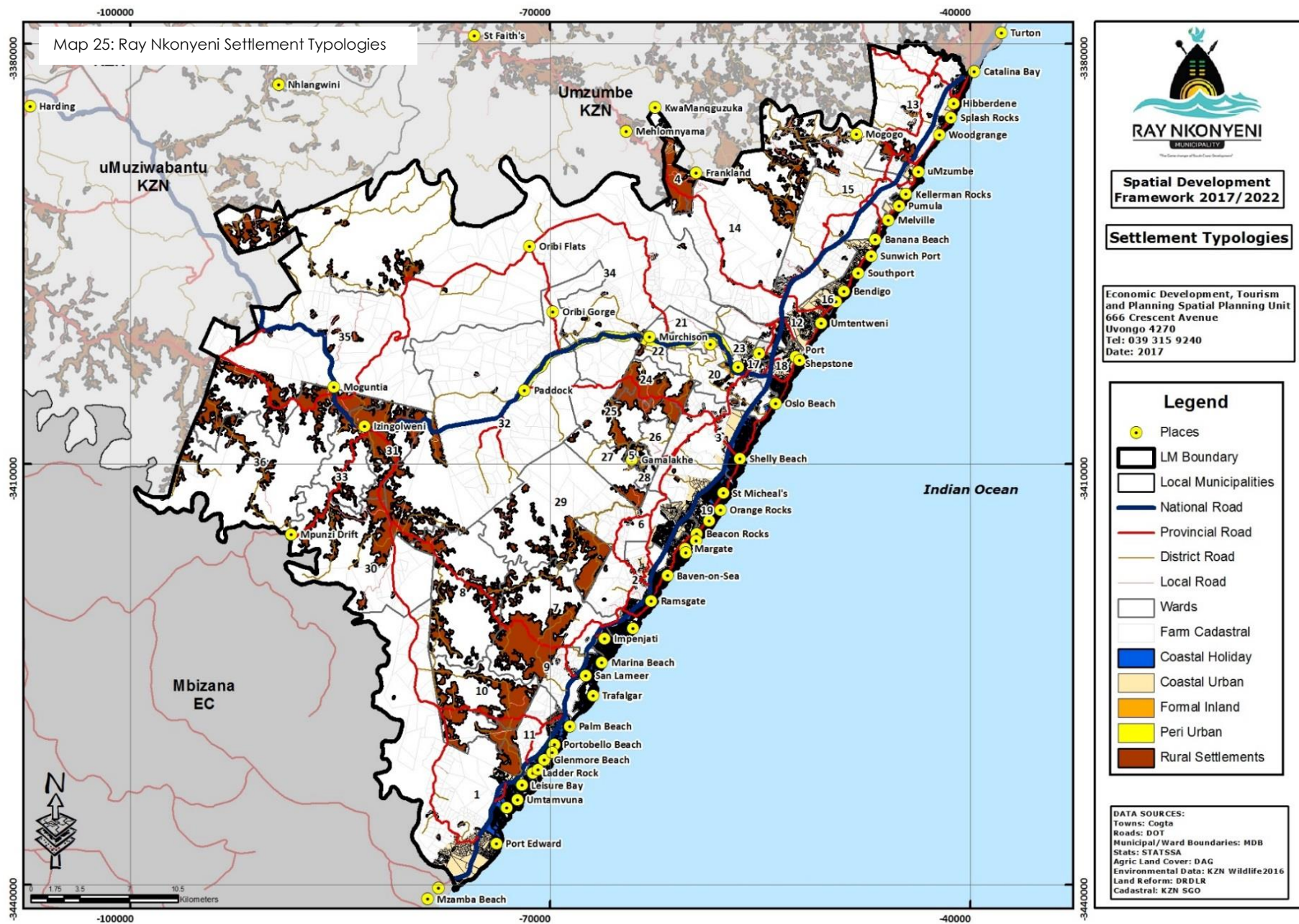
Image 1: Murchison Densely Populated Settlement along N2



The densely populated rural settlements are found along the main roads. These are KwaXolo (i.e. Gcilinga, Enkulu and Duzane), KwaNdwalane/ Nsimbini (i.e. Murchison Flats, Boboyi, Madakane and Nyandezulu) and KwaMavundla (i.e. Thafeni and Nsangwini). Each homestead occupy between 0.6 – 1.0 ha within these settlements.

8.2.3 LOW DENSITY RURAL SETTLEMENTS

The low density settlements are mainly outlying peri pheral settlements which include KwaXolo (i.e. Dumezulu, Thulawayeka, Mbecuka and Nkampini), KwaMadlala (i.e. Sentombi, Cabhane and Mambili), Oribi Flats, Paddock, Bhosiki and KwaLushaba (i.e. Mgolobi). Each homestead occupy between 5 – 10 ha within these settlements.



8.3 BROAD LAND USE PATTERN

8.3.1 COASTAL TOURISM TOWNS AND SURROUNDING SUBURBS

There are a number of coastal tourism towns that are located along Marine Drive, Ocean Drive and Finnis Road. These towns are also surrounded by associated formal suburbs. These towns have a number of commercial and entertainment activities within it which were introduced in order to embolden this tourism environment.

8.3.2 URBAN TOWNS AND SURROUNDING SUBURBS

The main urban centres within the area are Port Shepstone, Hibberdene, Margate and Port Edward. These serve as the main towns for the municipal area with the highest agglomeration of commercial activities. These towns are surrounded by the associated formal suburbs including Gamalakhe.

8.3.3 RURAL TOWN AND SURROUNDING PERI-URBAN SETTLEMENTS

Ezingolweni is the main rural town that is found within the municipal area. It is surrounded by the densely populated rural settlements which have grown around it over the years.

8.3.4 RURAL VILLAGES AND SETTLEMENTS

The majority of the inland area is occupied by rural villages and settlements. These are spread within different parts of the administrative boundaries of traditional authorities. These villages and settlements have a number of commercial and social activities within it. The kind of commercial

activities are limited to small local convenient shops, taverns as well as scale manufacturing activities (block making) and personnel services such as salons and small scale agricultural activities (ploughing field and food gardens).

8.3.5 COMMERCIAL AGRICULTURE

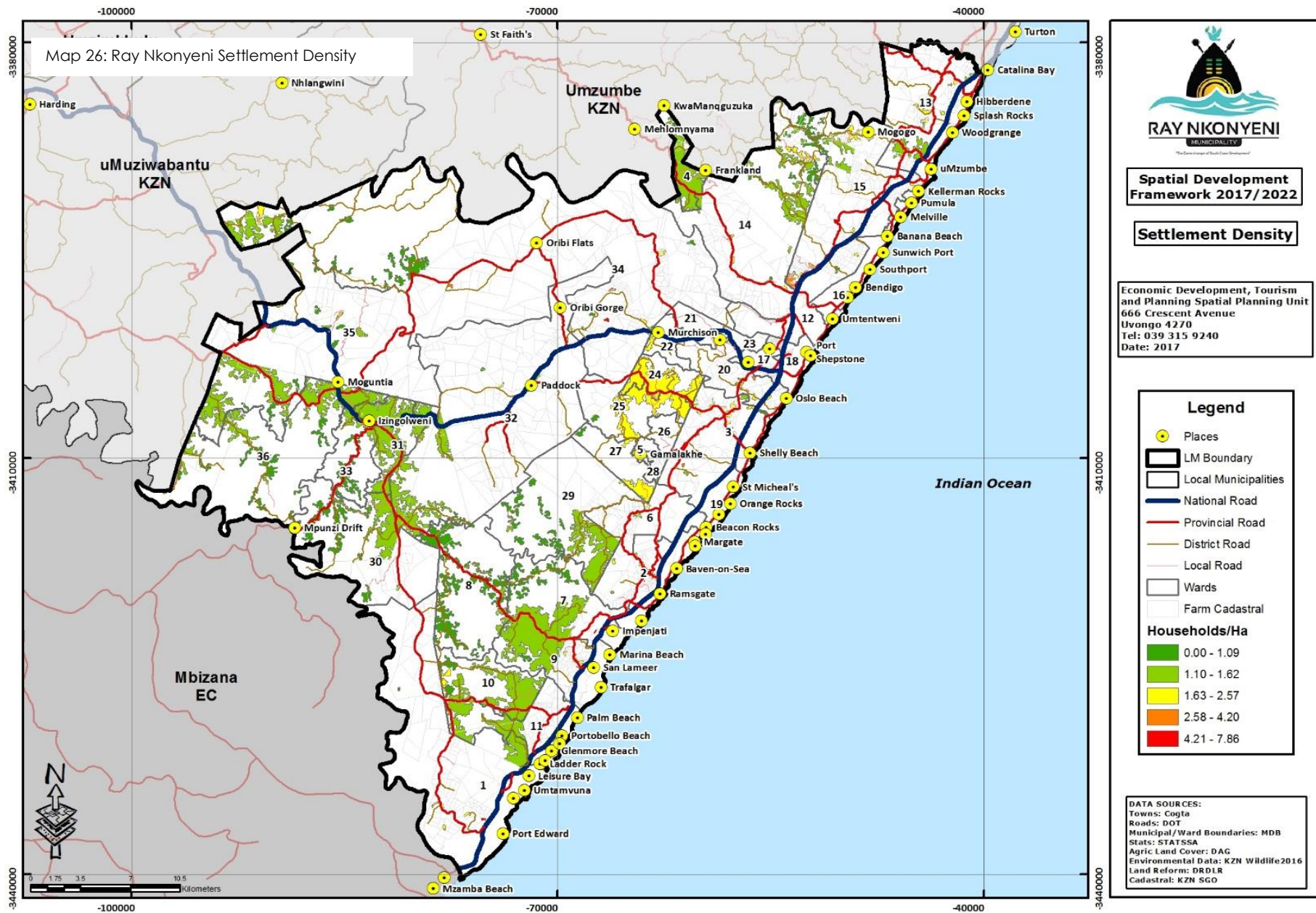
Ray Nkonyeni Municipality has an abundant amount of agricultural land which is geographically located between the urban and rural areas in the form of commercial agricultural farms. The agricultural pattern within the area is primarily due to the undulating topography, which prescribes the available land parcels out of the valley lines and along other major structuring elements. The agricultural industry is a prominent feature within the KwaZulu-Natal south coast, and therefore becomes a predominant land use within the area. The predominance is due to the rich natural resources and climatic conditions, which allow for the farming of produces such as sugar, bananas, pawpaw's, coffee, tea and exotic nuts along the coast, maize, legumes, cattle, vast pine, wattle and eucalyptus plantations inland.

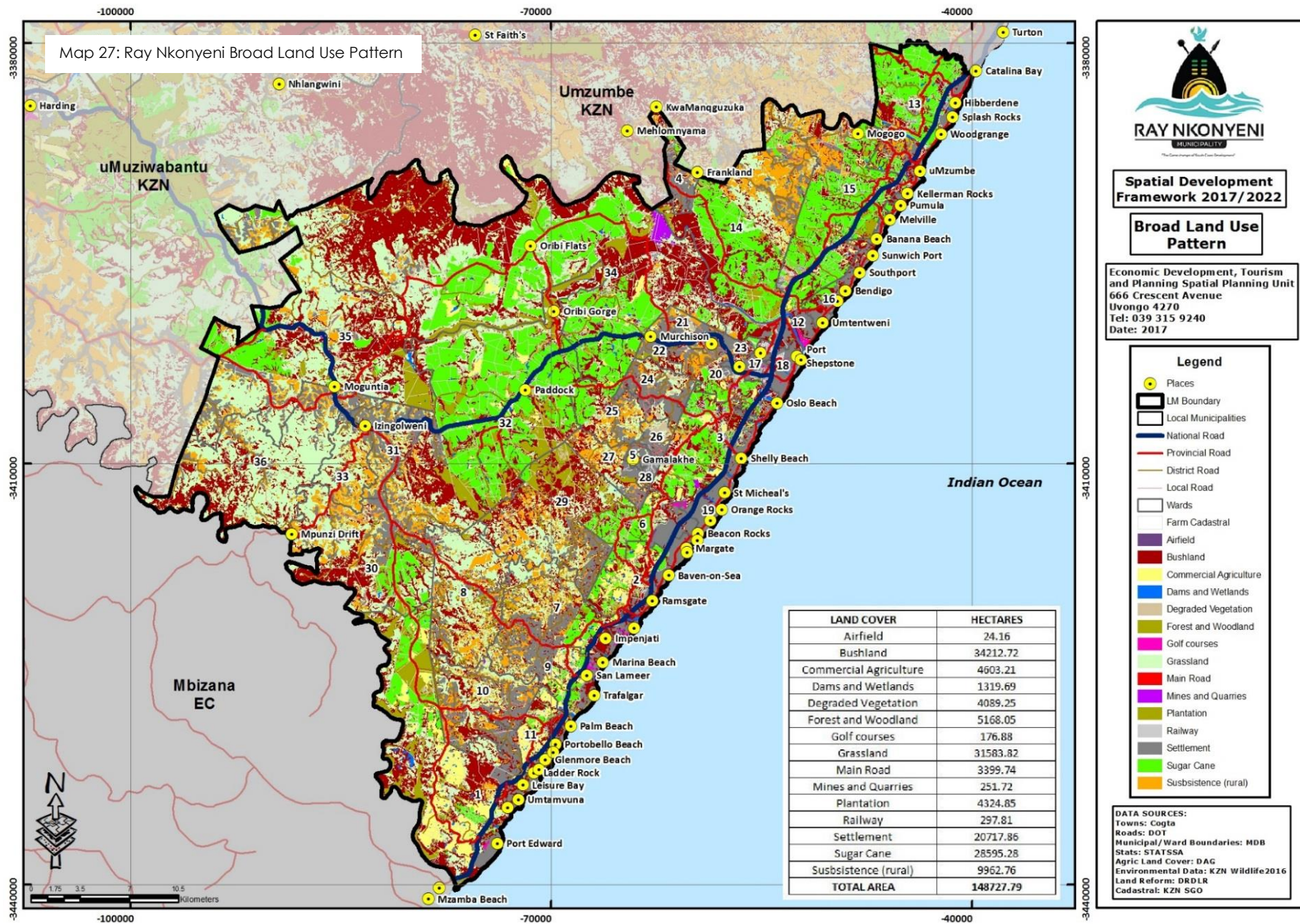
8.3.6 ENVIRONMENTAL AREAS

There are six declared formal conservation areas which are Umtamvuna, Mbubazi, Mpenjati, Skyline, Oribi Gorge and Umzimkhulu river valley Nature Reserves. There are also a number of unprotected environmental areas within the area which are undeveloped /untransformed and consist of grassland, dense bush and forests. High biodiversity areas represent a substantial fraction of the area. High biodiversity areas occur in discrete pockets within the municipal landscape, with larger portions located in the southern part of the municipality. The intrinsic value of these areas lies in its ecological and tourism development potential.

8.3.7 INDUSTRIAL HUBS

Izotsha Industrial Development Corridor which is a theatre of manufacturing and storage/ warehouse activities within the municipal area. The coverage of this area stretches to include properties located along the Izotsha Road, N2 and R102. Other industrial activities are found in towns such as Marburg and Port Shepstone which also extensively contribute in the economic growth of the municipality. The municipality has identified land along Izontsha Corridor and Hibberdene and Margate for future industrial development. Some of the projects which are in the pipeline within the industrial hubs include Technology Hub. This is to be located in Izotsha Corridor on REM of ERF 494 Shelly Beach and the site is 60 hectares. The project will house residential, mixed use residential, commercial and light industry.





8.4 LAND LEGAL ISSUES

8.4.1 LAND OWNERSHIP

Land ownership within Ray Nkonyeni is diverse but the dominant owner within the inland is Ingonyama Trust, most of the land is privately owned within the coastal urban areas and the farms are either privately or owned by corporate. The remaining intermediate pockets are under the ownership of the state, association, trust or church owned.

8.4.2 LAND REFORM

There are a number of land claims that were lodged within Ray Nkonyeni. However few of these claims were transferred into projects. There are also a number of gazetted restitution claims within the area. According to the IDP, there are two programmes that are currently running namely, the Land Restitution Programme and Land Re-distribution Programme.

8.5 LAND USE MANAGEMENT

SPLUMA requires all municipalities across the country to develop and adopt “Wall-to-Wall Schemes” throughout their area of jurisdiction. This must take place within 5 years from the commencement of the Act. In addition, SPLUMA requires that the wall-to-wall scheme be reviewed every after 5 years in order to achieve consistency within the Municipal SDF. A large portion of Ray Nkonyeni Municipality is covered by the Scheme which was refined and adopted in December 2015. However, this scheme need to be extended to cover the entire municipal area particularly the pressure points such as Ezinqoleni. It must contribute towards sustainable development, and

improve governance (as it relates to land use management) within Ray Nkonyeni. As such, alignment and integration with the other tools (land audit, valuation roll, etc.) should be maintained. The introduction of the scheme in rural areas should:

- ❖ Provide for the participation of municipal officials in all land allocation processes as undertaken by traditional councils.
- ❖ Involve the participation of local communities in Ray Nkonyeni, particularly traditional councils and other structure that are responsible for spatial planning and land allocation;
- ❖ Include the development of maps, systems and procedures for effective decision making to guide traditional councils in the execution of this function.
- ❖ Incorporate the KwaZulu-Natal Rural Land Use Norms and Standards as soon as these are gazette.

8.6 TRANSPORT NETWORK

An extensive road network exists in Ray Nkonyeni, providing a large number of households with access to road transport. While the national and provincial roads are in a generally good condition, the quality of district and local roads is poor. This is mainly because these roads are gravel they require regular maintenance and upgrading. During the rainy season, these roads are particularly bad and hamper access to settlements.

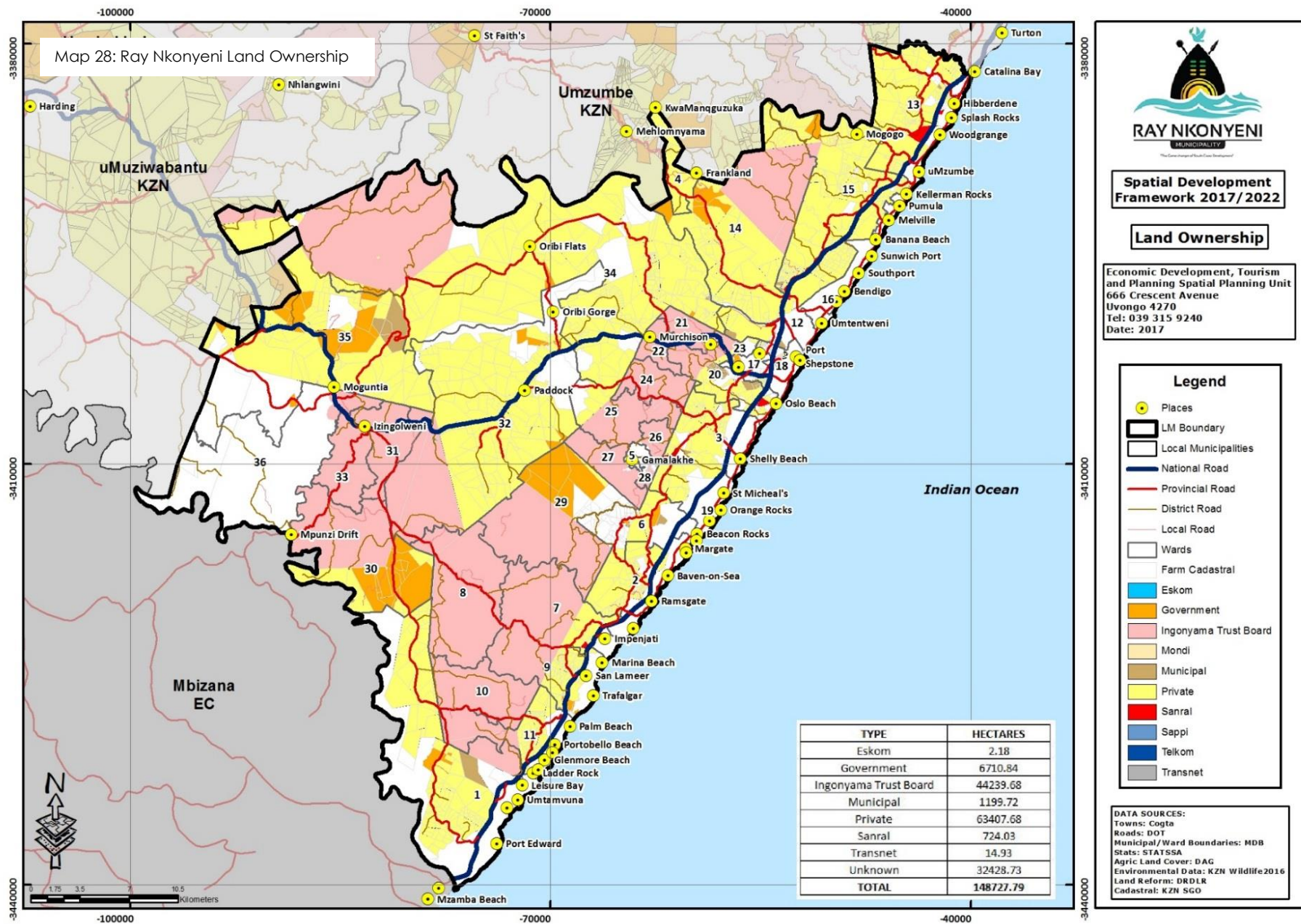
8.6.1 REGIONAL ROAD NETWORK

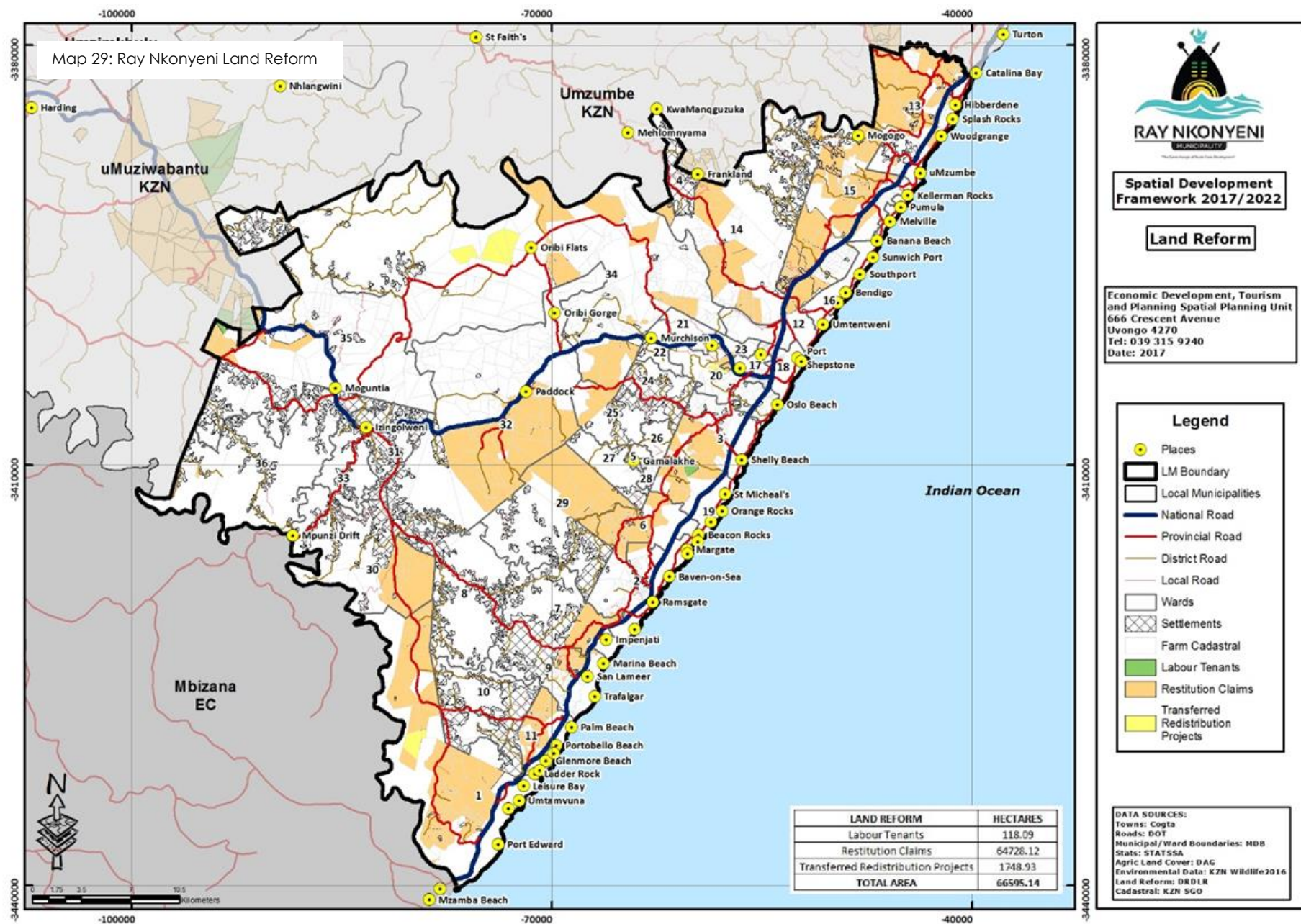
The N2 is the primary north-south regional linkage route. It links Port Shepstone in the South with Durban in the North. The N2 also links Port Shepstone with Kokstad as an east-west linkage. The section of the N2 which runs in the north-south direction up to Port Shepstone is of freeway standard, and comprises of 4 lanes, 2 lanes in each direction for most

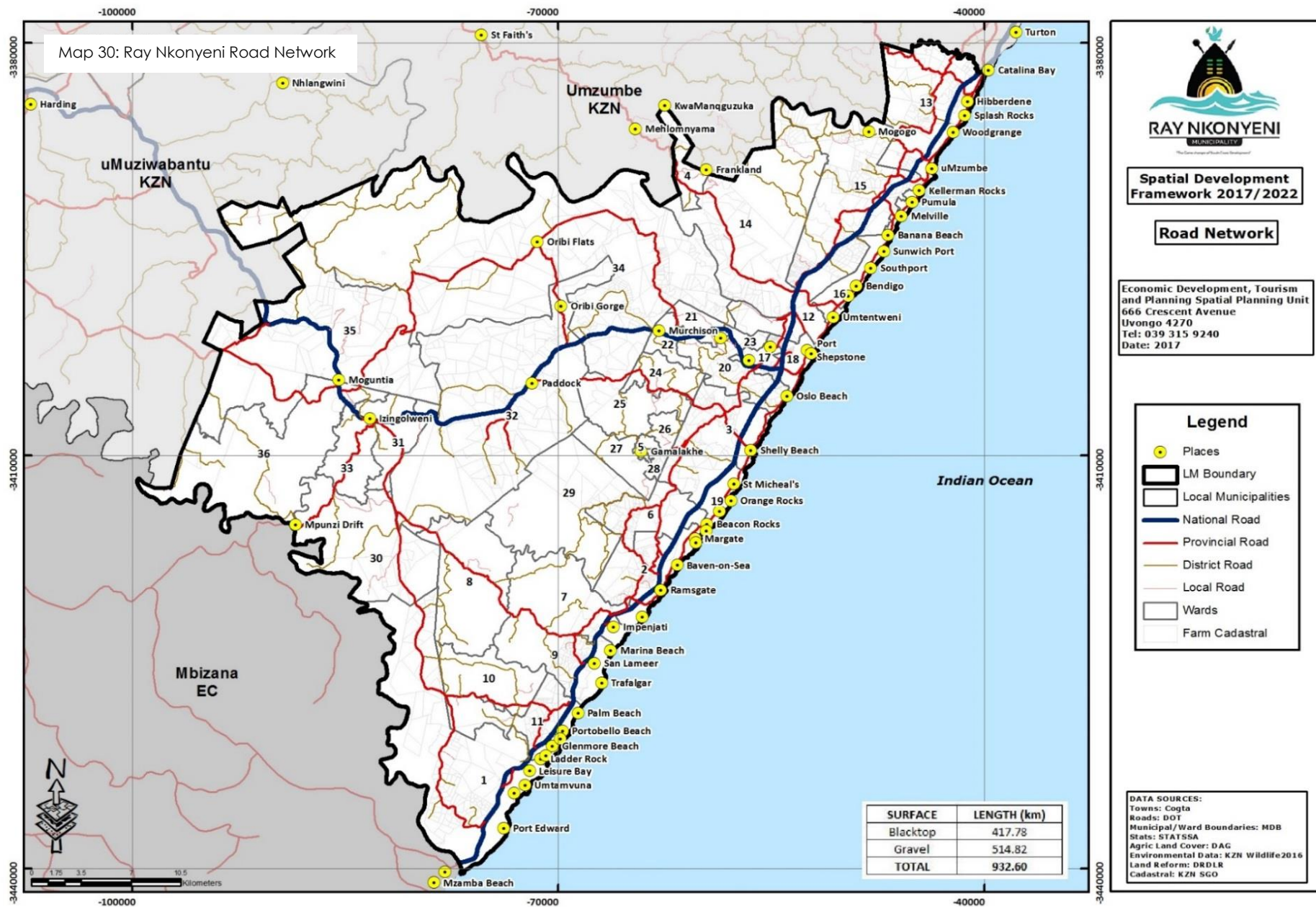
parts. The N2 is regarded as a generator for growth, particularly between Port Shepstone and Harding. This is the main high level limited access mobility road and is component part of the Provincial “Corridor” system. Interchanges link this road to the Regional major arterials that give access to both formal urban settlements and most of the rural settlement clusters that occur mostly within Traditional Authority areas.

8.6.2 PRIMARY ROAD NETWORK IN RAY NKONYENI

Some of the main provincial roads within the study area include the R102, R61, R612 and the R56. R102/R61: The R102/R61 is termed the ‘beach road’ and it runs in the north-south direction along the coast, linking the various coastal towns. The provincial roads are predominantly in the east-west direction and provide high levels of accessibility linking into the minor arterials. This network of provincial roads functions as primary transport corridors. The regional road network can be classed into either surfaced (blacktop) or un-surfaced (gravel), which can be further classified into a north-south link or an east-west link. There are also District Roads. The district roads provide major internal linkage, linking schools, clinics etc. A problem that faces the municipality is the alignment of KZNDOT implementation projects with that of the municipality’s implementation projects.

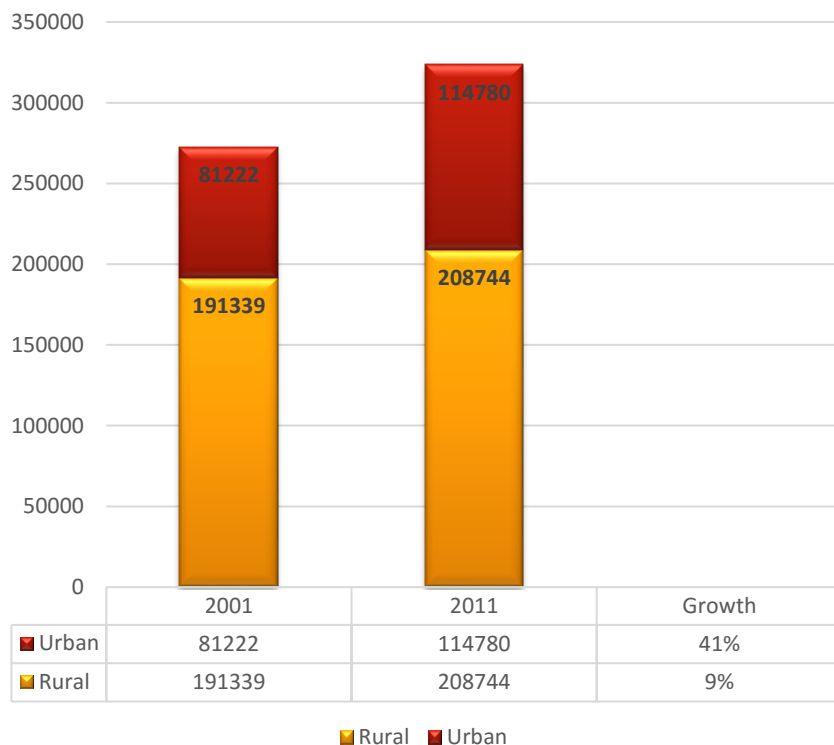






8.7 URBANISATION AND POPULATION OUT-MIGRATION

Figure 5: Urbanisation and Population Outmigration



Statistics SA: Census 2001 and 2011

The urbanization process and the rural population out-migration do not seem to be taking place within Ray Nkonyeni. Urbanization is the increasing number of people that migrate from rural to urban areas and mainly results in the physical growth of the urban areas. The urban population is

increasing much faster than the rural population; however this cannot be purely concluded as the process of urbanization since rural population is also notably increasing within Ray Nkonyeni Municipal Area. Comprehensive analyses of population statistics at ward level by place from 2001 – 2011 suggest the following:

- ✧ The urban population increased by an overall 41%;
- ✧ The rural population increased by an overall 9%; and
- ✧ This suggests that there is an external movement of people who relocate to Ray Nkonyeni from other areas.

The following can be noted with regards to rural population:

- ✧ KwaNdwalane (-14%), KwaNzimakwe (-15%), Mthimude (-28%) and Manyuswa (-23%) are areas that experienced a decline in population;
- ✧ Most of the population grew outside of the traditional authority areas. These include the farming areas and peri-urban settlements with a population that grew by 45%;
- ✧ KwaMavundla recorded the highest growth rate than any other tribal areas. The population grew by approximately 27%; and
- ✧ The population of KwaXolo tribal council does not seem to be increasing.

The urban areas that have declined in terms of population are Gamalakhe Township and Ezinqoleni where each of these declined by -6%. The other urban areas have increased in terms of population growth with Sea Park that has recorded a highest growth of approximately 83%. This is followed by Ramsgate and South Broom which grew by 73%.

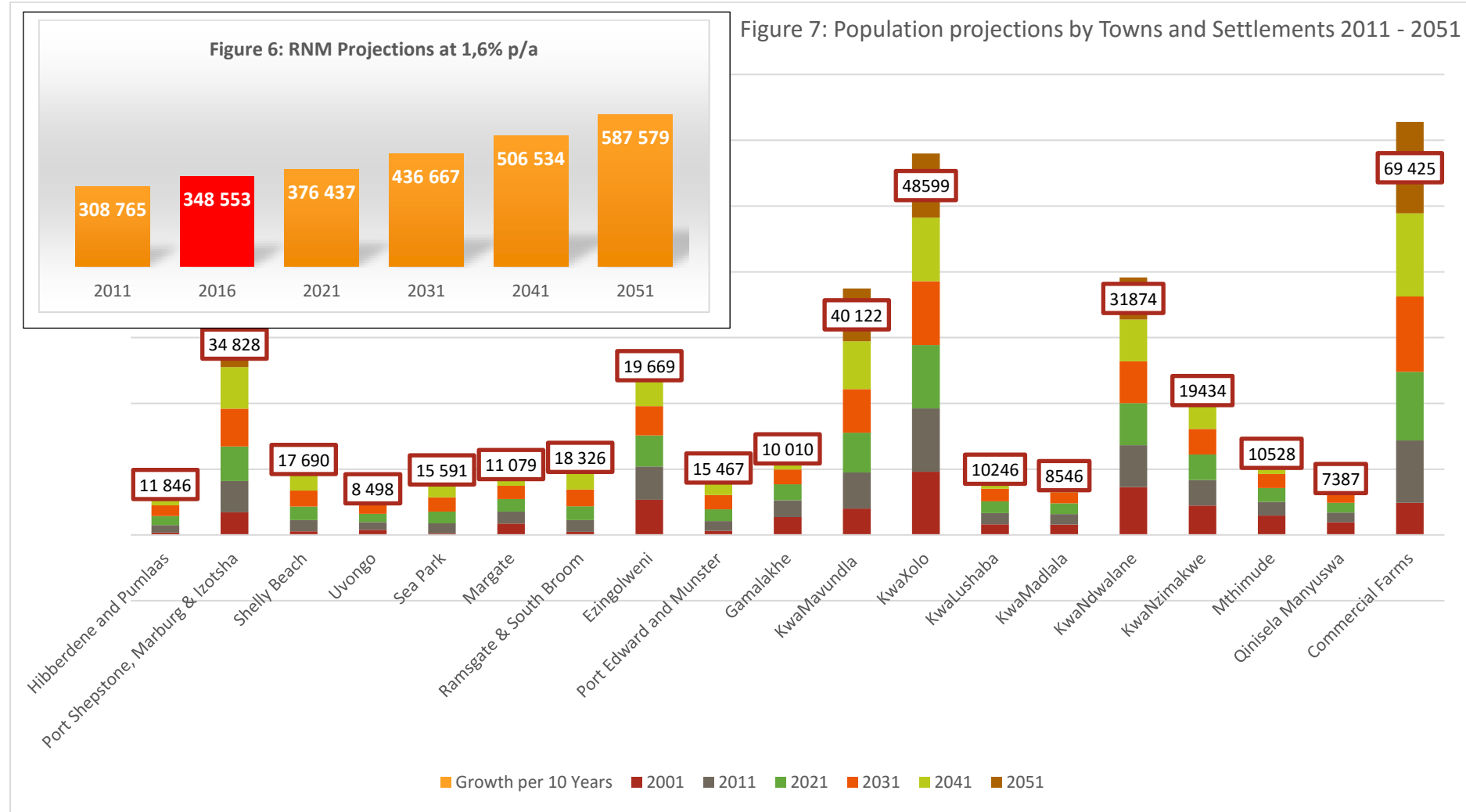
Table 2: Urbanisation and Population Out-migration

RURAL SETTLEMENTS	CENSUS 2011		CENSUS 2001		% CHANGE
	WARDS	POPULATION	WARDS	POPULATION	
KwaMavundla	25, 27 & 28	27404	12	20066	37%
KwaXolo	5, 7, 8, 9 & 29	48139	6	48024	0%
KwaLushaba	4	8534	7	8106	5%
KwaMadlala	14	8026	8	7896	2%
KwaNdwalane	21, 22, 23 & 24	31874	16	36335	-12%
KwaNzimakwe	10 & 11	19434	17	22279	-13%
Mthimude	5	10528	2	14661	-28%
Qinisela Manyiswa	1	7387	4	9622	-23%
Commercial Farms	12, 15 & 20	47418	1, 2, 5, 11, 14, 18, 23, 25, 28, 29, 30, 31, 32 & 33	24350	95%
TOTAL		208744		191339	9%

URBAN SETTLEMENTS	CENSUS 2011		CENSUS 2001		% CHANGE
	WARDS	POPULATION	WARDS	POPULATION	
Hibberdene and Pumlaas	13	5713	4, 13 & 21	1749	227%
Port Shepstone, Marburg & Izotsha	18, 17 & 20	23788	20, 9 & 35	17222	38%
Shelly Beach	3	8531	26	2713	214%
Uvongo	19	5804	34	3879	50%
Sea Park	16	7519	24	1249	502%
Margate	6	9115	10	8654	5%
Ramsgate & South Broom	2	8838	22 & 27	2352	276%
Ezingolweni	2, 3 & 6	25192	5	26757	-6%
Port Edward and Munster	1	7459	15 & 19	3077	142%
Gamalakhe	26	12821	3	13570	-6%
TOTAL		114780		81222	41%

Statistics SA: Census 2001 and 2011

8.8 POPULATION GROWTH ESTIMATES: 2011 – 2051



8.9 LANDSCAPE CHARACTER AND BUILT FORM

The landscape character and built form for Ray Nkonyeni Municipal area can be segregated into four categories which are as follows:

- ❖ Coastal Strip – Ray Nkonyeni area is also referred to as the 'South Coast' due to its popular scenic beaches. This part is characterized by outstanding landscape character and built form. It is developed with medium to high density buildings that boosts with modern and ambitious architectural styles. The municipality has a responsibility to enhance and maintain this landscape and built form i.e. this part can be considered to be jewel of the Ray Nkonyeni.
- ❖ Urban (Inland) – this includes formal suburbs and townships within close proximity to main routes. These areas are characterized by formal low-rise and uniform structures.
- ❖ Farmlands (Inland) – the inland are also occupied by farms which deal with sugar cane or Banana production. The farms present a rather natural landscape which is less clouded by built form.
- ❖ Rural (Inland) – the rural areas do not boost with aggressive architectural styles nor built form. However, there are signature buildings that exist within different parts of it and these include social facilities such as clinics, community halls and Thusong Centres.

Images 2: Landscape Character of Ray Nkonyeni



8.10 DISASTER MANAGEMENT AREAS

8.10.1 BACKGROUND

Ray Nkonyeni Municipality has a dedicated disaster management centre which is responsible for the management of disasters within the area. However, this unit is understaffed as it only has two persons per shift. These personnel have been seconded from Fire and Rescue services to communication and are not dedicated for Disaster Management. The centre has telecommunication equipment including two way radios, cell phones and land telephone lines and facsimile services.

There are no backup electricity services which will make the centre vulnerable during an extreme event. As such Ray Nkonyeni has prepared a Disaster Management Plan in order to minimize, reduce and eradicate any risk that the area may face due to disasters. This plan indicates that a disaster can be caused by humans or nature since these are events that are sometimes unpredictable. The natural disasters include floods and lightning while the human induced disasters may include fires and accidents.

It also states that disasters and development have both a negative and positive relationship, this relationship needs to be recognised and managed to achieve sustainable development. In a negative sense, disasters can destroy development or uncontrolled, improper development can cause disasters. In a positive sense, disaster can create an opportunity for more resilient development and proper development can reduce the risk of disasters occurring.

The Disaster Management Plan further points out that badly planned development in a floodplain increases disaster risk by making the new

community vulnerable to flooding, which would constitute a disaster. The development of well-planned and effective flood defence measures can decrease the vulnerability of the community and thus contribute to disaster risk reduction. Disasters are inevitable although we do not always know when and where they will happen. But their worst effects can be partially or completely prevented by preparation, early warning, swift and decisive responses.

8.10.2 NATURAL HAZARDS

Using the detail disaster hazard, vulnerability and risk assessments of Ray Nkonyeni it was possible to compile appropriate GIS profile maps. These GIS-profile maps summarise the disaster hazard, vulnerability and risk analysis. Hence, these profile maps indicate the risk profile of the Ray Nkonyeni area of jurisdiction. Most of the disasters are anticipated along the coastal area. There are eight eminent disasters within the area which can be listed follows:

- ⊗ Aircraft accident
- ⊗ Hazardous installation
- ⊗ Fire
- ⊗ Transport routes
- ⊗ Flooding
- ⊗ Flooding and transport route
- ⊗ Extreme weather
- ⊗ Storm surge

This may be due to the possibility of flooding as many major rivers diverge within this part of the municipal area to join Indian Ocean. The vulnerability of these coastal areas to natural disasters, such as floods and droughts, is greater than inland areas due to their location at the end-point of the system. The impacts of upstream activities are therefore magnified in

coastal areas. Further to this, the coastal areas are also vulnerable to natural disasters, such as storm surges, as they are located at the interface between land and sea. The vulnerability of these areas to natural disasters, such as the 2008 floods, is projected to increase with sea level rise and the increase in the frequency and intensity of storm events.

8.11 ENVIRONMENTAL ANALYSIS

8.11.1 RIVERS, HYDROLOGICAL WATER FEATURES AND ECOSYSTEM

The Municipality is richly blessed with numerous naturally occurring water bodies which range from riverine systems, wetlands, wet marshes and most importantly the ocean. Most rivers run in an easterly direction from high altitudes and finally channelling into the warm Indian Ocean. The most important rivers in the context of the Municipality are:

- ❖ Mzimkhulu River;
- ❖ Mtamvuna River;
- ❖ Mbizana River;
- ❖ Vungu River;
- ❖ Mzumbe River; and
- ❖ Mzikhulwane River.

The banks of these rivers contain high value biodiversity such as natural vegetation and ecosystems. The Municipality is also characterised by a number of wetlands areas which are connected to the major catchments areas such as the rivers and the ocean. As can be seen on the Table below the Mzimkhulu and Mtamvuna are the two major perennial rivers found in Ray Nkonyeni. According to the Ugu Biodiversity Sector Plan (2014) the sub-quaternary catchments for the Mzimkhulu, Mtamvuna and portions of the Mtwalume catchment have been identified as National Freshwater Ecosystem Priority Areas (NFEPA) which are a priority for meeting national aquatic conservation targets. Furthermore, it is also important to note that

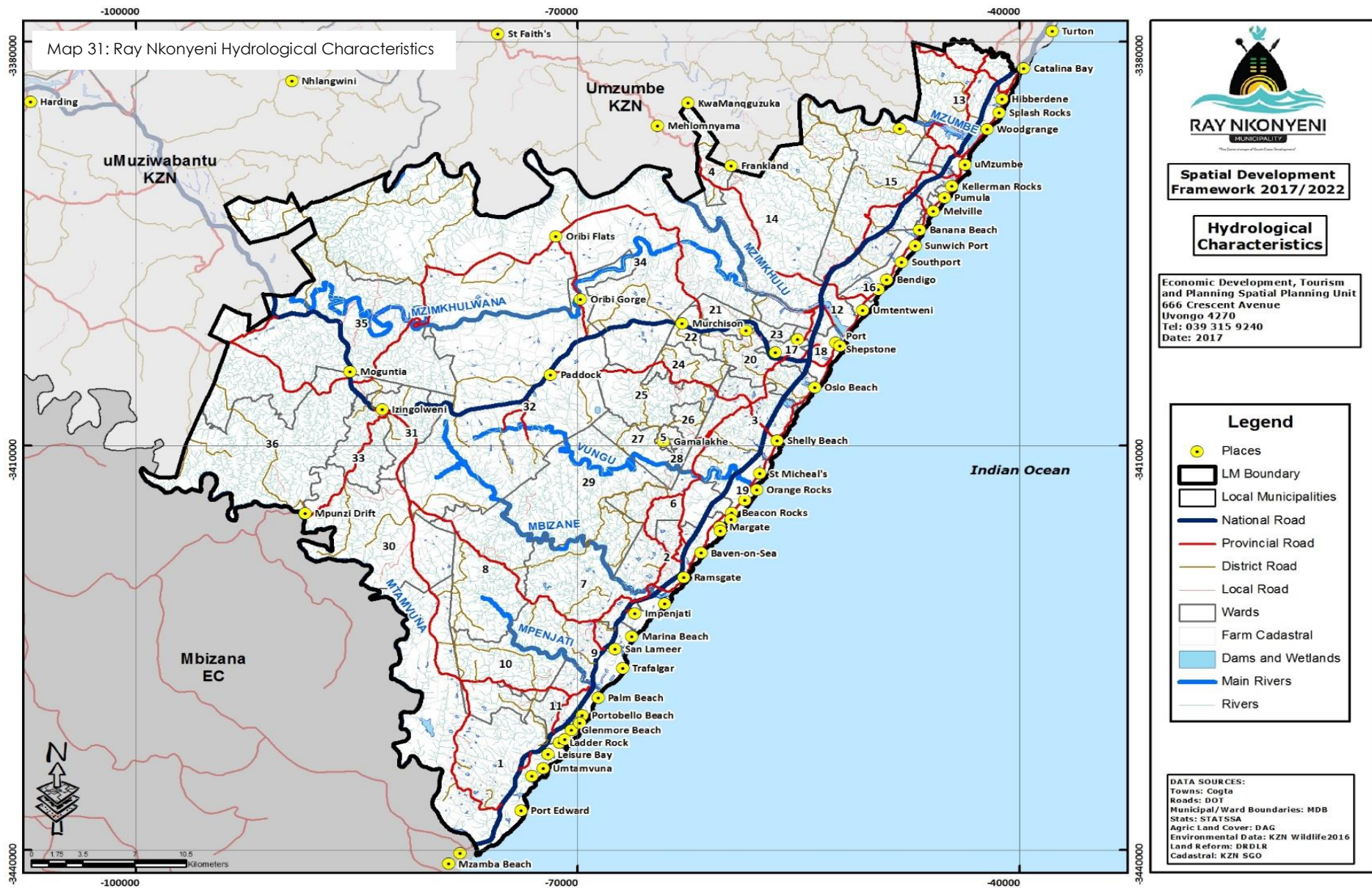
these two major perennial rivers are identified as being in a good condition (A/B class) despite the current levels of modification in the district (Ugu Biodiversity Sector Plan). In the context of Ray Nkonyeni, the Uvungu River is identified as being moderately affected by modification (C-class).

Table 3: Water Resources and Freshwater Ecosystem

WATER RESOURCES AND FRESHWATER ECOSYSTEM PRIORITIES			
Feature	Description	Desired State	Length (km)
Mtamvuna River	The Mtamvuna has formed prominent steep-sided river valleys that extend a considerable distance inland to drain the western inland regions of the District. This river is also free flowing (lacking significant impoundments) which is significant given the levels of impoundment in most South African rivers.	This river is currently in a good condition and should remain so. It should receive top priority for retaining its free-flowing character (i.e. no impoundments). This means that land-use practices or activities that will lead to deterioration in the current condition of a river FEPA are not acceptable.	144.1
Mbizana River	This river has a continuous flow in parts of its stream bed all year round during years of normal rainfall.	Moderately modified, a loss and change of natural habitat and biota have occurred but the basic ecosystem functions are still predominantly unchanged. This means that land-use practices or activities that will lead to deterioration in the current condition of a river FEPA are not acceptable	32.1
Vungu River	This river has a continuous flow in parts of its stream bed all year round during years of normal rainfall.	Moderately modified, a loss and change of natural habitat and biota have occurred but the basic ecosystem functions are still predominantly unchanged. This means that land-use practices or activities that will lead to deterioration in the current condition of a river FEPA are not acceptable	32.6
Mzikhulwana River	This river has a continuous flow in parts of its stream bed all year round during years of normal rainfall.	Largely natural with few modifications, a small change in natural habitats and biota may have taken place but the ecosystem functions are still predominantly unchanged. This means that land-use practices or activities that will lead to deterioration in the current condition of a river FEPA are not acceptable	141.9

WATER RESOURCES AND FRESHWATER ECOSYSTEM PRIORITIES			
Feature	Description	Desired State	Length (km)
UMzimkhulu River	UMzimkhulu River has exactly the same characteristics as the Mtavuma River both the rivers have formed prominent steep-sided river valleys that extend a considerable distance inland to drain the western inland regions of the District. These two rivers are also free flowing (lacking significant impoundments) which is significant given the levels of impoundment in most South African rivers.	This river is currently in a good condition and should remain so. It should receive top priority for retaining its free-flowing character (i.e. no impoundments). This means that land-use practices or activities that will lead to deterioration in the current condition of a river FEPA are not acceptable.	130.5
Mpenjanti River	Mpenjanti River emerges within the inland of Ray Nkonyeni and it runs up to the Indian Ocean to form an estuary. There are extensive sugar fields and orchards located on the middle to lower coastal parts of the municipality. It is part of Mpenjanti Nature Reserve and Estuary.	The storage regulation in this water resource zone is low and the only dams in the area include a number of small farm dams in tributaries and a few Instream dams. Land use activities in the water resources zones generally include cultivation (mostly sugar cane with some orchards). Rural settlements are usually located more inland with semi-urban and urban areas towards the coast.	15.4
Mzumbe River	This river has a continuous flow in parts of its stream bed all year round during years of normal rainfall.	Largely natural with few modifications, a small change in natural habitats and biota may have taken place but the ecosystem functions are still predominantly unchanged. This means that land-use practices or activities that will lead to deterioration in the current condition of a river FEPA are not acceptable	75.4
Wetlands	There are numerous relatively small wetland areas scattered throughout the Hibiscus Coast LM, as with rivers the development buffer around wetlands is dependent on the local situation such as the type of activity and may extend beyond the statutory 20m	All wetlands should be protected from development impacts. Wetlands that are in a good condition should remain so. Wetlands that are not in a good condition should be rehabilitated to their best attainable ecological condition. This means that land-use practices or activities that will lead to	

WATER RESOURCES AND FRESHWATER ECOSYSTEM PRIORITIES			
Feature	Description	Desired State	Length (km)
	note that for particular activities within 32metres of the edge of a wetland, environmental authorisation is required from the relevant environmental authorities (NEMA EIA regulations 2010)	deterioration in the current condition of a wetland are not acceptable, and land-use practices or activities that will make rehabilitation of a wetland difficult or impossible are not acceptable.	



8.11.2 BIODIVERSITY CONSERVATION

Ray Nkonyeni LM contains several sensitive vegetation types or areas of conservation significance. These areas have been identified as being of conservation value as they are necessary to maintain a representative sample of biodiversity and to sustain the functioning of that particular ecosystem. Note that the conservation significance of these areas is not necessarily related to their condition, but the need to conserve these sites in order to meet provincial and national conservation targets. From a national perspective, the municipality contains several Critically Endangered (CE) ecosystems, namely Interior South Coast Grasslands, Margate Pondoland-Ugu Sourveld, and Southern Coastal Grasslands, and Endangered (E) ecosystem types, namely Oribi-Port Edward Pondoland-Ugu Sourveld vegetation types.

The implications for development are that certain activities within these areas require environmental authorisation from the relevant environmental authorities and may be subject to an offset requirement (Ezemvelo KZN Wildlife (2009), Norms and Standards for Biodiversity Offsets: KwaZulu-Natal Province). From a provincial perspective, the municipality contains large natural areas which are classified as irreplaceable in terms of their conservation value. As with the above, certain activities within these areas may require environmental authorisation and an offset. There are six declared formal conservation areas which are Umtamvuna, Mbubazi, Mpenjati, Skyline, Oribi Gorge and Umzimkhulu river valley Nature Reserves.

In 2009, Ezemvelo KZN Wildlife developed a marine conservation plan which identifies the best sites for marine protected areas based species, habitats and threat data. As shown below, there are several sites of

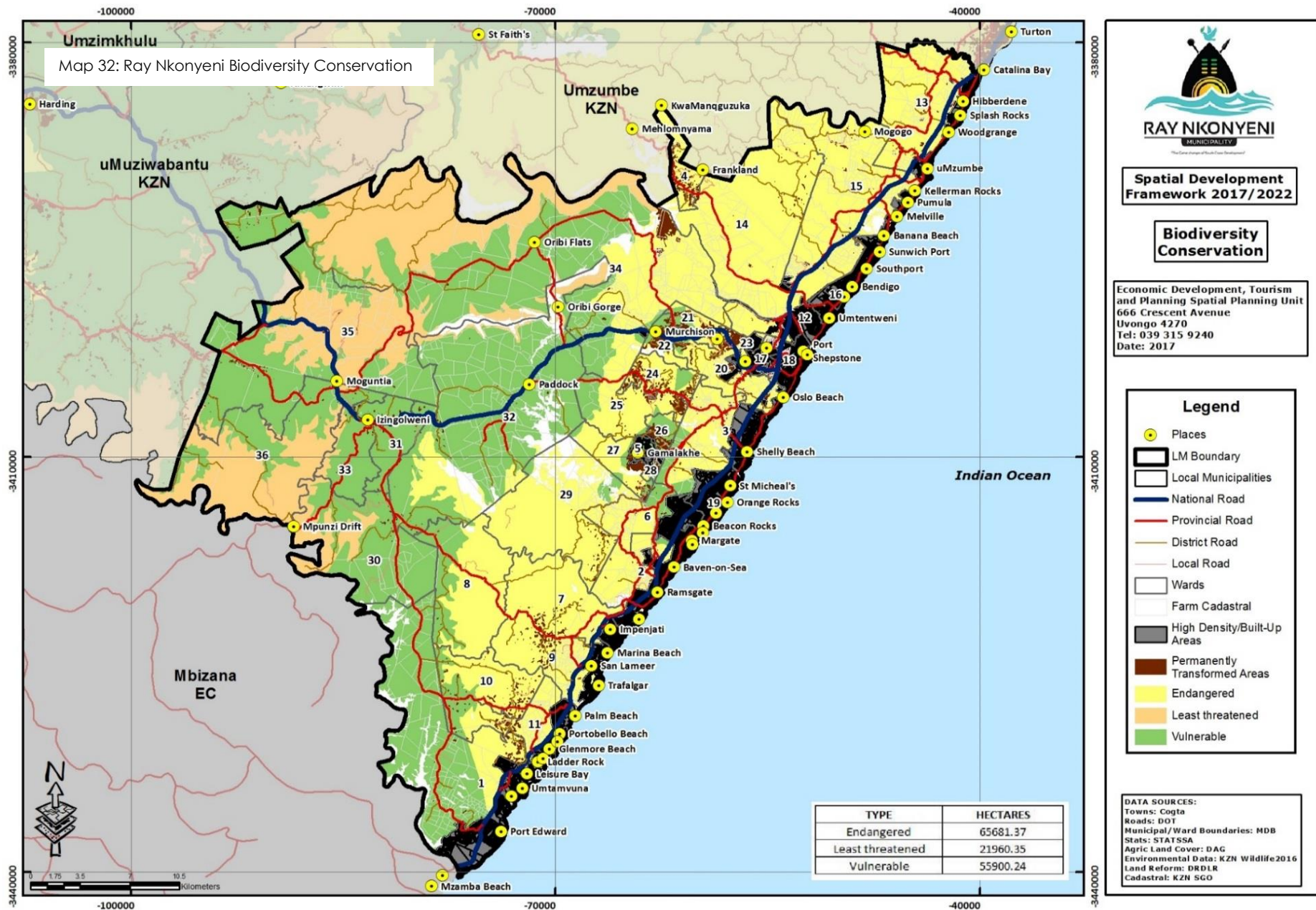
conservation significance on the coast of the municipality, particularly between Pumula and Uvongo, near Hibberdene, and approximately 10 kilometres off the coast of Shelly Beach (i.e. Protea Banks). The implications for development are that certain activities are prohibited or restricted within these marine areas of high conservation value. Further to this, there should be careful management of on-shore activities which can potentially impact negatively on the biodiversity of these areas.

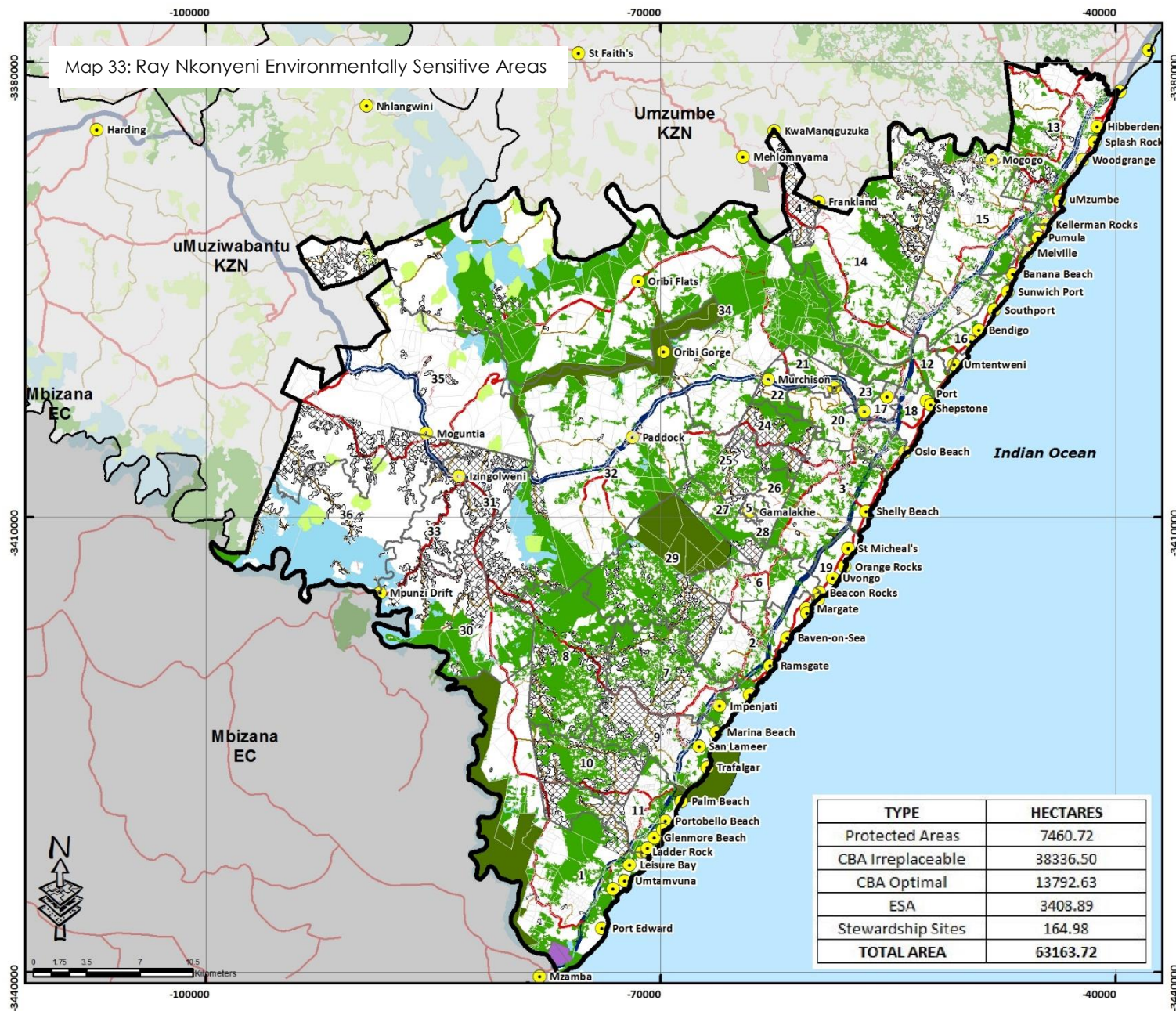
8.11.3 GEOLOGY

The soil geology of the area indicates that Ray Nkonyeni is covered by seven geological formations. The predominant is Margate gneiss, followed by Msikaba Arenites, Gneiss, Tilleite, Shale, Marble and Natal Group Arenite. Margate gneiss originates from a high grade metamorphic rock which implies that it has been subjected to higher temperatures and pressures. It is formed by the metamorphosis of granite, or sedimentary rock. Gneiss displays distinct foliation, representing alternating layers composed of different minerals. Gneiss does not preferentially break along planes of foliation because less than 50% of the minerals formed during the metamorphism are aligned in thin layers. Because of the coarseness of the foliation, the layers are often sub-parallel, i.e. they do not have a constant thickness, and discontinuous. Gneiss is typically associated with major mountain building episodes. During these episodes, sedimentary or felsic igneous rocks are subjected to great pressures and temperatures generated by great depth of burial, proximity to igneous intrusions and the tectonic forces generated during such episodes. Shale originates from Beaufort Geology Group of the Karoo Super Group, which comprises shale.

This type of geology has high potential of eroding, low potential for underground water supplies but suitable for foundations. The area's soils is moderately hydromorphic, shallow to partially shallow, sandy grey with Kroonstad (contains particles of clay subsoil) and Cartref (shallow with particles of stony soil). It is suitable for grazing, agriculture and urban development. Marble is a non-foliated metamorphic rock composed of recrystallized carbonate minerals, most commonly calcite or dolomite. Geologists use the term "marble" to refer to metamorphosed limestone; however, stonemasons use the term more broadly to encompass un-metamorphosed limestone.

Marble is commonly used for sculpture and as a building material. Natal Group Arenite is a sedimentary geological formations found in Karoo Basin region of Southern Africa. It is carbon-rich sedimentary deposit; owing to the high vegetation content of the original sediment i.e. in some instances this type of geological formation contains mineral occurrences for coal mining. In terms of construction mudstone is characterized with few serious geotechnical problems compared with other soil formations but it is significant to the construction industry because it is frequently encountered in civil engineering activities involving foundations, excavations and earthworks. Its nature is such that its properties may vary between a soil and a rock depending on its detailed lithology and its state of weathering. As a result of this, in some cases, weaker material may be found below stronger rather than the more normal weathering progression where the weakest material occurs at the surface and becomes fresher and stronger with depth.





Spatial Development Framework 2017/2022

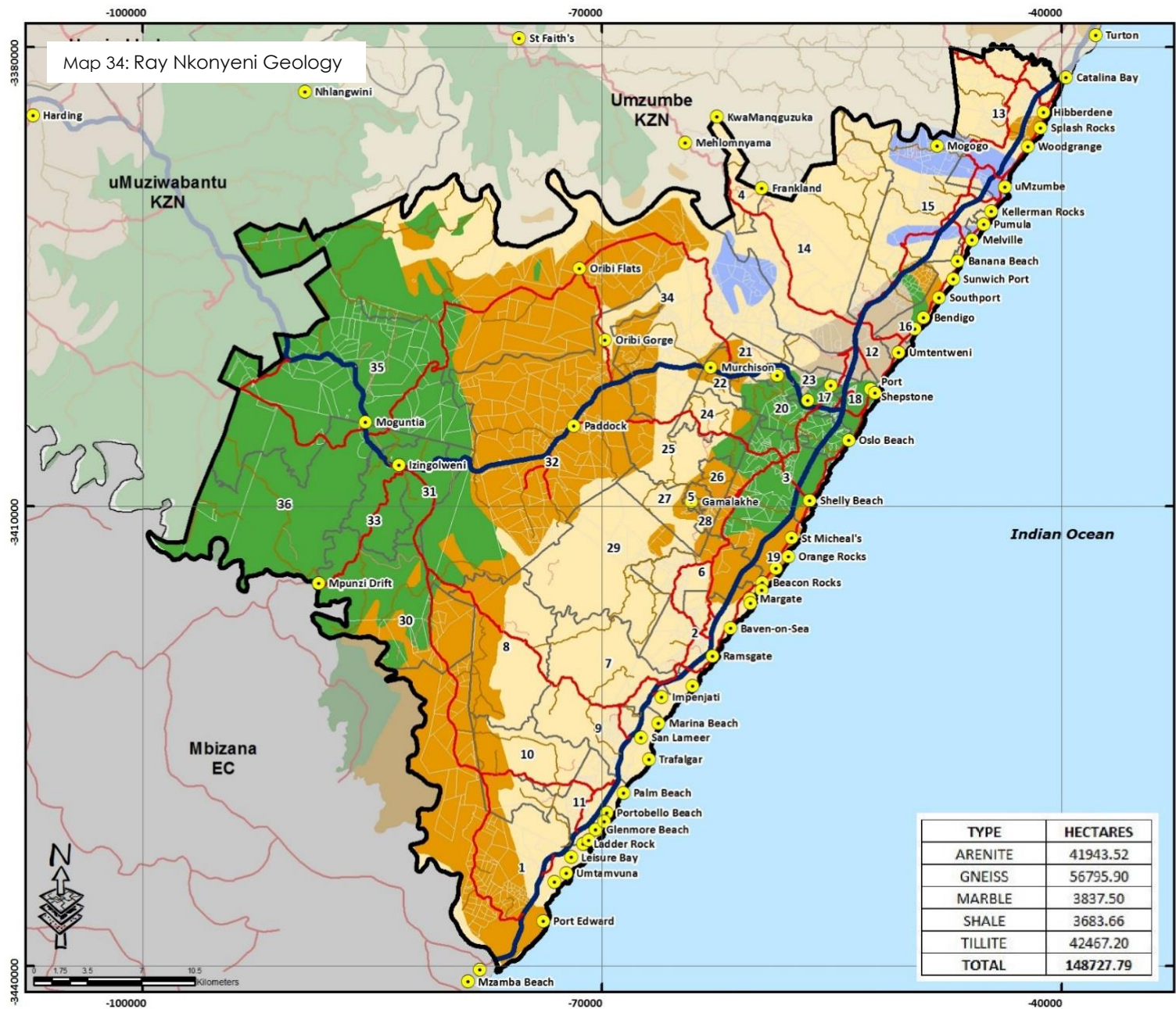
Environmentally Sensitive Areas

Economic Development, Tourism and Planning Spatial Planning Unit
666 Crescent Avenue
Uvongo 4270
Tel: 039 315 9240
Date: 2017

Legend

- LM Boundary
- Local Municipalities
- Wards
- Farm Cadastral
- Places
- Protected
- Stewardship Sites
- KZN CBA Irreplaceable
- KZN CBA Optimal
- KZN ESA
- Settlements
- National Road
- Provincial Road
- District Road
- Local Road

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Stats: STATSSA
Agric Land Cover: DAG
Environmental Data: KZN Wildlife 2016
Land Reform: DRDLR
Cadastral: KZN SGO



**Spatial Development
Framework 2017/2022**

Geology

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- Places
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- Wards
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- GNEISS
- MARBLE
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Agric Land Cover: DAG
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Land Reform: DRDLR
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8.11.4 CLIMATE CHANGE

The effects of climate change in South Africa are not limited to increased water scarcity in some parts of the country and drastic qualitative changes in the water supply, but extend to losses in biodiversity and rangelands, which impacts in the farming and agricultural sector, as well as possible increases in infectious and respiratory diseases. Climate change will have a significant impact on food availability, food accessibility and food systems stability. Climate change affects the large proportion of South Africa's population who have a low resilience to extreme climate events due to poverty, inadequate housing infrastructure and location.

Climate change affects the decision making processes of the vulnerable poor people in South African communities, such as; where they choose to live and which areas are sustainable for their livelihoods. In some households people survive on subsistence farming as they may not have the opportunities to access formal employment channels neither are they close to any public facilities which could enable them to access employment opportunities. Therefore in such cases subsistence farming becomes a way of life and survival.

However because of climate change, this form of livelihood is mostly threatened leaving subsistence farmers vulnerable to drought or forced to relocate from one area to another, where there is rainfall or access to water in order to survive. In some cases the inability to access potable water forces people to relocate into other areas where water is available. These patterns then directly affect settlement patterns, in terms of where most informal settlements tend to conglomerate within a Municipal area. Furthermore they determine which parts of municipal areas have the most sporadic development of informal settlements despite efforts by planners

and local authorities to curb housing backlog and demand. Climate change may also influence the switch from subsistence farming as a form of livelihood to people moving closer to areas in which they can access public facilities or areas of mobility such that they have access to economic opportunities in the market.

Cities are also required to deal with the rising threats of climate change and dwindling resources. These constraints mean that cities that do not plan adequately will face higher costs to residents, a decline in welfare, and reduced economic competitiveness. Preparations for these circumstances typically require decades of forward-thinking development guidance.

The effects of climate change has been experienced in the municipal area both inland and coastal areas over the past few years. The 2008 floods destroying many houses mainly at Murchison/ Bhubhoyi area which happened together with the tidal surge destroying a lot of public infrastructure and private property along our beaches. The response on the inland has been to rebuild most of the destroyed houses and on the coast restoring public infrastructure with latest (soft) engineering requirements. Ever since 2008 almost every year the municipalities more than one flash floods affecting some of its communities. Damage private property and public infrastructure is experienced. Climate change is recognized as the major environmental problem facing the globe. Escalating greenhouse gas emissions contribute towards climate change and will ultimately impact on human health, food security, natural resources, sea level rise, land loss and coastal infrastructure. Climate change embraces far more than temperature change and may include changes in rainfall patterns, sea level rise, and the

spread of infectious disease such as malaria, increase alien vegetation invasion and loss of biodiversity.

Climate change is likely to cause a number of challenges for Ray Nkonyeni Municipality, linked to global impacts such as increased temperatures, extreme weather events (e.g. flooding and drought), sea level rise and climate variability. As such, climate change runs the risk of undoing all of the development gains of the last one and a half decades; climate change adaptation in all sectors will have to become one of the Municipality's top development priorities.

Temperatures in the Ray Nkonyeni are likely to increase by 1.5⁰C and 2.5⁰C by 2065 and by 3.0⁰C and 5.0⁰C by 2100. Projected annual rainfall changes are likely to include an increase in aggregated rainfall by 2065 with an increase of up to 500 mm by 2100. This increase is likely to be manifested as an increase in extreme rainfall events and stream flow intensity across the municipal area with prolonged dry spells between rainfall events. Sea level rise along Municipality's coastline is already occurring at 2.7 cm per decade and may accelerate into the future. (Source: <http://www.epa.gov/climatechange/science/future.html> - 20 March 2015)

Climate change impacts for the Ray Nkonyeni may include:

- ❖ An increase in the frequency and intensity of floods and droughts;
- ❖ A decrease in water availability due to changed rainfall patterns and increased evaporation; this will affect subsistence dry land farmers the most.
- ❖ An increase in erosional capacity of river courses, resulting in the loss of more top soil, thus decreasing the agricultural value of land and increasing siltation in dams.

- ❖ Infrastructural damage as a result of extreme weather events causing flooding, affecting human wellbeing and safety as well as insurance costs;
- ❖ An increase in erosion of coastal areas due to sea-level rise;
- ❖ Higher energy consumption due to increased residential cooling load;
- ❖ An increase in economic losses due to property damage and decreased tourism revenue;
- ❖ An increase in heat-related vector-borne (e.g. malaria) and water-borne (e.g. cholera) illnesses;
- ❖ An increase in heat stress, leading to dehydration, particularly for those that reside in the urban areas, as well as children and the elderly;
- ❖ Changes in the geographical distribution of plants and animals with extinction of species that are unable to move and an increase in the prevalence of alien invasive species. This will negatively affect the biodiversity of the Municipal Area and the associated goods and services;
- ❖ Further loss of critically endangered grassland habitats as they are outcompeted by woody species able to utilize the higher concentrations of CO² in the atmosphere.
- ❖ A reduction in yield of staple food crops, such as maize;
- ❖ Changes in the optimal planting and harvesting dates for crops as well as land suitable for crop production;
- ❖ Heat stress increasing livestock and poultry mortality rates;
- ❖ An increase in respiratory problems in the city due to a decrease in air quality (e.g. changes in the concentration and distribution of near-surface ozone) and increased dampness; and
- ❖ Deterioration of foods leading to increased incidents of food-borne diseases.

The areas particularly vulnerable to sea-level rise are coastal wetland and dune ecosystems. Shoreline Management Plans are required to determine what adaptation interventions if any are required now or in the future. To respond to these changes the Ray Nkonyeni has to develop a similar approach that was initiated by the Ethekweni Municipality, by initiating the Municipal Climate Protection Programme (MCP) in 2004. This was a phased programme, which has focused on climate change adaptation and

enhancing the city's ability to cope with climate change impacts. The likely climate change impacts have been assessed and plans, programmes and projects have been developed to assist the Municipality in dealing with these impacts.

The mitigation and adaptation work streams of the MCPP are located in the Energy Office and the Environmental Planning and Climate Protection Department respectively. The issue of energy challenges and demand to reduce use of traditional electricity thereby reducing our emissions as the country is also on the agenda for the municipality. In this regard Eskom has offered second round of distributing energy efficiency globes. The municipality is also exploring ways to switch to energy saving alternatives in its traffic and streetlights as well as all public infrastructures in the municipal area. The use of solar for heating water and lighting is being considered. A total of seven projects have been submitted as applications to the Green Fund's window that opened towards the end of 2012 and the results are awaited.

Ugu has developed a Climate Change response which states that SDF's provide key entry points for addressing pressing climate change related issues and climate change responsive spatial development planning will be critical to the long terms sustainability of the Ugu DM. Apart from support climate resilient development, failure to take climate change impacts into account could deem municipalities liable for damage and losses resulting from negligent planning decisions. The municipal SDF should consider climate change impacts on the following areas:

- ❖ Sensitive, vulnerable, highly dynamic and stressed ecosystems in the municipal area
- ❖ Vulnerable neighbourhoods;
- ❖ Desertification;

- ❖ Soil loss;
- ❖ Ecologically sensitive areas;
- ❖ Drought vulnerable areas;
- ❖ Flood risk areas or low-lying areas;
- ❖ Estuaries;
- ❖ Infrastructure and facilities in close proximity to the ocean;
- ❖ Impact of deforestation and the land use changes that may result from climate change and migration;

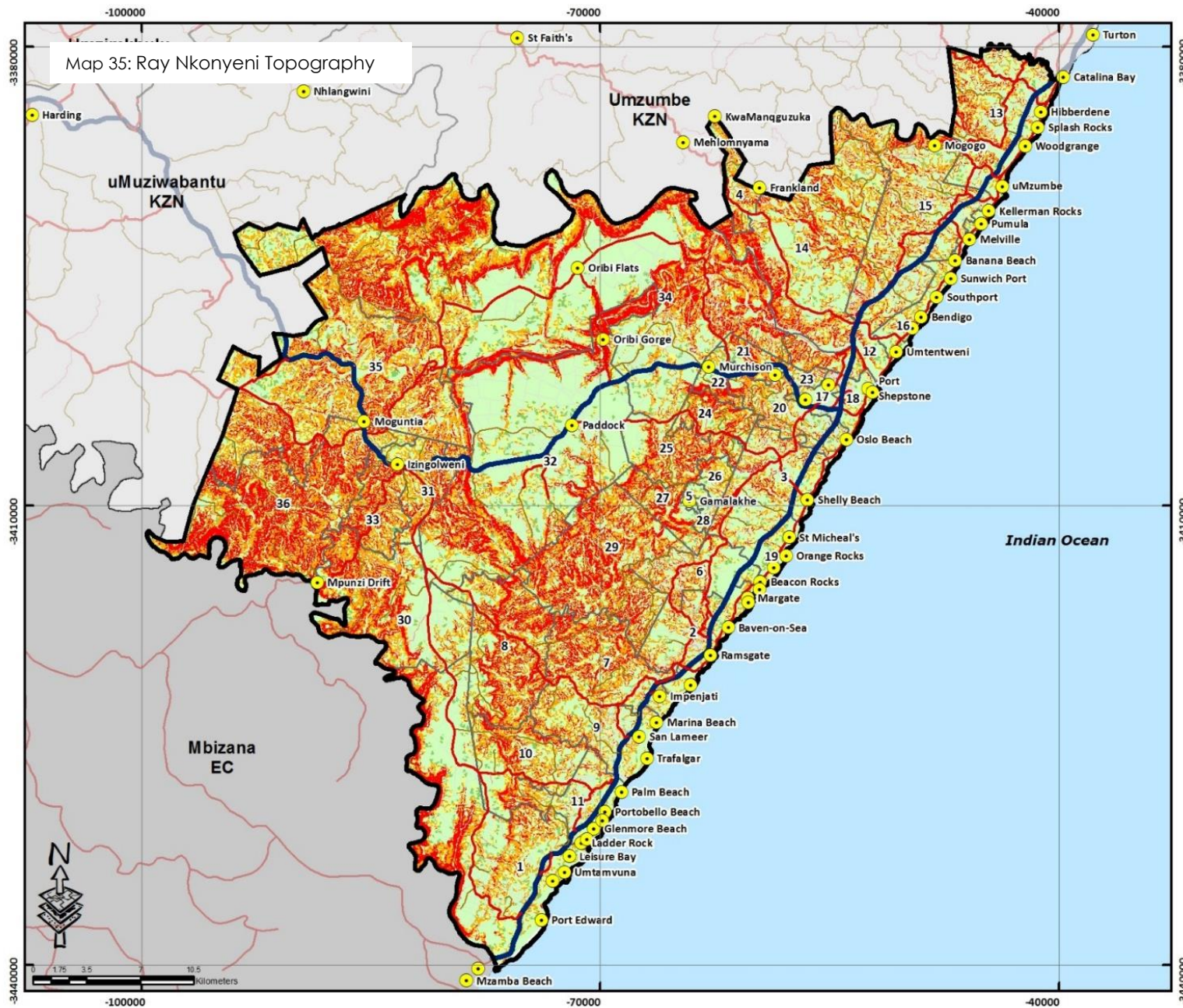
Response Options are identified as follows:

- ❖ Map vulnerable areas (flood lines, etc.) and implement development bans in highly vulnerable zones;
- ❖ Implement land use planning and zoning to avoid building and development infrastructure in hazard prone areas;
- ❖ Relocate existing development away from areas of high risks;
- ❖ Strengthen building code requirements according to increased risks of flooding, heat waves,
- ❖ intense storms on building and infrastructure development projects;
- ❖ Maintain and upgrade drainage systems;
- ❖ Consider permeable pavements, green roofs and rain tanks to increase on-site retention of storm water;
- ❖ Building regulation to ensure efficiency in all new buildings – monitor and enforce and encourage best practice development;
- ❖ Densification of land use through zoning regulations to support high density living and work and mixed use;
- ❖ Development preference given to developments on priority nodes;
- ❖ Ensure thorough planning reduces incidence of unplanned population and economic growth and ensure contingency for unplanned settlements/growth; and
- ❖ “Smart growth” planning—a strategy that highlights high-density, mixed-use, transit-oriented development— also has other goals, such as maintaining open space, farmlands, and other natural areas and directing city resources toward existing communities rather than diverting them to new development in outlying areas.

8.11.5 SLOPE ANALYSIS

The slope is generally flat along the coast and within the immediate adjoining farming areas. However as one move towards the inland of the municipality, the terrain changes and become undulating with some parts that are very steep and undevelopable. The majority of the rural areas with the very steep terrain include KwaXolo, KwaNzimakwe and Nsimbini. This is due to the mountainous conditions of these areas and the existence of major river catchments. In urban areas, a number of river systems contribute to the rolling aspect. Conditions identified inland from Ramsgate, Southbroom and Marina Beach the slope conditions are primarily greater than 1:3, which makes settlement in Dumezulu, Thelawayeka, Mbecuka and Ingwemabala regions more challenging.

Higher density settlements are located, and to a degree forced onto the lower lying, gentle slopes and plateaus. Slope conditions of less than 1:5 are more favourable for development, as costs are lower due to more manageable topographical conditions. The settlement patterns, growth and development within the Municipality are determined by the topographical conditions. The steeper slopes within the region will make commercial and industrial development more challenging. Therefore making the flatter areas within the Municipality more attractive, however residential development is more flexible as it requires less floor areas and therefore could be built on steeper slopes. The following cross-section through Hibberdene, Port Shepstone and Port Edward are indicated on the adjacent map, and clearly illustrate the topographical conditions found within the Municipality.



**Spatial Development
Framework 2017/2022**

Topography

Economic Development, Tourism
and Planning Spatial Planning Unit
666 Crescent Avenue
Uvongo 4270
Tel: 039 315 9240
Date: 2017

9. SPATIAL PLANNING ISSUES AND CHALLENGES

9.1 SIGNIFICANCE FOR URBAN COASTAL CORRIDOR

The regional economy has been shaped by the economic opportunities afforded by that coast. Port Shepstone was established as an active seaport during the nineteenth century as a sea port transporting sugar to Durban, and functioned that way for some time. This also motivated the establishment of Umzimkulu sugar mill along Umzimkulu River running into the sea at Port Shepstone, the river mouth having functioned as an early sea-port. It was also for this reason that motivated for urban development to take place within Port Shepstone. As time progressed the function changed with tourism that became a drive.

This was alluded by the 1998 the Green Paper on Sustainable Coastal Development for South Africa, drawing upon a coastal economy specialist study, noted that: 'A large proportion of the economic activity in the Hibiscus Coast region is due to [beach] tourism and recreation. During the holiday periods there is a large influx of visitors from all over the country. Indeed, over the past decade what has become striking is that the rise of urbanization, manufacturing and services are of growing importance.

9.2 URBANISATION AND FUTURE NEED FOR INTEGRATED MIXED RESIDENTIAL

Ray Nkonyeni urban centres has experienced a sizeable amount of urbanization which amount to 41% over a 10-year period (2001 – 2011). The impact of migration is assumed to be one of the main driving forces. If this is not properly managed then one of the most visible crises that may

emerge may be informal settlements which can act as poverty traps that are badly located and are ideal breeding grounds for social problems (e.g. routine aggression and violence, substance abuse, broken family relations) and suffer high levels of violent crime (compared with commercial and middleclass areas). A study undertaken by South African Cities Network (titled Towards an Integrated Urban Framework) advised that a "growing town/ city can win with sustainable and mixed-use development".

Central to this advice is a need to plan for a liveable, economically viable and sustainable towns with infrastructure that resilient enough to support inclusive growth. If properly managed, urbanisation generates significant opportunities for economic growth and poverty reduction. The urban areas of Ray Nkonyeni will continue to grow and should be treated as a priority for urban policy, increased investments, services delivery, mixed use affordable integrated housing provision to support emerging stronger economy.

9.3 TRANSPORT ROUTE AS AN INFLUENCE FOR FUTURE DEVELOPMENT DIRECTION

The rural settlements within Ray Nkonyeni are highly influenced by factors of accessibility and proximity to public transport routes. These settlements tend to develop or concentrate along ridgelines and create a complex web. This is usually where transport routes run, which provides people with easy access to public transport that links them to areas that provide a range of services and public facilities. Rural settlement patterns in Ray Nkonyeni are closely related to migration patterns, livelihood survival

strategies and the ability to access certain services and infrastructure. They have not developed according to predetermined systems and procedures and therefore future settlement trend predictions are limited to that which is known and experienced.

9.4 ENVIRONMENTAL ANXIETIES

Ray Nkonyeni Municipality has a variety of environmentally related challenges. These need to be addressed from an environmental perspective:

- ❖ There are a number of dongas which are susceptible to soil erosion which need to be properly maintained and rehabilitated. Development in these areas should be minimized.
- ❖ The undulating terrains that are prevalent within Ray Nkonyeni restrict development.
- ❖ Areas located in the vicinity of the river banks, should be protected.
- ❖ Wetlands which are found around Umtamvuna, Port Edward and Munster should be protected as a limited development zone.
- ❖ The management of solid waste and the treatment of all waste should be considered the shortage of landfill sites and waste recycling programmes is a concern.
- ❖ The high density rural settlements should be upgraded from VIP to waterborne sewerage system.

9.5 SIGNIFICANCE OF TOURISM AND AGRICULTURE

Ray Nkonyeni is located within a region that has been characterised as being highly dependent upon agricultural practises and tourism. It has significant portions of land that have been identified as having a high agricultural potential. Being a rural environment with limited alternative opportunities to economic development, the majority of the households invariably rely on agriculture for both livelihood and economic

requirements. Compounding the issue is the notion that, at present, the Ray Nkonyeni is a tourism hotspot within the South Coast and has a well-established commercial farming sector. Agriculture and tourism form the base of the economy of the entire municipality and therefore the management of these sectors should be prioritised. Ray Nkonyeni also has significant conservation areas that have economic value and contribute to the local economy namely the Umtamvuna and Mbubazi Nature Reserves.

It was mentioned earlier that Ray Nkonyeni is bordered by various municipalities namely Mbizana LM and Umzumbe LM. These municipalities influence and impact on the development within Ray Nkonyeni. There are linkages and development corridors that have been identified, that present comparative advantages which should essentially be exploited for further economic gain within Ray Nkonyeni. Primary corridors such as the N2 serve as trade distributor route (it distributes and collect traffic from different areas) hence it is identified as one of the key primary investment corridors. To further strengthen the importance of this road, it also serves as a link road with adjoining municipalities. Another significant transport route is R61, which is also identified as a primary development corridor. This route connects Ray Nkonyeni with Mzamba in Eastern Cape. Critical in this regard is to strengthen connectivity with neighbouring areas so that Ray Nkonyeni may benefit from potential economic spin-offs from various development initiatives in other areas within and beyond its administrative boundaries.

9.6 DILAPIDATED RURAL TOWNS

The role that rural towns play in the economy include that of a service centres and an economic hub which supports the clusters of rural settlements that surround it. Such towns would include Ezingoleni which grew to become

the small commercial services hubs providing a number of relatively low paying formal and informal jobs for some members of the local and regional economies. The current role that this town for the community includes:

- ❖ Basic services – banking facilities, educational facilities, health and safety;
- ❖ Provides basic market for goods and services – opportunities for small business development and jobs; and
- ❖ Transportation hub which links different areas within the municipality with other regions within Eastern Cape and KwaZulu-Natal.

The growth of this towns was mainly organic and incoherent with the planning precept. The most visible challenges at this stage include the following:

- ❖ Poor urban character i.e. lack of relation between streetscapes, building facades, poor street furniture and land use;
- ❖ Inefficient urban structure that promotes congestion, lack of parking and informality; and
- ❖ Lack of requisite urban infrastructure which includes storm-water drainage, streetlights and signage.

Such that they are characterised by an unstructured linear form, land use separation and sprawling residential expansion. This towns should be planned as the notable rural towns, be structured and managed to enable it to perform their functions efficiently and effectively. The ultimate goal is to address the negative status quo and develop the CBDs into an aesthetically and appealing precincts where people will enjoy a mixture of both social and economic services.

9.7 COASTAL MANAGEMENT

The National White Paper on Sustainable Coastal Development in South Africa was produced in 2000. It acknowledged that the coastline is a national asset with value, opportunity and potential that is however vulnerable to overuse and degradation. Significant disparities exist between the former KwaZulu and Natal areas which together make up the Ray Nkonyeni region. The former Natal coastal area contains many small towns, where infrastructure and services are well developed. The inland coastal area falls in the former KwaZulu and is characterised by a large population, high unemployment, limited infrastructure and services, and continuing conflict in some places.

The economy is based largely on seasonal leisure-based tourism and recreation. Ray Nkonyeni is well positioned to develop nature-based tourism with community participation, because of its proximity to Durban, warm coastal waters, reefs with high biodiversity and dense coastal thicket with a variety of unique animals and plants. Although tourism infrastructure is well developed, there is concern that development has not always occurred in a socially and environmentally responsible manner. Ribbon development and private ownership of land have limited equitable access to coastal resources.

The coast, however, continues to provide an important source of food and other resources for local people. In addition to carefully managed tourism and recreational development, there is some scope for further agricultural development in the region. Small-scale farming, in particular, can provide alternative livelihood prospects, for example, through the cultivation of tropical fruits and sugar-cane in association with land-reform programmes. The weakness of government structures has allowed uncontrolled and often

illegal use of coastal resources by residents and visitors. The coast however remains an important source of food and provides other resources for local people. Agriculture, forestry and tourism are the main potential growth industries, and form the basis of the proposed Wild Coast Spatial Development Initiative. Opportunities exist for small-scale farming and small, medium and micro enterprises around nature-based and adventure tourism with community participation. The White paper also identifies a number of goals and objectives which seek to address the following key coastal issues:

- ❖ Improve pedestrian access above high water mark
- ❖ Improve infrastructure for access and ensure that more people benefit from coast
- ❖ Prevent exclusive use and address conflicting rights between public interest, private property owners and communal and traditional users
- ❖ Address interests of subsistence fishers and alleviate poverty
- ❖ Minimise adverse impacts on environment, promote the preservation and protection of archaeological sites.
- ❖ Limit development that could disrupt natural processes and encourage open space
- ❖ Rehabilitate degraded coastal habitats and eradicate invasive alien vegetation
- ❖ Identify priority areas for protection and protect sensitive coastal ecosystems
- ❖ Reduce pollution affecting tourism potential and improve pollution monitoring
- ❖ Improve catchment practices, address informal settlements and water quality
- ❖ Prohibit direct discharge of untreated waste and address the contamination of aquifers by septic tanks
- ❖ Improve sewage treatment, discourage litter, waste on beaches, dunes, reduce air and noise pollution

The White paper was the first move by government to protect and maintain the coastal areas. In 2009, national government took the idea

forward through promulgating the Integrated Coastal Management Act (Act No. 24 of 2008). It aimed at establishing a system of integrated coastal and estuarine management in the country, including norms and standards for ecological protection. Chapter 3, Section 18(1) and (2) of the act stipulated that “each municipality whose area includes coastal public property must within four years of the commencement of the Act, make a by-law that designates strips of land as coastal access land in order to secure public access to that coastal public property.

Coastal access land is subject to a public access servitude in favour of the local municipality within whose area of jurisdiction it is situated and in terms of which members of the public may use that land to gain access to coastal public property”. While Section 19 recommended that “before designating land as coastal access land or withdrawing any such designation, a municipality must (a) assess the potential environmental impacts of doing so; (b) consult with interested and affected parties”.

There are a number of issues and directives that the legislation stipulated for different spheres of government. These include the responsibilities of municipality in terms of coastal management including developing a coastal management plan and alignment of the coastal management plan with the municipal plans. In terms of responsibilities the act states that a municipality in whose area coastal access land falls, must—

- (a) signpost entry points to that 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 so as 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, taking into account 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;

(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;

(i) perform any other actions that may be prescribed: and

(j) report to the MEC within two years from the date that the act came into effect on the measures taken to implement this section.

The act (section 48) further states that the municipalities must develop and adopt the municipal coastal management programmes, establish the municipal coastal committees, mark the coastal boundaries in their zoning maps, develop by-laws for coastal management and align the coastal management plan with the land use schemes.

10. SPATIAL DEVELOPMENT GOALS AND OBJECTIVES

10.1 SPATIAL DEVELOPMENT VISION AND MISSION

Ray Nkonyeni spatial vision is being developed to guide the direction and growth of the Municipality. The key underlying themes for the development of this vision are Ugu District Development Vision as captured in the district IDP as well as the principles that emanated from SPLUMA. Ugu DM vision promotes equity and accessibility to the entire spectrum of economic opportunities that the district has to offer. This principle of equity is very important as it also reflected on SPLUMA as the first principle (i.e. Spatial Equity) as such Ray Nkonyeni adopted this principle as part of the spatial vision.

The other elements of the vision advocate for spatial efficiency, environmental sustainability, economic growth and positioning Ray Nkonyeni as the leading tourist's destination within the province of KwaZulu-Natal. The proposed spatial development vision is aligned to the National Development Plan: 2030 vision, the Spatial Planning and Land Use Management Act, the KZN PGDS and the UGu DM Vision and it should also be aligned to the upcoming Ray Nkonyeni Development Vision.

Figure 8: Proposed Spatial Vision

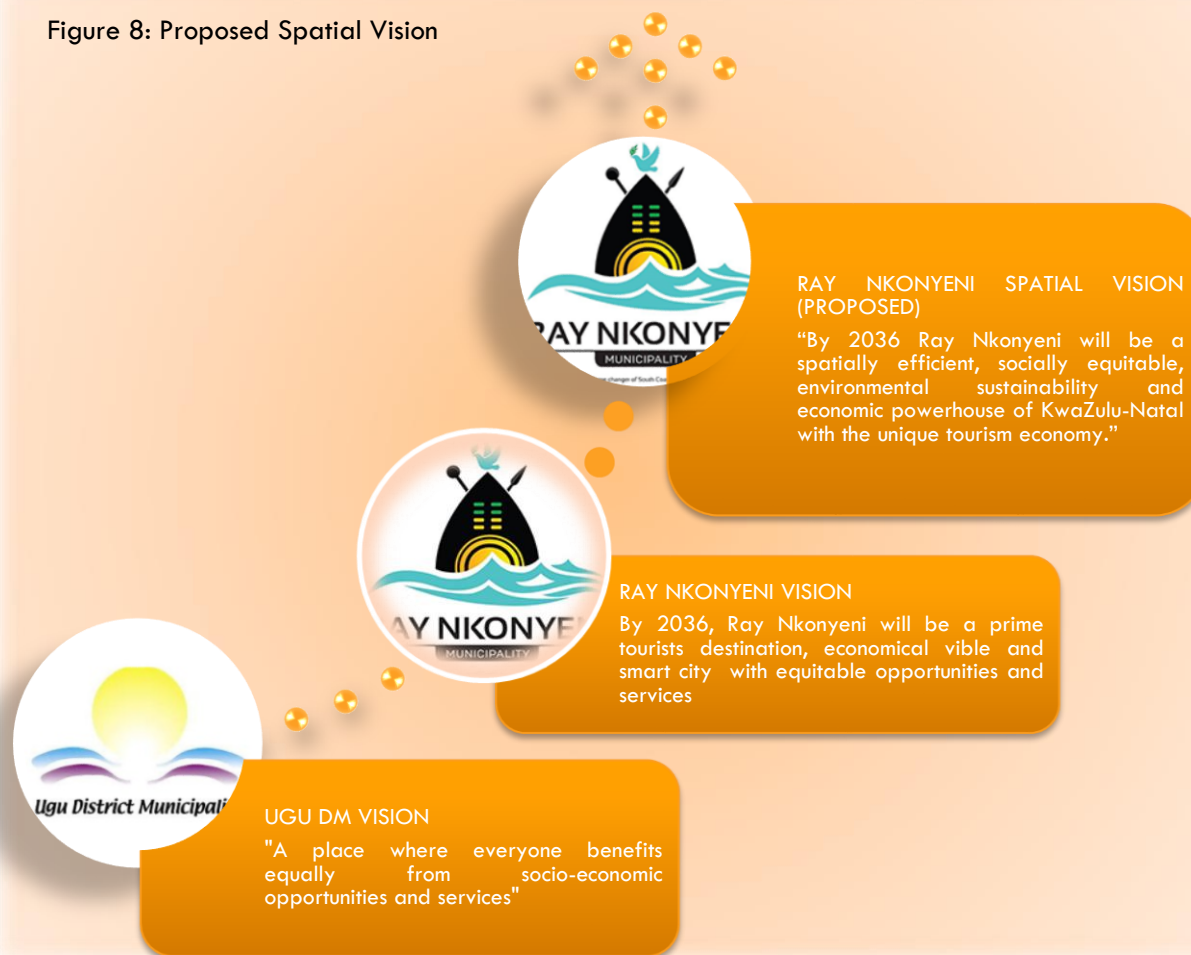


Figure 9: SPLUMA Principles



(Source: SPLUMA, 2013)

The SDF is guided by the above five (5) spatial principles which form the foundation of an appropriate SDF. These principles were formulated as part of the Spatial Planning and Land Use Management Act (Act No. 16 of 2013) (SPLUMA). In addition, they promote:

- ⊗ accountable spatial planning, land use management and land development decision-making by organs of state;
- ⊗ cooperative governance and wider information sharing in plan-making and implementation; and
- ⊗ Maximum openness and transparency in decision-making.

The principles and norms collectively form a vision for land use and planning in Ray Nkonyeni. They constitute a single point of reference, and an overarching coherent set of policy guides to direct and steer land development, planning and decision-making in land use so that outcomes thereof are consistent with the development objectives as outlined in the IDP.

10.3 SPATIAL DEVELOPMENT OBJECTIVES AND STRATEGIES

10.3.1 SPATIAL JUSTICE

Table 4: Objectives and Strategies on Spatial Justice

SPLUMA OBJECTIVES	RAY NKONYENI SPATIAL DEVELOPMENT FRAMEWORK	
	OBJECTIVES	STRATEGIES
<ul style="list-style-type: none"> Past spatial and other development imbalances are redressed through improved access to and use of land; Spatial Development Frameworks and policies at all spheres of government address the inclusion of persons and areas that were previously excluded, with an emphasis on informal settlements, former homeland areas and areas characterised by widespread poverty and deprivation; Spatial planning mechanisms, including land use schemes, include provisions that enable redress in access to land and property by disadvantaged communities and persons; Land use management systems are inclusive of all areas of a municipality and specifically include provisions that are flexible and appropriate for the management of disadvantaged areas, informal settlements and former homeland areas; Land development procedures will include provisions that accommodate access to secure 	<ul style="list-style-type: none"> Transform the apartheid city 	<ul style="list-style-type: none"> Redress existing imbalances in the distribution of different types of residential development, and avoid creating new imbalances Transform townships and informal settlements into economically and socially integrated neighbourhoods Encourage public/private partnerships to develop integrated human settlements and diversify housing delivery
	<ul style="list-style-type: none"> Encourage integrated settlement patterns 	<ul style="list-style-type: none"> Generally, support development, rezoning, subdivision and similar applications that promote a greater mix of land uses, people and/or densities Ensure that land uses and built form within predominantly residential areas support the daily functioning of those areas and contribute to their overall character and well-being Ensure that development proposals provide an adequate and equitable distribution of social facilities, recreational space and public institutions
	<ul style="list-style-type: none"> Establish an integrated, town-wide public transport system that supports the accessibility grid 	<ul style="list-style-type: none"> Create a hierarchy of integrated public transport services related to the accessibility grid Ensure that new urban development is supported by appropriate public transport infrastructure and services Lobby for the introduction and/or expansion of passenger rail services Include walking and cycling as essential components of land use planning Introduce parking policies to encourage use of the most context-specific and appropriate modal travel choice
	<ul style="list-style-type: none"> Address spatial economic imbalances 	<ul style="list-style-type: none"> Unlock employment-generating opportunities within Ray Nkonyeni Support private-sector development initiatives in locations that are easily accessible Improve public transport links between Ray Nkonyeni and the main economic nodes of the city

10.3.2 SPATIAL SUSTAINABILITY

Table 5: Objectives and Strategies on Spatial Sustainability

SPLUMA OBJECTIVES	RAY NKONYENI SPATIAL DEVELOPMENT FRAMEWORK	
	OBJECTIVES	STRATEGIES
<ul style="list-style-type: none"> Promote land development that is within the fiscal, institutional and administrative means of the country; Ensure protection of the prime and unique agricultural land, the environment and other protected lands and the safe utilisation of land; Promote and stimulate the effective and equitable functioning of land markets; Consider all the current and future costs to all parties for the provision of infrastructure and social services in land developments; Promote land development in locations that are sustainable and limit urban sprawl; and Result in communities that are viable 	<ul style="list-style-type: none"> Encourage a more compact form of development 	<ul style="list-style-type: none"> Promote appropriate land use densification; Contain the development footprint of the city, and protect natural, rural, urban and heritage assets with development edges: Urban and Coastal Edge. New developments that promote urban sprawl should be discouraged. Prioritize infill development in areas that provide opportunities for linking and integrating peripheral areas. Ensure clustering of various activities (work, live, play and pray) at appropriate locations. Densification and Infill should be promoted in well serviced, strategically located areas and should contribute to the restructuring of urban environment. Densification and Infill should help to create thresholds for public transport and contribute to the more effective utilization of various modes of public transport. Higher residential densities should be promoted around nodes and within corridors
	<ul style="list-style-type: none"> Manage urban development impacts on natural resources and critical biodiversity networks 	<ul style="list-style-type: none"> Increase efforts to protect and enhance biodiversity networks at all levels of government Reduce the impact of urban development on river systems, wetlands, aquifers, aquifer recharge areas and discharge areas Manage urban development along the coast in a sustainable and precautionary manner Protect valuable agricultural areas, existing farmed areas and horticultural areas from urban infringement, and support urban agriculture Adopt a proactive planning approach to excavating resource management
	<ul style="list-style-type: none"> Integrate land use, economic and transport planning 	<ul style="list-style-type: none"> Reinforce and enhance development corridors Encourage medium to higher-density forms of urban development to locate on or adjacent to activity routes, development routes and activity streets.
	<ul style="list-style-type: none"> Support the rationalisation, upgrade and/or development of economic gateways, and manage land uses around them appropriately 	<ul style="list-style-type: none"> Support development and appropriate surrounding land uses Create and manage a functional interface between ports/harbours and their surrounding areas

10.3.3 SPATIAL EFFICIENCY

Table 6: Objectives and Strategies on Spatial Efficiency

SPLUMA OBJECTIVES	RAY NKONYENI SPATIAL DEVELOPMENT FRAMEWORK	
	OBJECTIVES	STRATEGIES
<ul style="list-style-type: none"> Land development optimises the use of existing resources and infrastructure; Decision-making procedures are designed with a view to minimising negative financial, social, economic or environmental impacts; and Development application procedures are efficient and streamlined and time frames are adhered to by all parties; 	<ul style="list-style-type: none"> Make efficient use of non-renewable resources 	<ul style="list-style-type: none"> Promote a culture of sustainable development and living
	<ul style="list-style-type: none"> Protect and enhance the municipality's rural environment 	<ul style="list-style-type: none"> Prevent urban development from intruding into the rural environment Support appropriate development and activities in rural areas, in and around unique and culturally significant rural settlements Rationalise and proactively manage smallholdings Develop and manage rural gateways
	<ul style="list-style-type: none"> Improve connectivity within the Municipal area. 	<ul style="list-style-type: none"> Strengthen and integrate public transport networks, services and modes to ensure that passengers move optimally from origin to destination in an efficient manner and in the shortest time possible. Investigate and promote public transport links between disadvantaged areas and main economic nodes of the Municipality Facilitate movement between areas of need and wider opportunities Create a safe, efficient and integrated city wide public transport system and use it as a tool to restructure the Municipality and integrate marginalized areas. Include Non-Motorized Transport as essential components of land use and transport planning Investigate new road and rail based network links. Engage with PRASA to explore potential of improving passenger rail service
	<ul style="list-style-type: none"> Promote accessible, townwide destination places 	<ul style="list-style-type: none"> Develop high-quality, accessible destinations and public spaces in newly developed and neglected areas

10.3.4 SPATIAL RESILIENCE

Table 7: Objectives and Strategies on Spatial Resilience

RAY NKONYENI SPATIAL DEVELOPMENT FRAMEWORK		
SPLUMA OBJECTIVES	OBJECTIVES	STRATEGIES
<p>✦ Flexibility in spatial plans, policies and land use management systems is accommodated to ensure sustainable livelihoods in communities who are most likely to suffer from the impacts of economic and environmental shocks;</p>	<p>✦ Sustain natural environments and resources</p>	<p>✦ Optimize the economic, social, appealing and functional value of open space services through the implementation of Open Space System</p> <p>✦ Existing natural environmental resources should be protected and enhanced to ensure that the ecosystem within the open space are able to effectively deliver services</p> <p>✦ Development must be directed away from hazardous areas such as floodplains, unstable soils and steep slopes</p> <p>✦ Protect environmentally sensitive areas, agricultural land and open space</p> <p>✦ Protect river catchments and develop a catchment management plans for river systems where rapid development will occur</p> <p>✦ Create a network of green open spaces and protect important environmental areas</p> <p>✦ Support sustainable catchment management and storm water practices.</p> <p>✦ Promote the prevention and reduction of pollution.</p>
	<p>✦ Enhance the unique sense of place and quality of the built form of Ray Nkonyeni</p>	<p>✦ Promote good contextual urban design fit, and ordering of the relationship between people, urban space and the environment (built and natural)</p>
	<p>✦ Enhance the value of heritage resources and scenic routes</p>	<p>✦ Identify, conserve and manage heritage resources, including cultural landscapes</p> <p>✦ Ensure access to and provide information about, public heritage resources</p> <p>✦ Create an enabling environment for urban regeneration that allows buildings and sites of historical and architectural significance to make a positive contribution to the economy and quality of urban life</p> <p>✦ Celebrate and reinforce Ray Nkonyeni's diverse historical legacies through urban form, architectural design, signage and, where appropriate, artwork</p> <p>✦ Provide positive spaces for cultural and social ceremonies and life-related events</p> <p>✦ Carefully manage land uses and interventions along identified scenic routes, and in places of scenic and visual quality</p> <p>✦ Identify additional scenic routes</p>

10.3.5 GOOD ADMINISTRATION

Table 8: Objectives and Strategies on Good Administration

SPLUMA OBJECTIVES	RAY NKONYENI SPATIAL DEVELOPMENT FRAMEWORK OBJECTIVES	STRATEGIES
<ul style="list-style-type: none"> ❖ All spheres of government ensure an integrated approach to land use and land development that is guided by the spatial planning and land use management systems as embodied in this Act; ❖ No government department may withhold their sector input or fail to comply with any other prescribed requirements during the preparation or amendment of Spatial Development Frameworks; ❖ The requirements of any law relating to land development and land use are met timeously; ❖ The preparation and amendment of spatial plans, policies, land use schemes as well as procedures for development applications, to include transparent processes of citizen participation and all parties to have the opportunity to provide inputs on matters affecting them; and ❖ Policies, legislation and procedures must be clearly set out and inform and empower citizens. 	<ul style="list-style-type: none"> ❖ Facilitate urban development ❖ Promote inclusive, shared economic growth and development 	<ul style="list-style-type: none"> ❖ Support property developers by identifying the locations potentially suited to densification and in-fill development ❖ Facilitate urban development and direct the phasing of urban growth through deliberate and integrated use of planning, infrastructure provision, and the regulatory and fiscal authority of all spheres of government. ❖ To promote ocean economy within Ray Nkonyeni Municipal Area. ❖ Maintain and enhance the features of Ray Nkonyeni that attract investors, visitors and skilled labour ❖ Support investors through improved information, cross-sectorial planning and removal of red tape ❖ Introduce land use policies and mechanisms that will support the development of small business (both informal and formal) ❖ Encourage area specialisation and the development of a diverse, mutually supportive system of economic areas ❖ Encourage the use of available economic incentives ❖ Promote sub-regional economic planning

10.4 CONCEPTUAL FRAMEWORK

The conceptual framework brings together the development concept of movement, networks, nodes, hierarchies, and surfaces. It takes cognizance of the development perspective and preferred scenarios. With tourism being the backbone of the Ray Nkonyeni economy, there is a need to use the municipality's natural resources base to foster a path of economic development with benefits to its regional population and beyond. The proposed spatial vision envisages bridging the spatial divide between urban and rural spaces in order to promote social equity and enhance spatial efficiency, environmental sustainability and economic growth for all.

The vision plays a significant role in informing the most appropriate spatial structure of the municipality which will then inform development strategies and best initiatives for the Ray Nkonyeni Municipality.

10.4.1 FOCUSING DEVELOPMENT IN STRATEGIC NODAL AREAS

The assembling and location of services and facilities, in a manner that promotes accessibility and efficiency in service delivery, is required. This is critical for the performance of the municipal area as a whole and land use integration. As such, the clustering of various activities at appropriate and accessible nodal locations provides the Ray Nkonyeni with a network/system of opportunity centres. Some of these nodes have benefited from significant public and private sector investment in services and infrastructure, which needs to be managed and maintained. Others are located in previously disadvantaged areas, which have suffered from institutionalised neglect.

Although the nodes have contrasting characters, profiles and management issues, they accumulatively accommodate the majority of economic activities, employment prospects, an existing/growing residential stock, and access to community facilities. As such, the strength and feasibility of the

nodal points is directly linked to the functioning and health of their catchment areas. The concentration of activities in and around these areas will stimulate further development of higher order activities.

10.4.2 DEVELOPMENT CORRIDORS AS INVESTMENT ROUTES

Corridor development is associated with a system of transport facilities on key routes that work together as an integrated system to facilitate ease of movement. A system of regional and local transport routes, which link a number of areas, should be viewed as the logical focus areas of an ordered strategy for rural development. These routes should be seen as activity and investment lines. The structure they give to the area is articulated in the form of movement patterns and systematic distribution of land uses in space. However, not all regional routes are the same in terms of the intensity of use and ability to attract investment, services, economic activities and settlement. Generally, larger routes linking generators of movement and investment have a greater generative capacity than smaller routes.

It thus follows that regional facilities and services should gravitate towards these areas. Smaller facilities requiring smaller thresholds should be located along smaller routes. Viewed in this way, the issue of regional and rural spatial organization becomes one of creating a systemic framework of interlocking activity routes over time. This has an impact of:

- ⊕ increasing equitable access to all level of services;
- ⊕ promoting investment; and
- ⊕ reducing spatial marginalization
- ⊕ integrate communities with service provision, and
- ⊕ fulfilling a range of economic and social needs

Location of facilities along major routes recognizes the importance of choice to the rural communities with respect to services such as education, health and welfare facilities. Upgrade and road maintenance projects on corridors that leads to development opportunity areas such as rural service

centres, high potential agricultural land and tourism nodes should be prioritized as this will encourage investment, improve accessibility and enhance mobility. This principle supports the phased approach to development, targeting areas of greatest potential first. Development corridors are effective in linking infrastructure and economic development as towns and structures connect to each other in a functionally effective manner.

10.4.3 SURFACES

Surfaces are areas that are filling the gaps between the nodes and networks are utilised for five main groups of activities. These activities have been assessed in detail but it is worth highlighting some key aspects applicable to the Ray Nkonyeni Municipality.

10.4.3.1 DEVELOPING SUSTAINABLE HUMAN SETTLEMENTS

A detailed consideration of the settlement pattern reveals a high level of disintegration and fragmentation. Higher density settlements should be located along the main transportation routes and held together by a web of local access roads and public facilities. At a regional level, they should be knit together by a system of regional access routes. However, settlements are also not static. They respond to change and are continuously in the process of transformation. The key challenge is to turn them from being creations and remnants of the apartheid regime into sustainable human settlements. This has serious implications for detailed planning and development of these settlements:

- Urban coastal areas promote integrated mixed use residential development, they should earmark all the strategically mark land parcels that can be used as opportunity. They should package land parcels for variety of housing projects i.e. BNG, low income housing, middle income housing and social housing.

- A convenient settlement improves the level of choice, encourages creativity and investment while a less convenient settlement imposes a lifestyle on people and results in unnecessary expenses.
- Settlements should be equitable in the sense that they should provide a reasonable access to opportunities and facilities to all. It is neither possible nor desirable for settlements to be homogenous hence an emphasis on choice.
- Centrally located settlement should provide improved access to higher order public facilities, intensive agriculture and other urban services. They should generate a wide range of opportunities. Rural sparsely populated settlements should be considered as opportunity areas for agricultural development such as crop production and livestock farming. Centrally located settlement should provide improved access to higher order public facilities, intensive agriculture and other urban services.

10.4.3.2 RURAL-URBAN INTERFACE

Development within the Ray Nkonyeni raises an issue of the traditional dichotomy between urban and rural, town and countryside. The structure of the local economy shadows the discrepancy between urban and rural. These realities underscore the necessity of putting together a spatial strategy within the broader development context. It should thus focus on managing the form and texture of development, in a manner that contributes to the following performance criteria:

- Developing a comprehensive spatial system that promotes integration of the previously disparate areas and eliminates the gap between where people live and where they work.
- Improving the overall quality of the urban environment by better integrating environmental concerns within development planning and urban management practices.
- Creating the base for efficiency in the delivery of services (water, electricity, sanitation, etc.), movement, investment and decision-making.
- Promoting integrated and coordinated development with all stakeholders working towards a common development vision and agenda.

- ✧ Creating a more efficient and productive sub-region through the development adoption of policies that seeks to build of the competitive advantages while also unlocking new opportunities.

10.4.3.3 GREEN CORRIDORS AND LUNGS

Ray Nkonyeni Municipality has rivers, wetlands, agricultural farms and nature reserves that need to be protected and preserved. Land development within the municipality will be undertaken in an economically, socially and environmentally sustainable manner, and with the following being acknowledged as key interventions for spatial transformation:

- ✧ protection and enhancement of the environmentally sensitive areas;
- ✧ protection and optimal utilization of good agricultural land;
- ✧ creation of an integrated open space system in an urban context; and
- ✧ Enhancement of the aesthetic quality of the environment.

Ezemvelo KZN Wildlife has made substantial progress in mapping the environmentally sensitive areas. However, this information needs to be refined and complemented by localised investigations and strategic assessments. Environmentally sensitive areas provide opportunities for eco-tourism, agriculture and sports and recreation. Similarly, ecological zones such as wetlands, areas where there are endemic species, scenic areas, etc., provides opportunities for environmental conservation and tourism development, and should not be subjected to development pressure.

10.4.3.4 PROTECTION OF HIGH VALUE AGRICULTURAL LAND

A substantial amount of land in Hibiscus is generally classified as having high and good potential for agriculture. It is important to note high potential agricultural land has become a scarce and a deteriorating resource. Its protection is high on the agenda for the Department of Agriculture. Sub-division and change of land use on agricultural land is governed in terms of the Sub-division of Agricultural Land Act (SALA), Act No. 70 of 1970, and is administered nationally. However, there is no coherent provincial policy that guides this process. As such, it is critically

important for Hibiscus Municipality to develop its own guidelines (as part of the SDF) for managing development on agricultural land.

10.4.3.5 INTEGRATION OF BUILT-FORM AND OPEN SPACES

The intention with the built environment should be the creation of large continuous precincts of built form, rather than it is occurring in spatially discreet pockets or cells. This is necessary to obtain economies of agglomeration. At places, the continuity of the fabric should be systematically broken so as to ensure equitable access to green space and other opportunities. The benefits of mixed development:

- ✧ Visual stimulation and delight of different buildings within close proximity
- ✧ A greater feeling of safety, with 'eyes on streets'
- ✧ Greater energy efficiency and more efficient use of space and buildings
- ✧ More consumer choice of lifestyle, location and building type
- ✧ Urban vitality and street life
- ✧ Increased viability of urban facilities and support for small business (such as corner shops).
- ✧ More convenient access to facilities
- ✧ Travel-to-work congestion is minimised
- ✧ Greater opportunities for social interaction
- ✧ Socially diverse communities

A more vibrant and sustainable spatial structure and form results from blurring the distinction between uses and designing places that make walking to the local Centre, and bus stop or taxi rank, as convenient and comfortable as possible.

10.4.3.6 INTEGRATED COMPACT DEVELOPMENT

More compact settlements areas can be achieved with the maintenance of a settlement edge in order to discourage development sprawling into prime agricultural land and other natural resource areas. The settlement edge can be used to encourage more efficient use of underutilised land existing in a

settlement, through development of vacant land or the re-use of degraded land areas. It can also be used to manage the investment and characteristics of infrastructure levels according to the needs of communities and economic activities located within settlement edges or outside settlement edges. This requires detailed planning at a settlement level and could best be sustained through the coding or integration of the existing community rules into a land use management system. Certainly, the level of compaction will take into account the nature and character of each settlement, as well as the prevailing spatial development trends and patterns.

10.4.3.7 ECONOMIC VALUE ADDED AREAS

The Municipality is characterised by key economic centres and areas where all the varieties of economic sectors (Agriculture, Tourism, Manufacturing, and Services) are prevalent and perceived to have good potential to be further expanded on. These areas should be promoted to be visibly linked to high accessibility areas with existing bulk infrastructure and relatively high population densities, which would both contribute to the economic expansion and benefit from interventions in these areas.

10.4.4 KEY SPATIAL STRATEGIC INTERVENTIONS

The strategies for Ray Nkonyeni are intended to provide short, medium and long term direction to various aspects of development including spatial planning, economic development, infrastructure planning and environmental planning. The ultimate aim is to ensure a better quality of life of municipal residents through aspects dealing with spatial restructuring, accessibility and mobility, economic opportunities and spatial resilience.

10.4.4.1 PROMOTE SPATIAL INTEGRATION

The majority of the settlements within the municipality are not spatially integrated. There is dislocation of settlements which depicts a clear spatial

distinction between urban and rural areas. Such dislocations pose major challenges in terms of basic service infrastructure provision. It is important that the municipality establishes a clear planning framework which include formulation of Local Area Plans for key land use system and more detailed precinct level investigations and plans for nodal developments and densification frameworks to promote spatial integration and development compaction. This will also include a strategic focus on locating people closer to areas opportunity to be identified by the nodes and corridor.

10.4.4.2 PROMOTE A STRONG AND VIABLE MOVEMENT STRUCTURE

The desired movement structure for the Ray Nkonyeni Municipality includes public investment in road connections to support public transport and pedestrian movement with the aim of enhancing linkages with activity areas. This movement structure will need to be supported by areas of economic growth and development which provides the municipal population with employment opportunities and contributes greatly to poverty alleviation.

10.4.4.3 SUPPORT PRIORITY INVESTMENT AREAS

The development of the Ray Nkonyeni Spatial Development Framework focuses on promoting and supporting areas which require public and private investments related to priority spending areas where need is considered a key determinant for socio-economic investment. Whilst this strategy is interrelated to the intent for nodal areas, this strategy refers specifically to needy areas which ultimately justify themselves for priority spending on infrastructure, housing, basic services and essential public services to support particular settlements. This also include ensuring the provision of adequate social amenities in appropriate locations, and facilitating social integration.

10.4.4.4 SUPPORT SUSTAINABLE ENVIRONMENTAL CONSERVATION AND MANAGEMENT

This strategy aims at protecting the conservation areas of environmental significance such as indigenous vegetation, priority biodiversity areas, wetlands, rivers and their surroundings, etc. For this strategy to work there is a need for management and enforcement of environmental laws and negotiation processes to enhance the viability of environmental conservation and management in the Municipality. These, together form part of contributing towards the minimisation of the related effects of climate change and achieving a sustainable environmental system.

10.4.4.5 MANAGEMENT AND FACILITATION OF SUSTAINABLE HUMAN SETTLEMENT THROUGH SPATIAL POLICY

This strategy will focus on the promotion and facilitation of sustainable human settlements through the utilisation of spatial policy such as the provincial inclusionary housing policy. Emphasise on housing development and associated infrastructural development will focus on nodal areas and will be directed by infill development. Within the current premise of human settlements, there is the need to rationalise housing typologies in accessible locations (i.e. in proximity to social amenities, jobs and transportation networks).

10.4.4.6 ERADICATION AND UPGRADING OF INFORMAL SETTLEMENTS

The strategy aims at upgrading informal settlements and transforming illegal structures into legal ones thus improving the Ray Nkonyeni housing statistics. This also focuses on the recognition of three fundamental conditions which include property rights, property values and physical attributes of the underlying assets and their impact on each other. Beyond the legal dimensions of upgrading the informal settlements, the strategy also aims at promoting improvement of services such as water, electricity, sanitation, road infrastructure, etc.

10.4.4.7 PROMOTING PUBLIC AND PRIVATE SECTOR INVESTMENTS IN RURAL NODAL AREAS FOR INFRASTRUCTURE DEVELOPMENT

This strategy will focus on promoting public sector investment through the prioritisation of provision of basic infrastructure such as water, sanitation and electricity. This will be done so as to encourage private sector investment into rural nodal areas thus also creating incentives to support such areas.

10.4.4.8 INCLUSIONARY HOUSING DEVELOPMENT

A comprehensive housing strategy should be followed in the development of sustainable human settlements. Particular focus should be paid on integrated mixed residential development (i.e. low income housing, gap-housing developments and high-income housing) and slums clearance within urban areas while the focus on rural areas should be the eradication of inadequate housing. Rural settlements should be prioritised for the development of human settlements through the rural housing subsidy scheme.

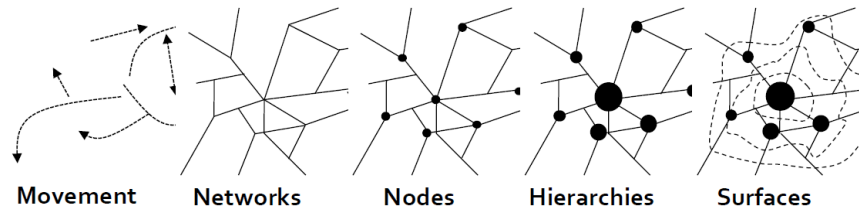
10.4.4.9 MAXIMISING AND COORDINATING THE TOURISM AND RECREATION POTENTIAL

Since the municipality is known for its tourism assets, there is scope for better utilisation of opportunities. This will have to take place bearing in mind that such development is not detrimental to the natural environment. Tourism activities should be in accordance with the image of the tourism features of the municipality, and various initiatives are to be coordinated.

11. SPATIAL STRUCTURING ELEMENTS

11.1 SPATIAL STRUCTURING

Figure 10: Spatial Restructuring Models



Source: Mogale City IDP, n.d.

The spatial framework is developed through an interrelated set of nodes, networks and surfaces. The essence of development in this system is the movement of people, goods and services that produces the basic impetus for developing functional relationships between otherwise independent and unrelated elements. The movement of people, goods, and services are channelled along specific routes that describe a network of interaction. Where networks intersect the opportunity for people, goods and services develop to interact and this gives rise to activity nodes. The intensity of interaction gives rise to the development of a hierarchy of nodes of different sizes depending on the level of interaction taking place in a node. This one-dimensional system of networks and nodes are tied together through surfaces that fill the areas between the nodes and networks.

The first structuring element is the development and reinforcement of a system of varied activity nodes. This will enable greater access to city-wide opportunities, as well as equitable access to a system of local opportunities. The idea is to ensure that all people within the area live within easy walking distance of a public transport hub which will link to the city's public transport systems. These nodes, depending on their position in the hierarchy,

will form points of access to a range of local and in some cases regional opportunities. Through the focus of development at these points the 'emerging core' will begin to reflect the opportunities that are present in the more developed areas of the Ray Nkonyeni.

11.1.1 SYSTEM OF ACTIVITY NODES

A development node refers to already established areas or potential ones that connects places of residence to areas of economic activities/opportunities. A development node may be a place of high or low-density intensity of development chosen for private or public investment to provide goods and services to the local communities based on their threshold of demand. A development node may be large or small depending on the area it serves. However, a properly functioning development node ought to have amenities like shopping, work opportunities, social and cultural opportunities and public transport facilities in a high quality and safe public environment. It includes cities, towns and other areas that exhibit or have potential for the developing the above-mentioned characteristics.

An activity node offers the opportunity to locate a range of activities, from small to large enterprises, often associated with mixed-use development. They are generally located along or at the cross-section of development corridors. Activity nodes have the potential to be an important sub-regional structuring device. They serve as points in the spatial structure where potentially access to a range of opportunities is greatest, where networks of association create diversity and where people are able to satisfy the broadest range of their day to day needs. Being points of maximum economic, social and infrastructure investment, as well as representing established patterns of settlement and accessibility, these nodes must be regarded as primary devices on which to anchor the structure of the sub-regional spatial system.

Beyond this a set of local service nodes oriented around neighbourhood needs should be defined at a local level. It is suggested that well located school precincts form the basis for the development of these community based activity nodes. To reinforce these activity nodes, a set of tools or supportive strategies at the local level are needed to realise these areas as safe, economically vibrant and accessible places. The nodes that are identified include the following:

11.1.1.1 DISTRICT DEVELOPMENT NODE

Port Shepstone town has been identified as a District Node as it is the main urban centre within the Ray Nkonyeni and Ugu District Municipality area of jurisdiction. The town is strategically located at the central parts of the District and it plays an important role as a regional centre for the District. It functions as a district centre and it qualifies to have its local justice system through a Magistrate Court. It is the primary area for investment promotion and centre of supply of services in the District. Port Shepstone is the main commercial centre and the major location of employment. District development nodes play a major role in the regional economy, and makes a substantial contribution to the provincial economy. They serve as major clusters of economic activities and provincial population. They have significantly developed and diversified economies. They serve as both economic hubs and administrative centres, but also includes performs some service centre functions. It forms part of the provincial spatial systems and is identified in the PSDP as one of the economic hubs. This node has administrative, social, and economic potential and there is provision of concentration of different activities of services. As a regional node, the following activities should be strengthened in this node: -

- ❖ Location of district and sub-district offices of various government departments and serve delivery agencies.
- ❖ Location of facilities and services for an effective administration.
- ❖ Industrial development, focusing mainly on the processing of raw materials produced within the sub-region.

- ❖ Location of public facilities serving the whole sub-region and beyond. These may include district hospital, sports facilities and transportation facilities.
- ❖ Location of regional commercial centres to promote the economic growth of the municipality.

11.1.1.2 MUNICIPAL DEVELOPMENT NODE

There are six (6) Municipal Development Nodes identified which provide medium order goods and services to surrounding settlements. These nodes are namely: -

- ❖ Shelly Beach;
- ❖ Margate;
- ❖ Hibberdene;
- ❖ Port Edward;
- ❖ Marburg; and
- ❖ Ezingolweni.

Municipal Development Nodes would be physically linked to each other and to urban centres outside their regions (districts) by frequent and reliable transportation and all-weather roads. They offer diversified commercial, financial, professional and administrative services. They accommodate sub-regional offices of national government departments and branch offices of provincial government department. They provide facilities for large scale and diversified markets, function as a communications node for a broad rural hinterland, and provide sites for agri-business and large-scale agricultural processing. They provide space of the location of small-scale consumer goods industries, repair workshops, and light durable goods. They offer higher educational opportunities and more specialized vocational training; and provide diversified and multi-purpose hospitals and health clinics. Municipal offices would mostly be located in these development nodes. These nodes currently function as the sub-regional urban centres for the Ray Nkonyeni that they serve. Similar to the primary node, these areas are well located within the main transportation routes that connect these nodes with various settlements

within Ray Nkonyeni area of jurisdiction. As a sub-regional node, the following activities should be strengthened in these secondary nodes:

- ❖ Development of commercial activities serving the whole local municipal areas and the surrounding areas (sub-region).
- ❖ Light Industrial development, focusing mainly on the processing of raw materials produced within the sub-region and the neighbouring areas agri-processing centre.
- ❖ Development of sub-regional shopping centres to serve the neighbouring communities.
- ❖ Location of public facilities serving the neighbouring communities. These may include sports and transportation facilities.
- ❖ Location of facilities and services for an effective administration and local governance of the municipalities.

11.1.1.3 COMMUNITY DEVELOPMENT NODE

While the District and Municipal Development Nodes serves as a regional and sub-regional centres, at least fourteen (14) other areas present an opportunity for the development of the Community Development Nodes with much less threshold/ sphere of influence, namely:

- ❖ Umzumbe;
- ❖ Glenmore Beach;
- ❖ Leisure Bay;
- ❖ Oslo Beach;
- ❖ Umtentweni;
- ❖ Ramsgate;
- ❖ Uvongo;
- ❖ Southport;
- ❖ Sea Park;
- ❖ Palm Beach;
- ❖ Munster;
- ❖ Gamalakhe;
- ❖ Southbroom; and
- ❖ Munster.

Community Development Nodes are small towns that provide an area-wide exchange point household and common consumer products, and farm inputs.

They serve as nodes of transportation and distribution linked to regional centres within the province. They provide higher-level administrative services that cannot be found in community development nodes and offer vocational and secondary education, health and childcare services, and rural commercial services. Three main factors have influenced the selection of these areas, that is:

- ❖ Location in relation to major access routes. Secondary nodes are located either along a primary or secondary corridor, or at the intersection of the primary and secondary corridors.
- ❖ Location in relation to large rural or urban settlements, which provides a threshold for services, rendered from these areas.
- ❖ Development potential based on the accessibility and the role and function of the town.

11.1.1.4 SETTLEMENT DEVELOPMENT NODE

Settlement Development Node serves specific geographical area and social network. Its service area would be limited to the surrounding cluster of settlements within a specific neighbourhood and would include low order public, shopping and small business enterprise facilities. It serves as a link between the local communities and the major towns as such they should locate in accessible areas along or at the intersection of public transport routes. These seven (7) nodes have been identified as follows:

- ❖ KwaNzimakwe;
- ❖ Gcilinga;
- ❖ Murchison;
- ❖ Ndimeni (Vukuzithathe);
- ❖ Moguntia;
- ❖ Nkumbini; and
- ❖ Mahlabathini.

11.1.1.5 RURAL INVESTMENT NODES

KwaMadlala has been identified as the Rural Investment Node. It is strategically located to serve rural settlements. Rural Investment node is

focussed on improving the local economic growth of the rural centre with basic socio-economic elements. This node will serve as major rural centre and serve as location points for community facilities serving the local communities. This is a rural area with a lot of potential for local economic centres and manufacturing activities. The most basic facilities for this type of node include Secondary/ Primary Schools, Crèches, Mobile Police Station, Traditional Court, Satellite pension pay points, Mobile Clinic, Community hall and Sports Fields.

11.1.1.6 RURAL SERVICE NODES

In addition to the Rural Investment Nodes, the vision for the future spatial development of Ray Nkonyeni makes provision for the development of community centres within a cluster of settlements. These small centres will serve as location points for community facilities serving the local community such as Primary and secondary schools, Clinics including mobile clinics, Pension pay points and Community halls and other community facilities. There are no foci that operate as Rural Service Centers at this stage, but some activity could be upgraded to perform this role. The location of these nodes is usually the most accessible location within an acceptable walking distance of a community. These were identified as:

- ❖ Mtateni (Vukuzithathe);
- ❖ Nqabeni;
- ❖ Thonjeni;
- ❖ Paddock;
- ❖ KwaMavundla (Gamalakhe);
- ❖ KwaNdwalande; and
- ❖ Lushaba.

11.1.1.7 RECREATIONAL NODE

In support of tourism development within the municipality and promoting it to be highly celebrated through efficient and sustainable infrastructural development. It is recommended that the Gamalakhe node, particularly the area surrounding the uGu Sports and Leisure Centre at the close vicinity of

the intersection of road P200 and St Michaels road be promoted as a recreational node. This node is envisaged to provide multifunctional recreational and network of public open spaces that could provide in all the needs of the local community. This node is currently vacant however this area has the potential location of mixed development such as promotion of network of public open spaces supported by residential, commercial, offices and conference facilities.

11.1.1.8 TOURISM NODE

Oribi Flats are situated to the north of the Oribi Gorge, and represents the centre point of an agri-tourism, eco-tourism and adventure areas. Any development within this area that may have adverse effects on the tourism industry needs to be discouraged. The area is situated centrally to the north-eastern parts of the Municipality, and represents the access point from the southern parts to the Northern tourism area. This area is envisioned to provide limited social amenities such as a postal collection point/post boxes but more specifically for the marketing of, and direction to tourism attractions in the Tourism Area. As such no large scale development would be encouraged here.

11.1.1.9 OTHER: TOURISM INTENSITY NODES

There are five nodes which have a tourism character over and above the role and function that has been listed above. These are:-

- ❖ Port Shepstone;
- ❖ Margate;
- ❖ Ramsgate;
- ❖ Port Edward; and
- ❖ Shelly Beach.

Although, the coastal strip is generally a tourism hive for the municipality but the main concentration of tourism activities is centred around these nodes.

TABLE 9: NODAL CLASSIFICATION				
CLASSIFICATION	ECONOMIC DEVELOPMENT	SERVICE DELIVERY CENTRE	ADMINISTRATIVE CENTRE	TOWN OR SETTLEMENT
District Development Node	Economic centre that serves the entire district.	Regional Commercial Activities Multi-skilling / training centre Regional Library Secondary & Primary schools/ Crèches Regional Hospital/Clinic Police Station/ Permanent emergency services facility Permanent welfare office/Pension pay-point Children's home/Aged/Infirm care centre Magistrates Court Multi-Purpose Community Centre/ Customer Service Centre Civic Centre Sports / recreation complex (with swimming pool)	Seat of the district municipality. Location of provincial and national government district offices.	Port Shepstone
Municipal Development Node	Economic centre that serves the entire municipal area	Sub-regional Commercial Centre Secondary & Primary schools/ Crèches Local Hospital/ Clinic Police Station Library Welfare office/Pension pay-point Multi-Purpose Community Centre/Satellite Customer Service Centre Municipal hall Sport Complex	Seat for the local municipality offices. Location of decentralised government offices	Marburg, Ezingolweni, Port Edward, Margate, Shelly Beach and Hibberdene
Community Development Node	Location of economic activities that serve the surrounding communities	Secondary/ Primary schools/Crèches Satellite Police Station Satellite Pension Paypoint Satellite Customer Service Centre Community hall; Sports grounds; Local commercial and industrial centre	Ward Councillors Satellite Offices	Umzumbe, Glenmore Beach, Leisure Bay, Oslo Beach, Umtentweni, Ramsgate, Uvongo, Southport, Sea Park, Palm Beach, Munster, Gamalakhe, Southbroom, Sunwhich Port and Munster.
Rural Investment Nodes	Local economic centres and manufacturing activities	Secondary/primary Schools /Crèches Mobile Police Station Traditional Court		KwaMadlala

		Satellite pension pay points Mobile Clinic Community hall Sports Field	
Rural Service Nodes	Local convenient shops and manufacturing activities	Small centres will serve as location points for community facilities	Mtateni (Vukuzithathe), Nqabeni, Thonjeni, Paddock, KwaMavundla (Gamalakhe), KwaNdwalane and Lushaba.
Recreational Node	Provides a multifunctional recreational and public open space that could provide in all the needs of the local community.	Sports Complex, Parks, Open Space Network and Conservation	Ugu Sports Complex
Tourism Node	Tourism accommodation, recreational activities, art and craft outlets and local service shops	Basic mobile services as and when required	Oribi Flats

Source: Towards a Framework for the Classification of Development Nodes in KwaZulu-Natal (2016)

11.2 HIERARCHY OF DEVELOPMENT CORRIDORS

The spatial development concept starts by understanding the movement networks of people, goods, and services which are channelled along specific routes that describes a network of interaction. The level of activity that these networks provides results in “Development Corridors” which are broad areas of high-intensity urban development centred on activity and development routes. They are characterised by a dynamic, mutually supporting relationship between land use and the supporting movement system. Development corridors are generally supported by a hierarchy of transport services that function as an integrated system to facilitate ease of movement for private and public transport users.

Corridor development is focused predominantly on activity/ development routes serviced by mass rapid public transport services (i.e. rail or bus rapid transport (BRT)); however, the system of routes may serve distinct functions, with some routes combining route functionality in terms of accessibility and mobility. Based on the above, the Ray Nkonyeni Municipality conceptual framework reflects: -

- ❖ Higher order activity routes, parallel to the National Road (N2), connecting major activity nodes. These routes have high levels of continuity,
 - ❖ Local activity routes, which connect local activity nodes to each other and to major activity nodes and feed into the higher order activity routes.
 - ❖ New links supporting physical integration of the areas
- Secondly, to support the role of these activity routes as integrating elements, a set of tools or supportive strategies are identified and are reflected below.
- ❖ Key network linkages are developed to reinforce the accessibility grid and the centrality of the activity nodes
 - ❖ An integrated network of Non-Motorised Transport (NMT) routes is developed to support access to local and broader opportunities.

Development corridors in Ray Nkonyeni Municipality occur at different scales depending on function and categorization of the transportation route that forms the basis of the corridor. They carry the flows of people and trade between two points (origin and destination) and encourages nodal development at strategic point. Corridor development as a spatial structuring element, and a tool for economic growth, seeks to create functional linkages between areas of higher thresholds (levels of support) and economic potential, with those that have insufficient thresholds. This will enable areas that are poorly serviced to be linked to areas of opportunity and benefit with higher thresholds. As a result, the system of development corridors in Ray Nkonyeni are developed on the following fundamental aspects: -

- ❖ Levels of Mobility;
- ❖ Levels of Access;
- ❖ Land use intensity and role in the spatial economy; and
- ❖ Functionality of the corridor.

These aspects summarises the significance of corridors within a municipal area. Upgrade and road maintenance projects on corridors that leads to development opportunity areas such as rural service centres, high potential agricultural land and tourism nodes should be prioritized as this will encourage investment, improve accessibility and enhance mobility. This principle supports the phased approach to development, targeting areas of greatest potential first. Development corridors are effective in linking infrastructure and economic development as towns and structures connect to each other in a functionally effective manner.

11.2.1 NATIONAL CORRIDOR: N2 AND R61

The N2 is the primary north-south linkage and it links Port Shepstone in the South with Durban in the North. The N2 also links Port Shepstone with Kokstad as an east-west linkage. The section of the N2 which runs in the north-south direction up to Port Shepstone is of freeway standard, and comprises of 4 lanes, 2 lanes in each direction for most parts. The N2 is regarded as a generator for growth, particularly between Port Shepstone

and Harding. This is the main high level limited access mobility road and is component part of the Provincial “Corridor” system.

Interchanges link this road to the Regional major arterials that give access to both formal urban settlements and most of the informal settlement clusters that occur mostly within Traditional Authority areas. The National Corridor identified provides public transport linkages and accessibility to the communities at the interceptor points with other movement channels. A range of development opportunities are envisaged along these channels. The N2 is identified in the NSDP as a national corridor, and is recognised as such (strategic transport route) in the PSDP. Therefore, the N2 is a high speed limited access road providing access and inter-nodal connections at a national and provincial level. The N2, in both a north/ south and east/ west direction, providing mobility routes. The north/ south routes provide the high friction lattices, namely the P395, P 3-1.

Inland arterials are identified as the P200, P482 and the P198. A set of east/ west roads connect the coast to the interior. The prominence of this line is limited to freight and is not utilised for passengers. The N2 running along the coast linking the coastal towns is a major structuring elements within the Municipality. This link provides the primary north/ south movement lattice through the study area. Secondary north/ south link can be identified as the P395 which runs along the coast from the north until Ramsgate, as well as a less prominent inland route running from north to south which is made up of the P198, P464, P482 and the P200. Therefore, there is no major structuring north/ south linkages exist inland of the N2. In an east/ west direction the N2 between Port Shepstone and Harding is the

Image 3: National Route – N2



primary link with a number of secondary supporting routes. It is a tourist route to the major tourist destinations in Eastern Cape. Development along this route should occur as follows:

- ❖ The N2 links the Ray Nkonyeni with Scottsburg, Durban airport and the Metropolitan area of eThekweni to the North. Moreover, the rail and air transport (Margate Airport) also serve as the primary corridors in the municipality as these play a major role in the promotion of tourism
- ❖ Facilitate the establishment of mixed land use activity nodes at the intersection of the N2 and the regional or provincial routes. Activities that may locate in these areas include logistics, warehousing, light industry and commercial facilities.
- ❖ In the short to medium term, high value agricultural land located along the corridor should be protected, but in the long term, strategically located areas abutting onto the mixed land use nodes should be opened for development as mixed land use precincts.
- ❖ Compliance with the policies and regulations introduced by the South African National Roads Agency (SANRAL).

R61 is the provincial routes that link Ray Nkonyeni with external significant nodes such as Kokstad, Port Edward and Mount Fletcher. Secondary to the N2, this route serve as a main link between the Eastern Cape Province and KwaZulu-Natal Province. These are identified in the Provincial Spatial Development Plan (PSDP) - Eastern Cape as some of the Strategic Transport Routes. Due to

the current settlement patterns and population distribution, R61 has attracted a lot of settlement and establishment of business uses dependent on accessibility and population concentrations. The ongoing densification along this route is resulting in R61 fulfilling the role of a residential access road. High Public Transport usage (with a lack for such provisions in the present road design), higher pedestrian movements along and across the route, high animal concentrations and insufficient fencing along this route

Image 4: Provincial R61



are all factors contributing to this route being extremely dangerous to both motorists/commuters and residents. Development along R61 Development Corridor should follow the following guidelines:

- ❖ R61 is a regional limited access and high speed public transport route; as such direct access onto this road should be subject to the provincial road transport regulations.
- ❖ Higher order land uses should be accommodated in the nodes, but lower order land uses could develop in a linear fashion subject to alternative access opportunities; and
- ❖ A 15m buffer should be observed from the boundary of the road reserve. This has implications for settlements that have encroached onto the buffer areas.

11.2.2 PRIMARY TOURISM CORRIDOR: R102 AND R602

Some of the main provincial roads within the study area include the R602, The R602 is termed the 'beach road' (better known as "Marine Drive) and it runs in the north-south direction along the coast, linking the various coastal towns. The provincial roads are predominantly in the east-west direction and provide high levels of accessibility linking into the minor arterials. This network of provincial roads functions as primary transport corridors. The regional road network can be classed into either surfaced (blacktop) or un-surfaced (gravel), which can be further classified into a north-south link or an east-west link. There are also District Roads. The district roads provide major internal linkage, linking schools, clinics etc. A problem that faces the municipality is the alignment of KZNDOT implementation projects with that of the municipality's implementation projects. The role of the R102 (Old Main Road) that runs from Hibberdene along the coastline as far as Port Shepstone as a Primary Tourism Corridor is to be maintained and strengthened.

Along this corridor there are various tourism attractions such as swimming beaches and commercial nodes. Secondary Tourism Corridors - The Secondary Tourism Corridor (inland) is to encourage the spread of tourist facilities to the inland component of the Municipality. This corridor has

potential to unlock tourism and business potential of the area. The sustained development of tourism facilities is dependent on the capacities of supply services networks, and it is essential that the IDP's capital development programme is aligned to the tourism elements of the SDF. The basic services backlogs need to be addressed. Secondary corridors need to be improved in order to give access to inland areas. In order for the tourism sector to grow, the tourism corridors need to be maintained and strengthened. The implication of the substantial Ingonyama and state-owned land is that many inhabitants do not have independent tenure rights and this impact on participation in the economy.

11.2.3 SECONDARY CORRIDORS

The Municipality is characterised by poor corridor development linking urban and rural settlements. This may be due to the lack of economic activities located along these routes. However, the rural linkages which are connected to the urban linkages have potential in becoming Secondary Corridors. The secondary corridors are P69, P732, P482, P344, D686, D0165, P0860, P0262, P0354, P0284, P0057 and P0058. A corridor serving areas of high poverty levels with good economic development potential within one or two sectors. There are a number of very important inter-and intra-roads within Municipality which should be defined and linked to function and activities. Therefore, Port Shepstone – St Faiths – and Ixopo corridor was identified as a secondary corridor with agriculture and tourism playing a significant role.

This Secondary corridor needs to be improved in order to give access to inland areas. In order for the tourism sector to grow, the tourism corridors need to be maintained and strengthened. The implication of the substantial Ingonyama and state-owned land is that many inhabitants do not have independent tenure rights and this impact on participation on the economy. In order to improve accessibility to the inland areas and to create potential inland tourism routes, Main and District Roads have been highlighted for upgrading and regular maintenance as Secondary Corridors. The rural

character of the area and proximity to the major economic opportunities in the Ray Nkonyeni, make the area attractive for residential and tourism development. Although it would be impossible to develop the total corridor, emphasis should be given to certain sections of the road. The type of activity should focus on tourism, arts and craft, recreational, hospitality and environmental related activities.

This road based public transportation spine can be considered the most valuable asset contributing to the development potential of the settlements close by, enabling the development of higher-density and mixed land uses. To ensure land use and transportation integration which need to be integrated with the surrounding land uses. Although specific areas have been identified for corridor development along the respective routes, some tourism activities could be established along the routes, subject to legislative and technical requirements. These principles also provide a guide to other planning initiatives. Secondary Corridors should be planned and developed to:

- ❖ Support and facilitate development and investment that contributes to the economic and social vitality of the Corridor and adjacent neighbourhoods.
- ❖ Promote and support development which enhances and respects the character of existing neighbourhoods where appropriate and creates vibrant, dynamic, and liveable urban places through high quality urban design.
- ❖ Develop compact, mixed use urban environments that support transit and active transportation.
- ❖ Promote and support an innovative sustainable built environment that uses resources efficiently and encourages a high quality of life.
- ❖ Identify areas of change as the locations for new development

The P69 and P732 plays a major role promoting tourism development as they are mainly connected to rural settlements. It is recommended that the municipality upgrade these roads to provide better access to tourism development, tourism marketing as well as private or community investment in rural accommodation in support of the tourism activities in Port Edward and KwaXolo Caves.

The Gamalakhe Township is slowly developing as a precinct area with the majority of activities ranging from mixed use development, residential, commercial and recreational activities defining the character of the township. It is important that such activities be supported by corridors which will increase or result in the role of the area positively contributing to the municipal economic growth. As a result, P482 linking Uvongo and Gamalakhe is envisaged to promote the character of the township as a Secondary Corridor. This corridor is also envisaged to promote recreational uses, as it passes through the Sport and Leisure Centre. P344/ D686 which links kwaMadlala and Sunwhich Port is envisaged to be a secondary corridor. Currently, no development is taking place along this route. However, potential lies in upgrading the road to increase investment opportunities to emerge to benefit the Madlala TC. Therefore, this corridor has potential to unlock basic service delivery through water provision, electricity and sanitation which will result in the investment in economic development into the area.

11.2.4 TERTIARY CORRIDORS

The following roads have been identified as the tertiary corridors:

- ❖ Road from Hibberdene to Msinsini,
- ❖ Road from St Michaels to Gamalakhe,
- ❖ a route that runs from Nkuswana-(D0920) via Thonjeni-Nkulu(D1085)-N2-Sunshine to Nqabeni,
- ❖ a route that runs from Moguntia to Maryland; and
- ❖ Road from Margate to Gamalakhe.

These corridors are mainly envisaged for movement purposes with direct access to properties permitted and high pedestrianized activity. The corridors services are envisaged to be of a lower order service to serve their sphere of influence.

11.2.5 TOURISM DEVELOPMENT CORRIDORS

The corridor aims at promoting and facilitating tourism development. The identified tourism development corridors include: -

- ❖ P69 linking Munster and KwaNzimakwe TC;
- ❖ P262;
- ❖ D251;
- ❖ P732 linking Southbroom and KwaXolo TC;
- ❖ P55 linking Murchison, Nyandezulu Waterfalls and Oribi Gorge; and
- ❖ D1095 linking Port Edward, Ezingolweni and passing through Red Dessert.

Another, Potential Tourism Corridor Route is located along the Port Edward to Ezingolweni east/ west link. The Route consists of a number of Cultural and Tourism Opportunities such as the Red Desert, the Umtamvuna Nature Reserve, the Space Centre, KwaXolo Caves. A cultural village is proposed in support of the tourism activities along this route. This will be subject to further economic studies to test its feasibility but essentially the intention is to draw tourists that will travel to the Mbubazi Nature Reserve through this area and secure much needed local economic development opportunities. This proposed Tourism Corridor Route presents a unique opportunity for the southern extremity of the Municipality, creating new cultural and tourism opportunities.

11.2.6 IZOTSHA CORRIDOR

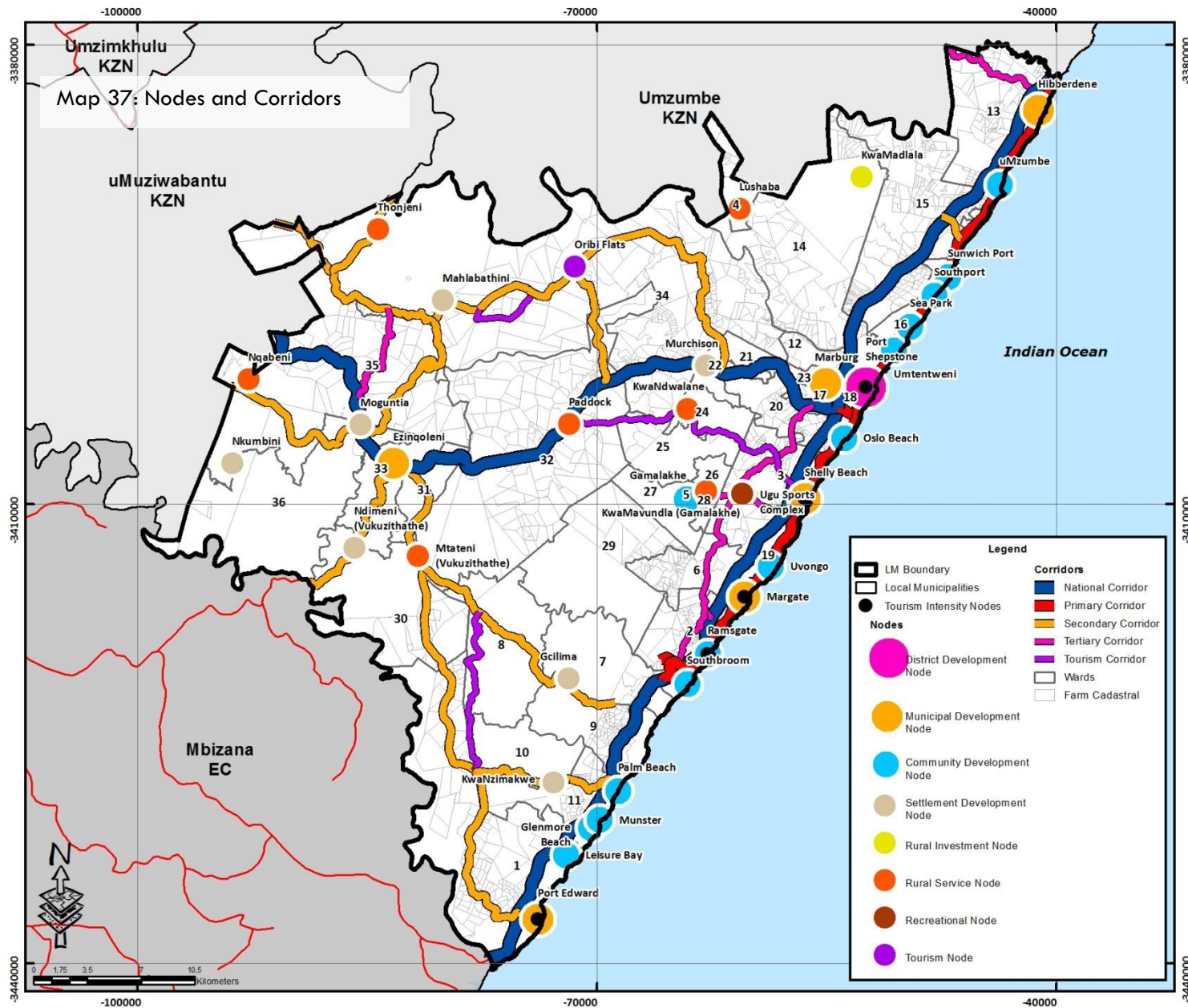
This corridor is located on the west-southern part of Port Shepstone. It is intended to facilitate the expansion of the town through industrial, commercial and residential developments. This area is partially developed with few industrial, warehouses, agricultural and residential activities. The are key issues that needs to be addressed with this proposed corridor and are:

- ❖ Road widening – since this route is currently a very narrow road with sharp and steep bends which does not make it user friendly for heavy duty trucks;
- ❖ Creation of Service Lanes that runs parallel to land uses activities. This will ensure that this route does not function as both an activity corridor and a mobility route which can potentially create traffic accidents; and
- ❖ Resourcing it with streetscape infrastructure (including signage, pavements and streetlights).

11.2.7 FUTURE DEVELOPMENT CORRIDOR

A Future Development Corridor is proposed to facilitate the expansion of Port Shepstone and Margate towards the south-west of the municipal area. It adjoins Izotsha Corridor and it is positioned in close proximity to Gamalakhe Township. The proposal is to encourage mixed land use activities which includes commercial, offices and residential along this main road which will allow for the development of a new Community Urban Town Centre (at the intersection of the road that leads to Gamalakhe and Uvongo) over a long term.

Table 10: Corridors			
TYPE OF ROUTE	FUNCTIONS	LAND USE INTENSITY	BUILDING LINES
National Route (National Corridor) (N2 and R61)	<ul style="list-style-type: none"> Principal Arterial Expressway Mobility Route Prohibited Direct Access 	<ul style="list-style-type: none"> Large Industrial Hubs Large Commercial Hubs 	60 metres
Provincial Route (Primary Corridor) (R102 and R620)	<ul style="list-style-type: none"> Major Arterial Mobility Highway Limited Access 		15 metres.
District Routes (Secondary Corridors) (P69, P732, P482, P344, D686, D0165, P0860, P0262, P0354, P0284, P0057 and P0058)	<ul style="list-style-type: none"> Minor Arterial Main Road Limited Access 	<ul style="list-style-type: none"> Medium Industrial Hubs Medium Commercial Hubs Recreational Community Services Mixed Use Development Administration centres 	15 metres
Local Collector Roads (Tertiary Corridor) (Road from Hibberdene to Msinsini, Road from St Michaels to Gamalakhe, a route that runs from Nkuswana-(D0920) via Thonjeni-Nkulu(D1085)-N2-Sunshine to Nqabeni, a route that runs from Moguntia to Maryland and Road from Margate to Gamalakhe)	<ul style="list-style-type: none"> Collector Road Access Permitted Off Road Edge or Lay-byes 	<ul style="list-style-type: none"> Urban Settlements/ rural settlements Convenient shops/ neighbourhood centres Open Space Networks Light industrial activities 	7 metres
Tourism Corridors (P69 linking Munster and KwaNzimakwe TC, P262, D251, P732 linking Southbroom and KwaXolo TC, P55 linking Murchison and Nyandezulu Waterfalls and Oribi Gorge, D1095 linking Port Edward and Ezingolweni and passing through Red Dessert)	<ul style="list-style-type: none"> Aims at promoting and facilitating tourism development 	<ul style="list-style-type: none"> Tourism and Cultural Activities 	15 metres
Future Development Corridor (A Future Development Corridor is proposed to facilitate connectivity of the Margate Airport towards Marburg. The corridor connects to Izotsha Corridor and it is positioned in close proximity to Gamalakhe Township)	<ul style="list-style-type: none"> Aims to promote investment growth and encourage mixed use developments in the near future. 	<ul style="list-style-type: none"> Medium Density Residential Developments Medium Density Commercial hubs Light Industrial Activity. 	7 metres



Spatial Development Framework 2017/2022

Nodes and Corridors

Economic Development, Tourism and Planning Spatial Planning Unit
666 Crescent Avenue
Uvongo 4270
Tel: 039 315 9240
Date: 2017

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Stats: STATSSA
Agric Land Cover: DAG
Environmental Data: KZN Wildlife 2016
Land Reform: DRDLR
Cadastral: KZN SGO

11.3 CONTINUUM OF SUSTAINABLE HUMAN SETTLEMENT CLUSTERS

The 1976 Vancouver Declaration defined human settlement as:

"The totality of the human community - whether city, town or village - with all the social, material, organizational, spiritual and cultural elements that sustain it. The fabric of human settlements consists of physical elements and services to which these elements provide the material support"

The concept of sustainable human settlements has been developed further into a strategic framework for overall socio-economic development. Human settlements are the spatial dimension as well as the physical expression of economic and social activity. The creation of sustainable human settlements is inevitably an objective for social development as it defines and determines the relationship between where people live, play and work on the one hand and how this occurs within the confines of the natural environment. It is one of the most visible and quantifiable indicators of the society's ability to meet one of its basic needs - shelter, and a pre-requisite for sustainable human development and economic growth.

11.3.1 LAND RELEASE

Land identification exercise should be undertaken to identify, map and assess all strategically located land that is suitable for housing development. This is in addition to the land that is subject of the current and planned housing projects. The exercise should be based on the following criteria:

- ⊗ Ownership of land.
- ⊗ Restrictive conditions of title and other encumbrances.
- ⊗ Current land use and existing zoning.
- ⊗ Size and potential yield for different housing products.

- ⊗ Availability of services within the site.
- ⊗ Location in relation to employment and other urban opportunities.
- ⊗ Market value of the land as determined by the municipality for rating purposes.
- ⊗ Geotechnical, topographical and other environmental conditions.
- ⊗ The use of the land for housing purposes should be in accordance with IDP and the associated sector plans.

This exercise should be supported by a land release policy clearly stating the manner in which the municipality will acquire, allocate land and release it for development. In some instances, this may include entering into collaborative initiatives with the private sector (e.g. private public partnerships).

11.3.2 HOUSING DEVELOPMENT AND DELIVERY

A comprehensive housing strategy should be followed in the development of sustainable human settlements. Particular focus should be paid on integrated mixed residential development and slums clearance within urban areas while the focus on rural areas should be the eradication of inadequate housing. Rural settlements should be prioritised for the development of human settlements through the rural housing subsidy scheme.

11.3.3 INTEGRATED MIXED RESIDENTIAL DEVELOPMENT

This involves the following strategic approaches:

- ⊗ Identification of vacant strategic located land parcels to undertake BNG projects and Mixed Residential Development;
- ⊗ To facilitate the provision of bulk infrastructure and services within the sites earmarked for future integrated residential development; and

- ✿ To package mixed residential (low, middle and upmarket) housing projects involving the Department of Human Settlements and Private Sector (Banks).

11.3.4 SLUMS CLEARANCE

The informal settlements are:

- ✿ Bhobhoyi Phase 2 with 1 100 households.
- ✿ Louisiana with 1 000 households.
- ✿ Masinenge with 1 542 households.
- ✿ Mkhholombe with 1 600 households.

The key driver for informal settlement establishment in the municipality is primarily to access livelihood opportunities within the available urban areas. The location of the primary informal settlement areas such as Mkhholombe close to Port Shepstone and Masinenge close to Margate and Uvongo attest to this. The predominant settlement pattern is one of very dense informal settlement in areas (65-100 du/ha) close to the towns with more sparse, although still dense rural settlements areas, just of the main coastal line and in the Ingonyama Trust Land areas. The following spatial planning directives will be applied in the implementation of slums clearance projects:

- ✿ Mapping and assessment of informal settlements to establish whether they can be upgraded Insitu or requires relocation.
- ✿ Develop and introduce a land invasion policy as a means to prevent development of new and expansion of the existing informal settlements.

11.3.5 RURAL HOUSING: SUSTAINABLE DENSELY AND SPARSELY POPULATED RURAL SETTLEMENTS

The government's rural housing assistance programme has been designed to complement the realisation of the objectives of Integrated and Sustainable Human Settlements. The rural housing assistance programme needs or demand based and designed to provide housing and

infrastructure assistance within the specific circumstances. The KwaZulu-Natal Draft Rural Land Use Norms and Standards suggested the following approaches in terms of sustaining rural settlements:

- ✿ Sustaining Densely Populated Rural Settlements: (a) Prioritized for settlement plan (b) Stronger ties between Land Use Managers and Land Allocators (c) Settlement edge: drawn up (d) Advanced Services i.e. waterborne sewerage (e) **Stringent controls i.e. prohibiting on-site/ home burial** (f) Nodal/ Densification Forecasting Plans. This designation has been prioritized for densely populated settlements which are KwaXolo (i.e. Gcilima, Enkulu and Duzane), KwaNdwalane/ Nsimbini (i.e. Murchison Flats, Boboyi, Madakane and Nyandezulu) and KwaMavundla (i.e. Thafeni and Nsangwini).
- ✿ Sustaining Sparsely Populated Rural Settlements: (a) Agri-village promotion (b) protection of patches for subsistence agriculture (c) grazing land management (d) Rudimentary services and 'country lifestyle' allowed (e) On-site burial allowed. This designation has been prioritized for KwaXolo (i.e. Dumezulu, Thulawayeka, Mbecuka and Nkampini), KwaMadlala (i.e. Sentombi, Cabhane and Mambili), Oribi Flats, Paddock, Bhosiki and KwaLushaba (i.e. Mgolobi).
- ✿ Enforcement of proper farmworker housing: (a) Location: within the farm or the nearby traditional council area if commuting is possible (b) Role of Owner: the farm owner shall engage local municipality with an intent to provide housing for workers (c) **No workers should be accommodated in shacks, stables, wooden cabins, storerooms or informal dwellings** not approved by council and (d) the farmworker subsidy can be used as an instrument in the event whereby the farm owner agree to a partial subdivision or (e) the farmer will be liable to provide housing to his/ her workers should subdivision of his farm be viewed as an undesirable option.

11.3.6 AREAS FOR FUTURE HOUSING

The areas that have been identified for future integrated residential developments are as follows:

- ✿ Marburg settlement (5344);

- ⊗ Lot 1561- Shelly Beach; and
- ⊗ Portion 15 (of 17) Portion 16 (of 7) and the remainder of 7 of the farm Success no 7108.

Further sites have been identified for social housing which are:

- ⊗ Erf 1675 Uvongo;
- ⊗ Rem 26 of Erf 4939 & 4941;
- ⊗ Marburg Erf 2319;
- ⊗ Marburg Rem 1627;
- ⊗ Erf 2309 Oslo Beach;
- ⊗ Erf 1735 Rathbonville; and
- ⊗ Erf 137 Port Shepstone.

11.4 LAND CARE AND AGRARIAN TRANSFORMATION

11.4.1 PROTECTION OF AGRICULTURAL LAND

The available large scale agricultural land will need to be protected from being encroached by settlements; this can be done through proper zoning of these land parcels to prevent loss of good agricultural and production potential. Along with government, rural authorities can play a significant role towards achieving this such that they need to be involved (in their capacity as custodians of land) in relevant workshops or meetings to ensure that agricultural land is protected and only utilized for sustainable agricultural production. Poor resource (veld) management such as overstocking, the development of land for settlement (mainly in land reform projects) and other non-agricultural uses has led to the loss of significant areas of good agricultural land leaving land degraded and unproductive. The Department of Agriculture, Environmental Affairs and Rural Development has a responsibility to protect agricultural land from development that leads to its alienation from its primary purpose or to diminished productivity. Thus, the protection of good agricultural land within Ray Nkonyeni Local Municipality should be based on the following policy principles:

- ⊗ Any proposal for non-agricultural development on agricultural land should be subject to an application made to, and assessed by, the Department of Agriculture in terms of the Sub-division of Agricultural Land Act, (Act No. 70 of 1970).
- ⊗ The preparation of planning schemes should include an evaluation of alternative forms of development, and significant weight should be given to those strategies which minimise the impacts on good quality agricultural land.
- ⊗ The Land Use Scheme should aim to minimise cases where incompatible uses are located adjacent to agricultural operations in a manner that inhibits normal farming practice. Where such instances do arise, measures to amend potential conflicts should be devised.
- ⊗ The land use scheme should provide for a hierarchy of agricultural zones based on the agricultural development potential and impact of non-agricultural activities on agricultural land. Non-agricultural activities such as agri-tourism, game farms with themed estates or lodges, resort developments, etc. should be located on land with low agricultural potential.

Agricultural potential should be used to establish agricultural zones in terms of the land use scheme, and provide for a continuum of agricultural zones from predominantly agriculture only zones to zones that allows for a mixture of agricultural and non-agricultural uses. The following criteria may be used in this regard:

- ⊗ High potential agricultural land should be used for mainly agricultural activities. However, limited non-agricultural uses may be permitted especially along the corridors and within the designated development nodes. Conservation should form part of a drive to protect and

enhance the quality of agricultural land. Irrigated land along the river corridors should be protected equally.

- ❖ Low potential agricultural land should be subjected to tourism and low intensity agricultural uses. Most of it is degraded and prone to soil erosion.

11.4.2 AGRICULTURAL DEVELOPMENT

Ray Nkonyeni Municipality is a predominately rural municipality with most the population dependent on agriculture either as a source of income or food. The municipality also boasts vast lands of relatively good agricultural potential which if fully exploited and properly developed can promote sustainable food production and livelihoods. The promotion of sustainable agricultural development especially among small scale farmers and households is key towards enhancing food security within the municipality and growing potential income for these respective farmers.

Several farming methods can be encouraged to small holder farmers looking to increase their production capacity without having to increase their acreage thus, the relevant infrastructure to support production and capacity building of these farmers will need to take place. Furthermore, promoting collaboration and knowledge sharing between small scale farmers and other agricultural organizations will be needed. Below is a list of strategies that can be promoted to promote the development of agriculture within the municipality:

11.4.2.1 TUNNEL FARMING

It is proposed that tunnel farming be used for the sole purpose of vegetable farming especially for the farmers with very restricted land potential. There are many advantages to using tunnel farming method of cultivating plants, such that, these plants are grown in plastic tunnels in a growth medium other than natural soil. The plants get a constant flow of nutrients as they are dissolved in the irrigated water system thus creating large and high quality crops. Hydroponic systems are costs effective in that

they produce high quality crops, at larger yields and reduces the cost of dealing with soil borne diseases.

Another form of this method fast gaining popularity is the utilization of Aquaponics this system is distinctively different to other systems as it is designed as a self-sustainable system with little to no waste products being released into the environment. Tunnel farming and aquaponics are greatly beneficial in areas with restricted land potential and land size. They allow small scale farmers to adapt to environmental threats associated with climate change, such that, these methods are resilient to the impacts of climate change such as heat stress, flooding, lightning, wind and hail associated with severe storms. Presently, subsistence farmers lack access to information and the resources necessary to adapt to climate change and as such are left vulnerable to its impacts.

11.4.2.2 SMALL SUGARCANE SCHEMES

A relatively large proportion of good agricultural land is currently used for sugarcane plantations within the municipality. Thus, creating an opportunity for the development of sugarcane schemes to promote and grow the small-scale growers within the municipality. This will require government and private sector support. Several land claims exist associated with some of these sugarcane farms and as such should they be successful, beneficiaries will need to be equipped and supported to ensure continuous success of these farms. Ongoing initiative for the rehabilitation of these existing lands under cane, as well as the development of new land to sugarcane such as communal land will be required.

Pursuing for continued productiveness of settled and unsettled land claim farms, will help increase small and medium-scale cane growers. Thus, the development of a sustainable sugar cane out-grower schemes will form key component towards promoting sustainable sugarcane production amongst

small scale sugarcane growers within the municipality. As such strategic partnerships involving government and the sugarcane industry participants is much warranted through the provision of agricultural inputs, infrastructure and production and financial support. Furthermore, this provides a great platform for partnerships or collaboration between small-scale farmer groups (including formation of cooperatives) and partnerships involving small-scale farmers and already established commercial farmers which involves knowledge and information sharing, joint ventures between these farmers in marketing of their produce to assist in lowering transaction costs, speeding up spread of knowledge, information and innovation.

11.4.2.3 FOOD GARDENS

While the vast tracks of this land have been encroached by settlements an opportunity still exists to make use of few patches of the available agricultural land within the settlements to respond to food security initiatives. Intensive production on areas of arable land available, such as, areas located along river systems need to be utilized for food production whilst also encouraging the community and households to participate in the initiative to grow food gardens, however, caution will need to be taken in terms of planting too close to the water edge.

Nonetheless, all these initiatives identified will require great support and collaboration between the communities, government, and the private sector to succeed. Thus, the initiative by government to build an Agri-park within the district and the associated Farmer Production Support Unit (FPSU) Centres within each Local municipality will greatly benefit Ray Nkonyeni Municipality and more importantly small scale farmers and communities located within.

11.4.2.4 AGRICULTURAL LAND CARE

Subsistence farming remains a major source of food for many rural households within the municipality and as such, proper land care

management should form part of promoting food security and sustainable agriculture considering community-based and indigenous approaches to sustainable food production. Rural communities need natural resources to sustain their livelihood and therefore sustainable land care management is required for these communities to continue and prolong this livelihood.

Though current and past planning and land use management has plagued these areas threatening their livelihoods and survival, sustainable land care management should be the basis of successful agricultural development; therefore, the following table provides a guide adopted from the draft KZN rural norms and standards by the Dept. of Cooperative Governance and Traditional Affairs (CoGTA) to different standards that can be used to achieving this:

Table 11: Land Care and Agriculture			
	SITE SELECTION CRITERIA	LAND SIZE	RECOMMENDED PRACTICE
SUBSISTENCE AGRICULTURE	Land for subsistence agriculture should be located on land with relatively good agricultural potential and strategically located near water catchment areas.	Land for subsistence farming needs to be at least 1000m ² to accommodate small scale agricultural production.	<ul style="list-style-type: none"> ⊕ Adoption of conservation tillage practices. ⊕ development of small-scale irrigation systems ⊕ Strengthening of community-based activities for farming ⊕ Promotion of multiple agriculture to reduce risk of monoculture ⊕ the use of contour ploughing and wind breaks; ⊕ allowing indigenous plants to grow along the river banks instead of ploughing and planting crops right up to the water's edge; ⊕ educating communities about the pollution impacts of the use of fertilizers and chemicals on water quality and food safety; ⊕ Pathways can be easily eroded when water flows over them. Prevent this by breaking the water flow with logs, stone packs or old tyres; and ⊕ Agricultural landowners need to familiarize themselves with those species that pose a threat on their own land and eradicate them.

Table 11: Land Care and Agriculture			
	SITE SELECTION CRITERIA	LAND SIZE	RECOMMENDED PRACTICE
GRAZING	Consider the suitability of grazing areas. Divide into camps based on herds and carrying capacity. In areas where tilling (ploughing) is impossible.	<ul style="list-style-type: none"> Land allocation for grazing should meet carrying capacity of grazing area such that 1 livestock unit (LU)/ 2.5 hectares (Ha); Land for holding livestock should be at 100m² per household; and Land for building chicken coup at 50m² per household 	<ul style="list-style-type: none"> Identification of a site for communal grazing where rotational grazing is compulsory and monitored and/or introduce a controlled grazing system that will regulate the amount of time and grazing that should occur at a place. proper disposal of manure produced by intensive livestock breeding to prevent water contamination; limiting herd sizes or restricting grazing ranges, avoiding overgrazing and the over-use of crop lands; and The replanting of indigenous plants to ensure that there are always plants growing on the soil. Alien plant species and bush encroachment control should be done on a regular basis this can be done through the formation of local groups whose purpose is to clear invasive alien plants from public land for the benefit of local communities and their environment.

Table 11: Land Care and Agriculture			
	SITE SELECTION CRITERIA	LAND SIZE	RECOMMENDED PRACTICE
MANAGING GOOD POTENTIAL AGRICULTURAL LAND	Land identified as good agricultural potential by the Department of Agriculture should be utilized for agricultural purposes only and is not be utilized for settlement purposes.	There is no specific site size this depends on specific area and its potential.	<ul style="list-style-type: none"> ⊕ Empowering traditional leaders in respect of the consequences of allocating land for settlements in agricultural lands; ⊕ proper disposal of sewage from human settlements to prevent run-offs to nearby water sources; ⊕ organic farming encouraged; and ⊕ Stimulating the formation of land care groups.

Source: KZN Rural Norms and Standards Draft, KZN COGTA (2017)

11.5 OPERATION PHAKISA: OCEANS ECONOMY

11.5.1 THE CONCEPT OF OCEAN ECONOMY

Operation Phakisa is an initiative of the South African government which aims to implement priority economic and social programmes better, faster and more effectively. The Operation Phakisa: Oceans Economy was launched by His Excellency President J.G. Zuma, in October 2014. Initially four growth areas were prioritised to contribute to unlocking the economic potential of South Africa's oceans. This was based on their potential contribution to economic growth and job-creation. The following growth areas and corresponding departments were prioritised:

- ❖ Marine Transport and Manufacturing led by the Department of Transport;
- ❖ Offshore Oil and Gas Exploration led by the Department of Mineral Resources;
- ❖ Aquaculture led by the Department of Agriculture, Forestry and Fisheries; and
- ❖ Marine Protection Services and Ocean Governance led by the Department of Environmental Affairs.

The Department of Agriculture, Forestry and Fisheries is the lead department for the Oceans Economy Aquaculture focus area and its deliverables. The Lab concluded that South Africa's aquaculture sector has a high growth potential due to an increasing demand of fish products due to the increasing global population; increasing income by the middle class in developing countries and more awareness on the dietary benefits offered by fish products. Moreover the capture fisheries yield has been plateauing over the past decade while aquaculture continues to grow over 7% per annum and it is expected to continue growing at an even a higher rate in the future. The goal is to grow the aquaculture sector in South Africa to play a major role in supplying fish products; an enhanced role in job creation, increased contribution to national income and rural livelihoods. The targets

over five years (2014-2019), seeks to grow sector revenue from R0,67 billion to R3 billion; production by 20 000 tons; jobs from 2 227 to 15 000 and to ensure increased participation to support transformation in the sector. During the Lab, twenty four (24) initial catalyst projects were registered on the Aquaculture Lab. Since the Lab more projects have been accepted as part of the Aquaculture Operation Phakisa and to date, thirty two (32) projects are registered. Thirteen projects discussed in detail below are operational and on track in terms of implementation plans. It is now 2 years since the launch of Operation Phakisa.

11.5.2 RAY NKONYENI OCEAN ECONOMY

Ray Nkonyeni Local Municipality is one of the municipalities that has been identified by the National Department of Public Works to implement the development projects associated with Operation Phakisa Programme which was launched by the President the Planning, Monitoring and Evaluation Department in July 2014 with the ultimate goal of boosting economic growth and create jobs. A maximum of five (5) projects were recommended. These include the pre-laboratory harbours and these are:

- ❖ Hibberdene Waterfront Development;
- ❖ Port Edward Small Fishing and Development Harbour;
- ❖ Port Shepstone Boat building, maintenance, repairs, economic zone; and
- ❖ Shelly Beach Water Theme Park.

Over and above these pre-laboratory harbours, an additional three (3) projects were recommended for implementation under the Operation Phakisa Oceans Economy initiative. These projects include:

- ❖ Priority 1: Port Shepstone Urban Renewal, Beachfront and John Mason Park Development;
- ❖ Priority 2: Technology Hub; and
- ❖ Priority 3: Margate Urban Renewal.

Recently, the National Department of Public Work have had various engagements with the municipality on the Operation Phakisa Methodology and roadmap with regard to convening of the small craft harbour initiative

across the coastal municipalities of South Africa including Ray Nkonyeni Municipality. Such engagements took place in January and February 2017 in which each Municipality provided priority projects to Department of Public Works to be implemented as part of the Operation Phakisa initiative. The Minister of Public Works made an announcement on the 29th of March 2017, during the launching of the identified projects for each Municipality in East London.

11.6 PROPOSED LAND USES

11.6.1 PROPOSED COMMERCIAL

There are proposed future commercial activities within Ray Nkonyeni. These are proposed on the strategic points of all nodal areas. Future commercial land uses are proposed as part of mixed land use zones and future urban expansion. These would include the shopping mall and business parks. The commercial land uses will on the one hand facilitate the expansion of the existing nodes and diversification of the incipient nodes.

11.6.2 RETAINING EXISTING INDUSTRIAL

The current light industries areas will be retained within Izotsha and Marburg industrial areas. These are ideally located on the outskirts of the main settlement areas and are avoiding conflicting land use activities. The intention is to strengthen the industrial sector within Ray Nkonyeni Local Municipality.

11.6.3 PROPOSED MIXED USE

The proposed mixed uses are identified along all nodes. The intention is to encourage commercial, offices and residential. Residential development mainly targets gap housing or middle income housing within the appropriate threshold of the nodes. These will also facilitate expansion of these nodes.

11.6.4 PROPOSED INTEGRATED RESIDENTIAL SETTLEMENTS

The strategically located and prime land parcels within the District, Municipal, Community and Neighbourhood Development Nodes should be unlocked for future integrated residential developments. These land parcels are within the urban areas of the Municipality and should be seen as an opportunity for future housing opportunities which include integrated residential development with diverse typologies.

11.6.5 AGRICULTURE AND ECO-TOURISM

These are generally areas of lower accessibility and higher environmental sensitivity. The general objective is therefore that agricultural activities should continue, and natural resources be conserved. Tourism developments should be limited to natural and culture-based activities, and preferably integrated with farming activities. Large-scale land transformation such as exclusive residential estates shall not be allowed, nor will other forms of accommodation which have no link to the natural resource base and which diminish the agricultural potential and biodiversity value. Land subdivision will also be discouraged, but rural housing projects to accommodate the rural poor and farm and tourism workers will be allowed in appropriate locations. Attention should be paid to the retention of the integrity of rural landscapes.

11.6.6 AGRICULTURAL DEVELOPMENT ONLY

Most of the land in the municipality is utilised for commercial agriculture, and a significant proportion of the land has a very high production potential. Those areas identified through the agricultural assessment as having the highest agricultural potential have been reflected on the Spatial Framework Map as areas of agricultural development only. In general, the subdivision of prime agricultural land is discouraged and the development of this land for non-agricultural purposes should only be allowed if:

- ⊕ The land has already been subdivided to such an extent that it is no longer agriculturally viable;
- ⊕ The land has already been developed for non-agricultural purposes;
- ⊕ The proposed development does not compromise the primary agricultural activity of the property;
- ⊕ The proposed development comprises a secondary activity to supplement a landowner's income;
- ⊕ It will facilitate the implementation of the Land Reform Programme and Labour Tenant Projects.

Rural housing projects to accommodate the rural poor and farm and tourism workers will be allowed in appropriate locations.

11.6.7 AGRICULTURAL AND LIMITED TOURISM

The high potential irreplaceable agricultural land should not be subdivided or subjected to any non-agricultural land uses. However, such land is at times located along tourism routes. The farms that are located adjacent to the SDF tourism routes can be allowed to transform into Agri-tourism whereby a % of the farm can be used for tourism related development.

11.6.8 FORMALLY CONSERVED

The formally conserved areas will be protected for conservation purposes. These areas should not be subjected to high intensity development. Any proposal that supplements conservation should be subjected to a detailed Environmental Impact Assessment.

11.6.9 ARCHAEOLOGICAL SITES

An archaeological site is a place (or group of physical sites) in which evidence of past activity is preserved (either prehistoric or historic or contemporary), and which has been, or may be, investigated using the discipline of archaeology and represents a part of the archaeological record. Sites may range from those with few or no remains visible above ground, to buildings and other structures still in use. Beyond this, the

definition and geographical extent of a "site" can vary widely, depending on the period studied and the theoretical approach of the archaeologist. (Source: <https://www.archaeological.org/education/askexpertsfaq> 04 June 2017)

There are three sites which are of archaeological significance within Ray Nkonyeni and these are:

- ⊕ KwaXolo Caves - The original inhabitants of the KwaZulu-Natal South Coast were the Bushmen or San people. They lived an idyllic life with plenty of game, fish and an idyllic climate with ample fresh water. A far cry from the deserts they would inhabit in later years. A treasure of rock paintings with unique stories to tell a hidden story of years gone by. These caves are still almost inaccessible, which is fortunate, as this has ensured the protection of this valuable natural asset. (Source: http://www.southcoasttourism.co.za/en/History_Heritage_Legend/ArchaeologicalDiscoveries.aspx 04 June 2017)
- ⊕ The Red Desert (Port Edward) - The world's smallest desert. This lies some 10 kilometres west of the town of Port Edward and is only 200 m in diameter and 11 hectares in its entirety. Best described as a miniature version of the Arizona Desert, the man high hills and valleys of naked red soil bare stark contrast to the surrounding lush and tropical vegetation. Archaeological artefacts going back millions of years can be found and the locals are pleased this is now an internationally protected heritage site. This peculiar phenomenon is surrounded by myth and legend including stories that this is the site of an alien landing. Truth be told the origins of this desert are found in the location of a Zulu tribe in the 1800's, with vast cattle herds stolen from the Pondo's. The terrain became severely over grazed and subsequently eroded by wind leading to the desertification and an opportunity to study the unique desert ecology. (Source: http://www.southcoasttourism.co.za/en/History_Heritage_Legend/ArchaeologicalDiscoveries.aspx 04 June 2017)
- ⊕ Petrified Fossil Forest (Port Edward) - The petrified forest, officially known as the Mzamba Cretaceous Deposits, is a set of famous marine fossil beds exposed in a 10 metre-high cliff that forms a prominent headland about 2,5 km south of the Mtamvuna River. The deposits

consist of greyish-brown sandstone as well as limestone rich in fossil material dating back some 80 million years to the Upper Cretaceous period. The lower layers contain numerous tree trunks that have been silicified (converted into silica). Many of these were penetrated by marine worms before silicification was completed. The deposits also include an abundance of marine shells, among them spirally coiled cephalopod ammonites, echinoids (sea urchins) and bivalve shells. When the formation was brought to the attention of the scientific world in 1855, it provided the first evidence of fossils from the Upper Cretaceous. The Cretaceous is a geologic period and system from about 145.5 to 65.5 million years ago. Following on the Jurassic period, when dinosaurs walked the earth, it was a period with a relatively warm climate and high sea level. The oceans and seas were populated with now extinct marine reptiles, ammonites (a bit like octopus and cuttlefish) and rudists (primitive shellfish); and the land by dinosaurs. At the same time, new groups of mammals and birds as well as flowering plants appeared. The Cretaceous ended with one of the largest mass extinctions in Earth history, when many species, including the dinosaurs, pterosaurs, and large marine reptiles, disappeared. The Mzamba Cretaceous Deposits have long been a protected locality, and fossil hunting and removal at this site are strictly prohibited. (Source: http://www.southcoasttourism.co.za/en/History_Heritage_Legend/ArchaeologicalDiscoveries.aspx 04 June 2017)

11.6.10 HERITAGE ASSETS AND NATURAL RESOURCES

Worthington (1964 p 2 and 8) defines the term natural resources as “everything that is derivable for the use of man from any part of the universe”. These include organic and inorganic natural resources. The organic being human beings, animals and plants while the inorganic is land surface (i.e. landscape), rocks (i.e. mineral occurrences and power), air (i.e. climate, nitrogen fixation), water (rivers, natural dams, ocean etc.) and soils. The heritage assets on the other hand is defined as “assets of historical, artistic or scientific importance that are held to advance preservation, conservation and educational objectives of charities and through public access

contribute to the national culture and education either at a national or local level” (Accounting Standards Board: Discussion Paper, 2006, p18)

The focus of Ray Nkonyeni SDF will be on inorganic heritage resources found within rural areas which may include physical material or substances occurring on land which can be exploited for economic gain as well as heritage assets with all the values deemed necessary for conservation. The example of heritage assets that are found within Ray Nkonyeni are:

- ⊕ Amadliza (Graveyard for Amakhozi); and
- ⊕ Historical Buildings.

The natural resources that are found include:

- ⊕ Aesthetic Historical Mountains and Ridges; and
- ⊕ Historical Forestry.

The KwaZulu-Natal Draft Rural Land Use Norms and Standards suggests that these assets and resources should be maintained as follows:

Table 12: Heritage Assets	
HERITAGE ASSET	MAINTENANCE AND PRESERVATION NEEDED
Idlinza (Graveyard for Amakhosi as local Monuments)	Fencing and placement of signage
	Clear the site using only hand trimmers or other hand tools
	Designate dump sites away from monuments/memorials
	Maintain existing pathways
	Do not apply paint to gravestone inscriptions
	Do not burn waste on site or within a memorial.
	Memorial Tombstones should not be cleaned with power washers, sand blasters or with chemical cleaners as these methods enhance the process of decay and will in the long-term speed up the loss of the inscription carved onto the cleaned memorial ¹ .

¹ Guidance for the Care, Conservation and Recording of Historic Graveyards: September 2011 – Second Edition

Table 12: Heritage Assets	
HERITAGE ASSET	MAINTENANCE AND PRESERVATION NEEDED
	The only safe way to clean a memorial is to wash the stone with water by using a damp cloth and followed by gentle brushing that will result in the removal of bird droppings and other biological growths that may be obscuring the inscription on the memorial ² .
Historical Buildings (Cultural Features)	<p>Monthly / Annually – Annual checking of electrical equipment by professional trades people, Annual pest control treatment, Monthly test of alarm systems and smoke detectors, Monthly filter checks and cleaning for air conditioning unit, Annual inspection of ceilings, floors, paving, plumbing, internal painting, door hinges, hooks and locks. Every two years – Replace of glass where necessary and powder coated finishes applied where necessary.</p> <p>Every five years – Internal painting.</p> <p>Every ten years – External painting, Replacement of floor coverings, Replacement of guttering and Replacement of electrical wiring.</p> <p>Every twenty-five years – roof refurbishments/ replacement.</p>

The KwaZulu-Natal Draft Rural Land Use Norms and Standards also suggest that the Natural Resources should be maintained as follows:

Table 13: Natural Resources	
NATURAL RESOURCES	MAINTENANCE AND PRESERVATION NEEDED
○ Aesthetic Historical	Develop the complementary land use and landscape policy for each local area to avoid unacceptable visual intrusion

² Guidance for the Care, Conservation and Recording of Historic Graveyards: September 2011 – Second Edition

Table 13: Natural Resources	
NATURAL RESOURCES	MAINTENANCE AND PRESERVATION NEEDED
Mountains (topographical features)	Prohibit the encroachment of buildings and structures within all historical sites
○ Historical Rivers and Lakes	Disallow the burning of waste, veld fires and setting alight of any material
○ Historical Forestry	Discourage extensive water harvesting within the designated historical spot of the rivers and lakes
○ Ridges and Skylines (geological features)	Protect wetlands/ watercourses as the drainage of the wetlands will result in increased velocity of runoff and consequent soil erosion
	Adequate vegetation cover should be maintained and unnecessary vegetation removals should be prevented
	Control surface runoff through the development of appropriate
	Introduce measures to control water quality and prevention of pollution of water sources and air quality
	Existing mature trees and other vegetation on site should be retained whenever feasible
	Promote the use of indigenous species

Source: KZN Rural Norms and Standards Draft, KZN COGTA (2017)

11.6.11 ENVIRONMENTAL MANAGEMENT

The environmentally sensitive areas were identified during the situational analysis. Essentially there are serious environmental risks spots with a high level of endangerment in terms of freshwater catchment, wetlands exposure, critically endangered as well as vulnerable vegetation and soil erosion. The need exists to put measures in-place in terms of conserving and

managing this environment. These areas are a high priority in terms of environmental management with intent to avoid pollution and degradation due to irresponsible development and land uses. More stringent measures are applied when assessing any land use proposal within the vicinity of this designation. Essentially, the key goal is to promote conservation related land usage within these areas. The formally protected areas within Ray Nkonyeni Municipality are as follows:

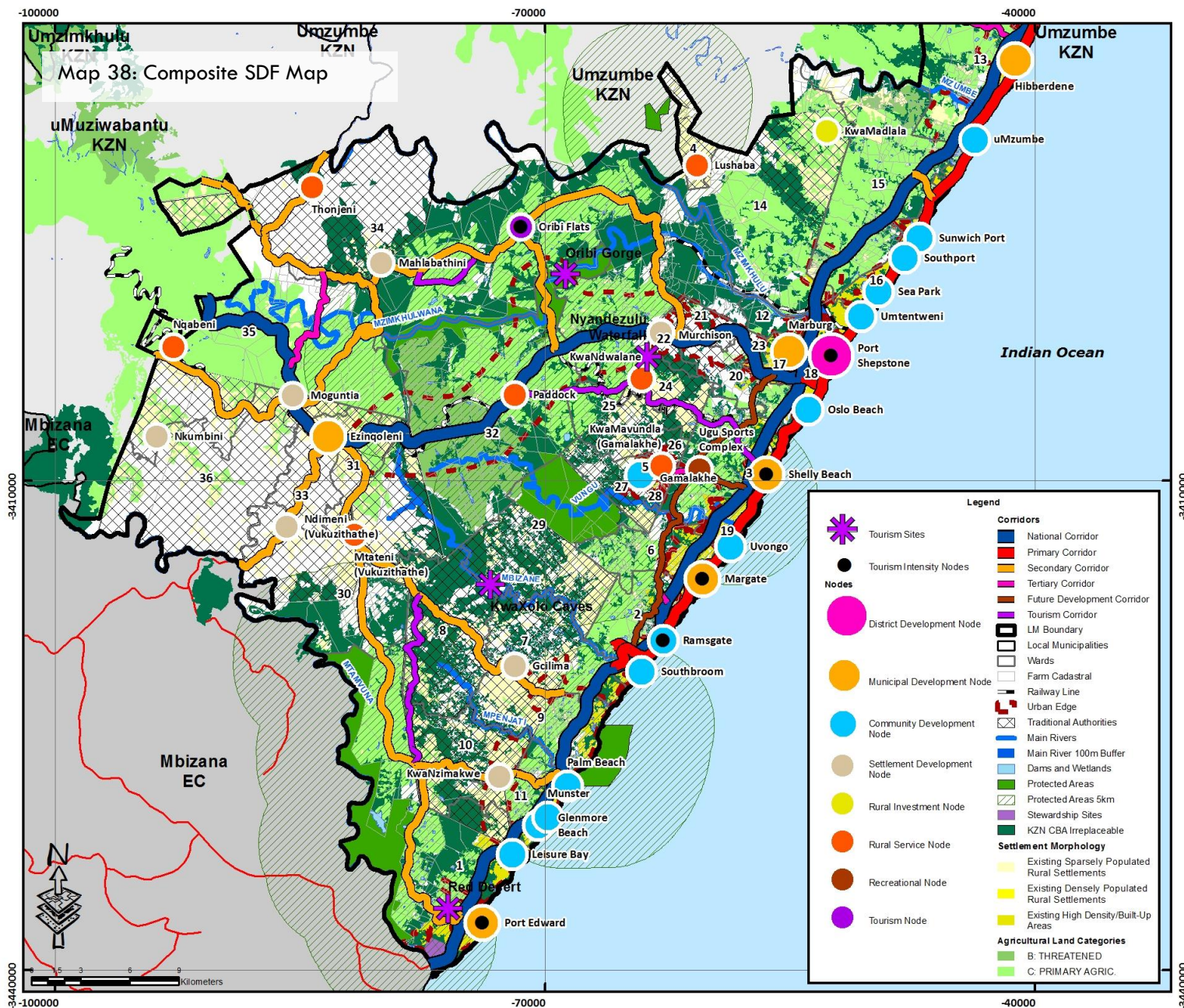
Table 14: Protected Areas		
Site	Date Proclaimed	Extent (Ha)
Oribi Gorge Nature Reserve	1950	1745,7
Skyline Nature Reserve	1986	17,1
Mbubazi Nature Reserve	1986	2022,9
Mehlomnyama Nature Reserve	1908	160,6
Umtamvuna Nature Reserve	1971	2653
Mpenjanti Nature Reserve	1985	94,9
Trafalgar Marine Reserve	1979	552

Source: Ugu Bio-diversity Sector Plan (2014)

There are few Ecological Support Areas (or ESAs) which are found within Ray Nkonyeni Municipality. These play an important role in supporting the ecological functioning of critical biodiversity areas in delivering the ecosystem and buffering protected areas. ESAs include landscape, local ecological corridors that allow for connectivity along altitudinal gradients between the coast and inland, west-east corridors along the coastal belt. The aquatic ESAs within Ray Nkonyeni include the following:

Table 15: Environmental Buffers	
Ecological Support Areas	Requirement
Freshwater Systematic Conservation Assessment (FSCA) Wetlands	100m
CBA Perennial Rivers, KZN Flagship Rivers and National Flagship Rivers	70m
Non Perennial Rivers	70m
Freshwater Ecosystem Priority Areas (FEPA) Priority Wetlands and KZN Priority Wetlands	500m

Source: Ugu Bio-diversity Sector Plan (2014)



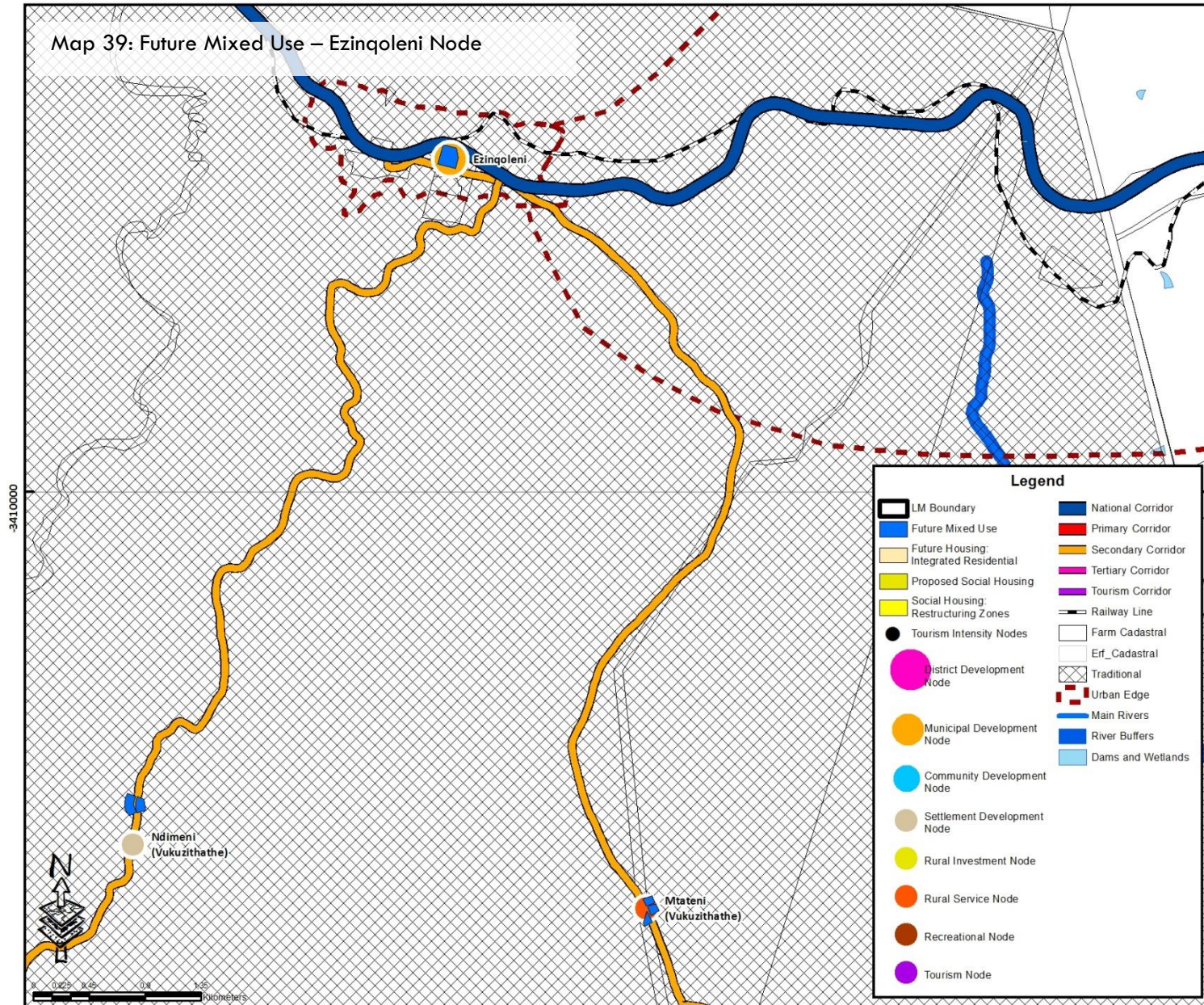
Spatial Development Framework 2017/2022

SDF Composite Map

Economic Development, Tourism and Planning Spatial Planning Unit
666 Crescent Avenue
Uvongo 4270
Tel: 039 315 9240
Date: 2017

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Stats: STATSSA
Agric Land Cover: DAG
Environmental Data: KZN Wildlife 2016
Land Reform: DRDLR
Cadastral: KZN SGO

Map 39: Future Mixed Use – Ezinqoleni Node

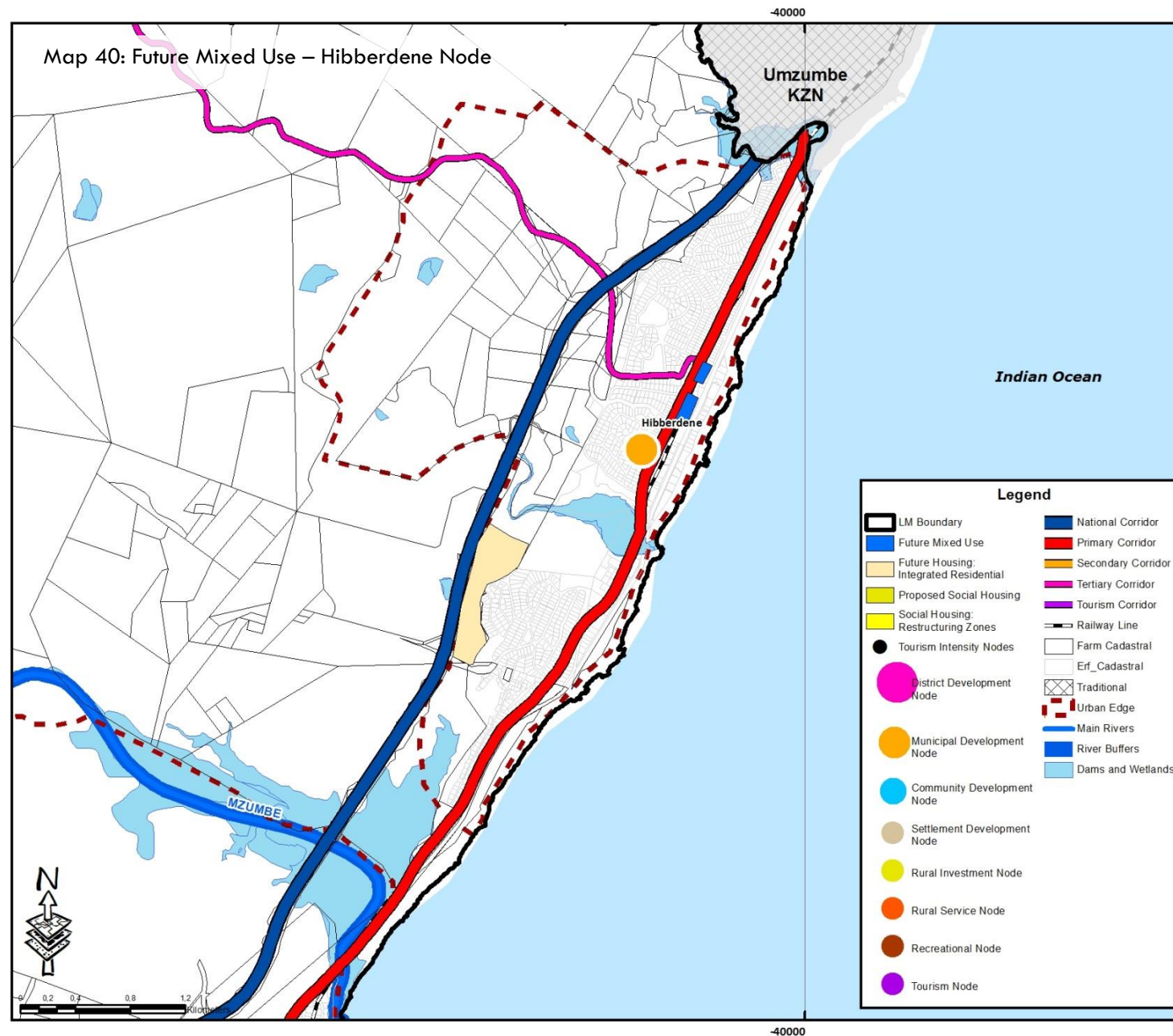


Spatial Development Framework 2017/2022

Future Development

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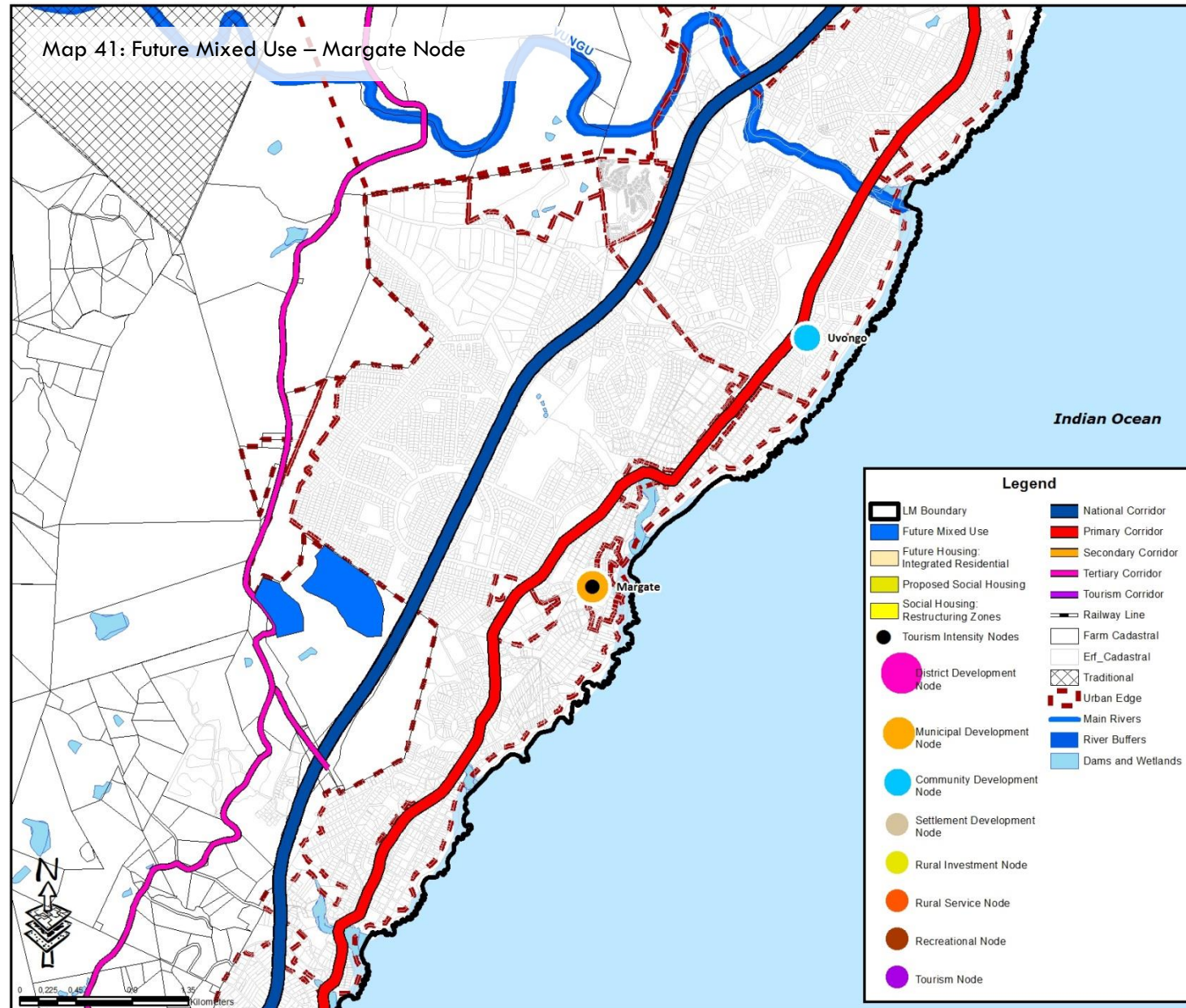


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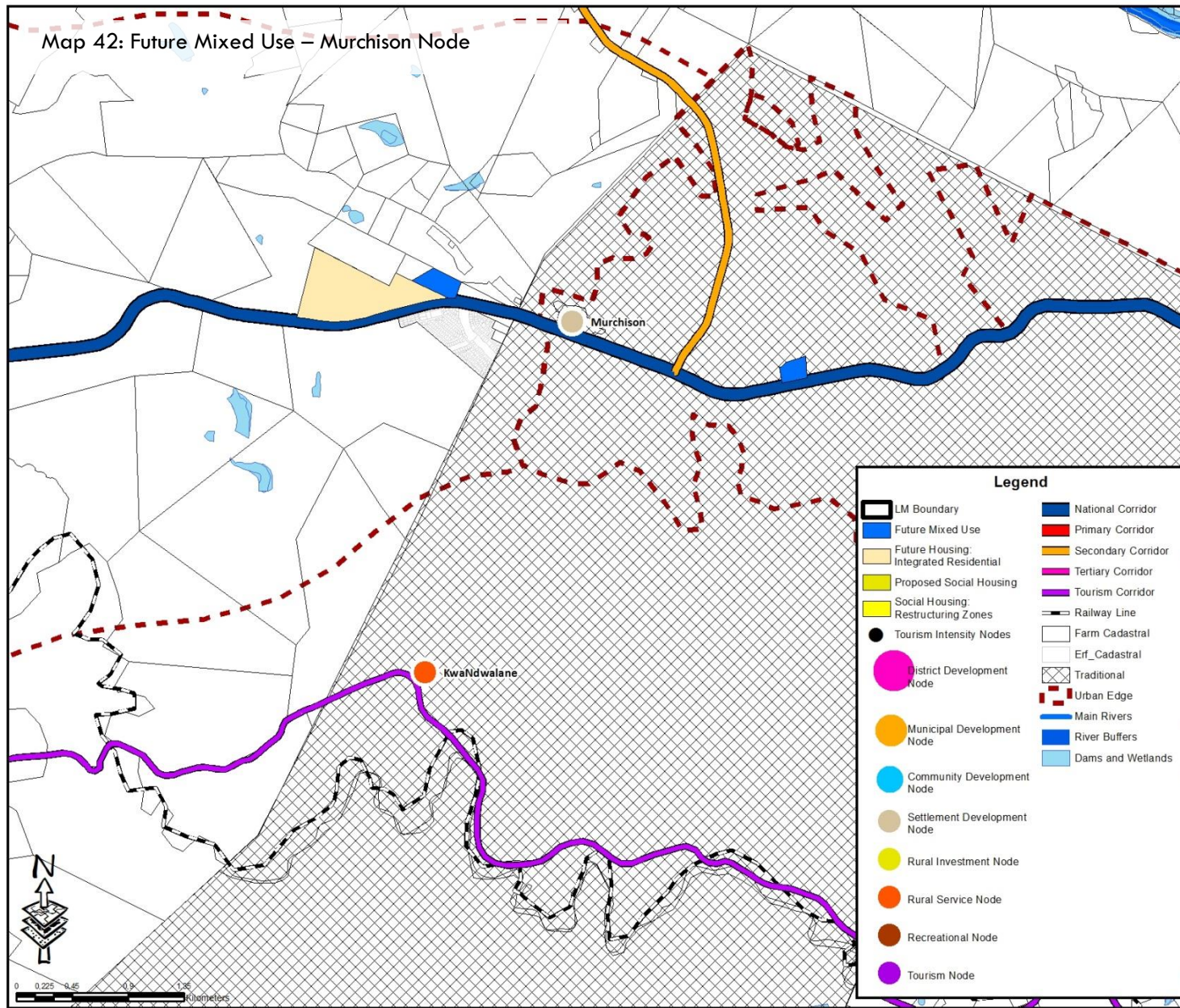


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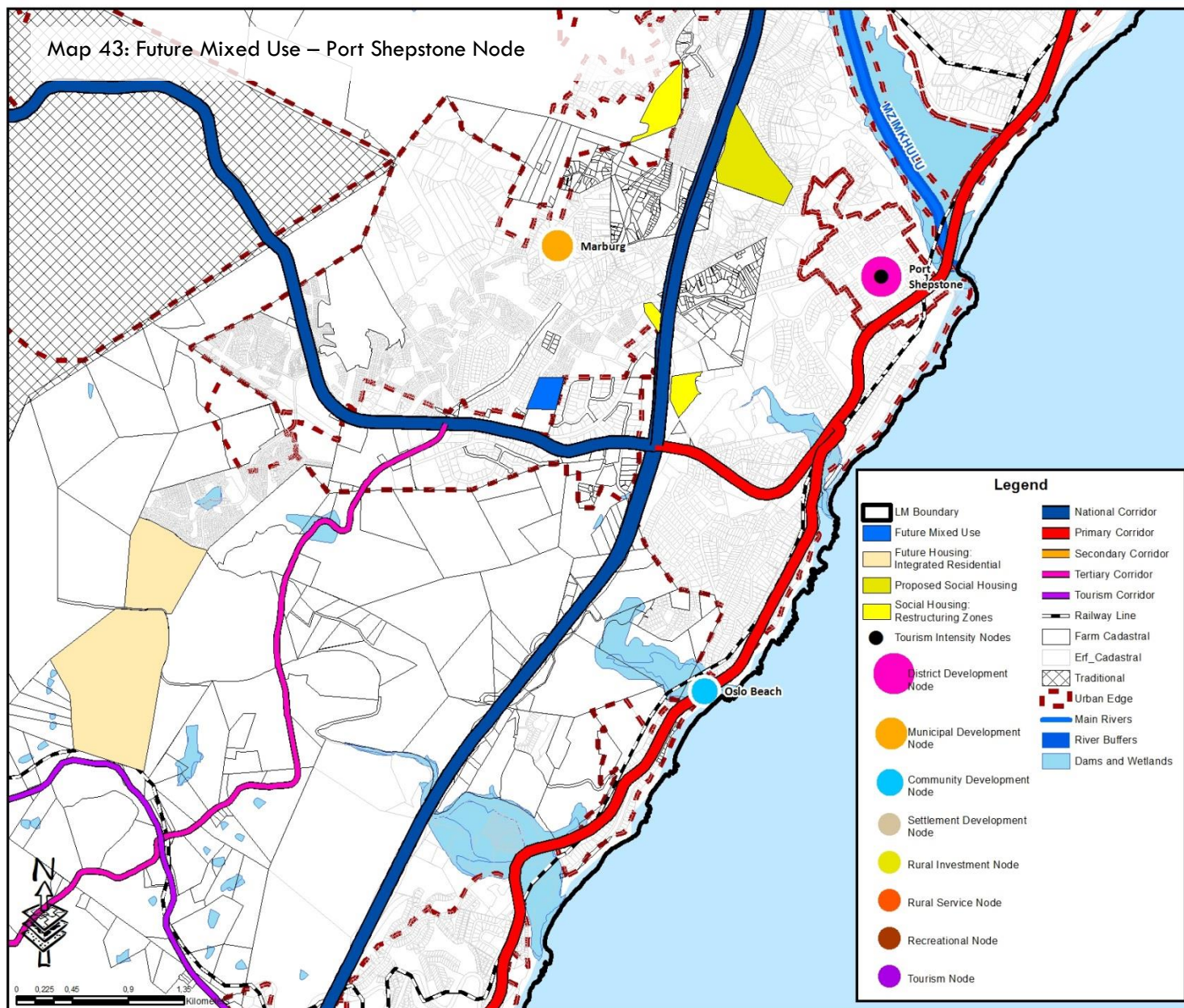


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RAY NKONYENI
MUNICIPALITY
"The Queen of South Coast Development"

**Spatial Development
Framework 2017/2022**

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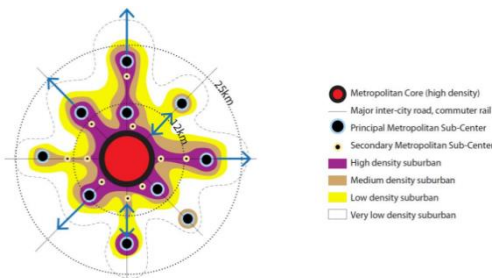
11.7 FUTURE DEVELOPMENT DIRECTION

11.7.1 COMPACT INTEGRATED DEVELOPMENT DIRECTION

The spatial transformation vision of the SDF seeks to create a spatially just municipality based on a compact polycentric growth model. The model is based on an exercise testing three development scenarios, each hypothesising the growth of Ray Nkonyeni from 348 553

people today to 506 534 people by 2040. The first model tested describes a sprawled scenario with dispersed growth. The second describes a 'linear development' scenario where future development occurs along an expansive public transport network (corridor development) linking peripheral marginalised areas of the city, through vast development corridors to the inner town. The third scenario is a compact polycentric model which concentrates growth in a compact urban core, around transformation areas and key urban and transit oriented development nodes.

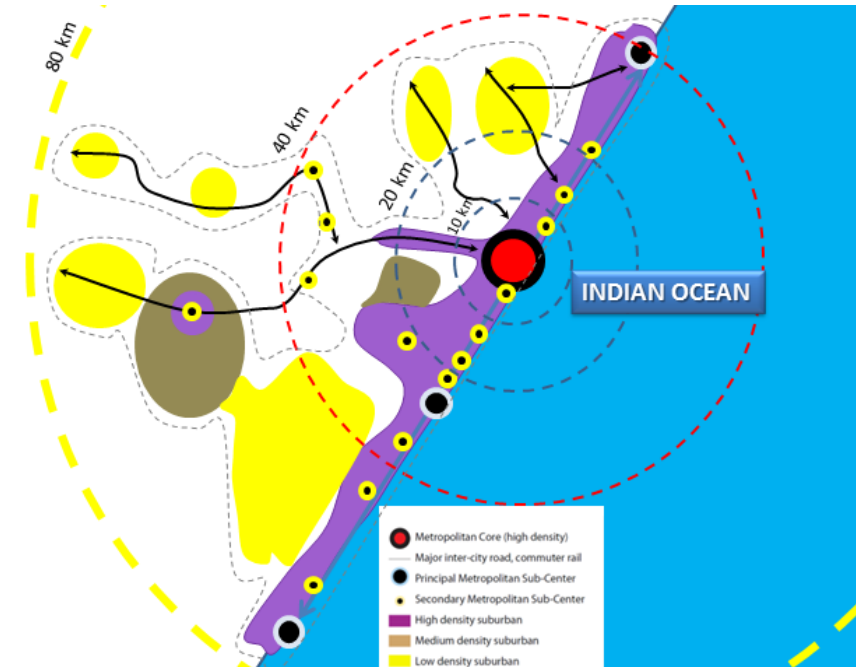
Figure 11: Polycentric City Model



The compact polycentric city model performed significantly better than the other two in terms of economic, environmental and social indicators. Therefore, the spatial vision of the SDF is a compact polycentric city. Here the inner town would form the strong urban core linked by efficient public transport to dense, mixed use (residential and commercial), sub-centres, situated within a protected and integrated natural environment. The development model above (Figure 1) is a diagram of a traditional polycentric city with a strong core, connected to economic sub centres by

efficient public transit, with high housing densities surrounding cores and gradually lower densities further from cores.

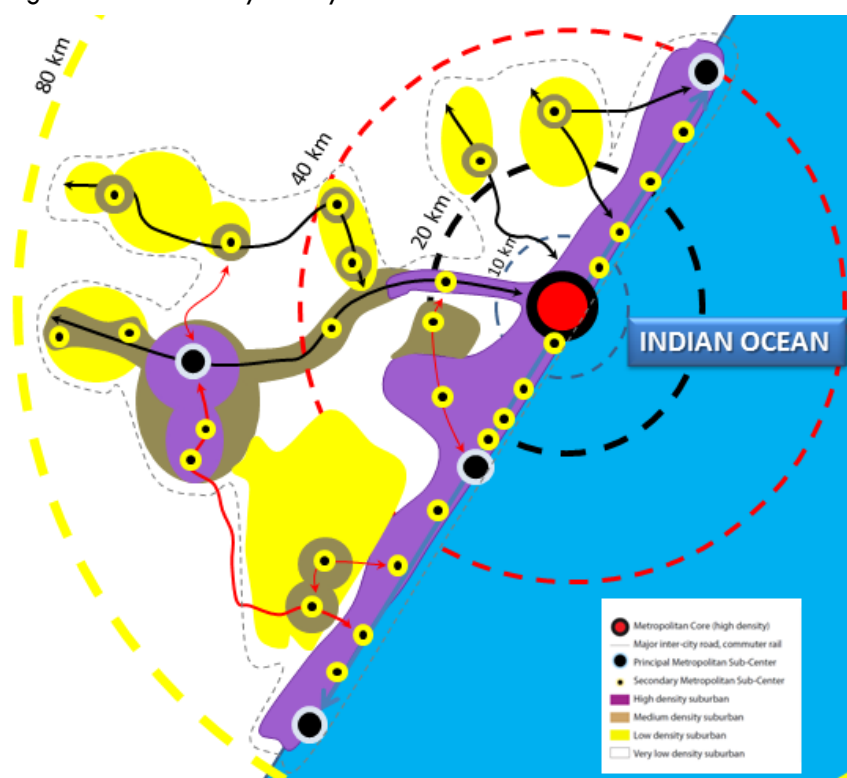
Figure 12: Current Reality



Ray Nkonyeni presently displays the opposite of this polycentric urban model with separated land uses and people living far from work opportunities (Figure 2). The Port Shepstone core does not perform as the strong, structuring centre it should be. High density residential areas (the 'rural settlements') are separated from urban economic centres and movement structures of the area. This pattern of development results in high social, economic and environmental costs. This SDF thus proposes a shift to a more efficient and inclusive urban logic of compact polycentricity

(Figure 3) with a focus on the CBD/ inner town as the core node of Ray Nkonyeni, surrounded by mixed use nodes of various intensities connected by effective public transport and a more logical and efficient density gradient radiating outward from cores. The nodal strategy and the transformation areas developed in this SDF present the hierarchy of nodes to be supported for intensification.

Figure 13: Future Ray Nkonyeni



The future polycentric Ray Nkonyeni will bring jobs to residential areas and housing opportunities to job centres rather than merely transporting people between the two. It will create complete nodes where people can live work and play that are efficiently connected by public transport. It will bridge spatial and social barriers and build a framework for a spatially just municipal area.

11.7.2 DESIRABLE GROWTH PATH

The following proposal is made in terms of direction for future growth:

- ✦ Outward expansion of the nodes. This should involve linking the existing nodes through activity or mobility route in a manner that promotes infill and interface development. This should be prioritized for District, Municipal and Community Development Nodes; and
- ✦ The existing nodes are still low in terms of densification. Inward densification could be encouraged within the District and Municipal Development Nodes. However, this should be supported provided that there is sufficient infrastructure capacity to warrant it.

11.7.3 UNDESIRABLE DIRECTION

The following proposal is made in terms of direction for future growth:

- ✦ Some of the nodes on the northern part of the municipality are surrounded by agricultural land. Expansion of these nodes to high potential agricultural land would be undesirable.
- ✦ Expansion of the nodes to environmentally sensitive areas is prohibited. This includes expansion to KZN CBA Irreplaceable zones and KZN ESA zones.

11.8 URBAN EDGE

There are two Urban Edges that have been identified within Ray Nkonyeni Municipal Area. These cover the following areas:

- ❖ Coastal urban boundary; and
- ❖ Sporadic urban edges.

The administrative logic for the demarcation of this urban edge was mainly influenced by the *Provincial Spatial Planning Guideline 5: Defining Limits on Settlement Expansion: The issue of the Urban Edge* produced in July 2009. These guidelines state that:

There is no 'scientific' way of defining these containment edges: they require strong administrative actions to defend them. A number of factors contribute to the delineation which are characteristics of the natural environment (natural barriers such as water courses, steep slopes, vegetation of significance and so on), central purpose of these edges is to compact urban development in order to achieve greater urban efficiencies (an effective edge should be as close to the existing built-up area as possible), should not follow existing cadastral boundaries (strong straight geometric edge not wavy lines) and should be reinforced through the creation of fire-breaks and more intensive forms of agriculture which should be encouraged to occur hard against the edge. Suburban and leap-frog' sprawl should be discouraged. As far as is possible, new development should be contiguous with the existing built edge. (Department of Co-operative Government and Traditional Affairs: 2009, p8-10).

The proposed urban edges have incorporated the existing built up areas which are mostly covered by the Urban Planning Schemes of the Municipality. These edges have also incorporated important land parcels that will act the role for infill development requirements and expansion of existing urban areas. The important environmental management areas have also been incorporated for proper management against urban conurbation.

The Department of Rural Development and Land Reform has further refined this study by suggesting the following primary factors when demarcating the urban edges:

- ❖ Growth pressures;
- ❖ Potential for growth deflection;
- ❖ Densification;
- ❖ Protection of high agricultural land;
- ❖ Infrastructure capacity; and
- ❖ Fiscal capacity and fiscal strength.

The secondary factors when demarcating the urban edge are identified as follows:

- ❖ Land monopolies within the potential urban growth boundary;
- ❖ Fractured ownership pattern outside the potential urban growth boundary; and
- ❖ Deferred areas outside the urban growth boundary.

The tertiary factor is institutional capacity. It is acknowledged that managing growth requires sophisticated governing structures, policies and procedures. The capacity to monitor land and demands as well as produce plans that combines infrastructure planning with urban spatial planning requires a great of institutional sophistication.

11.9 DENSIFICATION

Densification is a spatial structuring tool that can positively contribute to sustainable urban growth, should it be applied accordingly. Densification is broadly defined as 'the increased use of space, both horizontally and vertically, within existing areas/properties and new developments, accompanied by an increased number of units and/or population threshold'. Incremental densification, in turn, denotes the following:

- ❖ Small-scale densification that has a relatively low impact on the character of an area, e.g. the subdivision of a residential property or construction of a second dwelling; and
- ❖ Densification is not an end in itself, but a means of improving the sustainability of the city as well as the vitality of urban precincts. It is a relative indicator of the intensity of development and the population thresholds that could support economic activity, public transport services and the like.

Densification can contribute to the creation of good-quality, efficient and sustainable urban environments in a number of ways, including the following:

- ❖ Densification reduces the consumption of valuable/non-renewable resources.
- ❖ By encouraging development upwards rather than outwards, densification helps reduce the consumption of valuable resources such as agricultural land, areas of mineral potential, aquifer recharge areas and valuable biodiversity areas. It can also reduce the consumption of non-renewable fuels by lessening car dependence.
- ❖ Densification supports the development of a viable public transport system.
- ❖ Higher densities, accompanied by increased population thresholds and mixed-use development, support the efficient functioning and viable provision of public transport services, especially on major line-haul routes for mass and rapid transit.
- ❖ Higher densities in appropriate locations, especially those close to urban opportunities (services, facilities, jobs) and public transport, help

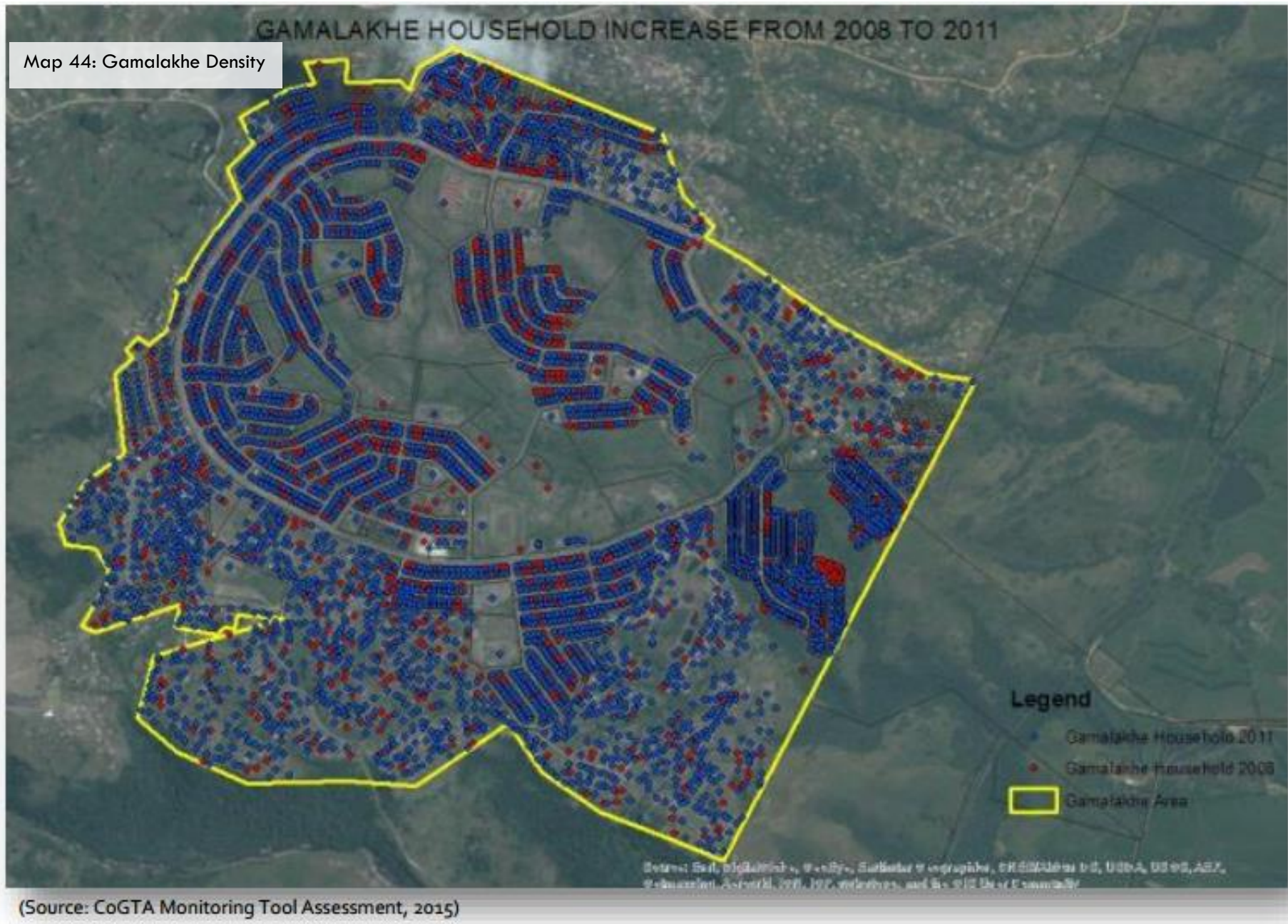
rationalize the housing pattern in the city, also improve access to the city's amenities and facilities. They help reduce travel distances and times, as well as the associated costs.

- ❖ Higher densities, accompanied by increased population thresholds, create sufficient consumers to generate the development of economic opportunities, social facilities and services, it also enable the cost-effective provision and optimal use of infrastructure; especially where there is excess service capacity or where increased thresholds are required to provide services and infrastructure.
- ❖ Densification improves housing patterns and choice of house type;
- ❖ Densification contributes to urban place-making and improves safety;
- ❖ Appropriately designed and located higher densities (in terms of form, scale, height, orientation) can provide an opportunity for place-making, the creation of attractive and safe urban environments, particularly those in proximity to public spaces (both natural and built).

11.9.1 GAMALAKHE DENSIFICATION MONITORING

Gamalakhe Township was used as an example for the use of densification monitoring tool. This involved mapping and showing household increase between 2008 and 2011. The proposed areas identified are 614 Hectares. The household density increased from 1.05du/ha in 2008 to 5.37du/ha in 2011.

Map 44: Gamalakhe Density



(Source: CoGTA Monitoring Tool Assessment, 2015)

GAMALAKHE HOUSEHOLD INCREASE FROM 2008 TO 2013

Legend

- Gamalakhe Household 2013
- Gamalakhe Household 2011
- Gamalakhe Household 2008
- Gamalakhe Area

Sources: Geo, DigitalGlobe, GeoEye, Earthstar OpenSource, CNR/Media RS, USDA, USGS, Aero
Vantage, AeroGRID, IGN, IGP, swiremaps, and the GIS User Community

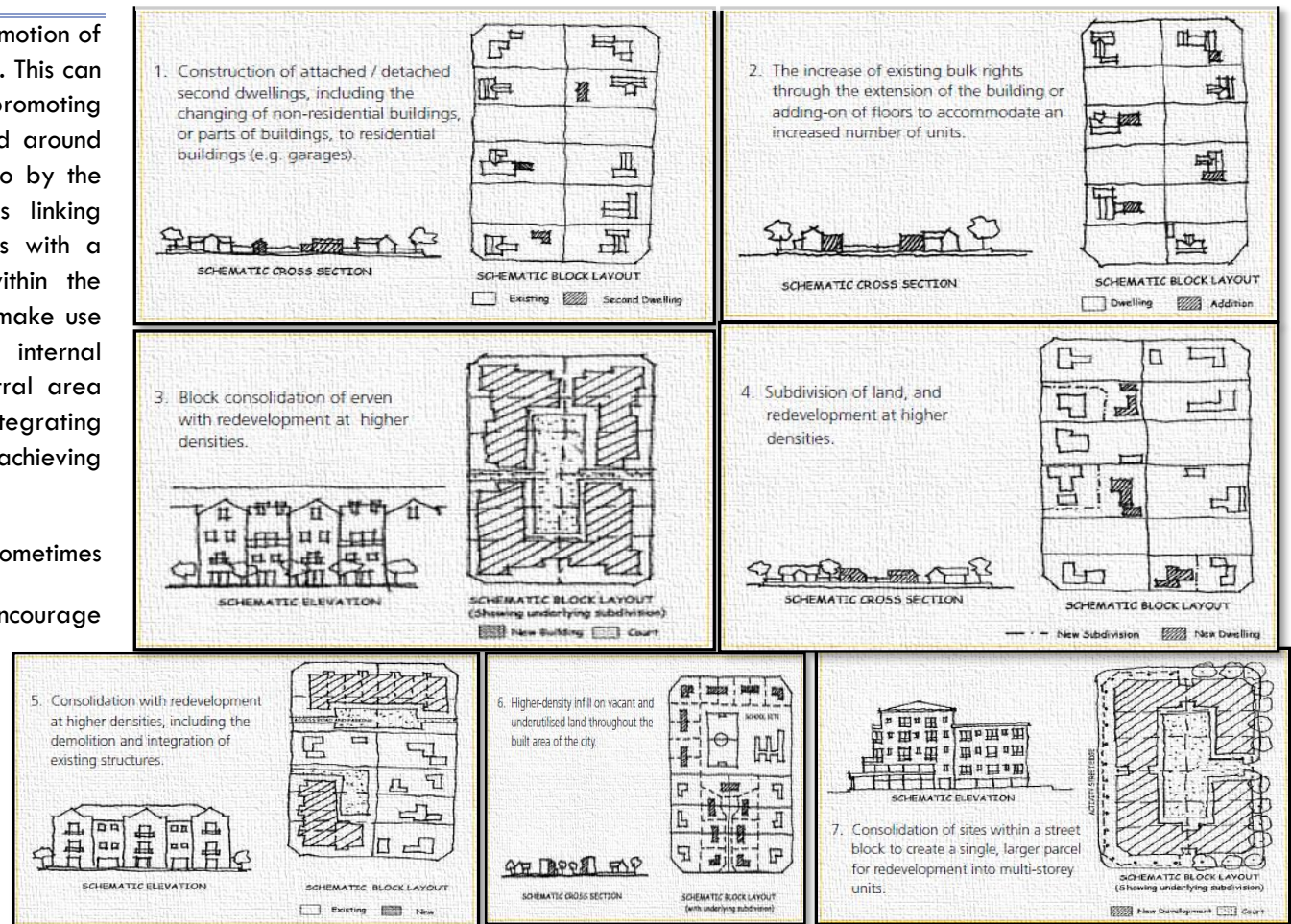
(Source: CoGTA Monitoring Tool Assessment,

11.9.2 DENSIFICATION MODELS

The key elements of densification are the promotion of compact, integrated and efficient urban form. This can be attained by limiting urban sprawl, by promoting higher densities, infill, re-development in and around the urban core and other activity nodes also by the promotion of mixed use activity corridors linking otherwise isolated and non-functional areas with a focus of public transport. Vacant land within the central area provides infill opportunities to make use of existing services and to strengthen internal development. Vacant land beyond the central area provides opportunities for linking and integrating peripheral areas. The different methods for achieving densification can occur through:-

- ❖ Conversion of existing building (sometimes vacant/derelict) to other uses;
- ❖ Subdivision of large pieces of land to encourage higher densities;
- ❖ Cluster development on large parcels of land through a consolidation process;
- ❖ New development on vacant or under-utilized land at higher densities;
- ❖ Allowing additional units to be developed on a single piece of land;
- ❖ Infill development on vacant or underutilized parcels of land at higher densities. A range of infill processes may include transfer of development rights, land exchanges, land consolidation, public housing projects and so forth; and
- ❖ Allowing additional units to be developed on a single piece of land.

Figure 14: Densification Models

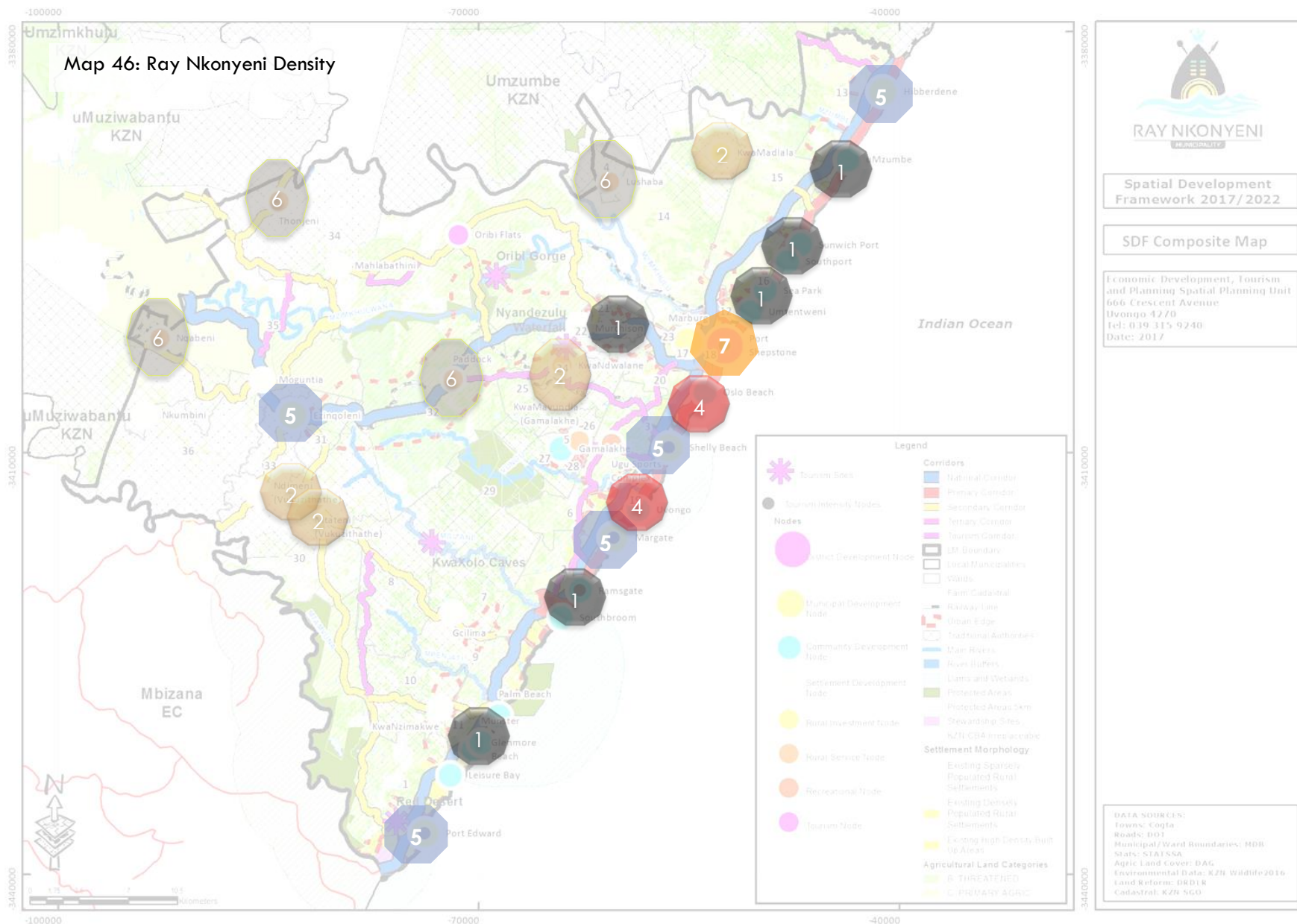


11.9.3 SPATIAL LOCATION AND DENSITY PARAMETERS

Table 16: Spatial Location Criteria and Density Parameters

Targeted Areas	Description of the Spatial Area/Structure	Targeted Locations/Areas	Density Guidelines at the Locations
SPATIAL STRUCTURING ELEMENT			
District Development Node	Urban nodes characterised by a very high intensity, mix and clustering of urban activities or land use at points of very high accessibility, exposure, convenience and urban opportunity. Examples: Port Shepstone	Generally within and abutting the defined node or CBD area. Particularly in the vicinity of public transport routes, interchanges and stations, near civic precincts, public open space and where there is a diverse, concentrated mix of land uses, activities and services	100–375 du/ ha (net) 4 to 15 storeys
Municipal Development Node	Urban nodes characterised by a medium intensity, mix and clustering of urban activities or land use at points of good accessibility, exposure, convenience and urban opportunity. They tend to serve district or suburb-level needs. Examples: Marburg, Margate, Ezingoleni, Port Edward and Shelly Beach	Generally within and abutting the node with a focus on public transport routes, interchanges and stations, next to civic precincts, public open space, and where there is a diverse and concentrated mix of land uses, activities and services	75–175 du/ ha (net) 3 to 7 storeys
INCREMENTAL DENSIFICATION			
Community and Neighbourhood Development Nodes	All single, residential zoned areas	Areas that are identified as the Community Development Nodes or Neighbourhood Development Node. E.g. Gamalakhe, Southbroom, Ramsgate, Uvongo, Southport etc.	Second dwellings (Rights of surrounding properties are not negatively affected)
AFFORDABLE HOUSING AREA			
Specific Residential areas	Within areas of focused public-sector investment, e.g. subsidised housing	Informed by spatial structure locations	80-300 du/ha (net) 1 to 4 storeys.

SPATIAL STRUCTURING ELEMENTS			
Development Route	Major district movement routes, including linehaul public transport. Mixed land uses and higher density development tend to be nodal, with access provided at intersections, and generally linked to parallel and connecting side routes. Development routes may include short stretches of 'activity route' –type development. Examples: N2, R102, R61 routes	Particularly near points of direct access, transport intersections and interchanges, places of intense mixed-use and nodal activity ('activity route' character) and next to or part of commercial complexes	75-175 du/ha (net) 3-7 storeys
Activity route	Significant routes, characterised by strip and nodal urban development along sections of the route. Activity routes are generally supported by a mix of land uses and higher-density urban development. Activity routes are characterised by direct access and interrupted movement flows, especially at bus and taxi stops and traffic lights.	Generally near the activity route, but particularly near public transport interchanges and stations, mixed-use areas and concentrated activity, business/ commercial nodes, and public institutions and facilities including open space	100–375 du/ha (net) 4 to 15 storeys
Activity street	Local routes characterised by continuous development, including mixed land use, linear commercial and business developments, light industry, institutions and social facilities. Activity streets are characterised by direct access and interrupted movement flows, especially at bus and taxi stops and traffic lights.	Generally near the activity street, but particularly near public transport stops, stations and route intersections, in mixed-use areas and concentrated activity, local business/ commercial nodes, and at public institutions and facilities including open space	35–100 du/ ha (net) Townhouses – 4 storeys



12. IMPLEMENTATION PLAN

12.1 LAND USE MANAGEMENT FRAMEWORK

A land use framework is one of the components of the land use management system of a municipality. The primary aim of the Land Use Management Framework (LUMF) is to bridge the gap between the Integrated Development Plan and the detailed requirements of land use management applied at municipal level. Although it is not a legal requirement, it is an important aspect of spatial planning. It provides for the refinement of the SDF, identification of areas that require different levels of detail in terms of land use schemes and the formulation of broad principles to guide the development of land use schemes. It enables development control, at differing levels of complexity, to extend over rural areas, and giving property owners, developers and the authorities a clear point of reference from which to manage the conservation and development of land.

The latter, referring to a set of actions required by a municipality to manage land and includes different components, such as a SDF, Land Use Framework, Scheme, Valuation and rating system, ownership and tenure, infrastructure and services etc. A land use framework provides for the linkage between the Spatial Development Framework (SDF) and the Scheme. It in effect, bridges this gap by providing additional information and guidelines that can assist the municipality in decision-making processes, while a Scheme is under preparation.

12.1.1 LAND USE MANAGEMENT SCHEME

Ray Nkonyeni Local Municipality still need to commence with the process to develop a Wall-to-Wall Land Use Management Scheme for its area of

jurisdiction. The Spatial Planning and Land Use Management Act, Act No 16 of 2013 (SPLUMA), requires all municipalities in the province to develop and introduce wall-to-wall Land Use Schemes throughout their area of jurisdiction. This has to take place within 5 years from the promulgation of SPLUMA which implies that the target is now 2018. According to the Municipal Systems Act, a Land Use Scheme is a key component of the Integrated Development Plan (IDP).

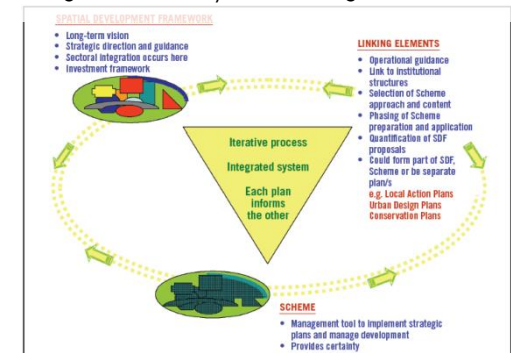
12.1.2 LINKAGE BETWEEN THE SPATIAL DEVELOPMENT FRAMEWORK, LAND USE FRAMEWORK AND THE SCHEME

As mentioned previously, the Land Use Framework is a bridging/ linking element that provides a linkage between strategic planning (SDF) and statutory planning (Scheme). As such, the SDF provides strategic direction, the Linking Elements provide more detailed spatial plans and the Schemes provide the statutory basis for land use decision-making.

The relationship between the SDF, Land Use Framework and Scheme is indicated in figure below. The main functions of developing a Land Use Framework for Ray Nkonyeni Municipality are as follow:

- ❖ To translate strategic objectives contained in the IDP and SDF to a level that will provide spatial representation;
- ❖ Quantification to guide the preparation of the Scheme;

Figure 15: SDF/ LUMS Alignments



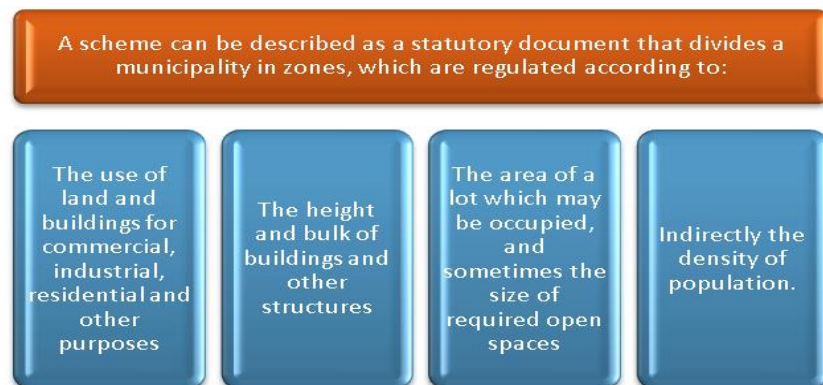
- ⊗ To provide institutional guidance that takes account of existing governance structures (e.g. involving Traditional Council in some areas of land use decision-making);
- ⊗ To provide an indication of timing and phasing of development;
- ⊗ To guide the preparation of a Scheme for the area;
- ⊗ Guide planning decisions in the Municipality (together with the SDF on which this Framework is based) in the interim period when the different phases of the Scheme are being prepared.

12.1.3 PURPOSE OF A SCHEME

The KwaZulu-Natal Guidelines for the Preparation of Schemes defines a scheme as:

“a tool used by a municipality to guide and manage development according to the vision, strategies and policies of the Integrated Development Plan and Spatial Development Framework, and in the interest of the general public to promote sustainable development and quality of life.”

Figure 16: Scheme Description



Source: KZN Land Use Management Guidelines for the Preparation of Schemes for Municipalities – Update 2011

There are a number of reasons for the preparation of Schemes. Firstly, a municipality must satisfy the legal requirements emanating from both the

Municipal Systems Act and the SPLUMA, which require a municipality to prepare a Scheme as part of an Integrated Development Plan (IDP). Secondly, the municipality has a responsibility to encourage harmonious development within its area of jurisdiction. This includes the protection of property rights and ensuring that development occurs in a compatible manner. In addition, scheme will promote sustainable land use and assist the municipality and other role-players to address environmental management issues. As indicated on Figure above, the scheme divides a municipal area into zones and regulates the use of land and buildings on the one hand, and the nature, extent and texture of development on the other. Ray Nkonyeni Local Municipality scheme will therefore:

- ⊗ Indicate what may or may not occur on particular areas of land.
 - ⊗ Provide land use certainty and boost investor confidence.
 - ⊗ Promote amenity, efficient land use practice and reserve land for essential services.
 - ⊗ Resolve conflict between different land uses and control negative externalities.
 - ⊗ Enable mix of convenient land usage, efficient movement processes and promote economic development.
 - ⊗ Protect natural and cultural resources and land with high agricultural production potential.
 - ⊗ Provide for public involvement in land management decision processes.
 - ⊗ Provide for sound local regulation and enforcement procedures.
 - ⊗ Accord recognition to indigenous and local spatial knowledge, land use practices land allocation practices.
 - ⊗ Facilitate social justice and equitable regulation of contested spaces.
- Reserve land for future uses where the need for location and extent is not certain at present.

12.1.4 ADMINISTRATION OF THE SCHEME

The municipal officials must administer the Scheme, while final decision-making rest with the Council. The current, structure of Ray Nkonyeni makes

provision for three positions that are responsible for the scheme and these are:

- ❖ Head of Department Economic Development, Tourism and Planning (HOD) – the section 57 Manager has an overall responsibility of the scheme.
- ❖ Manager for Town Planning – is a full-time (permanent) manager who reports to the HOD. He is responsible for managing the development and maintenance of the scheme.
- ❖ Senior Town Planners x3 (Land Use Planning) – these are full-time planners who are responsible for the scrutiny of development applications and advising the applicants.
- ❖ Senior Town Planner x1 (Spatial Planning) – is a full-time planner who is responsible for the preparation of the spatial frameworks, local area plans and precincts plans in order to guide the implementation of the scheme.
- ❖ Town Planning Technicians x2 (Spatial Planning and Land Use Planning) – these are full-time junior planners who are responsible for the day to day management of the scheme and SDF monitoring.
- ❖ GIS Specialist x1 – is a full-time officer who is responsible for spatial data administration, editing and processing.

Given the size of the municipality, this can be considered to be sufficient capacity to implement and maintain the land use management scheme.

12.1.5 KEY ELEMENTS OF LAND USE MANAGEMENT

The adopted Ray Nkonyeni Wall-to-Wall Scheme will put forward management of the following areas:-

12.1.5.1 URBAN TOWNS AND TOWNSHIPS

There are a number of urban settlements within Ray Nkonyeni which are located along the coast and within the inland. These include suburban areas of Port Shepstone, Marburg, Margate, Port Edward and Hibberdene. The other urban areas that are located within the inland and these are Gamalakhe Township, Ezinqoleni and Merlewood. The coastal urban

settlements are mostly located along N2 and R61. These are developed into towns due to the high level of visibility and accessibility. The inland urban settlements tend to be mainly residential areas with limited commercial activities within these.

12.1.5.2 COASTAL AREAS

The coastal strip of Ray Nkonyeni is used as swimming beaches, fishing, harvesting of marine animals and plants, and recreation. The municipality also identified the coast as a potential opportunity for promoting tourism. This resource must therefore be protected from harm in order to ensure that continued use of these resources can be guaranteed over time.

12.1.5.3 HIGH POTENTIAL AGRICULTURAL LAND

Generally, any land considered to have potential for any form of agricultural activity would require some form of management mechanism to be applied. The idea is to ensure that such land is not used inappropriately for other undesirable land uses, particularly in light of promoting food security in South Africa. Of importance is also the need to guard high potential agricultural land which often faces pressure from physical development. All agricultural land, particularly, those with high agricultural land and those currently under agricultural activity are to be adequately guarded as an invaluable scarce resource that must be managed appropriately. The Municipality's benefits from resource protection may include:

- ❖ Continual food production towards food security; and
- ❖ Development of agricultural opportunities that support local livelihoods such as Local Economic Development (LED) projects.

12.1.5.4 ECO- TOURISM AREAS

There are certain environmental areas within the Municipality with the inherent potential to contribute to Local Economic Development. As such, the

environmental conditions that prevail to make these high potential tourism areas must be conserved and properly managed.

12.1.5.5 ENVIRONMENTAL AREAS

There are four conservation areas within and surrounding the Municipal area. These areas include Mpenjati, Umtamvuna, Mbubazi and Skyline Nature Reserves. These areas are protected in terms of the environmental conservation legislations, the SDF proposed a 5km buffer from the boundaries of the reserves. The conservation and management of these areas would require coordination between key stakeholders such as Ray Nkonyeni Municipality, Ugu District Municipality, the Department of Agriculture and Environmental Affairs, Ezemvelo KZN Wildlife and Land Owners.

12.1.5.6 WATER RESOURCES

The SDF noted that there are numerous and substantial east-westerly running river valleys within the Ray Nkonyeni Municipality. Note that the steep sided valleys of several rivers, such as the Mzimkhulu, Mbizana and Mtamvuna. The 1:50 year and 1: 100 year flood line is required for major developments to take place. Although this has not been undertaken at the municipal scale as it is done on a project by project basis, the SDF has identified a need to guide against development that affect rivers and wetlands. The SDF therefore recommended that a 32m confidence buffer should be reserved for environmental service. The width of the river corridor is dependent on the local situation, for example the condition of stream, and may extend beyond the statutory 32m. Note that for particular activities within 32 meters of the edge of a stream, environmental authorisation is required from the relevant environmental authorities (NEMA EIA regulations, 2010)

12.1.5.7 ESTUARY MANAGEMENT

Ray Nkonyeni has a number of Estuaries. These comprise the unique zone where rivers meet the sea. They are highly variable systems that may experience water chemistry fluctuations, depending on tidal strength and river flow. There are eleven estuaries in the area which have been identified as provincial conservation priorities and these are Boboyi, Damba, Fafa, Mbizana, Mpenjanti, Mtamvuna, Mtentweni, Mtwalume, Mzimkhulu, Vungu and Zotsha. The seaward boundary of the estuary is the high watermark and the upstream boundary is the point where the system is no longer subject to tidal action or has no trace of salinity. The outer perimeter of estuaries is taken as the 5m height contour.

12.1.5.8 RURAL SETTLEMENTS

Settlements growth, if not planned and managed appropriately can have negative implications for environmentally sensitive areas, adjacent agricultural land and access to services. Future residential settlements should be encouraged to locate within nodal areas identified in the SDF. In areas where public-funded housing projects occur, it is essential that these projects are executed in an integrated manner, taking into consideration availability of basic services and infrastructure in support of building liveable and sustainable human settlements. Where necessary, housing projects should be phased in conjunction with basic services provision to minimise the occurrence of abandonment by beneficiaries.

12.1.6 DEVELOPMENT RIGHTS MANAGEMENT MECHANISMS

12.1.6.1 POLICY BASED MECHANISMS

A land-use rights policy is essentially an expression of the government's perception of the direction to be taken on major issues related to land use and the proposed allocation of the municipal land resources over a fixed period of time. It has a production and a conservation component. A sound

land-use policy is effectively part of the enabling environment and should cover all uses of land. To achieve the policy objective of sustainable production and conservation of natural resources, Ray Nkonyeni Municipality should pursue strategies which actively promote forms of land use which are both attractive to the people and sustainable in terms of their impacts on land resources. This will have to be developed through a participatory, integrated and iterative process which promotes greater likelihood of achieving implementation. The policy-based mechanisms for land use management which can be applied in Ray Nkonyeni Municipality include but not limited to:-

- ❖ Rural Densification Policy;
- ❖ Integrated Public Transport Management Policy;
- ❖ Agricultural Development Policy;
- ❖ Climate Change Policy;
- ❖ Informal Trading Policy, etc.

These policies will therefore play a significant role in ensuring enforcement and promoting sustainable human settlements.

12.1.6.2 REGULATORY BASED MECHANISMS

This refers to land use management mechanism which uses statutory instruments based on an applicable legislation to regulate land use activities by lawfully conferring land use rights in terms of a Land Use Scheme. As mentioned before that the Ray Nkonyeni Municipality has adopted a Land Use Scheme as per Section 24 (1) of the Spatial Planning and Land Use Management Act, 2013 (Act No. 16 of 2013), the following SDF guidelines were taken into consideration. These guidelines will also need to be taken into consideration during the review or the formulation of a new scheme, when amalgamating with the Ezingoleni Local Municipality.

12.1.7 PROPOSED LAND USE ZONES

Broad land use typologies for the Ray Nkonyeni Land Use Framework are suggested in table 1 on the overleaf. It is suggested that a more

prescriptive/ regulatory approach is required where important resources (e.g. high potential agricultural land and important environmental service areas) need to be protected and where pressure for development is higher such that the Municipality needs clear regulations to manage this development e.g. a potential urban settlement where there is or may be a demand for commercial and industrial development sites. A policy-orientated approach would be suitable for areas where there is less pressure for development.

Table 17: Broad Land Use Management Categories				
Parent Zone	Possible Zone	Statement of Intent	Scheme Approach	Existing and Future Land Use
Mixed Use Zones	<ul style="list-style-type: none"> Core Mixed Use Zones Medium Impact Mixed Use Zones Low Impact Mixed Use Zones Suburban Office Zones 	Areas that provide for a range of business, commercial and office uses; and may include residential with varying degrees of mix. Uses are compatible and generally do not breach the level of amenity contemplated by the zone.	Development pressure will ultimately be greatest in these nodes thus a more prescriptive approach is required.	<ul style="list-style-type: none"> Business Commercial Workshop Garage Hotel Guest Lodge Launderette Parking Garage Professional Office Public Office Restaurant Service Industrial Building Service Station Shop Storage Warehouse
Industrial Zones	<ul style="list-style-type: none"> Medium Impact Industry Zone Low Impact Industry Zones Quarrying and Mining Zone 	This zone will be used to designate and manage a range of industrial activities – from light industrial with limited impact on surrounding land uses to hazardous or noxious industry with high-impact and must be separated from other uses. This set of zones would include agricultural industry.	To promote a mix of industrial uses that provides the Municipal area with a sound, diverse industrial base. To promote high standards of site planning and landscape design for industrial developments within the Municipal area.	<ul style="list-style-type: none"> Business General Industrial Building Light Industrial Building Professional Office Service Industrial Building Storage Warehouse Wholesale Warehouse Professional Office
Civic and Social Zones	<ul style="list-style-type: none"> Education Zones Institutions and Worship Zones Public Buildings Zone Utility Facility (Reservation) 	To provide appropriate areas for civic and social facilities, and public offices for public administration or government functions, including education, health, pension offices, museums, libraries, community halls, prisons, juvenile facilities, cemeteries and crematoria. To provide for uses and buildings associated with public and private service providers.	To provide social facilities and services across different parts of the municipality.	<ul style="list-style-type: none"> Crèche Dwelling House Educational Building Residential Building Educational Building Institution Veterinary Clinic Retirement Village Place of Worship Place of Public Assembly
Residential Zones	<ul style="list-style-type: none"> Residential Only Zones Residential 	To provide a range of dwelling unit densities (i.e. low-density estate, single-family detached and attached, multi-family, and	To protect the amenity and the integrity of the various residential neighbourhoods and	<ul style="list-style-type: none"> Dwelling House Agricultural Land Residential Building

Table 17: Broad Land Use Management Categories				
Parent Zone	Possible Zone	Statement of Intent	Scheme Approach	Existing and Future Land Use
	<ul style="list-style-type: none"> Medium Impact Zones Residential High Impact Zones Tourist Residential Zone 	housing for special needs) which meet the diverse economic and social needs of the residents, and which are consistent with the Integrated Development Plan and appropriate standards of public health, safety, welfare and aesthetics;	zones from undesirable land uses and activities.	<ul style="list-style-type: none"> Home Garden Medium Density Housing Bed and Breakfast Boarding House Guest House Guest Lodge Hotel Private Recreation Area Self-Catering Units or Rooms Boarding House Holiday Park
Imizi (Homestead/ Rural Residential)	Imizi/ Rural/ Transitional Settlement (RTS) Zone 1	To provide for densely populated rural settlements which are located within 5km Radius to SDF Nodes and Corridors.	To promote proper growth of rural residential areas in terms of servicing needs and amenity.	<ul style="list-style-type: none"> Dwelling Cattle Kraal Chicken Coop Granaries Additional granny flat
	Imizi/ Rural/ Transitional Settlement (RTS) Zone 2	To provide for sparsely populated rural settlements which are located within a radius beyond 10km from SDF Nodes and Corridors.	To promote and protect the agri-village lifestyle, sense of place and amenity of the rural areas.	<ul style="list-style-type: none"> Dwelling Cattle Kraal Chicken Coop Granaries Additional units On-site burial On-site waste disposal pit
	Traditional Royal Residency/ Isigodlo	To provide for the traditional palace for Isilo or Amakhosi. It is often used for royal residency, administrative and recreational (cultural festivities) purposes in most rural areas and some regulations are crucial to consider in relation to these.	To cater for royal cultural and religious needs.	<ul style="list-style-type: none"> Royal residency Dwelling Administrative Recreational and traditional/ cultural festivities (virginity testing) Royal gathering/ Meeting Place
Agriculture Zones	<ul style="list-style-type: none"> Commercial (Agriculture 1) Small Holding (Agriculture 2) 	To provide for agricultural land uses. This protection is obtained by ensuring that development does not create soil erosion, silting of lower slopes, land slide damage,	To protect high potential agricultural land from non-agricultural activities and transformation towards	<ul style="list-style-type: none"> Agricultural Building Agricultural Land Tunnels/ Hydroponics Dip Tanks

Table 17: Broad Land Use Management Categories				
Parent Zone	Possible Zone	Statement of Intent	Scheme Approach	Existing and Future Land Use
		flooding problems, and severe cutting or scarring, since any proposed non-agricultural use or development and certain agriculturally related activities will be subject to prior assessment.	degradation.	
	<ul style="list-style-type: none"> Subsistence Farming 	To provide for livestock breeding, grazing, ploughing and veld management at a smaller scale.	To protect land from degradation due to poor farming methods.	<ul style="list-style-type: none"> All-Season Grazing Land (Amadlelo) Winter Grazing Camps (Amakhaphelo) Izinkambi Dip Tank (Idiphu) Insimu Isivande
Environmental Service Zones	<ul style="list-style-type: none"> Active Open Space Private Conservation Public Open Space 	Areas that provide environmental and recreational services that are essential to the sustainable development of the Municipality. These include areas requiring preservation and conservation as they provide ecosystem services, are unique natural landscapes, viewpoints, areas of ecological, historical and/or cultural importance, biodiversity, and/or have unique, rare or endangered habitats or species.	Given the environmental sensitivity of these areas and their importance to the sustainable development of the area a more prescriptive approach to land use management would be required.	<ul style="list-style-type: none"> Recreation Cultural Gas regulation Climate regulation Disturbance regulation e.g. flood control Water regulation Water supply Erosion control Soil formation Nutrient cycling Waste treatment Pollination Biological control Refugia i.e. habitat for resident and migratory population e.g. nursery for fish. Food production Raw materials Genetic resources
	<ul style="list-style-type: none"> Cultural and 	To preserve the natural and cultural open	To ensure that the cultural open	<ul style="list-style-type: none"> Isigcawu (Meeting Places

Table 17: Broad Land Use Management Categories				
Parent Zone	Possible Zone	Statement of Intent	Scheme Approach	Existing and Future Land Use
	Heritage Open Space	spaces from land use intrusion and degradation.	spaces remain vacant and undisturbed.	<ul style="list-style-type: none"> and Traditional Trials) Amagquma (Hilly Areas that are communicating (views)) Amahlathi Emvelo (Indigenous Forests for Wood harvesting, Wild fruit harvesting and Hunting areas) Imithombo/ Iziphethu (Waterbodies and Wetlands where fishing and agricultural water collection can be done) Isishozi (Lightning prone areas that are kept vacant)
Coastal management	<ul style="list-style-type: none"> Coastal management Sea shore Estuary Management 	Provides for the management and development of land located within the low and high water mark, as defined in the Sea Shores Act, along the coast including, inter alia, bathing, shore angling, deep-sea angling, jet skiing, surfing, boogie boarding, kite-surfing, construction of tidal pools and the erection of shark nets. The purpose of the zone is to ensure that permitted activities do not impact negatively on ecosystems, marine and coastal, fauna and flora, within these areas.	Given the environmental Sensitivity of the coastal strip a more prescriptive approach to land use management would be required.	<ul style="list-style-type: none"> Recreation Park Beachfront Private Beach
Transport	<ul style="list-style-type: none"> Roads Road reserves Railway line Landing strip Bus and taxi rank Railway station Public parking 	The provision of land for the full range of road infrastructures within rural and urban areas to ensure an optimal road transport network can be constructed and maintained.	Regulations with respect to roads will focus on issues of access onto roads and the use of road reserves for trading on some areas. Regulations relating to taxi and bus ranks would need to be specific to these uses and more	<ul style="list-style-type: none"> Existing Roads Future Roads Taxi/Bus Rank

Table 17: Broad Land Use Management Categories				
Parent Zone	Possible Zone	Statement of Intent	Scheme Approach	Existing and Future Land Use
			prescriptive as these uses can have a high impact on neighbours.	

12.1.8 SCHEME APPROACH

A wall-to-wall scheme will cover the entire Ray Nkonyeni Municipality and provide certainty to land users and land development applicants irrespective of location. The municipality has developed a comprehensive scheme with a range of zones some of which may not apply in less developed areas. The following broad categories were used in developing the scheme:

- ✿ Urban which includes all areas that fall within the urban edge as delineated in this SDF.
- ✿ Areas that are subject to the Sub-division of Agricultural Land Act, Act No. 70 of 1970.
- ✿ Rural settlements located on communal land, state land and/or privately owned land.

Rural land use policies were developed to guide land use management on agricultural land and rural settlements. It is suggested that a more prescriptive/ regulatory approach is required where important resources (e.g. high potential agricultural land and important environmental service areas) need to be protected and where pressure for development is higher such that the Municipality needs clear regulations to manage this development e.g. a potential urban settlement where there is or may be a demand for commercial and industrial development sites. A policy-orientated approach would be suitable for areas where there is less pressure for development.

12.2 STRATEGIC SPATIAL PLANNING PROJECTS

Table 18: Strategic Spatial Planning Projects

PROJECT NAME	PROJECT DESCRIPTION	TOTAL BUDGET	MEDIUM TERM EXPENDITURE FRAMEWORK		
			2018/2019	2020/2021	2022/2023
Paddock, Oribi Gorge and Ezinqoleni Corridor Development Plan	A corridor development will unlock develop opportunities along the N2 from Murchison to Ezinqoleni (incorporating Oribi Gorge). The focus will be agri-tourism with limited mixture of supporting land use activities such as commercial and retail.	R 500 000.00	R 500 000.00		
Oribi Gorge Conservation Assessment	Detailed study into the potential expansion of the Oribi Gorge Nature Reserve which will include a biodiversity and agricultural assessment, land ownership audit, extensive consultation, management plan and infrastructure requirements towards a comprehensive business plan.	R 300 000.00	R 300 000.00		
Ray Nkonyeni Wall-to-Wall Land Use Management Scheme	A land use management scheme that covers the entire municipal area of jurisdiction and respond to the requirements of SPLUMA.	R 1 000 000.00	R 1 000 000.00		
Izotsha Corridor and Conceptual Precinct (Techno Hub)	A corridor plan that takes into account the pressures from private investors, market forces, development applications for Izotsha route. The plan will build on targets areas identified for industrial, Mixed use, social activity. Conceptual Precinct plans must focus on movement, urban form, public space, quality of environment. Broad development guidelines must be developed to assist the municipality in accessing development applications for this area.	R 200 000.00	R 200 000.00		
Tourism Corridor Strategic Plan	The aim of this study is to understand the economic implications of establishing a Tourism corridor from Port Edward from the Red Desert through to the KwaXolo caves as well as the feasibility of	R 200 000.00		R 200 000.00	

PROJECT NAME	PROJECT DESCRIPTION	TOTAL BUDGET	MEDIUM TERM EXPENDITURE FRAMEWORK		
			2018/2019	2020/2021	2022/2023
	establishing a cultural village for the areas alongside the nature reserve. The aim is to generate Tourism Led opportunity in the municipality by developing a suitable Business Plan.				
Gamalakhe Precinct Plan	The areas around the Ugu Sport & Leisure centre will need to be resourced with bulk infrastructure including roads, water and sanitation. Promotion of not only recreational uses should be allowed. Such uses may include small scale office space and commercial, middle-income housing. This will assist to ensure that future nodal development of this area is realized.	R 450 000.00		R 450 000.00	
Farmworker Housing and Rural Development Strategy	The plan will target the needs for farmworkers in terms of farmworker housing and agrarian reform. It will inform the municipality and the Departments (Dept. of Rural Development and Land Reform as well as the Department of Human Settlements) about important interventions that need to be done in order to improve the lives of Ray Nkonyeni farm dwellers.	R 300 000.00		R 300 000.00	
Agricultural Development Plan	This plan would focus on the development of the agrarian economy in order to enhance the productivity of the sector as well as food production.	R 300 000.00		R 300 000.00	
Integrated Transport Plan	The preparation of an Integrated Transport Plan is a legal requirement in terms of Section 27(2) of the NLTTA. This indicates that the ITP must be formulated for the planning authority's official vision, policy and objectives. This has to be consistent with the national and provincial policies, due regard being given to any relevant integrated development planning or land development objectives.	R 600 000.00			R 600 000.00

PROJECT NAME	PROJECT DESCRIPTION	TOTAL BUDGET	MEDIUM TERM EXPENDITURE FRAMEWORK		
			2018/2019	2020/2021	2022/2023
Infrastructure Investment Plan	The Infrastructure Investment Plan is a process through which a municipality prepares a strategic plan for unlocking development through infrastructure delivery and development in a medium to long term period as a means to facilitate effective implementation of the Integrated Development Plan. It will serve as principal infrastructure planning instrument which guides and informs infrastructure planning decision-making in a municipality. It will be a component of Ray Nkonyeni Local Municipality Integrated Development Plan (IDP) and aims to create the enabling environment for economic and social investment through infrastructure delivery which unlocks such development intentions.	R 500 000.00			R 500 000.00
TOTAL		R 4 350 000.00	R 2 000 000.00	R 1 250 000.00	R 1 100 000.00

12.3 MONITORING AND EVALUATION FRAMEWORK

Table 19: Monitoring and Evaluation Framework

Objective	Performance Indicators	Means of Verification	Assumptions
<ul style="list-style-type: none"> Environmental Management 	<ul style="list-style-type: none"> Established programmes for clearing of invasive aliens through Working for Water, or other forms of rehabilitation e.g. through Working for Wetlands and Land Care. Established environmental management programs. Effective Water Resource Management Delineation of flood risk areas Establishment of protected areas Catchment management Alien plant management Protected area development Wetland management Biodiversity zones 	<ul style="list-style-type: none"> 1:50 years and 1:100-year flood lines. People removed from flood risk areas. Developed Water Resource Management Strategy Improved sanitation and waste management infrastructure and services in primary nodal areas. Rehabilitated wetlands and riparian zones. Catchment management programme. Participation in national catchment management initiatives. Application of carrying capacity standards to grazing land management. Amount of land cleared of alien plants. Programme to remove alien plants. Initiatives to rehabilitated land affected by soil erosion. Protection of indigenous forestry. Proclamation of environmentally sensitive areas that are not currently protected. Delineation of all major wetlands. Observation of a 100m buffer from each wetland. Management of bio-diversity corridors. Environmental overlays. 	<ul style="list-style-type: none"> The municipality must work with all stakeholders towards an environmentally sustainable development.

Objective	Performance Indicators	Means of Verification	Assumptions
<ul style="list-style-type: none"> Regional Access and Road Network 	<ul style="list-style-type: none"> Upgrading of major access and arterial/link roads. Improving access to the existing and growing settlements. Creating new linkages. Location of development nodes along and at the intersection of key roads. Focusing development projects on settlements located along strategic roads. 	<ul style="list-style-type: none"> Number and location of roads upgraded. KMs of roads upgraded. New roads. Number of high impact and catalytic projects located along development corridors. Type and level of services provided to settlements located along development corridors. 	
<ul style="list-style-type: none"> Clustering Public Facilities and Economic Activities in Development Nodes 	<ul style="list-style-type: none"> Development of service centres. Focusing strategic and high impact projects within development nodes. Promoting clusters of public facilities as a means to encourage nodal development. 	<ul style="list-style-type: none"> Number, nature and budgets for municipal projects in each of these nodes. Level of access and location of public facilities serving different communities in these nodes. Availability of infrastructure in nodes to enable these to perform their role. Number of public facilities locating in identified service 	<ul style="list-style-type: none"> Development nodes have potential to improve access to basic and public services.
<ul style="list-style-type: none"> Protection of agricultural land 	<ul style="list-style-type: none"> High potential agricultural land Agricultural protection plans Agricultural development support 	<ul style="list-style-type: none"> Identification and mapping of agricultural land with high potential. Size and use of high potential agricultural land Scheme clauses designed to protect high potential agricultural land. Introduction of land use controls for agricultural land. Initiatives to promote agriculture. Direct support to land reform projects. 	<ul style="list-style-type: none"> Agricultural land is under threat from non-agricultural uses such as settlement.

Objective	Performance Indicators	Means of Verification	Assumptions
<ul style="list-style-type: none"> Unlocking Economic Development 	<ul style="list-style-type: none"> Tourism development Commercial & industrial development in nodal areas Number of Public Private Partnership Agreements signed 	<ul style="list-style-type: none"> Increased investment in terms of commercial, tourism and leisure within Ray Nkonyeni. Branded Tourism Route. Introduction of new tourism products. Number of new tourism facilities and products located in Ray Nkonyeni. Commercial and industrial development applications received by the municipality. Percentage increase in commercial land. Uptake of commercial land in dense rural settlements 	
<ul style="list-style-type: none"> Development of social and service infrastructure 	<ul style="list-style-type: none"> Improved sanitation services and infrastructure Improved access to water Improved access to electricity Improved access to social facilities 	<ul style="list-style-type: none"> All households access a health facility within a 5km radius. Number and location of new health facilities. Weakly mobile clinics Number of VIP's in rural areas Waterborne sanitation system in areas inside urban edge Piped water within the house in urban settlements Water on site or at least within a 200m from each household in dense rural settlements Eradication of electricity backlogs Number of new health facilities Number of new schools 	<ul style="list-style-type: none"> The municipality must work together with government departments to improve the quality of life of residents through the development and improvement of social and service infrastructure.
<ul style="list-style-type: none"> Sustainable Spatial Planning System 	<ul style="list-style-type: none"> The sustainable Spatial Planning System must be able to map out all the strategically located land parcels for packaging for commercial and tourism investments. 	<ul style="list-style-type: none"> Council approved land use management system. Cooperation between traditional leaders and the municipality on land use management issues. Continuum of settlements from urban high density to remote low density settlements. Number of functional tertiary nodes. Availability of infrastructure in Ray Nkonyeni to enable the area to perform its role. 	<ul style="list-style-type: none"> The municipality must refine the SDF and develop it further through the formulation of a series of plans with varying degrees of detail and flexibility.

Objective	Performance Indicators	Means of Verification	Assumptions
<ul style="list-style-type: none"> Developing sustainable human settlements 	<ul style="list-style-type: none"> Upgrading of informal settlements. Consolidation of settlements located along primary and secondary corridors. Level and type of infrastructure in each settlement. Implementation different types of housing projects. 	<ul style="list-style-type: none"> Number of informal settlements upgraded. Number of consolidated settlements. Number of Integrated Residential Development packaged. 	<ul style="list-style-type: none"> There is a need to improve the structure and form of settlements.

12.4 CAPITAL INVESTMENT FRAMEWORK

12.4.1 BACKGROUND

A Capital Investment Framework (CIF) is considered to be a very important component of the Spatial Development Framework (SDF). CIF is a sound step towards a more systematic approach to infrastructure planning and coordination. These key goals of this component are as follows:

- ❖ Spatial budgeting – which involves mapping of the capital infrastructure projects that are approved by the IDP. This assists to determine whether the development trajectory that is advocated by the IDP is in harmony with the spatial development vision that is suggested by the SDF.
- ❖ Intensify spatial objectives with infrastructure proposals – the SDF identifies a number of spatial development proposals for further economic development and investments within the area but these proposals will be meaningless if the supporting infrastructure has not been planned for in tandem with the overall SDF. The CIF provides an opportunity to relook at these proposals in line with infrastructure requirements.
- ❖ Comparison of areas of greatest needs and where services or infrastructure proposals are directed to – this is intended to establish if the areas that encounters backlogs are receiving attention to address that. There are areas within the municipal area which suffers from historical and institutional neglect from benefiting from services. It is the role of a developmental government to be pro-active at developing these areas. This is part of the reconstruction and developmental mandate.

The normative aims and objectives are:

- ❖ To inform public and private sector investment decision-making.
- ❖ To influence municipal capital infrastructure project allocation.
- ❖ To serve as a strategic infrastructure guide for economic infrastructure priority areas.

- ❖ To map out all service delivery priority areas.
- ❖ To identify all major infrastructure priority areas including the projects currently underway.
- ❖ To determine if spatial proposal can be resourced by sufficient infrastructure resources.
- ❖ To integrate Capital Investment Framework with the IDP.

12.4.2 SPATIAL BUDGETING

12.4.2.1 IDP CAPITAL PROJECTS

Table 20: IDP Capital Projects		
Organisation	Project Description	Budget
RNM	Parking Block in Dick Kings Parking	
RNM	Municipal Office Precinct	
RNM	Ocean Upmarket Restaurant	
RNM	Uvongo Hotel and Conference	
RNM	Rural Tourism: KwaXolo Caves and Nyandezulu	
Total		

12.4.2.2 SECTOR DEPARTMENTAL PROJECTS

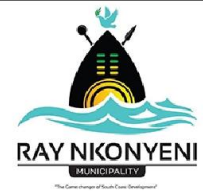
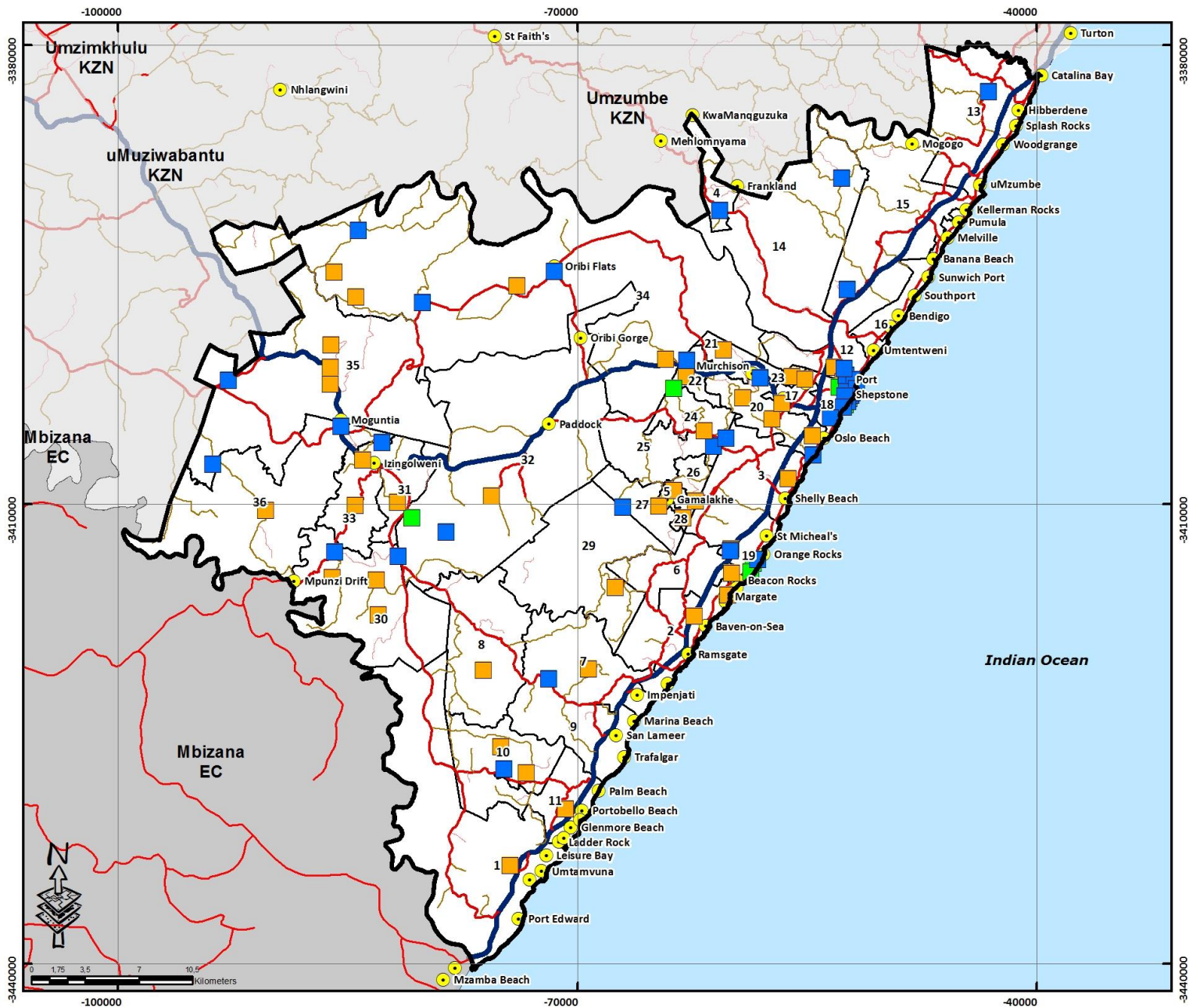
Table 21: Sector Departmental Projects		
Organisation	Project Description	Budget
Eskom	Ward 5, 7, 8, 28, 10, 11 Electrification/ Infills (1 293 Connections)	R 33 622 124.00
	Wards 30 31 32 33 34 35 36 Electrification/ Infills (1 716 Connections)	
Department of Human Settlements	Mkholombe – Ward 20 (1000 units)	
	Bhobhoyi Phase 2 – Ward 20 (1098 units)	
	KwaNdwalane (Peri-urban) – Portions of Wards 20, 21, 22, and 23 (1000 units)	

Table 21: Sector Departmental Projects		
Organisation	Project Description	Budget
Department of Human Settlements	Gamalakhe (insitu- upgrade) - Portions of wards 25, 26, 27, and 28 (2000 units)	
	KwaNyuswa Phase 2 - WoSiyane /Nkulu – Ward 34 (1000 units)	
	KwaNyuswa Phase 2 – Blose – Ward 35 (1000 units)	
	Mthimude Phase 2- Hlomedini /Bhosiki – Ward 35 (1000 units)	
	Mthimude Phase 2- Shibe – Ward 35 (1000 units)	
	Vukuzithathe Phase 3- Ngawusheni / Bdlazi – Ward 30 (1000 units)	
	Vukuzithathe Phase 3- Bandlana /Shobashobane – Ward 30,31 and 33 (1000 units)	
	Lot 7 Albersville (40 Units)	
	Merlewood Middle Income (177 units)	
	Marburg settlement (164 units)	
	Lot 1561- Shelly Beach (300 units)	
	Portion 15 (of 17) Portion 16 (of 7) and the remainder of 7 of the farm Success no 7108 (281 units)	
Department of Public Works	Justice Park in Port Shepstone	R 360 000 000.00
Department of Transport	Intermodal Public Transport Facility	
Office of the Premier	Regional Technology Hub	
CoGTA	Margate Beachfront Redevelopment	R 30 000 000.00
SANRAL	R61 Upgrade	
Ugu DM	Ugu Agri-Park (Ezingoleni)	
	Gamalakhe Bulk Water Supply Project: Security of Supply	R 31 000 000.00
	KwaNyuswa Water Scheme - Phase 3 (AFA) MIS 194753	R 10 000 000.00
	Umtamvuna Water Works Raw Water Upgrade	R 2 000 000.00
	Umzimkhulu Bulk Water Augmentation Scheme	R 30 000 000.00
	Msikaba and Surrounds Water Supply Scheme	R 7 000 000.00
	Water Pipeline Replacements	R 90 000 000.00
	Margate Sewer Pipeline Replacement	R 9 000 000.00
	Masinenge/ UVongo Sanitation Project	R 1 000 000.00
	KwaLatshoda Low-cost Housing Sanitation Services	Still in Planning
	Rural Sanitation (VIPs)	R 6 200 000.00
Total		

12.4.3 PREFERRED AREAS FOR CAPITAL INVESTMENT FRAMEWORK

Table 22: Preferred Capital Investment Framework		
Area	Project Description	Budget
Port Shepstone	Upgrade Nelson Mandela drive to accommodate the proposed multimodal facility. This should include proper access and egress into the facility, pedestrian crossings, walkways, sidewalks and general public realm upgrades.	R5 000 000.00
	Activity streets will benefit from general public realm upgrade, which aims at creating an aesthetically pleasing, attractive and functional urban environment. Ultimately, it aims at creating a 'walkable' town, with a safe, clean and green public environment in a good state of repair streets (Aikin, Bazley, Nelson Mandela, Connor And Reynolds Streets)	R5 000 000.00
	Railway Station Development	
	Improved Pedestrian Crossings along The R102 at the Main Intersection Points	R2 000 000.00
	Propose New Intersection On R102 and Reynolds Street	R5 000 000.00
	Settlers Park Office Park Development	
	Parking Meter System	
	Beachfront Promenade	R5 000 000.00
	Development of Entrance Features	R500 000.00
	Bus Terminal (Coach Operators) With a Taxi Facility	
	Redevelopment of Beachfront Node	R3 000 000.00
	Development of the Block and Lighthouse Node	R12 000 000.00
	Eco Park Along Umzimkulu Riverfront	R4 500 000.00
	Formalise Coastal Access Points	
	Periodic Market	
	Realign Entrance to the Beachfront From R102	
	Feasibility of Revitalisation of the Narrow-Gauge Line to Paddock	R650 000.00
	Upgrading of the Mbango WWTP	
Murchison	Bulk Water and Sanitation	
Gcilima	Water and Sanitation Supply	
Louisiana	Electrification	
Ingwemabala	Electrification	
Ezinqoleni	Roads, sidewalks, streetlights and stormwater infrastructure	R30 000 000.00
Nqabeni	Roads, sidewalks, streetlights and stormwater infrastructure	R10 000 000.00
Thonjeni	Roads, sidewalks, streetlights and stormwater infrastructure	R10 000 000.00
Mtateni	Roads, sidewalks, streetlights and stormwater infrastructure	R10 000 000.00
Lushaba	Roads, sidewalks, streetlights and stormwater infrastructure	R10 000 000.00

Table 22: Preferred Capital Investment Framework		
Area	Project Description	Budget
KwaMadlala	Roads, sidewalks, streetlights and stormwater infrastructure	R10 000 000.00
Ndimeni	Roads, sidewalks, streetlights and stormwater infrastructure	R10 000 000.00
Nkumbini	Roads, sidewalks, streetlights and stormwater infrastructure	R10 000 000.00
Mogontia	Roads, sidewalks, streetlights and stormwater infrastructure	R10 000 000.00
KwaNzimakwe	Roads, sidewalks, streetlights and stormwater infrastructure	R10 000 000.00
Mahlabathini	Roads, sidewalks, streetlights and stormwater infrastructure	R10 000 000.00
Oribi Flats	Roads, sidewalks, streetlights and stormwater infrastructure	R10 000 000.00
Total		



Spatial Development Framework 2017/2022

SDF CIF Map

Economic Development, Tourism and Planning Spatial Planning Unit
666 Crescent Avenue
Uvongo 4270
Tel: 039 315 9240
Date: 2017

Legend

- LM Boundary
- IDP CIF Project
- Preferred CIF Project
- Sector Departmental Project
- Places
- ocean
- National Road
- Provincial Road
- District Road
- Local Road
- Wards

DATA SOURCES:
Towns: Cogta
Roads: DOT
Municipal/Ward Boundaries: MDB
Stats: STATSSA
Agric Land Cover: DAG
Environmental Data: KZN Wildlife 2016
Land Reform: DRDLR
Cadastral: KZN SGO