WINNIE MADIKIZELA MANDELA LOCAL MUNICIPALITY

SPATIAL DEVELOPMENT FRAMEWORK

2025/2026 - 2045/2046

Dept: Planning & Development

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LIST OF ACRONYMS

ANDM	ALFRED NZO DISTRICT MUNICIPALITY
AQMP	AIR QUALITY MANAGEMENT PLAN
AU	AFRICAN UNION
BNG	BREAKING NEW GROUND
CCRS	CLIMATE CHANGE RESPONSE STRATEGY
CMP	COASTAL MANAGEMENT PLAN
COGTA	COOPERATIVE GOVERNANCE AND TRADITIONAL AFFAIRS
CRDP	COMPREHENSIVE RURAL DEVELOPMENT PROGRAMME
DDM	DISTRICT DEVELOPMENT MODEL
DOHS	DEPARTMENT OF HUMAN SETTLEMENTS
ECBCP	EASTERN CAPE BIODIVERSITY AND CONSERVATION PLAN
ECSECC	EASTERN CAPE SOCIOECOOMIC CONSULTATIVE COUNCIL
EMF	ENVIRONMENT MANAGEMENT FRAMEWORK
ICT	INFORMATIONAL COMMUNICATION TECHNOLOGY
IDP	INTEGRATED DEVELOPMENT PLAN
ISRDP	INTEGRATED SUSTAINABLE DEVELOPMENT PROGRAMME
IUDF	INTEGRATED URBAN DEVELOPMENT FRAMEWORK
IWMP	INTEGRATED WASTE MANAGEMENT PLAN
IWRM	INTEGRATED WATER RESROUCE MANAGEMENT
LED	LOCAL ECONOMIC DEVELOPMENT
LM	LOCAL MUNICIPALITY
MHSP	MUNICIPAL HOUSING SECTOR PLAN
MSA	MUNICIPAL SYSTEMS ACT
NAAQS	NATIONAL AMBIENT AIT QUALITY STANDARDS
NDP	NATIONAL DEVELOPMENT PLAN
NEMA	NATIONAL ENVIRONMENTAL MANAGEMENT ACT
NEMAQA	NATIONAL ENVIRONMENTAL MANAGEMENT AIR QUALITY ACT
NEMPA	NATIONAL ENVIRONMENTAL PROTECTED AREAS ACT
NEMWA	NATIONAL ENVIRONMENTAL MANAGEMENT WASTE ACT
NHSMSP	NATIONAL HUMAN SETTLEMENT MASTER SPATIAL PLAN
NSAA	NATIONAL SPATIAL ACTION AREAS

NSDP	NATIONAL SPATIAL DEVELOPMENT PERSPECTIVE
NSTETR	NATIONAL SPATIAL TRANSFORMATION AND ECONOMIC TRANSITION REGION
PDP	PROVINCIAL DEVELOPMENT PLAN
PGDS	PROVINCIAL GROWTH AND DEVELOPMENT STRATEGY
RSDF	REGIONAL SPAITAL DEVELOPMENT FRAMEWORK
SDF	SPATIAL DEVELOPMENT FRAMEWORK
SDG	SUSTAINABLE DEVELOPMENT GOALS
SPLUMA	SPATIAL PLANNING AND LAND USE MANAGEMENT ACT
WMMLM	WINNIE MADIKIZELA MANDELA LOCAL MUNICIPALITY
WSDP	WATER SERVICES DEVELOPMENT PLAN

DOCUMENT SIGNATURE SHEET

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EXECUTIVE SUMMARY

This document is referred to as the Long-Term (20-year) Spatial Development Framework (SDF) for Winnie Madikizela Mandela Local Municipality (herein referred to as "WMMLM" or "the municipality") (EC443). It serves as the principal spatial planning instrument, guiding and informing all planning, land management, development, and spatial decision-making within the municipality. According to the SDF 2017 guidelines, "A municipal Spatial Development Framework must assist in integrating, coordinating, aligning, and expressing development policies and plans emanating from the various sectors of the spheres of government as they apply within the municipal area" (SPLUMA Chapter 4 Part A 12 (2) (b)).

This document comprises various chapters that provide detailed information. It begins by introducing the project's background, emphasizing the legal requirement for municipalities to comply with statutes to formulate an SDF. This SDF will guide the spatial distribution of current and desired land uses to achieve the municipality's vision, goals, and objectives.

The second and third phases, examine policy and legislative reviews from international, national, provincial, district, and local plans, with implications for WMMLM. Additional analyses conducted include cross-border alignment, demographics and population growth estimates, the space economy, infrastructure assessment, public amenities, spatial analysis, landscape character, and the state of the environment, incorporating ecological mechanisms. The spatial opportunities and challenges are also addressed.

Following the aforementioned phases are proposals to address and mitigate the spatial issues identified. This leads to a new phase in the document, referred to as the spatial strategy, where strategies are spatially depicted. This chapter includes a long-term spatial development vision statement for the municipal area, indicating the desired spatial growth and development pattern for the next 20 years. The final section is an implementation framework chapter, linking the SDF, land use framework, and the scheme. This phase provides a list of strategic spatial planning projects that UMngeni Municipality needs to consider and budget for. It also highlights areas that require careful management, especially where future development pressures are expected.

The main objective of the project, as reflected in the inception report, is to create a credible SDF based on an agreed vision and planning principles that promote equity and sustainability. This involves restructuring spatially inefficient settlements, channelling resources to areas of greatest need and development potential and stimulating economic opportunities in both rural and urban areas. This project for the preparation of the Spatial Development Framework is submitted to:

Winnie Madikizela Mandela Local Municipality

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INTRODUCTION

1. INTRODUCTION

1.1. BACKGROUND

Winnie Madikizela Mandela Local Municipality intends to facilitate the development of a Spatial Development Framework (herein referred to as "SDF") that is sustainable, legally compliant, and provides clear guidance for the development of the land use scheme through the land use framework within its area of jurisdiction. The Municipal Systems Act No. 32 of 2000 (MSA) requires each municipality to prepare an Integrated Development Plan (IDP) to serve as a tool for transforming local governments towards the facilitation and management of development within their areas of jurisdiction. The Winnie Madikizela Mandela 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).

According to the Department of Agriculture, Land Reform and Rural Development (herein referred to as "DALLRD") Guidelines for the Formulation of the SDF, it is defined as a core component of a municipality's economic, sectorial, spatial, social, institutional, and environmental vision. In other words, it is a tool to achieve the desired spatial form of the municipality. Most importantly, the SDF is intended to facilitate the development of a spatial structure that promotes integrated development and enables efficient service delivery. It will guide future planning and development within Winnie Madikizela Mandela Local Municipality.

The Winnie Madikizela Mandela Municipality Spatial Development Framework (SDF) will serve as a strategic framework that directs the implementation of the IDP and guides the overall spatial distribution of current and desirable land uses within a Municipality in order to give effect to the vision, goals, and objectives of the municipal IDP. The Municipality's SDF will represent a long-term (+20 years) plan and is revised in line with the IDP 5-year cycles or annually if required by the municipality.

The Constitution of the Republic of South Africa, (Act No. 108 of 1996) confers to municipalities major developmental responsibilities intended to improve the quality of life for 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 the removal of spatial remnants of the apartheid past.

The SDF serves as the primary spatial response to the development context, needs, and vision of the municipality. It is a crucial land use management tool, guiding and managing municipal decisions related to land use, development, and planning. Ultimately, the SDF, along with its accompanying package of plans, defines and facilitates the progressive attainment of the municipality's desired spatial form.

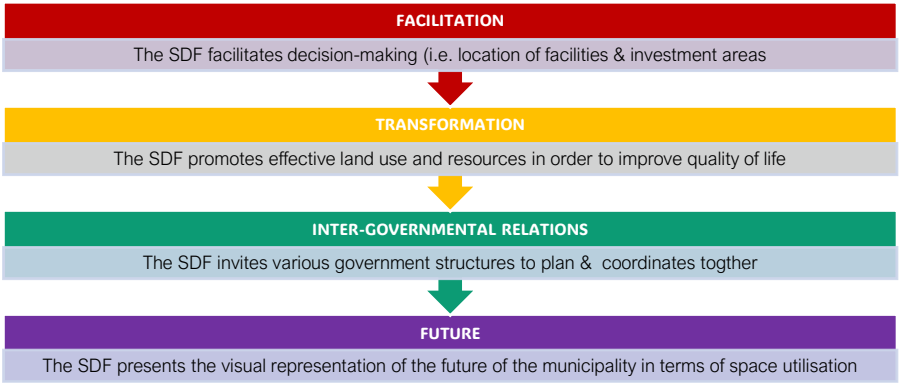


FIGURE 1: BENEFITS OF THE SDF

According to SPLUMA, a Municipal SDF must:

- Implement the development principles and applicable norms and standards outlined in Chapter 2.
- Include both a written and spatial representation of a five-year spatial development plan for the municipality's spatial form.
- Incorporate a longer-term spatial development vision statement for the municipal area, indicating the desired spatial growth and development pattern for the next 10 to 20 years.
- Identify current and future key structuring and restructuring elements of the municipality's spatial form, including development corridors, activity spines, and economic nodes where public and private investment will be prioritized and facilitated.
- Provide population growth estimates for the next five years.
- Estimate the demand for housing units across different socio-economic categories and outline the planned location and density of future housing developments.
- Forecast economic activity and employment trends and their locations within the municipal area for the next five years.
- Identify, quantify, and provide location requirements for engineering infrastructure and services provision for existing and future development needs for the next five years.
- Specify the designated areas where national or provincial inclusionary housing policies may apply.
- Include a strategic assessment of the environmental pressures and opportunities within the municipal area, including the spatial location of environmental sensitivities, high-potential agricultural land, and coastal access strips, where applicable.
- Identify areas within the municipality where incremental upgrading approaches to development and regulation will apply.
- Designate areas where more detailed local plans must be developed and where shortened land use development procedures and amendments to land use schemes may be applicable.
- Provide the spatial expression of the coordination, alignment, and integration of sectoral policies across all municipal departments.
- Determine a capital expenditure framework for the municipality's development programs, depicted spatially.
- Establish the purpose, desired impact, and structure of the land use management scheme to be applied in the municipal area.
- Include an implementation plan comprising:
    - Sectoral requirements, including budgets and resources for implementation.
    - Necessary amendments to a land use scheme.
    - Specification of institutional arrangements needed for implementation.
    - Specification of implementation targets, including dates and monitoring indicators.

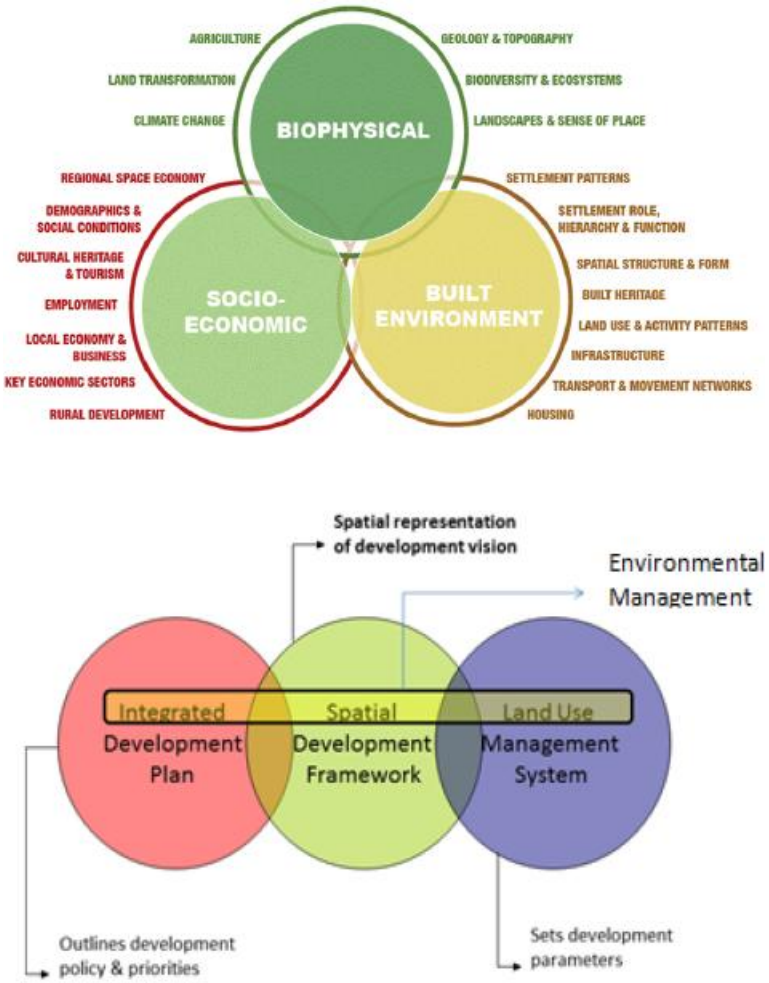


FIGURE 2: SDF GUIDELINES

1.2. STRATEGIC APPROACH OF THE SDF

In addition to ensuring SPLUMA compliance, the SDF must guide the strategic spatial response of the IDP and be informed by key international, national, provincial, and local influences. The following diagram offers an overarching view of the combined influences on the municipal IDP and SDF. Each strategy listed should be considered as an integrated component of an overall framework for the sustainable development of the municipal area, rather than in isolation.

1.3. METHODOLOGY

The planning process involved the use of the following methods to collect, generate and analyse data: Desktop data and literature review. Stakeholder engagement. Specialist investigations. GIS. It is important to indicate that stakeholder participation in the form of project steering committee meetings, presentations through public participation unfolded throughout the course of the project. Overarchingly, based on the terms of reference, the project unfolds in seven phases, namely:

1.3.1. PHASE 1 – PROJECT START UP

This phase includes:

- Meetings: Clarify terms of reference with district and local municipalities, and COGTA.
- Report Development: Create a report based on key municipal policy directives.
- Project Management Programme: Develop a programme with timeframes, actions, deliverables, and budget, presented as a Gantt Chart.
- Stakeholder Identification: Identify stakeholders and affected parties (e.g., PRASA, SANRAL).

- Provincial and Municipal Departments: Identify involved departments.
- Invitations: Invite interested parties to register as SDF participants.
- Notification and Presentation: Notify about the SDF preparation and present the draft inception report.
- Project Steering Committee: Establish the PSC.
- Roles and Stakeholders: Define roles and identify stakeholders.
- Final Report Presentation: Present the final inception report.
- Local Policy Directives Discussion: Discuss key local policy directives.
- Project Management Programme Development: Outline timeframes, actions, and deliverables according to the budget.

1.3.2. PHASE 2 – ISSUES AND VISION

This phase includes:

- Sector Department Involvement: Engage sector departments on relevant plans (housing, tourism, agriculture).
- Stakeholder Consultation: Consult with municipal and external stakeholders.
- Stakeholder Focus Groups: Convene focus groups with stakeholders.
- Policy and Legislative Review Synthesis: Synthesize national and provincial policy and legislative directives.
- Contextualization and Synthesis: Contextualize and synthesize legislative and policy directives at the municipal level.
- Spatial Challenges and Opportunities: Identify spatial challenges and opportunities from the district growth plan.
- Policy/Legislative M&E Targets: Identify monitoring and evaluation targets.
- Spatial Directive Informants: Outline spatial directive informants from policy reviews.
- Draft Vision Development: Develop the draft vision for the municipality.
- Objective Development: Develop municipal objectives.
- Draft Spatial Vision Development: Develop the draft spatial vision for 5-year intervals up to 20 years and beyond.
- Monitoring and Evaluation Discussions: Discuss key monitoring and evaluation issues with the municipality.
- Municipality Planner and M&E Involvement: Involve the municipality planner, M&E team, and COGTA Municipal Performance Management Unit.

1.3.3. PHASE 3 – SPATIAL ANALYSIS & SYNTHESIS

This phase includes:

- IDP and Sector Plans Review: Examine the latest IDP and municipal sector plans.
- Demographic Assessment: Identify trends and growth, ensuring SPLUMA compliance.
- Spatial Needs and Challenges: Assess spatial needs, challenges, and opportunities from neighbouring municipalities and the province.
- Stakeholder Consultation: Consult with departments, state-owned entities, and key role players.
- Focus Group Development: Form a focus group.
- Strategic Socio-Economic Assessment: Assess socio-economic conditions, addressing current and future challenges.
- Provincial Sector Reports Review: Consider relevant provincial sector reports, plans, and strategies.
- Census Data Assessment: Reference Census and other socio-economic data.

- Built Environment Assessment: Assess the built environment, considering legacy, current, and future challenges.
- Sector Plans Evaluation: Review sector plans (Housing, Environmental, Infrastructure, Transportation).
- Focused Spatial Challenges Assessment: Assess spatial challenges from neighbouring municipalities and the province.
- Provincial and National Plans Analysis: Analyse existing provincial and national sector plans, reports, and strategies.
- Public Open House Facilitation: Facilitate a public open house to discuss key findings.
- Census and Measurable Data Collection: Collect updated Census and other measurable data.
- Policy Context and Vision Directives Report Submission: Submit the combined report to the Project Steering Committee.
- Project Steering Committee Presentation: Present findings and reports to the committee.

1.3.4. PHASE 4 – THE DRAFT SPATIAL DEVELOPMENT FRAMEWORK

This phase includes:

- Conceptual Framework Development: Create a framework based on identified challenges and opportunities.
- Draft Vision Refinement: Update the draft vision to align with the spatial concept.
- Spatial Strategies Proposal: Propose strategies supporting the spatial concept and municipality's vision.
- Specialist Discussions: Hold discussions on key sectoral and area-based strategies.
- Measurable Goals Development: Develop realistic and relevant goals, targets, and indicators.
- Target Alignment: Ensure targets align with Spatial Planning Outcomes.
- Spatial Tools Formulation: Create tools to monitor SDF implementation.
- Composite Map Development: Develop a composite map of spatial strategies.
- Detailed Proposals for Settlements: Create detailed proposals for municipal settlements.
- SDF Compilation: Combine all elements into the SDF.
- Draft SDF Submission: Submit the draft SDF to the project steering committee.

1.3.5. PHASE 5 – ACHIEVING SUPPORT FOR THE DRAFT SPATIAL DEVELOPMENT FRAMEWORK

This phase includes:

- Public Advertisement: Publish the Draft Municipal SDF online and at public facilities for comment.
- SDF Roadshow: Present proposals in key areas, targeting communities.
- Council Presentation: Present the draft to the full council for adoption.
- Adoption Facilitation: Facilitate the council's adoption process.
- Comment Period: Allow 60 days for public comments.
- Public Open House: Present the Draft Municipal SDF and Implementation Plan at a public open house.

1.3.6. PHASE 6 – FINALISATION AND APPROVAL

This phase includes:

- Implementation Framework Refinement: Refine the framework based on stakeholder engagement.
- Summary Brochures and Posters: Prepare summaries of SDF proposals.
- Follow-Up Discussions: Discuss alignment interventions with municipal departments.
- Local Area Plans Initiation: Implement local area or precinct plans as outlined in the capital investment framework.
- Capital Investment Framework Integration: Incorporate key proposals into the next IDP review through discussions with municipal officials.

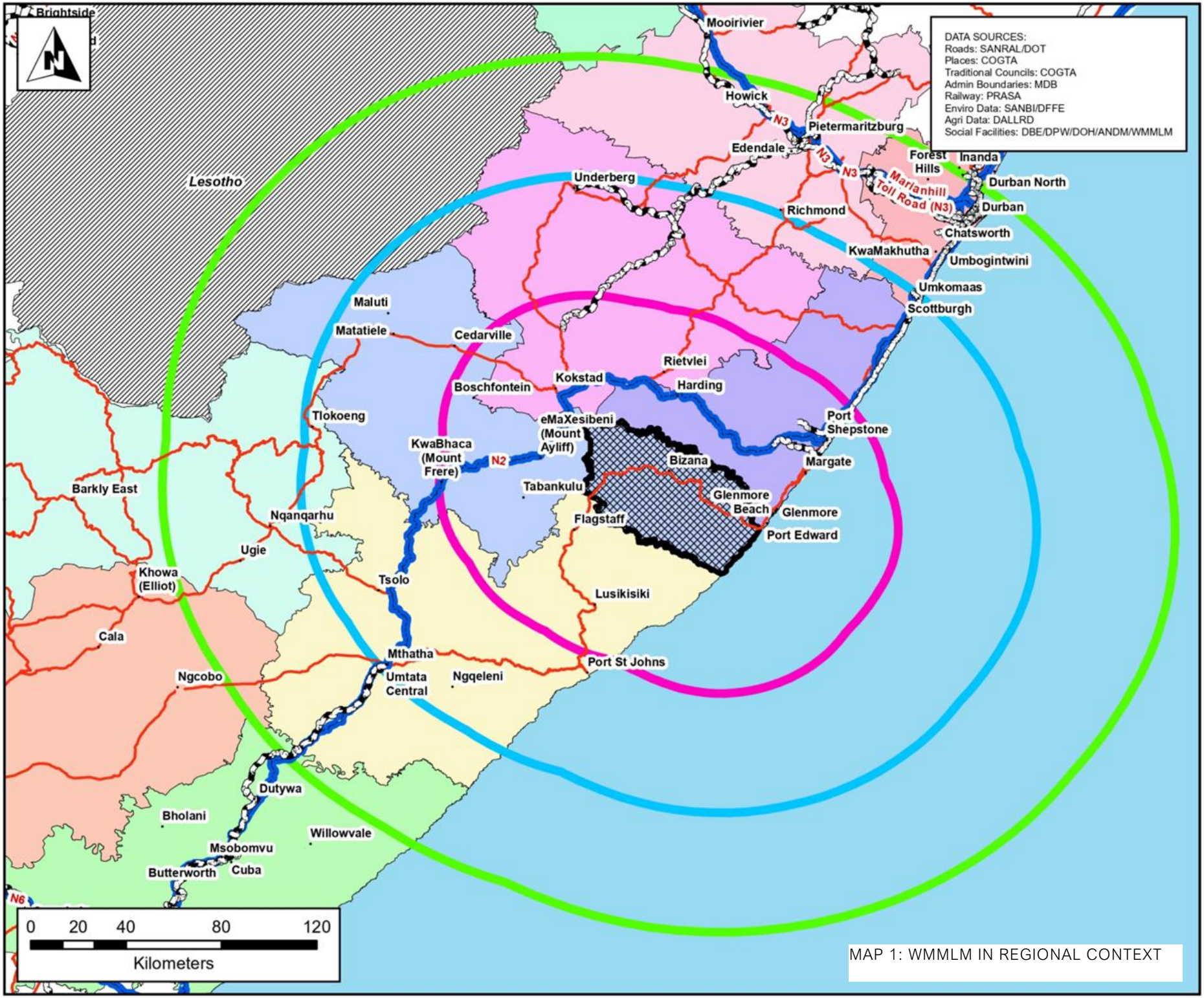
1.3.7. PHASE 7 – IMPLEMENTATION

This phase includes:

- Policy Development: Create policies to support SDF proposals.
- Spatial Development Guidelines: Develop guidelines for proposal implementation.
- Capital Investment Framework: Identify priorities, institutional arrangements, and implementation requirements.
- Monitoring Tool Development: Create a monitoring tool.
- Implementation Framework Compilation: Compile policies, guidelines, and the capital investment framework.
- Target Alignment with M&E: Align targets with monitoring and evaluation.
- Institutional Arrangements Alignment: Ensure alignment of institutional arrangement targets.
- Project Management Meeting: Discuss project progress and programme.
- Framework Refinement: Refine capital investment and expenditure frameworks.

1.4. WINNIE MADIKIZELA MANDELA LM WITHIN REGIONAL CONTEXT

Winnie Madikizela Mandela Municipality, situated in the Eastern Cape province of South Africa, enjoys a strategic position within a network of major towns and cities. Located approximately 300 kilometres northeast is Durban, a bustling metropolis known for its vibrant culture and significant economic activity. To the northeast, about 200 kilometres away, lies Port Shepstone, another important town that provides vital services and amenities to the region. Mthatha, a key economic and administrative center, is roughly 150 kilometres southwest of the municipality. Bisho, the capital of the Eastern Cape, is approximately 250 kilometres to the west, serving as the political hub of the province. The municipality is well-connected by several national and provincial roads, ensuring easy accessibility and facilitating the movement of goods and people. The N2 National Road, a major highway that runs along the eastern coast of South Africa, connects Winnie Madikizela Mandela Municipality to Durban in the north and Mthatha in the south, enhancing trade and economic integration. The R61 Provincial Road links the municipality to Port Shepstone and further connects to the N2, providing an essential route for commuters and goods transportation. Additionally, the R102 Provincial Road runs parallel to the N2, serving as an alternative route and connecting the municipality to various coastal towns and cities. These well-maintained roads play a crucial role in the economic and social integration of Winnie Madikizela Mandela Municipality with the broader region, facilitating trade, tourism, and access to essential services. They ensure that the municipality remains well-connected to major urban centres, thereby contributing to its growth and development.



MAP 1: WMMLM IN REGIONAL CONTEXT

WINNIE MADIKIZELA MANDELA SPATIAL DEVELOPMENT FRAMEWORK

Winnie Madikizela Mandela in Regional Context

Legend

- Railway
- National Road
- Provincial Road
- 150km Radius
- 100km Radius
- 50km Radius
- WMMLM
- Alfred Nzo
- Amathole
- Chris Hani
- Harry Gwala
- Joe Gqabi
- O.R.Tambo
- Ugu
- Umgungundlovu
- Uthukela
- eThekwini

INGUQUKO DEVELOPMENT PLANNING AND PROJECTS

POLICY CONTEXT & VISION DIRECTIVES

2. POLICY CONTEXT AND VISION DIRECTIVES

The Spatial Development Framework is undertaken in accordance with a set of policies and legislation emanating from all spheres of government, namely national, provincial, and local government, as well as international development policies. Furthermore, these policies and laws will act as guidelines for the development of the Spatial Development Frameworks. The need for a policy and legislative review is to guide the development of the NDP in a manner that aligns with the goals and objectives of the aforementioned spheres of government, as well as international policies. This report is, therefore submitted to the Winnie Madikizela Mandela Local Municipality to provide the policy and legislative framework under which the Spatial Development Framework.

2.1. NATIONAL POLICY AND LEGISLATIVE FRAMEWORK

2.1.1. CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA, 1996 (ACT NO. 108 OF 1996)

The Constitution of the Republic of South Africa, 1996 (Act No. 108 of 1996) stands as the supreme law of the country. It enshrines the Bill of Rights, which secures the rights of all residents and upholds the democratic values of human dignity, freedom, and equality. The Constitution specifically supports local government as a key sphere with the mandate to implement various developmental duties. This is facilitated through technical assistance and capital grant financing for municipal projects that either incorporate a private sector element or aim to establish such a connection.

The core objectives of local government include:

- Ensuring the provision of services to communities in a sustainable manner.
- Promoting social and economic development.

Furthermore, Section 153 highlights the developmental duties of municipalities:

- Municipalities must structure and manage their administration, budgeting, and planning processes to prioritize the basic needs of the community and promote its social and economic development.
- Municipalities are also required to participate in national and provincial development programs.

SPATIAL DIRECTIVES: The South African Constitution provides several directives that guide the development of Spatial Development Frameworks (SDFs) in municipalities. These directives are primarily aimed at promoting sustainable development, spatial justice, and equitable land use. Key directives include:

- **Section 24**: This section of the Constitution guarantees the right to an environment that is not harmful to health or well-being and promotes conservation. This directive ensures that SDFs consider environmental sustainability and protection.
- **Section 25**: This section addresses land reform and redistribution, emphasizing the need for equitable access to land. SDFs must align with these principles to ensure fair land distribution and use.
- **Section 26**: This section provides the right to housing, mandating that municipalities develop housing policies and plans that are integrated into their SDFs.

- **Section 27**: This section guarantees the right to access healthcare, food, water, and social security. SDFs must consider the provision of these basic services to promote social well-being.
- **Section 28**: This section ensures the right to education, requiring municipalities to plan for educational facilities within their SDFs.
- **Section 29**: This section guarantees the right to a basic education, which must be reflected in the spatial planning of educational facilities.
- **Section 30**: This section provides the right to use the language and participate in the cultural life of one's choice, which can influence the cultural and recreational planning within SDFs.
- **Section 31**: This section recognizes the right of communities to self-determination, which can impact the participatory planning processes in developing SDFs.

These constitutional directives ensure that SDFs are developed with a focus on sustainability, equity, and the well-being of all citizens. They provide a framework for municipalities to create inclusive and balanced spatial plans that address the needs of their communities.

2.1.2. NATIONAL HOUSING ACT NO. 107 OF 1997

This legislation was enacted to establish a legal framework to support the right to housing. Under this Act, all municipalities are required to develop housing strategies and targets within the context of their Integrated Development Plans (IDPs) and in accordance with National and Provincial Policies and Legislation. The creation of Integrated Development Plans is mandated by the Municipal Systems Act 32 of 2000, while formulating Housing Plans is a sectoral obligation. These plans aim "to enable the municipality to strategically plan housing development within its jurisdiction by establishing a Municipal Housing Plan that sets out housing delivery goals and ensures the implementation of sustainable housing projects." [The Housing Act No. 107 of 1997].

The objectives of local government include:

- Ensuring the provision of services to communities in a sustainable manner.
- Promoting social and economic development.

A particularly relevant section that addresses the developmental responsibilities of municipalities is Section 153:

- Municipalities must structure and manage their administration, budgeting, and planning processes to prioritize the basic needs of the community and to foster its social and economic development.
- They must also participate in national and provincial development programs.

2.1.3. NATIONAL ENVIRONMENTAL MANAGEMENT ACT NO. 107 OF 1998

The purpose of the statute is to facilitate cooperative environmental governance by setting out principles for decision-making on environmental issues, establishing institutions to promote cooperative governance, and outlining procedures to coordinate the environmental functions carried out by government bodies. The legislation governs development planning in relation

to biodiversity, protected areas and other environmentally sensitive elements inherent in development planning.

SPATIAL DIRECTIVES: The National Environmental Management Act (NEMA) provides several spatial directives that can guide the development of Spatial Development Frameworks (SDFs) in municipalities. Key directives include:

- **Co-operative Governance**: NEMA emphasizes the importance of co-operative governance, requiring all spheres of government to work together in environmental decision-making. This ensures that SDFs are developed with input from various governmental levels.
- **Environmental Protection**: NEMA mandates the protection of the environment for the benefit of present and future generations. SDFs must incorporate measures to prevent pollution, promote conservation, and secure ecologically sustainable development1.
- **Integration of Social, Economic, and Environmental Factors**: NEMA highlights the need to integrate social, economic, and environmental factors in planning and decision-making. SDFs should reflect this holistic approach to development.
- **Public Participation**: NEMA promotes public participation in environmental governance. SDFs should include mechanisms for public involvement in the planning process.
- **Sustainable Development**: NEMA supports sustainable development, ensuring that development serves present and future generations. SDFs should align with this principle by promoting sustainable land use and development practices.

2.1.4. SPATIAL PLANNING AND LAND USE MANAGEMENT ACT NO. 16 OF 2013 (SPLUMA)

The Act establishes several principles that govern all land development, which could also be relevant to the creation of the LUMS. These principles encompass integration, environmental sustainability, and development of both urban and rural lands, among others, such as a mixed-use land management approach. According to Chapter 2 of SPLUMA, 2013, the principles applicable to spatial planning, land development, and land use management include:

- Spatial Justice
- Spatial Sustainability
- Efficiency
- Spatial Resilience
- Good Administration

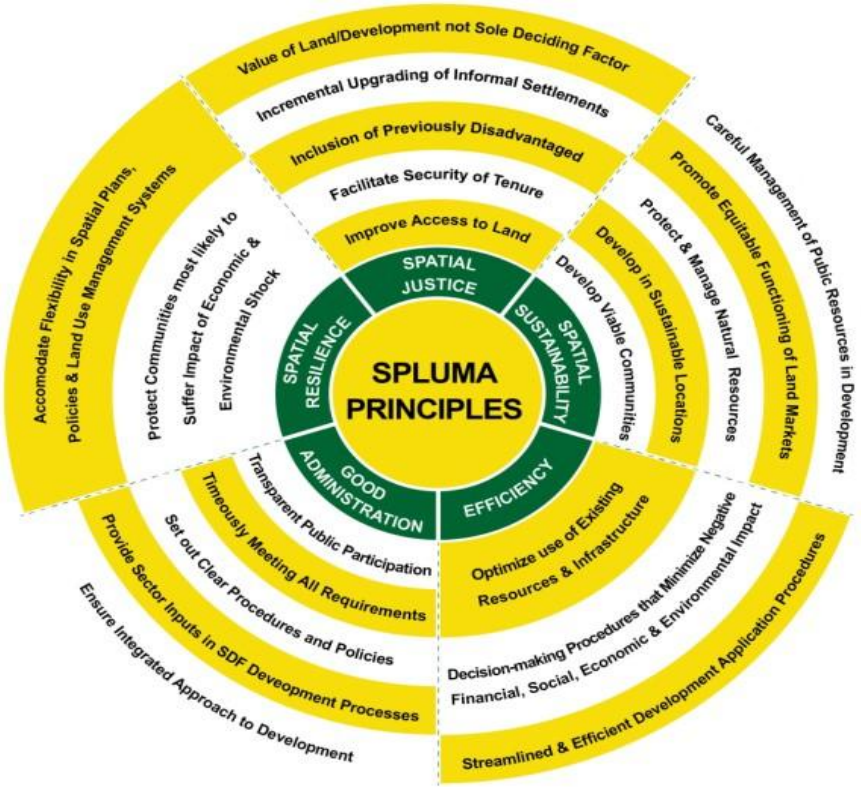


FIGURE 3: SPLUMA PRINCIPLES

SPATIAL DIRECTVES: Section 21 of the Spatial Planning and Land Use Management Act (SPLUMA) outlines the contents that must be included in a Spatial Development Framework (SDF). It specifies that the SDF should include:

1. Objectives reflecting the desired spatial form of the municipality.
2. Strategies, policies, and plans indicating desired patterns of land use within the municipality.
3. Addressing the spatial reconstruction of the location and nature of development within the municipality.
4. Providing strategic guidance on the location and nature of development within the municipality.
5. Basic guidelines for a land use management system in the municipality.
6. A strategic assessment of the environmental impact of the SDF.
7. Identification of programs and projects for land development within the municipality.
8. Alignment with the SDFs reflected in the integrated development plans of neighbouring municipalities.

Chapter 4 of the Act outlines the mandate for municipalities to prepare Spatial Development Frameworks (SDFs). Section 12 mandates that all spheres of government and each municipality must develop a spatial development framework. Section 21 specifies the contents to be included in the SDF. Additionally, SPLUMA defines the guiding principles for the SDF, which are as follows:

- Spatial Justice
- Spatial Sustainability
- Efficiency
- Spatial Resilience
- Good Governance

Part E stipulates that the Municipal Spatial Development Framework must address the following issues, which will be tackled in phases according to the specified methodology.

2.1.5. NATIONAL HOUSING CODE

Section 4 of the National Housing Act, Act No 7 of 1997 requires the Cabinet Human Settlements Minister to publish a National Housing Code. The rationale behind establishing the Code is to provide an implementation tool for national housing policy, as defined in the Act. The National Housing Code presents policy developments but does not supersede legislation set out in the National Housing Act. These include policies and strategies developed by the National Department of Human Settlements (DOHS). The Code is also updated annually so to ensure that national housing policy remains responsive to rapidly changing housing needs. Once published by the Minister, the Code is circulated to provincial and local governments. The Code binds these government spheres to planning and development procedures in place to ensure the provision of adequate housing.

SPATIAL DIRECTIVES: The National Housing Code aligns with the development of Spatial Development Frameworks (SDFs) in municipalities by providing a structured approach to housing and land use management. Key aspects include:

- **Integrated Development Plans (IDPs)**: The National Housing Code emphasizes the importance of IDPs, which are central to the SDFs. Municipalities are required to incorporate housing and land use strategies within their IDPs.
- **Spatial Justice and Sustainability**: The Code promotes principles of spatial justice and sustainability, ensuring that housing developments are equitable and environmentally sustainable.
- **Guidelines for Land Use Management**: The Code provides guidelines for land use management, which are essential components of SDFs.
- **Provision of Social and Economic Facilities**: The Code outlines the provision of social and economic facilities, which must be considered in the development of SDFs.

- **Funding and Institutional Arrangements**: The Code details funding arrangements and institutional responsibilities, ensuring that municipalities have the resources and support needed to develop effective SDFs.

2.1.6. MUNICIPAL SYSTEMS ACT, 2000 (ACT 32 OF 2000)

Municipal Systems Act (No. 32 of 2000) and its associated regulations serve as the driving force behind integrated development planning in South Africa. In the development of the ADLM SDF, this process will be guided by this legislation, which outlines the following requirements for SDFs:

- Establish objectives that reflect the desired spatial form of the municipality.
- Include strategies, policies, and plans that:
  - Indicate desired patterns of land use within the municipality.
  - Address the spatial reconstruction of the location and nature of development within the municipality.
  - Provide strategic guidance regarding the location and nature of development within the municipality.
- Set out basic guidelines for the land use management system in the municipality.
- Contain a strategic assessment of the environmental impact of the SDF.
- Identify programs and projects for land development within the municipality.
- Align with the SDFs reflected in the integrated development plans of neighbouring municipalities.
- Provide a visual representation of the desired spatial form of the municipality, which must:
  - Indicate where public and private land development and infrastructure investment should take place.
  - Indicate desired or undesired utilization of space in a particular area.
  - Delineate the urban edge.
  - Identify areas requiring strategic intervention.

SPATIAL DIRECTIVES: Chapter 5 outlines the process for preparing Integrated Development Plans (IDPs) and states that the Spatial Development Framework (SDF) should align with national and provincial planning, as well as the planning of neighbouring municipalities. Section 23(1) of the Act requires that municipalities engage in development-oriented planning. Section 26(e) specifies that the SDF must include basic guidelines for a land use management system within the municipality. Additionally, Section 26(e) identifies the SDF as a core component of the IDP and mandates that the SDF provides basic guidelines for municipal land use management.

2.1.7. NATIONAL HUMAN SETTLEMENTS MASTER PLAN

The National Human Settlements Master Spatial Plan (NHSMSP) is a strategic initiative formulated by the South African government to steer the development of human settlements within the country for the next two decades (2019-2039). The plan's objective is to ensure that all South Africans have access to adequate housing, essential services, and economic opportunities within well-organized, cohesive, and sustainable communities.

The NHSMSP is underpinned by a spatial framework designed to foster balanced regional development, curb urban sprawl, and support the growth of compact, connected, and resilient urban areas. It also aims to correct historical inequities in land and housing distribution, especially for disadvantaged groups.

Aligned with the National Development Plan (NDP) and other critical national policies such as the Integrated Urban Development Framework (IUDF) and the National Spatial Development Framework (NSDF), the NHSMSP is set to be

implemented through a coordinated effort involving multiple government sectors, local authorities, the private sector, and community groups.

The NHSMSP outlines six principal strategic objectives:

- Develop sustainable, inclusive, and liveable human settlements linked to economic opportunities and social facilities.
- Promote efficient land and resource use to create compact and interconnected urban areas resilient to climate and environmental changes.
- Address the backlog in housing and infrastructure, particularly for the disadvantaged and marginalized.
- Overcome the effects of apartheid-era spatial planning by fostering spatial transformation and equity through specific interventions and investments.
- Enhance institutional capacity and governance to ensure effective planning, execution, and monitoring of human settlements development.
- Encourage innovation and the sharing of knowledge to continuously improve human settlements planning and development.

The NHSMSP marks a significant advance in South Africa's approach to urbanization, spatial disparity, and sustainable development challenges. However, the plan's success hinges on enduring political support, sufficient funding, and robust partnerships across all societal sectors.

SPATIAL DIRECTIVES: The National Human Settlements Master Spatial Plan provides several spatial directives aimed at promoting sustainable and equitable human settlements. Key directives include:

- **Breaking Apartheid Spatial Patterns**: The plan emphasizes the need to break down the spatial inequalities inherited from apartheid, ensuring that development is more integrated and equitable.
- **Integrated Human Settlements**: The plan promotes the development of integrated human settlements that provide access to housing, services, and economic opportunities.
- **Sustainable Development**: The plan advocates for sustainable development practices that protect the environment and promote long-term viability.
- **Spatial Justice**: The plan highlights the importance of spatial justice, ensuring that all communities have access to resources and opportunities.
- **Public Participation**: The plan encourages public participation in the planning process, ensuring that the voices of all stakeholders are heard.
- **Coordinated Planning**: The plan calls for coordinated planning across different sectors and levels of government to ensure that development is cohesive and well-managed.

2.1.8. NATIONAL DEVELOPMENT PLAN: 2030

The plan, which launched on November 7, 2012, includes comprehensive discussions on various critical topics such as employment, infrastructure, foreign trade, education, health, housing, social protection, and safety. It makes a preliminary effort to align with Minister Patel's National Growth Path, introduced in October 2010. The NDP offers limited detailed discussion on fiscal and monetary policy. The growth targets set by the plan are highly ambitious but achieving them would significantly transform the country. The NDP aims to create 11 million jobs by 2030, which is projected to lower the unemployment rate to 14% by 2020 and 6% by 2030. This would increase total employment from 13 million to 24 million by 2030, raising the proportion of working adults from 41% to 61%.

The NDP recognizes housing as a crucial factor in enabling South Africa's workforce. It sets a goal for 2030 where housing delivery not only supports economic development, job creation, and growth but also provides equitable access to opportunities and services while reducing poverty.

SPATIAL DIRECTIVES: The National Development Plan (NDP) identifies the following spatial directives:

- Decentralization and Regional Development: Promoting balanced development across different regions to reduce the concentration of economic activities in urban areas.
- Infrastructure Investment: Directing infrastructure investments to support economic growth, improve connectivity, and enhance service delivery.
- Sustainable Land Use: Encouraging sustainable land use practices to protect natural resources and promote environmental conservation.
- Urban and Rural Integration: Fostering better integration between urban and rural areas to ensure equitable access to services and opportunities.
- Social and Economic Inclusion: Ensuring that spatial planning contributes to social and economic inclusion by addressing spatial inequalities and promoting inclusive growth.

2.1.9. NATIONAL OUTCOME 8: SUSTAINABLE HUMAN SETTLEMENTS, IMPROVED QUALITY OF LIFE

The National Outcome 8 is aimed at developing sustainable human settlements—environmentally, socially, and economically. This policy recognizes that housing and human settlement encompass more than just the construction of buildings and provision of services; it also involves enhancing the quality of life. The key aims and objectives of National Outcome 8 include:

- Accelerated delivery of housing opportunities, such as through the National Upgrading Programme.
- Improved access to basic services, with the primary responsibility resting with COGTA while NDHS provides support. A key action in this area includes the Bulk Infrastructure Fund and special purpose vehicles like MIG.
- Mobilization of well-located land for low-income and affordable housing, involving interactions with various agencies, access to a database of suitable state land, and the processes of land acquisition, release, and preparation for human settlement development.
- Enhancement of the property market by facilitating both private sector involvement and government support to finance the gap housing market for beneficiaries earning between R3,501 and R12,800.
- The Upgrading of Informal Settlements Programme (UISP) under Part 3 of the Housing Code, which supports the structured in-situ upgrading of informal settlements rather than relocation. This approach aims to achieve:
- Tenure security by recognizing and formalizing the tenure rights of communities within informal settlements.
- Health and Security by supporting healthy and secure living environments through the provision of affordable and sustainable basic municipal engineering infrastructure, which allows for future scaling.
- Empowerment by ensuring that communities are not socially or economically excluded, promoting social and economic integration, building social capital through participatory processes, and addressing the broader social needs of communities.

SPATIAL DIRECTIVES: National Outcome 8: Sustainable Human Settlements and Improved Quality of Life focuses on transforming South Africa's human

settlements to be more equitable, efficient, and sustainable. Here are some key spatial directives:

- Breaking Apartheid Spatial Patterns: Systematically addressing entrenched spatial patterns that exacerbate social inequality and economic inefficiency.
- Housing Policy Review: Revising housing policies to better realize constitutional housing rights and restructure towns and cities.
- Coherent Land Use Approach: Developing overarching principles for spatial development and revising regulations and incentives for housing and land use management.
- Housing Finance Regime: Radically revising the housing finance regime to support sustainable human settlements.
- Infrastructure Development: Ensuring access to adequate housing, affordable services, and better living environments.
- Upgrading Informal Settlements: Upgrading 400,000 units of accommodation within informal settlements and providing well-located public land for low-income housing.
- Access to Basic Services: Improving access to basic services such as water, sanitation, refuse removal, and electricity.
- Gap Market Housing: Facilitating the provision of 600,000 accommodation units for people earning between R3,500 and R12,800.

2.1.10. BREAKING NEW GROUND (BNG)

When it was first introduced in 1994, the Housing Policy and Strategy aimed to stabilize the environment by transforming the highly fragmented, complex, and racially based financial and institutional framework inherited from the previous government, while also establishing new systems to ensure efficient delivery to address the housing backlog. The successes of this program have gained recognition both nationally and internationally. Over the past decade, there have been significant socioeconomic, demographic, and policy changes.

While the government maintains that the core principles of the policy are still relevant and robust, there is a need for a new plan to refine and enhance the existing mechanisms to achieve more responsive and effective delivery. The human settlements plan bolsters the vision of the Department of Human Settlement, which is to foster a non-racial, integrated society through the development of sustainable human settlements and quality housing. The broader vision includes the following objectives:

- Accelerating the delivery of housing as a primary strategy for poverty alleviation.
- Using housing provisions to generate employment.
- Ensuring individuals have the opportunity to access property as a means of wealth creation and empowerment.
- Leveraging housing as a tool for developing sustainable human settlements and supporting spatial restructuring.

The Breaking New Ground (BNG) strategy aims to align with the National Spatial Development Perspective (NSDP) by enhancing spatial restructuring through several means:

- Integrating informal settlements into the broader urban fabric to address spatial, social, and economic exclusion.
- Securing access to well-located state-owned and parastatal land.
- Acquiring well-located land for housing development.
- Securing funding and land for these acquisitions.

SPATIAL DIRECTIVES: The "Breaking New Ground" policy provides several spatial directives that can guide the development of Spatial Development Frameworks (SDFs) in municipalities. Key directives include:

- **Promoting Densification and Integration**: Encouraging compact, mixed land use to create diverse, life-enhancing environments with maximum possibilities for pedestrian movement and efficient public transport.

- **Ensuring Access to Opportunities**: Providing low-income housing in close proximity to areas of economic opportunity to promote social and economic integration.
- **Urban Renewal and Inner-City Regeneration**: Supporting urban renewal projects to revitalize inner cities and improve living conditions.
- **Social and Economic Infrastructure**: Incorporating primary municipal facilities such as parks, playgrounds, sports fields, community halls, and healthcare centres into settlement designs.
- **Enhancing Settlement Design**: Including design professionals in planning and project design stages to improve settlement layouts and housing quality.
- **Alternative Technology and Design**: Promoting the use of alternative technologies and innovative design solutions to improve housing quality and sustainability.
- **Multi-Purpose Cluster Concept**: Applying a multi-purpose cluster concept to incorporate various facilities and services within residential areas

2.1.11. NATIONAL SPATIAL DEVELOPMENT FRAMEWORK, 2022

The National Spatial Development Framework (NSDF) serves as a long-term strategic plan for South Africa, extending to 2050. Legally mandated by the Spatial Planning and Land Use Management Act, 2013 (SPLUMA), the NSDF must align with the 2030 National Development Plan (NDP). Recognizing the unique spatial challenges faced by different regions, the NDP emphasizes the need for differentiated responses and calls for the development of a comprehensive spatial vision and framework.

Spatial transformation will not occur spontaneously. Proactive and concerted government action is crucial to overcome the legacy of past spatial injustices, inadequacies, and unsustainability. The NSDF vision provides a long-term guiding principle, derived from the national development paradigm and carefully considering the implications of key "national spatial development shapers."

The NSDF's foundational logic is built upon the following pillars:

- **Natural Resource Base:** Recognizing the importance of sustainable resource management.
- **Nature, Function, and Performance of Settlements:** Promoting well-functioning and sustainable urban and rural settlements.
- **Rural Areas:** Emphasizing the development of vibrant and resilient rural communities.
- **Nature, Significance, Form, and Impact of Spatial Development Planning:** Recognizing the critical role of effective spatial planning.

To translate the national spatial development vision into tangible outcomes and facilitate the necessary shifts, six key "national spatial development levers" have been identified:

- **National Development Corridors:** To stimulate economic growth and create quality human settlements.
- **Productive Rural Regions:** To drive rural development and strengthen the national resource base.
- **National Spatial Social Service Provisioning Model:** To ensure equitable and accessible social services for all.
- **National Ecological Infrastructure Network:** To safeguard and enhance the country's natural resource base.
- **National Transport, Communications, and Energy Infrastructure Network:** To support a shared, inclusive, and sustainable economy.

National Spatial Action Areas	Relevant NSDF Sub-Frames			
	National System of Nodes and Corridors	National Resource Economy Regions	National Movement and Connectivity Infrastructure System	National Ecological Infrastructure Network
National Spatial Transformation and Economic Transition Regions	• Consolidating development in fully-fledged and transformed national urban regions and nodes. • Supporting and strengthening regional development anchors to play their crucial (1) national connecting and (2) regional development anchoring and enhancing roles.	• Supporting and strengthening and emerging farmers and small and medium-scale agriculture. • Supporting eco-production and eco-entrepreneurs. • Ensuring sustainable food production for national food security.	• Creating new connections, e.g. the N2-extension, and strengthening existing connections.	• Managing land development and land-use to ensure the protection of critical national water resources. • Supporting agricultural practices and human settlement patterns and forms that (1) optimise the utilisation of land, and (2) limit their impact on the country's ecological infrastructure.
Central Innovation Belt	• Diversifying the economy, rebuilding, supporting and upscaling the secondary sector, and strengthening the tertiary sector. • Creating transformed, well-functioning settlements.	• Supporting agro-processing, viable mineral and metals beneficiation and alternative energy production.	• Strengthening existing connections to, and links with the core areas of the Gauteng Urban Region.	• Managing and mediating the impacts of (1) dense human settlement and (2) intense economic activity on critical national water resources, e.g. the pollution-mitigation actions in the case of the Vaal River.
National Resource Risk Areas	• Ensuring the sustainable use of resources, and preventing pollution and resource depletion.	• Managing competing and incompatible land uses, e.g. mining, agriculture and eco-tourism.	• Strengthening infrastructure networks to facilitate regional, national and cross-border flows.	• Prioritising natural resource management by, amongst others, introducing far more stringent protection and wise management of the country's scarce natural resources, notably so its high-value agricultural land.
National Urban Spatial Transformation and Economic Transition Regions	• Strengthening (1) the network and (2) nodes on the network to become national centres of economic growth, human resource development, and innovation.	• Managing national and cross-border interdependencies for national and wider SADC benefit.	• Refurbishing and developing infrastructure to enable and support (1) economic diversification and expansion, and (2) more youthful and larger populations. • Strengthening regional, national and cross-border linkages.	• Managing national and regional cross-border interdependencies for the benefit of all concerned. • Managing the impact of human settlement and economic activities on SWSAs.
Arid-Innovation Region	• Strengthening regional development anchors as connecting, catalytic and interface points.	• Supporting intensive, high-value agriculture by innovative means. • Strengthening and expanding alternative energy generation.	• Supporting connections between national urban nodes and regional development anchors.	• Ensuring sustainable aquaculture activities that assist with ensuring regional and national food security. • Managing land and settlement development and economic activities, to ensure the protection of critical natural resources.

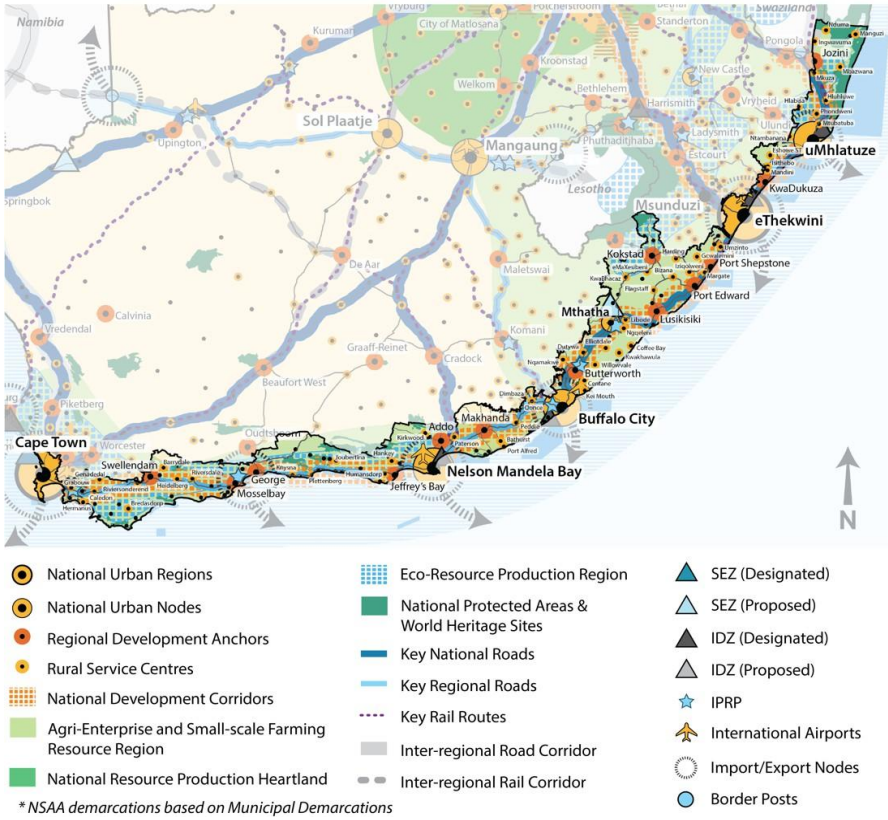
FIGURE 4: OVERVIEW OF NSAA

SPATIAL DIRECTIVES: Winnie Madikizela Mandela Local Municipality forms part of the Coastal National Spatial Transformation and Economic Transition Regions. The NSDF states that although these three regions each have their own unique contexts and challenges, they share many similarities: They all have (1) large, youthful populations, (2) shared histories of severe deprivation and neglect as former Apartheid Bantustans, (3) high levels of poverty and unemployment, and (4) extensive areas of dense and sprawling rural settlements. These regions also hold high ecological value for the country. They serve as (1) surface water producers in the Coastal National Spatial Transformation and Economic Transition Region (Coastal NSTETR) and the Eastern Escarpment Spatial Transformation and Economic Transition Region (Eastern Escarpment NSTETR), and (2) a vast source of groundwater in the Northwestern Spatial Transformation and Economic Transition Region (Northwestern NSTETR). Additionally, the Coastal and Eastern Escarpment NSTETRs contain large portions of the country's limited high-value agricultural land, which is crucial for long-term food security. The Northwestern NSTETR is essential for livestock, irrigation agriculture, and related agro-processing activities.

In terms of climate change predictions, the Coastal and Eastern Escarpment NSTETRs will be vital for providing (1) water and food, (2) essential ecosystem services, and (3) a habitat for millions of South Africans due to their relatively favourable climatic conditions compared to the harsher conditions expected in the western, north-western, and central parts of the country. Conversely, the Northwestern NSTETR is expected to face very harsh climatic conditions in the near future. Despite this, (1) intensive irrigation has made farming a regionally and nationally significant economic activity, and (2) mining has become a substantial employer, contributor to the national budget, and significant foreign exchange earner.

Given their shared histories, similar challenges, and importance to the country's future, declaring these areas as NSAAs is crucial for (1) historical redress, (2) addressing urgent rural spatial, social, and economic development challenges by optimizing the vast economic opportunities available within these regions at scale, (3) ensuring national food and water security, and (4) achieving our envisioned Ideal National Spatial Development Pattern. Failing to address the challenges these NSAAs face and ensuring sustainable (1) service delivery and (2) regional economic development would be detrimental not only to these areas and their inhabitants but also to the country as a whole due to significant sub-national regional interdependencies.

COASTAL NATIONAL SPATIAL TRANSFORMATION AND ECONOMIC TRANSITION REGION



MAP 2: COASTAL NSDF NSTETR

Within the national framework, Bizana is identified as a Rural Service Centre with the following priorities identified to:

- Enhance and expand transportation networks, with a focus on regular maintenance and upgrading of existing infrastructure, particularly roads. Increase investment in high-speed ICT infrastructure to boost urban-rural and rural-rural connectivity.
- Consolidate settlement development and support the creation of new cities in areas experiencing significant population growth and facing challenges but offering substantial opportunities for spatial transformation.
- Develop a network of strong, vibrant existing and emerging cities and large towns to serve as fully-fledged national urban nodes, viable regional development anchors, and well-capacitated rural service centres.
- Introduce and upgrade-built environment, transport, basic service, and communication infrastructure with a focus on housing, basic service delivery, public transport, and rural-urban and rural-rural connections, which will also stimulate enterprise development and expansion.
- Implement innovative settlement planning, rural design, urban land reform, and effective land-use management to curtail sprawl and consolidate place-specific urbanisation in dense rural settlements and rapidly growing formal and traditional settlement areas within a strategic network of rural service centres and villages/hamlets.
- Protect and manage ecological infrastructure, national resources, and protected areas, including SWSAs and high-value agricultural land, through regional and municipal resource management and eco-agri development strategies.
- Strengthen regional collaboration, partnerships, and cooperative governance models to ensure mutually beneficial natural resource use and land development, and to optimize national, regional, and local economic development benefits.
- Undertake integrated human capital development to enable young people to benefit from urbanisation through human capital development and the opening up of urban economies to support diverse livelihood options and opportunities.
- Provide innovative, contextually suitable infrastructure and deliver life-enhancing social and basic services to support enterprise development, well-being, and inclusive growth with both ecological and human-focused approaches.
- Prioritise human capital and people-centred enterprise development in areas such as arts and culture, tourism, knowledge creation, education, and innovation.
- Capitalise on the opportunities provided by universities and research entities in NSAAs for regional development, transformation, and transition.
- Optimise agricultural opportunities in the regions and support the establishment of small-scale farming activities, agri-enterprises, and agri-led industrialisation to foster productive regional-rural development, enhance national food security, and strengthen national water security.
- Develop the tourism sector and creative industries in the regions, focusing on small and medium-sized farming activities and agri-eco production.
- Accelerate small harbour development to support the fishing, tourism, and maritime economy in regional development anchors and rural service centres, particularly along the coast in the Coastal and Northwestern NSTETRs.
- Establish strong regional growth and development compacts, involving all role-players, including the three spheres of government, traditional leaders/authorities, communities (notably youth), the private sector, CBOs, NGOs, and organised labour, and ensure collaborative spatial development planning and governance across regional, provincial, and municipal boundaries.

2.1.12. INTEGRATED URBAN DEVELOPMENT FRAMEWORK (IUDF)

IUDF

INTEGRATED URBAN DEVELOPMENT FRAMEWORK

The Integrated Urban Development Framework (IUDF) is a policy initiative by the Government of South Africa, coordinated by the Department of Cooperative Governance and Traditional Affairs (CoGTA). The IUDF aims to manage urbanization effectively and achieve goals such as economic development, job creation, and improved living conditions1.

Key aspects of the IUDF include:

- Vision: Creating liveable, safe, resource-efficient cities and towns that are socially integrated, economically inclusive, and globally competitive.
- Strategic Goals: Access, Growth, Governance, and Spatial Transformation.
- Policy Levers: Spatial Planning, Transport and Mobility, Human Settlements, Urban Infrastructure, Land Governance, Economic Development, Empowered Communities, Urban Governance, and Sustainable Finances.
- Cross-Cutting Issues: Rural-urban interdependency, disaster risk reduction and climate change, and urban safety.

The IUDF seeks to foster a shared understanding across government and society about how best to manage urbanization and transform urban areas into more inclusive, safe, productive, and resource-efficient spaces.

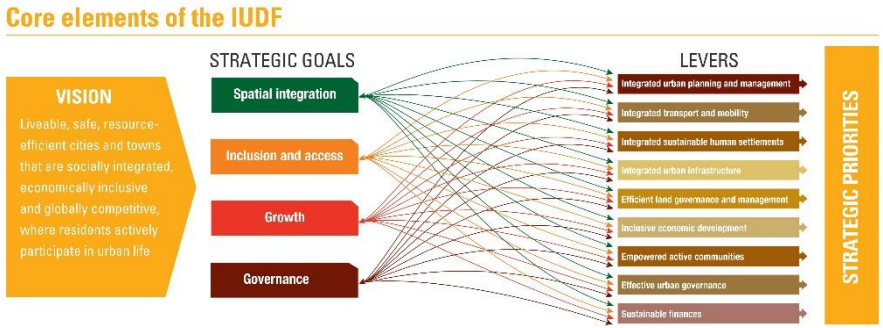


FIGURE 5: IUDF CORE ELEMENTS

SPATIAL DIRECTIVES: The Integrated Urban Development Framework (IUDF) outlines several spatial directives aimed at transforming urban areas into more inclusive, safe, productive, and resource-efficient spaces. Some key spatial directives include:

- **Integrated Spatial Planning**: Promoting coordinated and integrated planning across different sectors and administrative levels to ensure sustainable urban development.
- **Transport and Mobility**: Enhancing public transport systems and infrastructure to improve accessibility and reduce congestion in urban areas.
- **Human Settlements**: Ensuring the provision of adequate and affordable housing, and promoting mixed-use developments to create vibrant, inclusive communities.

- **Urban Infrastructure**: Investing in essential infrastructure such as water, sanitation, energy, and communication networks to support urban growth and improve living conditions.
- **Land Governance**: Implementing effective land-use policies and practices to ensure equitable access to land and prevent land speculation and misuse.
- **Economic Development**: Fostering economic opportunities and job creation in urban areas through targeted interventions and support for local businesses.
- **Empowered Communities**: Encouraging community participation and empowerment in urban planning and decision-making processes.
- **Urban Governance**: Strengthening governance structures and institutions to ensure transparent, accountable, and efficient urban management.
- **Sustainable Finances**: Securing sustainable funding mechanisms for urban development projects and initiatives.

2.1.13. COMPREHENSIVE RURAL DEVELOPMENT PROGRAMME

The Comprehensive Rural Development Programme (CRDP) is a strategic initiative by the South African government aimed at improving the quality of life in rural areas. Launched in 2009, the CRDP focuses on addressing poverty and food insecurity by maximizing the use and management of natural resources to create vibrant, equitable, and sustainable rural communities1.
Key components of the CRDP include:

- Integrated Development: Facilitating integrated development and social cohesion through participatory approaches in partnership with all sectors of society.
- Land Redistribution: Contributing to the redistribution of 30% of the country's agricultural land to improve food security and create business opportunities.
- Infrastructure Development: Implementing large-scale infrastructure projects to support rural economies.
- Empowerment: Expanding opportunities for rural women, youth, people with disabilities, and older persons.
- Community Participation: Encouraging community participation in planning, implementation, and monitoring of rural development projects.

The CRDP is implemented in phases, starting with meeting basic human needs, followed by large-scale infrastructure development, and finally, the emergence of rural industrial and financial sectors driven by small, medium, and macro-enterprises

SPATIAL DIRECTIVES: The Comprehensive Rural Development Programme (CRDP) includes several spatial directives aimed at improving the quality of life in rural areas. Here's a summary:

- Integrated Development: Promoting coordinated development across various sectors to ensure sustainable rural growth.
- Land Redistribution: Facilitating the redistribution of agricultural land to improve food security and create business opportunities.
- Infrastructure Development: Implementing large-scale infrastructure projects to support rural economies.
- Community Participation: Encouraging community involvement in planning, implementation, and monitoring of rural development projects.
- Economic Diversification: Supporting non-farming activities such as tourism and skills development to create diverse economic opportunities.
- Rural Revitalization: Revitalizing rural towns to serve as service centres for rural economies.

2.2. PROVINCIAL POLICY AND LEGISLATIVE FRAMEWORK

2.2.1. EASTERN CAPE DEVELOPMENT PLAN VISION 2030

The Eastern Cape Vision 2030 Provincial Development Plan is a detailed framework devised by the Eastern Cape government in South Africa to steer the province's development and growth over the next decade. The plan aims to transform the Eastern Cape into a thriving, sustainable, and socially integrated region by 2030. It focuses on six critical areas for development:

Economic Growth and Development: The plan seeks to foster a diverse, competitive, and inclusive economy. Strategies include supporting small businesses and entrepreneurship, fostering innovation and technology, investing in infrastructure, and capitalizing on the province's natural resources.

Agriculture, Rural Development, and Land Reform: The objectives are to enhance food security, promote sustainable agriculture, and bolster rural development. Strategies involve improving land reform and tenure systems, investing in agricultural infrastructure and support services, and encouraging agro-processing and value-added industries.

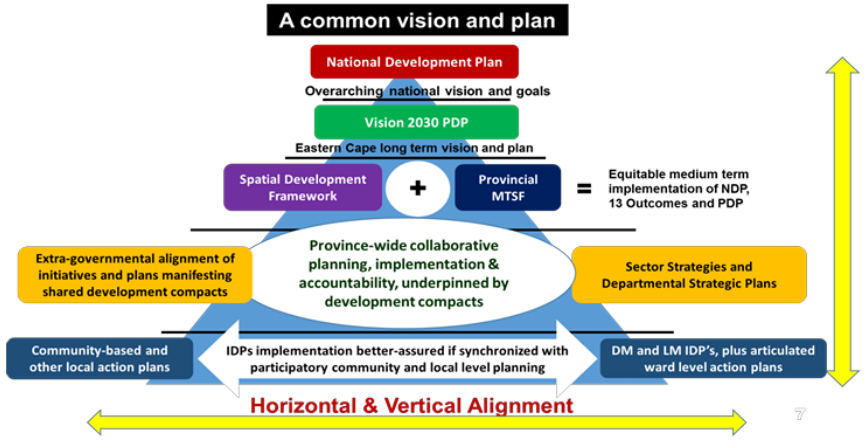
Human Development and Social Welfare: The plan is committed to enhancing access to quality education, healthcare, and social services for all residents. Efforts include improving the quality of education and healthcare services, expanding access to basic services, and fostering social cohesion and community development.

Infrastructure Development and Maintenance: The plan aims to develop and maintain robust and sustainable infrastructure. Actions include investing in transport infrastructure, expanding access to water and sanitation, and promoting energy efficiency and renewable energy.

Environment and Natural Resources: The plan focuses on the sustainable use and management of the province's natural resources, including its biodiversity and ecosystems. This will be achieved by promoting environmental awareness and education, encouraging sustainable tourism, and managing and conserving natural resources.

Good Governance, Public Participation, and Safety: The plan promotes good governance, public participation, and safety. This will be accomplished through enhancing transparency and accountability, encouraging public involvement in decision-making, and improving public safety and security.

A scheme for PDP implementation



SPATIAL DIRECTIVES: The Eastern Cape Development Plan, Vision 2030, provides several spatial directives aimed at promoting sustainable and equitable development in the region. Key directives include:

- **Managed Human Settlements**: Promoting clustered human settlements in regions and corridors, alongside productive areas, managed ecological natural resource areas, and connected to a network of strategic transportation routes.
- **Sustainable Economic Growth**: Coordinating provincial spatial frameworks to direct public sector investment towards sustainable economic growth.
- **Environmental Protection**: Protecting natural environmental systems and promoting efficient use of resources.
- **Integrated Planning and Land Use Management**: Enabling integrated planning and land use management to ensure cohesive development.
- **Public Participation**: Engaging stakeholders, including traditional authorities, government departments, municipalities, and civil society, in the planning process.
- **Infrastructure Development**: Focusing on infrastructure for equitable and sustainable development, including upgrading and maintaining access roads and strategic transport routes.
- **Local Economic Development**: Supporting local economic development initiatives to enhance economic opportunities within the region.

2.2.2. EASTERN SEABOARD REGIONAL SPATIAL DEVELOPMENT FRAMEWORK

A "regional" Spatial Development Framework (SDF) differs from local, provincial, or national spatial SDFs as outlined by SPLUMA and the SDF Guidelines. A Regional Spatial Development Framework (RSDF) is a discretionary planning instrument developed at the discretion of the Minister. The Minister responsible for spatial planning and land use management must specifically designate a region, which may cross provincial boundaries or be within a specific part of a province.

The RSDF is prepared following the requirements of the Spatial Planning and Land Use Management Act 16 of 2013 (SPLUMA). It aims to address the legacy of apartheid spatial planning and provide enhanced sustainable service delivery to improve the quality of life for current and future residents in terms of:

- Inclusive socio-economic development
- Agriculture and environmental sustainability
- Promotion, management, and conservation of culture and heritage

SPATIAL DIRECTIVES: Bizana town is identified as a Regional Development Anchor. Regional Development Anchors are productive secondary nodes or cities within a region and in priority national development corridors. They provide a variety of services to specific towns, cities, and surrounding networks of settlements and productive rural regions. These settlements also serve as district-level administrative hubs and service centres for commercial goods, services, and educational centres of excellence.

These secondary cities should be prioritized and strengthened as key anchors or "engines" of the regional economy. Although it is not prominently mentioned in the NSDF, Port St. Johns has been included as a Regional Development Anchor for the region due to its provincial status and potential future role, being adjacent to the new N2 toll route, recognized as a National Development Corridor in the NSDF. This will likely change its role and development possibilities in the future.

In light of their national status in the NSDF, Port Edward and Matatiele have also been included as Regional Development Anchors. Port Edward's location along the new N2 National Development Corridor contributed to its inclusion, while Matatiele was included partly because it is situated along a proposed inland development corridor.

The R61 from Lusikisiki following the R61 via Flagstaff and Bizana to Port Edward is identified as a DC 6 Development Corridor which serves the purpose of a mobility corridor with its main focus on distributing people and goods between nodes and areas.

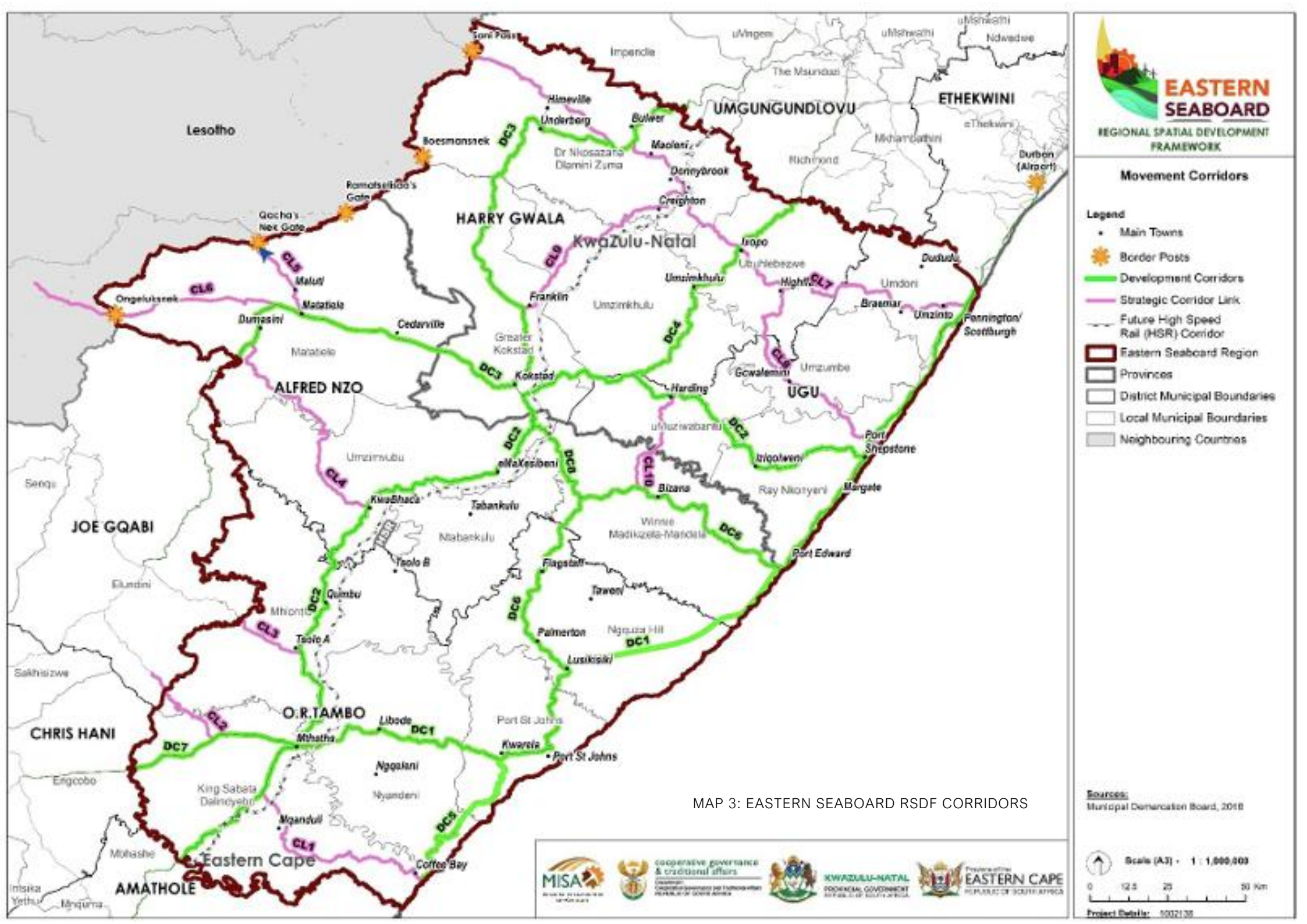
WMMLM is also identified as an area where "Agri-Business, and Agri-Industry Focus" should be encouraged. The WMMLM is also identified as an Eastern Seaboard Spatial Transformation & Economic Transition Region. The designated Coastal NSTETR within the NSDF framework is identified as the Region's focal area for spatial transformation and economic transition, termed the Eastern Seaboard Spatial Transformation and Economic Transition Region (ESTETR). Strategies supporting this initiative align with national action plans and span key sectors:

The Region prioritizes ecological protection and management, as detailed in Objective 1, alongside promoting small-scale farming and agri-led industrialization (Objective 5). Tourism is a vital component, including fostering creative industries like filmmaking. Additionally, small harbour development is planned for Port St. Johns, Port Edward, and Port Shepstone to boost fishing tourism and the maritime economy.

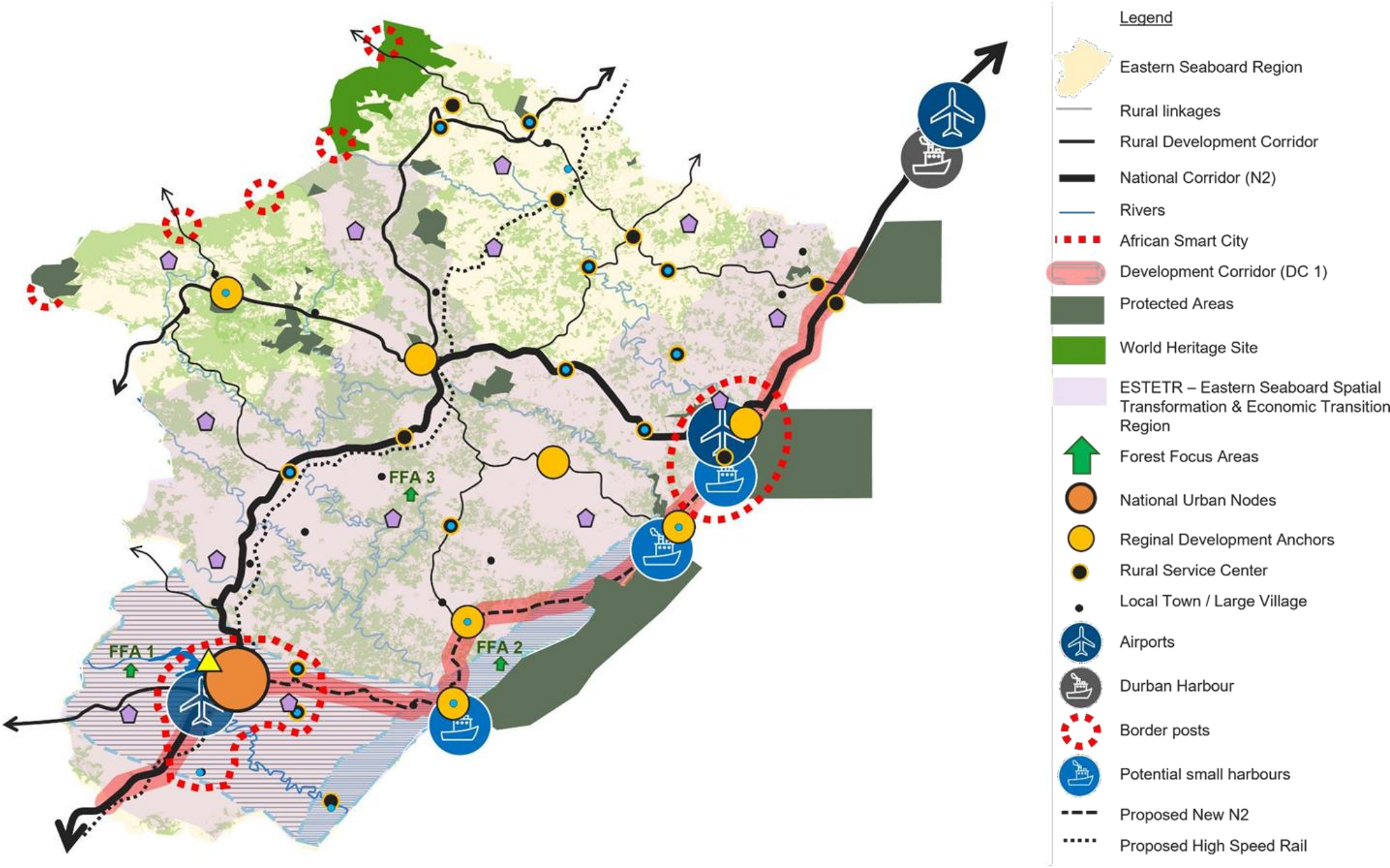
Enhanced connectivity is key to economic transformation. Priorities include extending transportation networks, improving urban-rural connectivity, upgrading communication infrastructure, and strengthening public transport. The proposed N2 toll road is a national priority, linking major cities. Airport development at Margate and Port St. Johns is also a focus.

Transforming human settlements is central to regional growth. Local municipalities are encouraged to establish development edges, integrate settlements, and prevent urban sprawl. Provincial and district authorities must ensure compliance for sustainable service delivery and spatial transformation.

This streamlined approach integrates environmental, economic, and infrastructural strategies to drive the Region's transformation and connectivity.



MAP 3: EASTERN SEABOARD RSDF CORRIDORS



MAP 4: EASTERN SEABOARD RSDF CONCEPTUAL FRAMEWORK

2.2.3. EASTERN CAPE SPATIAL DEVELOPMENT FRAMEWORK, 2017

The Eastern Cape Spatial Development Framework (EC-SDF) is a strategic planning document that establishes a long-term vision for spatial development in the Eastern Cape province of South Africa. This framework outlines a comprehensive strategy for guiding the province's spatial development and land use planning, aiming to foster sustainable, inclusive, and balanced growth across the region. The EC-SDF is underpinned by several guiding principles:

- Sustainable Development: The framework advocates for development that is economically viable, socially equitable, and environmentally sustainable.
- Inclusive Development: It strives to ensure that all residents of the province, irrespective of race, gender, or social status, benefit from developmental initiatives.
- Balanced Development: The framework emphasizes reducing disparities between urban and rural areas, promoting uniform development throughout the province.
- Integrated Development: It focuses on fostering integrated development across various sectors, enhancing synergy and coordination among different development areas.
- Participatory Development: The framework encourages community involvement in decision-making processes, ensuring that the voices of residents are considered and heard.

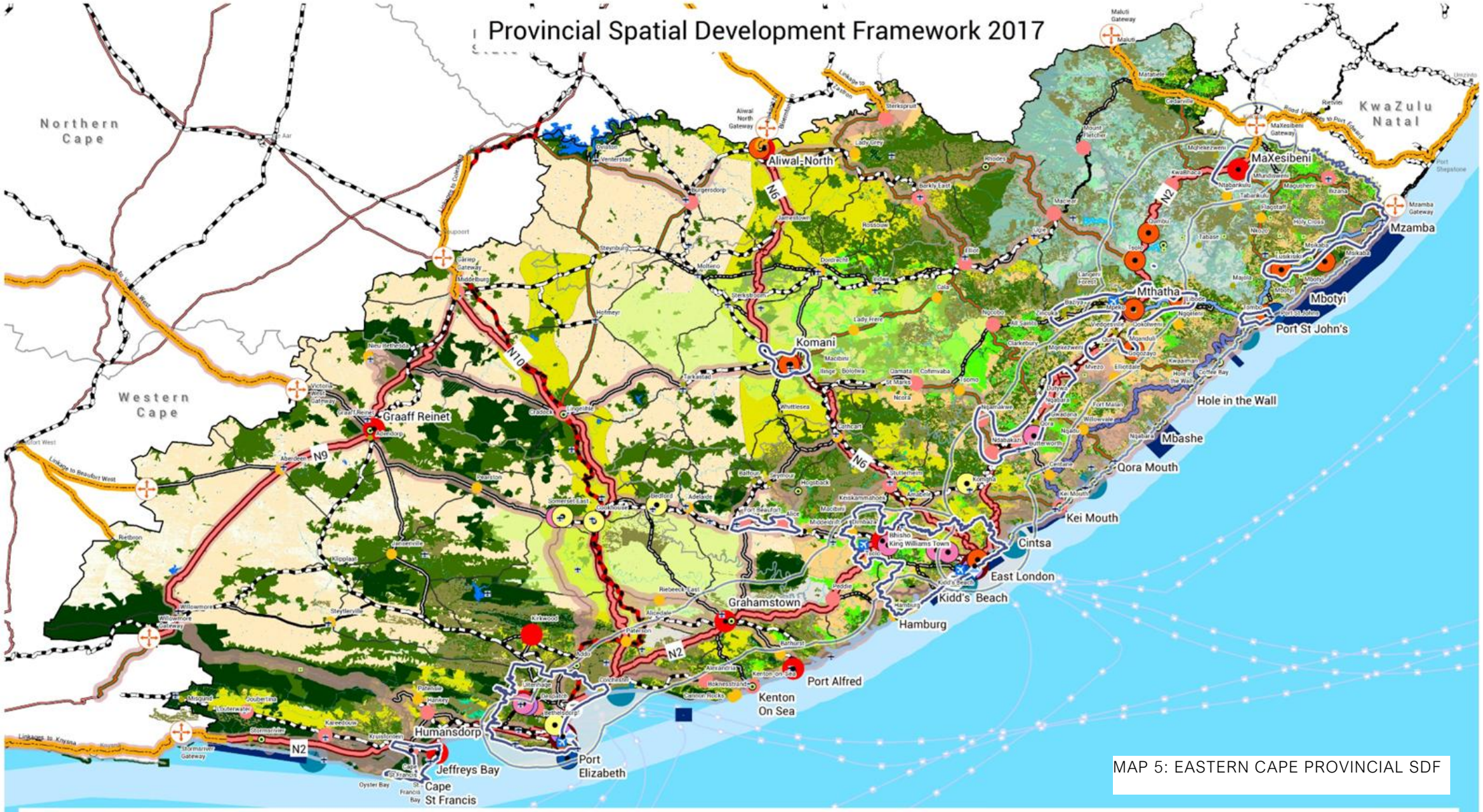
To guide the spatial development in the province, the EC-SDF has outlined a number of strategic objectives, including:

- Economic Growth and Job Creation: By channelling targeted investments into key sectors and infrastructure to stimulate economic activity and employment opportunities.
- Sustainable Urban Development: Focusing on improving urban environments and advocating for mixed-use developments that blend residential, commercial, and recreational spaces.
- Rural Development: Through investments in infrastructure, agriculture, and tourism to uplift rural areas.
- Access to Basic Services: Enhancing the provision of essential services such as water, sanitation, healthcare, and education.
- Environmental Sustainability and Biodiversity Conservation: Promoting sustainable land use and resource management to protect and preserve biodiversity.

SPATIAL DIRECTIVES: The PSDF identified Bizana as a Sub-District Centre. The SDF should seek to strengthen the role of Bizana as a Sub-District Centre within the province, which purpose is to serve as a focal point for local economic development, service delivery, and community interaction. These centres are designed to:

- **Promote Local Economic Development**: By providing infrastructure and facilities that support businesses and economic activities.
- **Enhance Service Delivery**: Ensuring that essential services such as healthcare, education, and public utilities are accessible to the local population.
- **Facilitate Community Interaction**: Creating spaces where community members can gather, engage in social activities, and participate in local governance.

These centres aim to improve the quality of life for residents and foster sustainable development within the sub-district.



MAP 5: EASTERN CAPE PROVINCIAL SDF

2.2.4. EASTERN CAPE BIODIVERSITY AND CONSERVATION PLAN

The Eastern Cape Biodiversity and Conservation Plan (ECBCP) is a strategic roadmap aimed at preserving and sustainably utilizing biodiversity within South Africa's Eastern Cape province, encompassing regions like the WMMLM. This plan serves as a guiding light for governmental bodies, civil society, and various stakeholders, ensuring that biodiversity conservation aligns with sustainable development goals.

By offering a holistic perspective on the province's biodiversity, including significant areas like the Drakensberg Mountains, Amathole, and Tsitsikamma forests, as well as vital wetlands, estuaries, and marine habitats, the ECBCP identifies and addresses key threats such as habitat loss, invasive species, climate change, and resource overexploitation.

Strategic objectives outlined in the ECBCP include safeguarding and rehabilitating ecosystems and habitats of significant biodiversity, managing invasive alien species, and ensuring the sustainable utilization of marine and coastal biodiversity. Moreover, it advocates for the adoption of sustainable land use practices, integrating biodiversity conservation imperatives. Research and monitoring are also prioritized to enhance understanding and management of biodiversity within the province.

Recognizing the pivotal role of community engagement, the ECBCP underscores the necessity of collaboration and partnerships among governmental bodies, civil society, and other stakeholders. It stresses the importance of education and awareness campaigns in fostering a culture of biodiversity conservation and sustainable development.

In essence, the ECBCP provides a robust framework for conserving and responsibly utilizing biodiversity in the Eastern Cape province, including the Matatiele municipality. It underscores the imperative of preserving ecosystems and habitats of high biodiversity value, managing invasive species, and promoting sustainable land use practices, all while emphasizing community involvement and collaborative efforts as cornerstones of effective conservation strategies.

SPATIAL DIRECTIVES: The Eastern Cape Biodiversity and Conservation Plan (ECBCP) provides several spatial directives that can guide the development of Spatial Development Frameworks (SDFs). Key directives include:

- **Conservation of Biodiversity**: Prioritizing the conservation of biodiversity by identifying and protecting critical biodiversity areas within the municipality.
- **Sustainable Land Use**: Promoting sustainable land use practices that minimize environmental impact and support biodiversity conservation.
- **Integrated Planning**: Ensuring that biodiversity considerations are integrated into land use planning and decision-making processes.
- **Public Participation**: Engaging local communities and stakeholders in the planning and implementation of biodiversity conservation initiatives.
- **Protected Area Network**: Supporting the establishment and management of protected areas to conserve biodiversity and ecosystem services.
- **Environmental Education:** Promoting environmental education and awareness to foster a culture of conservation within the community.

EASTERN CAPE SOCIO-ECONOMIC CONSULTATIVE COUNCIL (ECSECC) PROVINCIAL GROWTH AND DEVELOPMENT PLAN

The Eastern Cape Socio-Economic Consultative Council (ECSECC) Provincial Growth and Development Plan (PGDP) serves as a medium-term strategic blueprint for fostering economic progress in South Africa's Eastern Cape province. Spanning a five-year period and subject to triennial updates, this plan is geared towards realizing sustainable economic expansion, job generation, and poverty alleviation within the region.

Identifying pivotal sectors such as agriculture, manufacturing, tourism, renewable energy, and the ocean economy, the ECSECC PGDP prioritizes initiatives aimed at catalysing economic growth and diversification. It acknowledges the formidable challenges confronting the province, including entrenched poverty, unemployment, inequality, and historical deficiencies in infrastructure and human capital investment.

To tackle these hurdles head-on, the ECSECC PGDP delineates strategic imperatives, including:

- Stimulating economic advancement and infrastructural development through targeted investments in critical sectors.
- Enhancing the proficiency and aptitude of the Eastern Cape workforce via comprehensive educational and training initiatives.
- Augmenting access to fundamental services encompassing healthcare, education, water, and sanitation.
- Advocating sustainable environmental stewardship and conservation practices.
- Cultivating social harmony and fostering resilient communities.

Emphasizing the indispensability of partnerships and cooperation among governmental entities, private enterprises, civil society, and local communities, the plan underscores collaborative endeavours as essential drivers for achieving its outlined objectives. Moreover, it underscores the imperative of effective governance, transparency, and accountability to ensure judicious utilization of resources.

2.2.5. EASTERN CAPE SUSTAINABLE DEVELOPMENT GOALS FRAMEWORK

The Eastern Cape Provincial Sustainable Development Goals (SDGs) Framework is a strategic blueprint designed to harmonize the development agenda of the Eastern Cape province with the 17 Sustainable Development Goals (SDGs) outlined by the United Nations in 2015. This framework serves as a guiding beacon for achieving sustainable development within the province, leveraging the SDGs as a compass.

Acknowledging the gamut of development challenges confronting the Eastern Cape, including poverty, unemployment, inequality, and environmental degradation, the framework delineates strategic objectives and priority areas aimed at addressing these pressing issues. Key focus areas encompass:

- Poverty Eradication: The framework underscores the imperative of reducing poverty by fostering inclusive economic growth, generating employment opportunities, and bolstering social protection measures.
- Quality Education: Recognizing education as a linchpin for sustainable development, the framework advocates for enhancing access to quality education across all levels.
- Health and Well-being: Prioritizing health outcomes, the framework advocates for expanding access to healthcare services, promoting healthy lifestyles, and addressing social determinants of health.
- Gender Equality: Emphasizing gender parity, the framework advocates for the empowerment of women and girls across all spheres of society.
- Environmental Sustainability: Highlighting environmental preservation, the framework emphasizes the necessity of safeguarding natural

resources and fostering sustainable resource management practices to ensure the well-being of future generations.

By aligning development efforts with the SDGs, the framework seeks to catalyse concerted action towards achieving sustainable development goals within the Eastern Cape province. Through targeted interventions and collaborative partnerships, it aims to foster holistic development that is both equitable and environmentally sustainable.

2.3. DISTRICT AND LOCAL POLICY AND LEGISLATIVE FRAMEWORK

2.3.1. ALFRED NZO DISTRICT MUNICIPALITY INTEGRATED DEVELOPMENT PLAN, 2023

The Integrated Development Plan (IDP) for 2021 of the Alfred Nzo District Municipality is a comprehensive blueprint spanning five years, delineating the municipality's developmental priorities. Crafted through an inclusive process involving community consultation, stakeholder engagement, and collaboration with pertinent government bodies, the IDP maps out the vision, mission, and strategic objectives for the municipality from 2021 to 2026.

Key focal points of the Alfred Nzo District Municipality IDP for 2021 encompass:

- Economic Development: Prioritizing the fostering of economic growth and job creation, the municipality endeavours to bolster local enterprises, attract investments, and bolster tourism within the district.
- Infrastructure Development: The municipality aims to enhance the delivery of essential services such as water, sanitation, and electricity. Additionally, attention is directed towards enhancing the district's road network, public transportation, and information and communication technology (ICT) infrastructure.
- Social Development: Efforts are directed towards enhancing access to education, healthcare, and social services across the district. Furthermore, initiatives are in place to promote social cohesion, gender equality, and uphold human rights principles.
- Environmental Management: Upholding the ethos of sustainable development, the municipality strives to safeguard the natural environment through the implementation of policies and programs aimed at curbing pollution, conserving natural resources, and fostering biodiversity.
- Institutional Development: The municipality endeavours to enhance its capacity for service delivery and effective governance by fortifying its systems and processes, advocating for good governance practices, and ensuring financial sustainability.

By articulating these priorities and objectives, the IDP seeks to guide the Alfred Nzo District Municipality towards holistic development, underpinned by principles of inclusivity, sustainability, and effective governance.

SPATIAL DIRECTIVES: The following spatial directives can be gleaned and inferred from the district IDP:

- **Public Infrastructure Improvement**: Enhancing public infrastructure in an environmentally sustainable manner.
- **Land Use Management**: Supporting local municipalities in land use management to ensure orderly development.
- **Economic Development**: Formulating and reviewing strategies for local economic development, including growth and development strategies, agricultural master plans, and tourism development plans.
- **Spatial Development Framework**: Developing a Spatial Development Framework (SDF) to guide future spatial growth and development within the district.
- **Geographic Information Management**: Capturing and updating spatial planning data and maintaining a Geographic Information System (GIS) infrastructure.

2.3.2. ALFRED NZO DISTRICT MUNICIPALITY AIR QUALITY MANAGEMENT PLAN

According to Section 15(2)(a) of the National Environmental Management: Air Quality Act (Act No. 39 of 2004) (NEM:AQA), all municipalities must incorporate an Air Quality Management Plan (AQMP) into their Integrated Development Plan (IDP). To assist the ANDM in developing its AQMP, the Department of Economic Development, Environmental Affairs and Tourism (DEDEAT) is providing support as part of its mandate for good environmental management.

An Air Quality Management Plan (AQMP) is a strategic document designed to fulfil the requirements of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) and Section 24 of the Bill of Rights, which advocates for air quality that is not harmful to health and well-being. This means that governance and management efforts must focus on maintaining or improving air quality to comply with health-based National Ambient Air Quality Standards (NAAQS, 2013).

An AQMP outlines the current state of air quality in an area, its historical changes, and measures to ensure clean air quality. It sets forth goals and objectives for the region and specifies short- and long-term policies and controls to improve air quality. Implementing an AQMP requires concerted efforts from government, business, industry, Non-Governmental Organisations (NGOs), and the population, as its success hinges on support from all these sectors (DEA, 2012).

SPATIAL DIRECTIVES: The Alfred Nzo District Municipality Air Quality Management Plan (AQMP) includes several spatial directives aimed at improving air quality across the region. These directives focus on:

1. Identifying and monitoring air quality hotspots: Mapping areas with poor air quality to target interventions effectively.
2. Promoting sustainable land use: Encouraging practices that reduce air pollution, such as green spaces and buffer zones around industrial areas.
3. Enhancing public transportation: Developing infrastructure to reduce vehicle emissions, such as dedicated bus lanes and cycling paths.
4. Regulating industrial emissions: Implementing stricter controls on emissions from factories and other industrial activities.
5. Community engagement: Involving local communities in air quality monitoring and awareness campaigns to foster a culture of environmental responsibility.

2.3.3. ALFRED NZO DISTRICT MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK

The Alfred Nzo District Municipality Spatial Development Framework (SDF) serves as a strategic blueprint outlining a long-term vision and spatial framework for the district's development. This document considers various economic, social, environmental, and institutional factors influencing district development. Its primary goal is to steer sustainable and integrated growth, tailored to the distinctive features of each local municipality within the district.

Key priorities identified within the Alfred Nzo District Municipality SDF include:

- Economic Development: Emphasizing the promotion of economic growth and job creation, the SDF advocates for the establishment of strategic economic nodes, local industry promotion, and enhancement of basic infrastructure to bolster economic activities.
- Social Development: Addressing the imperative of enhancing access to essential services like healthcare, education, and social services, particularly in rural areas, the plan also underscores the promotion of social cohesion, gender equality, and human rights.
- Environmental Management: Recognizing the significance of preserving the district's natural environment and biodiversity, the SDF

delineates strategies to encourage sustainable land use, mitigate pollution, and conserve natural resources.

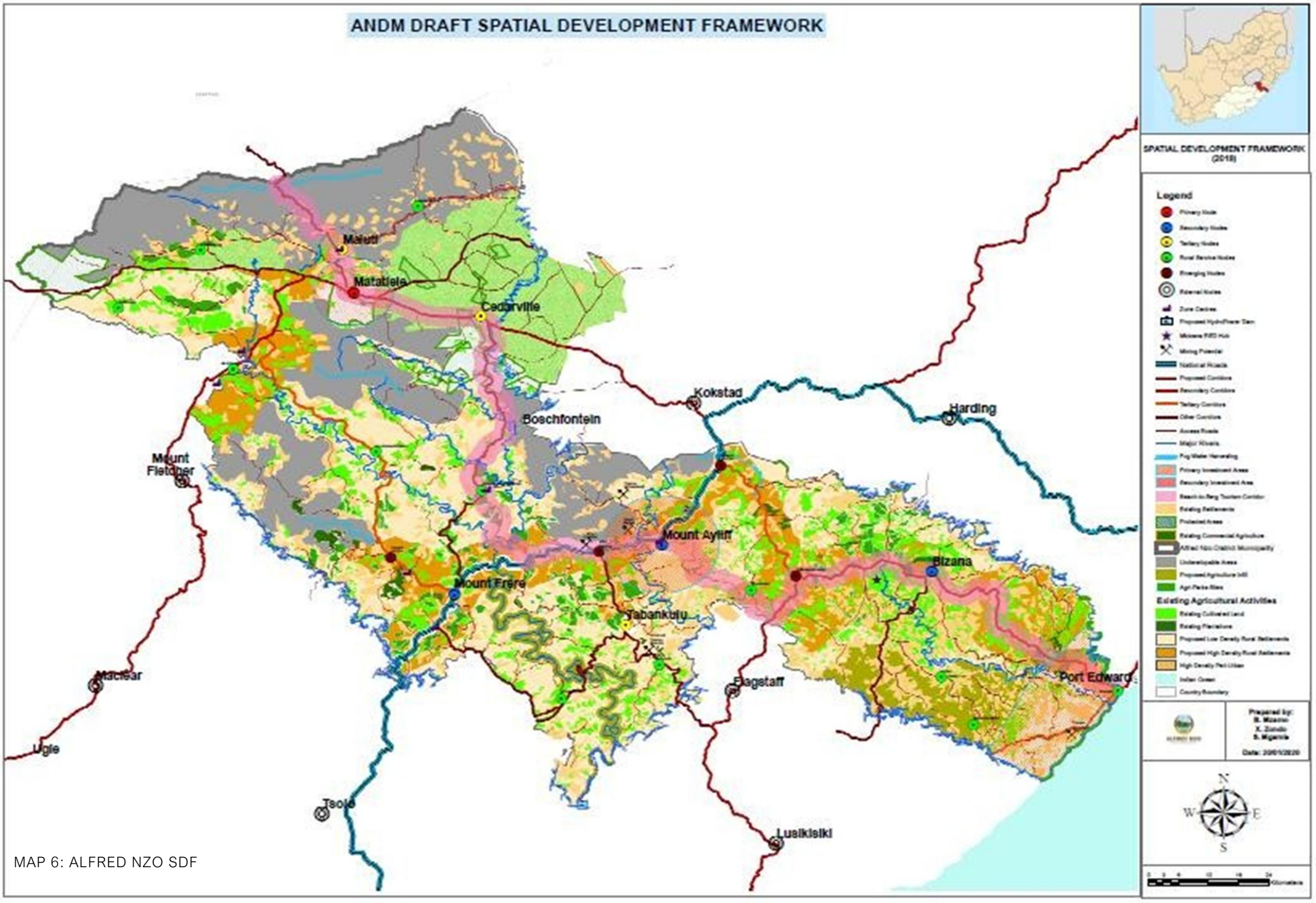
- Infrastructure Development: Highlighting the necessity of improving basic infrastructure such as water, sanitation, energy, and transportation, the SDF aims to support economic and social development endeavours.
- Institutional Development: Acknowledging the critical role of effective governance and institutional development in fostering sustainable development, the plan includes strategies to bolster good governance practices, enhance institutional capacity, and ensure financial sustainability.
- The Alfred Nzo District Municipality SDF offers a spatial framework tailored to the district's development, accounting for the unique characteristics of each local municipality. Its overarching aim is to foster sustainable, integrated, and inclusive development, guiding decision-making processes and investment priorities over the long term.

SPATIAL DIRECTIVES: From a district level, **Bizana town** is one of the secondary nodes in the district, serving as a local economic and service hub for the surrounding rural areas. Other secondary nodes include EmaXesibeni and KwaBhaca. These towns play a crucial role in providing services such as healthcare, education, and retail to the rural population. These secondary nodes are also key to the Beach-to-Berg tourism corridor, which aims to link coastal tourism areas with inland attractions, promoting economic development and tourism within the district. The development potential for secondary nodes includes:

- The need for investment in secondary nodes to enhance their role as service centres and economic hubs. This includes improving infrastructure, such as roads, water supply, and electricity, to support economic activities and attract private investment.
- The secondary nodes are also seen as potential areas for densification and mixed-use development, which can help reduce urban sprawl and promote more efficient land use.

The SDF identifies the following challenges which need to be mitigated and resolved in the municipality SDF:

- Secondary nodes face challenges such as **limited economic opportunities**, **poor infrastructure**, and **high levels of poverty and unemployment**. These issues need to be addressed through targeted interventions and investment to unlock their full potential as drivers of regional development.



MAP 6: ALFRED NZO SDF

2.3.4. ALFRED NZO DISTRICT MUNICIPALITY LOCAL ECONOMIC DEVELOPMENT STRATEGY

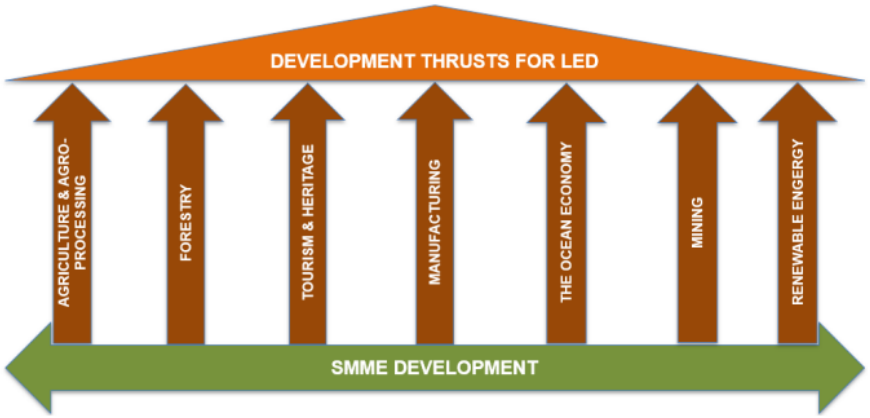
Local Economic Development (LED) aims to foster economic growth and development within a locality, with the goals of creating jobs and enhancing the quality of life by leveraging the locality's unique advantages. This process requires collaboration between the municipality and stakeholders to identify resources, understand needs, and develop plans to make the district's economy fully functional, attractive to investors, and competitively productive. LED acknowledges that local people, businesses, and governments are best positioned to restructure economic conditions to stimulate the growth needed to create jobs and reduce poverty. It integrates various approaches to local development into a single, cohesive concept, cutting across multiple portfolios.

The National Development Plan (NDP), Vision 2030, provides a long-term perspective on the development of the South African economy. It outlines a desired destination and identifies the roles different sectors of society must play to achieve that goal.

The Eastern Cape Provincial Development Plan (EC-PDP), based on the NDP, outlines a development path for the province. Vision 2030 sets the development agenda and priorities for the next 15 years (2015-2030). The reviewed Local and Regional Economic Development (LRED) strategy is a key component of the ANDM Integrated Development Plan (IDP) for 2017-2022, establishing a clear strategic agenda for LED in the IDP and ensuring compliance with constitutional and legislative obligations.

SPATIAL DIRECTIVES: The following key spatial directives are inferred from the ANDM LED Strategy:

- **Supporting Local Municipalities**: Assisting local municipalities in land use management to ensure orderly development.
- **Infrastructure Development**: Enhancing public infrastructure in an environmentally sustainable manner.
- **Economic Planning**: Formulating and reviewing strategies for local economic development, including growth and development strategies, agricultural master plans, and tourism development plans.
- **Geographic Information Management**: Capturing and updating spatial planning data and maintaining a Geographic Information System (GIS) infrastructure.
- **Area Marketing Framework**: Developing a framework for area marketing to promote the district's economic potential.
- **Implementation Program**: Creating an implementation program to effectively execute the local economic development strategy.
- **Monitoring and Evaluation**: Establishing a monitoring and evaluation framework to track the progress and impact of the strategy.



2.3.5. ALFRED NZO DISTRICT MUNICIPALITY CLIMATE RESPONSE STRATEGY

The Alfred Nzo District Municipality developed a comprehensive Climate Change Response Strategy (herein referred to as "CCRS") to address the challenges posed by a changing climate. This strategy recognizes the district's vulnerability to climate change impacts, such as increased temperatures, altered rainfall patterns, and rising sea levels, and aims to build resilience and adaptive capacity across various sectors.

The strategy emphasizes the importance of ecosystem-based adaptation, recognizing that healthy ecosystems play a crucial role in mitigating climate change impacts and enhancing resilience. It highlights the need to protect and restore natural habitats, such as forests, wetlands, and coastal ecosystems, which provide essential ecosystem services, including carbon sequestration, water regulation, and biodiversity conservation. The strategy also emphasizes the importance of sustainable land use practices, such as agroforestry and integrated water resource management, to reduce greenhouse gas emissions and enhance the resilience of agricultural systems.

The Alfred Nzo Climate Change Response Strategy focuses on mainstreaming climate change considerations into all sectors of development, including agriculture, water resources, human settlements, and disaster risk management. It aims to build the capacity of local communities and institutions to adapt to climate change through awareness raising, training, and knowledge sharing. The strategy also emphasizes the importance of collaboration and partnerships between government, civil society, and the private sector to effectively address climate change challenges.

The Alfred Nzo District Municipality has taken several concrete steps to implement its Climate Change Response Strategy. These include the development of a Climate Change Vulnerability Assessment, which provides a comprehensive understanding of the district's climate risks and vulnerabilities. The municipality has also established a Climate Change Committee to oversee the implementation of the strategy and ensure coordination among different sectors. Additionally, the municipality has been actively involved in various climate change adaptation projects, such as the development of climate-resilient infrastructure and the promotion of sustainable livelihoods.

2.3.6. ALFRED NZO DISTRICT MUNICIPALITY DISTRICT DEVELOPMENT MODE – ONE PLAN

The Alfred Nzo District Municipality's District Development Model (DDM) One Plan is a comprehensive strategic framework aimed at addressing the socio-economic challenges faced by the region. Recognizing the interconnectedness of various development issues, the One Plan integrates multiple sectors and stakeholders to achieve a unified vision for the district.

The DDM One Plan focuses on five key pillars:

- People development
- Economic development,
- Social development
- Environmental sustainability, and
- Good governance

Each pillar outlines specific goals, objectives, and action plans to address critical issues such as poverty, unemployment, inequality, and environmental degradation. The plan emphasizes the importance of community participation and collaboration with various stakeholders, including government departments, civil society organizations, and the private sector, to ensure effective implementation.

The DDM One Plan also incorporates a spatial development framework that guides land use planning and infrastructure development across the district. This framework aims to create sustainable and resilient communities by

promoting economic growth, protecting natural resources, and enhancing social inclusion. The plan also recognizes the importance of addressing climate change and its impacts on the district, including through the promotion of sustainable energy sources and climate-resilient infrastructure.

The DDM One Plan provides a roadmap for the Alfred Nzo District Municipality to achieve its development goals. It serves as a guiding document for all stakeholders involved in the district's development, ensuring that their efforts are aligned and contribute to the overall vision for the region. By implementing the DDM One Plan, the Alfred Nzo District Municipality aims to create a more equitable, prosperous, and sustainable future for its residents.

The DMM One Plan proposes the following vision for the district:

"A District whose communities are self-sustaining and enjoy a good quality life, equitable access to basic services and socio-economic opportunities".

SPATIAL DIRECTIVES: The Alfred Nzo District Development Model (DDM) outlines several spatial directives aimed at improving service delivery and development impact in the district. Key spatial directives include:

- Integrated Spatial Planning: Promoting coordinated planning across different sectors and administrative levels to ensure sustainable development.
- Spatial Restructuring: Redesigning the spatial layout to enhance accessibility, connectivity, and land-use efficiency.
- Environmental Sustainability: Ensuring that development initiatives are environmentally sustainable and contribute to the preservation of natural resources.
- Infrastructure Development: Investing in essential infrastructure such as roads, water, sanitation, and energy to support urban and rural growth.
- Land Use Management: Implementing effective land-use policies to prevent land speculation and misuse, and to ensure equitable access to land.
- Economic Positioning: Fostering economic opportunities and job creation through targeted interventions and support for local businesses.
- Community Participation: Encouraging community involvement in planning, implementation, and monitoring of development projects.

2.3.7. ALFRED NZO DISTRICT MUNICIPALITY ENVIRONMENTAL MANAGEMENT FRAMEWORK

The Alfred Nzo District Municipality Environmental Management Framework (EMF) is a strategic planning document outlining the strategies and actions devised to manage the district's environmental resources sustainably. This framework ensures that environmental considerations are integrated into the decision-making processes for all development activities within the district.

Several environmental issues are identified within the Alfred Nzo District Municipality, including:

- Biodiversity Conservation: Acknowledging the district's unique biodiversity, including the Maluti Drakensberg Park World Heritage Site, the EMF emphasizes the need to promote conservation and effective management of natural habitats.
- Climate Change: Recognizing the adverse impacts of climate change, such as increased occurrences of extreme weather events, the EMF underscores the importance of implementing adaptation and mitigation measures.
- Air Quality: Addressing air pollution as a significant environmental concern, the EMF includes strategies to reduce emissions from industrial, transportation, and domestic sources to improve air quality.

- Water Resources: Highlighting the vital importance of water resources, the EMF outlines strategies to enhance water quality and quantity while promoting sustainable water management practices.
- Waste Management: Identifying the necessity to enhance waste management practices, the EMF includes strategies to encourage waste reduction, recycling, and proper disposal methods.

The EMF serves as a framework guiding the district in managing its environmental resources sustainably and integratively. It aims to ensure that all development activities within the district are environmentally responsible, considering the district's unique characteristics and challenges. Additionally, the EMF provides guidance to decision-makers, stakeholders, and the public on environmental issues and their sustainable resolution.

SPATIAL DIRECTIVES: The Alfred Nzo District Environmental Management Framework outlines several spatial directives aimed at promoting sustainable development and environmental conservation. Key directives include:

- Catchment Management: Implementing measures to manage and protect water catchment areas to ensure sustainable water supply and quality.
- Soil Erosion Control: Addressing soil erosion and loss of topsoil and fertility through appropriate land management practices.
- Control of Alien Plant Infestation: Managing and controlling invasive alien plant species to protect native biodiversity.
- Biodiversity Conservation: Promoting the conservation of grassland ground cover and biodiversity to maintain ecosystem health.
- Water Quality Improvement: Implementing strategies to improve water quality and address water quantity shortages.
- Climate Change Adaptation: Developing measures to mitigate the impacts of climate change-induced extreme events.
- Environmental Monitoring: Establishing systems for ongoing environmental monitoring and assessment to track progress and identify areas needing intervention.

2.3.8. ALFRED NZO DISTRICT MUNICIPALITY WATER SERVICES DEVELOPMENT PLAN, 2015

The Alfred Nzo District Municipality Water Services Development Plan (WSDP) is a strategic document designed to establish a framework for the development, management, and maintenance of water services within the district. This plan aims to ensure the provision of sustainable, affordable, and accessible water services to all communities residing within the district. Within the WSDP, several key water services issues are identified:

- Water Supply: Acknowledging access to a reliable and safe water supply as a fundamental human right, the plan outlines strategies to guarantee that all communities in the district have access to potable water.
- Sanitation: Recognizing sanitation as an integral aspect of water services, the plan includes strategies to ensure that all communities within the district have access to safe and hygienic sanitation facilities.
- Water Conservation and Demand Management: Understanding the importance of conserving water resources, the plan incorporates strategies to promote water conservation practices and efficient demand management.
- Infrastructure Development and Maintenance: Identifying the necessity for infrastructure development and maintenance, the plan emphasizes the importance of sustaining water services within the district.
- Water Quality: Recognizing the significance of maintaining water quality, the plan includes strategies to ensure that all water supplied to communities within the district meets required quality standards.

By addressing these key issues, the WSDP endeavours to establish a robust framework for the sustainable provision of water services throughout the Alfred Nzo District Municipality. It aims to ensure that water services are not only

accessible but also of high quality, meeting the needs of all communities within the district.

SPATIAL DIRECTVES: The following spatial directives can be gleaned from the ANDM WSDP:

- Integrated Water Resource Management (IWRM)
  - Directive: Ensure that spatial planning integrates water resource management to balance water demand and supply across the district.
  - Action: Align land use planning with water availability, prioritizing development in areas with adequate water resources and infrastructure.
- Prioritization of High-Need Areas
  - Directive: Focus on underserved and rural areas where water services are lacking or inadequate.
  - Action: Prioritize infrastructure development in these areas to ensure equitable access to water services, in line with the WSDP's goals.
- Infrastructure Corridor Planning
  - Directive: Plan and protect corridors for bulk water infrastructure, such as pipelines, reservoirs, and treatment plants.
  - Action: Incorporate these corridors into spatial plans to avoid land use conflicts and ensure efficient implementation of water services projects.
- Climate Resilience and Disaster Management
  - Directive: Incorporate climate change adaptation measures into spatial planning to mitigate risks such as droughts and floods.
  - Action: Identify and protect water sources, wetlands, and recharge areas, and avoid development in flood-prone or water-scarce zones.
- Sustainable Urban and Rural Development
  - Directive: Promote compact, sustainable settlements to reduce the cost and complexity of water service delivery.
  - Action: Encourage higher-density development in areas with existing or planned water infrastructure to optimize resource use.
- Protection of Water Sources
  - Directive: Safeguard critical water sources, such as rivers, dams, and groundwater aquifers, from pollution and over-extraction.
  - Action: Designate buffer zones around water sources in spatial plans and enforce regulations to prevent incompatible land uses.
- Alignment with Municipal Spatial Development Frameworks (SDFs)
  - Directive: Ensure that water services planning is integrated with municipal SDFs and other sectoral plans.
  - Action: Collaborate with municipalities to align water infrastructure projects with spatial development priorities and growth corridors.
- Public Participation and Stakeholder Engagement
  - Directive: Involve communities and stakeholders in spatial planning processes to ensure that water services meet local needs.
  - Action: Conduct consultations to identify water service challenges and incorporate community feedback into spatial plans.
- Economic Development and Water Services
  - Directive: Support economic development by ensuring reliable water services for key sectors such as agriculture, industry, and tourism.
  - Action: Identify and prioritize water infrastructure projects that support economic growth and job creation.

- Monitoring and Evaluation
  - Directive: Establish mechanisms to monitor the implementation of spatial planning directives related to water services.
  - Action: Regularly review spatial plans and water services projects to ensure alignment with the WSDP and adjust plans as needed.
- Water Conservation and Demand Management
  - Directive: Promote water conservation and efficient use through spatial planning.
  - Action: Encourage the development of water-efficient technologies and practices in new developments and retrofits.

2.3.9. ALFRED NZO DISTRICT MUNICIPALITY GRAIN MASTER PLAN

The Grain Master Plan is a strategy and implementation plan were collaboratively developed with input from both public and private stakeholders, guided by a Project Steering Committee. The plan incorporated insights from previous sector development attempts, including the AsgiSA-EC and the Massive Food Project, with interviews conducted with subsistence and smallholder commercial farmers to extract valuable lessons.

Geographic Information Systems were employed to analyse high-potential maize production areas based on climatic, macro soil, and topographic data. The identified high-potential areas were then verified by the project team through site visits. Specifically, lands with a potential yield exceeding 4 tonnes/ha (dryland) were focused on throughout most of the district, with validation assistance provided by Grain SA's representative for small farmer development in the Eastern Cape.

Following the prioritization of high-potential land in terms of locality and size, the project team determined that there is over 50,000 hectares of such land for maize production across the four local municipalities. The Matatiele Local Municipality emerged with the highest concentration of potential, particularly in the Ludeke locality of the Winnie Madikizela-Mandela Local Municipality.

Despite the expansive areas of high-potential land, insights from previous case studies revealed that the availability of land is not the primary challenge; instead, the critical factors lie in developing a viable business model and effective management to establish long-term sustainable projects. Stakeholder feedback and input from the Project Steering Committee underscored the importance of high levels of involvement by local stakeholders and smallholder farmers as crucial success factors. Another challenge acknowledged by the project was the significant capital required to initiate a large-scale maize production industry virtually from scratch in an area with limited infrastructure and support services. The primary strategic objectives outlined in the grain master plan are as follows:

- Utilize the existing production base to cultivate the systems and implementation capabilities necessary for a broader program, ensuring the sustainability of current producers and facilitating the entry of new ones.
- Mobilize the local farming community within suitable support systems to establish new production areas.
- Apply commercial principles to foster the development of sustainable production systems capable of self-support without continuous reliance on state subsidies.
- Design institutional systems and ownership structures that present attractive investment opportunities for the private sector. Crucially, these structures should facilitate skills transfer to local entrepreneurs and offer ownership and investment opportunities to local farmer communities over time.
- Secure the commitment of key strategic partners, including government, development institutions, and the private sector, to

contribute financial and other resources to various key elements of the plan, ensuring the necessary expansion in production areas.

- Achieve the establishment of a sustainable commercial industry that contributes to regional development, economic growth, employment, and wealth creation.
- Develop a minimum of 50,000 hectares within a 20-year period.
- Establish the essential services support infrastructure in areas such as inputs, training and development, mechanization, post-harvest storage infrastructure, and access to finance and markets.

SPATIAL DIRECTIVES: Several spatial directives can be gleaned from the master plan, and need to form part of the SDF proposals:

- Designation of Agricultural Zones
  - Directive: Identify and designate specific areas suitable for grain production based on soil quality, climate, and water availability.
  - Action: Incorporate these zones into municipal Spatial Development Frameworks (SDFs) to protect them from incompatible land uses such as urban sprawl or mining.
- Infrastructure Development for Grain Production
  - Directive: Plan and develop infrastructure to support grain production, storage, and distribution.
  - Action: Prioritize the development of roads, irrigation systems, storage facilities, and processing plants in key grain-producing areas.
- Water Resource Management
  - Directive: Ensure sustainable water use for irrigation and grain production.
  - Action: Integrate water resource planning with agricultural development, focusing on efficient irrigation systems, rainwater harvesting, and the protection of water sources.
- Climate-Resilient Agriculture
  - Directive: Promote climate-smart agricultural practices to mitigate the impacts of climate change on grain production.
  - Action: Identify areas vulnerable to droughts, floods, or soil degradation and implement measures such as crop diversification, conservation agriculture, and soil rehabilitation.
- Land Reform and Access
  - Directive: Facilitate access to land for smallholder farmers and emerging grain producers.
  - Action: Identify underutilized or state-owned land suitable for grain production and allocate it to farmers through land reform programs.
- Protection of High-Potential Agricultural Land
  - Directive: Protect high-potential agricultural land from non-agricultural activities.
  - Action: Enforce zoning regulations to prevent the conversion of fertile land into residential, industrial, or mining uses.
- Value Chain Development
  - Directive: Support the development of grain value chains, including production, processing, and marketing.
  - Action: Identify spatial nodes for agro-processing facilities and markets, ensuring they are strategically located near production areas.
- Rural Development and Job Creation
  - Directive: Use grain production as a driver of rural development and job creation.
  - Action: Focus on developing rural infrastructure, such as roads, electricity, and water supply, to support agricultural activities and improve livelihoods.
- Environmental Sustainability

- Directive: Promote sustainable land use practices to prevent soil erosion, deforestation, and water pollution.
- Action: Implement spatial planning measures to protect natural ecosystems, such as wetlands and grasslands, that support agricultural productivity.

➢ Research and Innovation Hubs
- Directive: Establish research and innovation hubs to improve grain production techniques and technologies.
- Action: Identify locations for agricultural research centres and collaborate with universities and agricultural institutions.

➢ Market Access and Trade
- Directive: Improve market access for grain producers by developing transport and logistics infrastructure.
- Action: Plan and develop transport corridors linking grain-producing areas to local and regional markets.

➢ Disaster Risk Management
- Directive: Incorporate disaster risk management into spatial planning for grain production.
- Action: Identify and mitigate risks such as pests, diseases, and extreme weather events through early warning systems and contingency planning.

➢ Community Participation and Empowerment
- Directive: Involve local communities in planning and decision-making processes related to grain production.
- Action: Conduct consultations with farmers, cooperatives, and other stakeholders to ensure that spatial plans reflect local needs and priorities.

➢ Monitoring and Evaluation
- Directive: Establish mechanisms to monitor the implementation of spatial planning directives related to grain production.
- Action: Regularly review spatial plans and agricultural projects to ensure alignment with the Grain Master Plan and adjust strategies as needed.

2.3.10. WINNIE MADIKIZELA MANDELA LOCAL MUNICIPALITY INTEGRATED DEVELOPMENT PLAN, 2023

The Winnie Madikizela Mandela Local Municipality Integrated Development Plan (IDP) for 2023-2024 is a comprehensive plan that sets out the future development trajectory for the municipality. The IDP is a product of robust consultative engagements and interactions with the communities in all 32 Wards, development role-players in the public.

The IDP includes several key focus areas:

- Basic Service Delivery (Engineering Services): This includes electricity, project management, operations and maintenance, and water and sanitation.
- Basic Service Delivery (Community and Social Services): This covers community and social services, disaster management, community/recreational facilities, and protection services.
- Local Economic Development and Spatial Planning: This includes spatial planning and land use, local economic development, and Eastern Seaboard development.
- Institutional Transformation and Human Resource Development: This covers human resources, auxiliary services, and information and communication technology.
- Financial Planning and Reporting: This includes financial viability, funding streams, Auditor General comments, and the filling system and the audit file.

The IDP is a strategic document that guides all planning, budgeting, management, and decision-making processes in the municipality. It is

reviewed annually to ensure that it remains relevant and responsive to the changing needs and priorities of the community. The IDP is a critical tool for promoting sustainable development and improving the quality of life for all residents of the Winnie Madikizela Mandela Local Municipality.

2.3.11. WINNIE MADIKIZELA MANDELA LOCAL MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK, 2021

The Winnie Madikizela Mandela Local Municipality Spatial Development Framework (SDF) for 2021 is a strategic planning document that guides spatial development and land use management in the municipality.

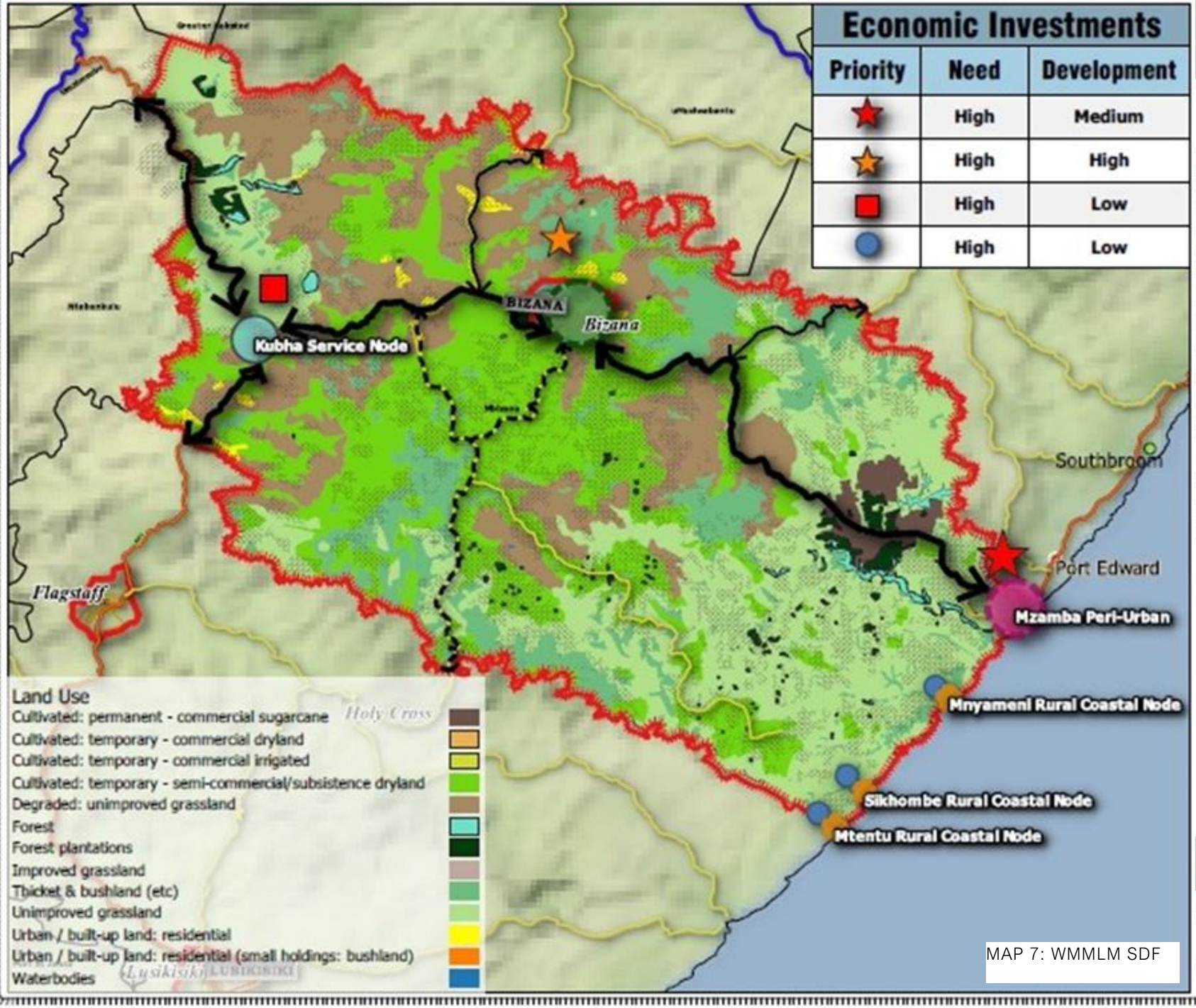
The SDF is developed in accordance with the Spatial Planning and Land Use Management Act of 2013 (Act 16 Of 2013) and the Winnie Madikizela Mandela Local Municipality Spatial Planning and Land Use Management (SPLUM) Bylaws (2016).

The SDF provides a long-term vision for the spatial growth and development of the municipality. It identifies key areas for development and conservation and sets out policies and strategies to guide land use and development decisions.

The SDF is a critical tool for promoting sustainable development, enhancing the quality of life for all residents, and ensuring that development is carried out in a way that is beneficial to the community and the environment.

SPATIAL DIRECTIVES: This project marks the review of the MSDF. The review needs to identify the current spatial challenges and opportunities in the municipality and provide proposals and strategies to mitigate the challenges and take advantage of the opportunities extant in the municipality.

MBIZANA SPATIAL DEVELOPMENT FRAMEWORK 2019



Economic Investments

Priority	Need	Development
★	High	Medium
★	High	High
■	High	Low
●	High	Low

Land Use

- Cultivated: permanent - commercial sugarcane
- Cultivated: temporary - commercial dryland
- Cultivated: temporary - commercial irrigated
- Cultivated: temporary - semi-commercial/subsistence dryland
- Degraded: unimproved grassland
- Forest
- Forest plantations
- Improved grassland
- Thicket & bushland (etc)
- Unimproved grassland
- Urban / built-up land: residential
- Urban / built-up land: residential (small holdings: bushland)
- Waterbodies

CONCEPT Plan

Mbizana Municipality

LEGEND

ADMIN

- Mbizana Local Municipality
- Settlements
- Eastern Cape
- District_Municipalities_2016
- Local_Municipalities_2016
- Wards_2016

NODES

- CBD
- Peri-Urban
- Rural Coastal Node
- Service Node

LINKS

- Strong links
- Average links
- Weak links

GOLDENECON TOWN PLANNERS

Co-ord. System : Hartebeesthoek 94

Date: May 2020 Plan No:

MAP 7: WMMLM SDF

2.3.12. WINNIE MADIKIZELA MANDELA LOCAL MUNICIPALITY LOCAL ECONOMIC DEVELOPMENT (LED) STRATEGY

The Winnie Madikizela Mandela Local Municipality Local Economic Development (LED) Strategy is a comprehensive plan that aims to stimulate economic growth and development within the municipality. The strategy sets out critical markers for employment creation and growth and identifies where viable changes in the structure and character of production can generate a more inclusive and greener economy over the medium to long run.

The LED Strategy is aligned with the municipality's Integrated Development Plan (IDP) and is central to the monitoring and evaluation of the performance of the municipality in implementing its IDP and Budget. The LED Strategy outlines Key Performance Indicators and Targets that are linked to Key Performance Areas derived from the IDP.

The strategy also includes a focus on sustainable development goals and eight critical economic and social development priorities that world leaders agreed, at the United Nations Millennium Summit in 2000, needed to be achieved by 2015.

Furthermore, the strategy aims to pilot local economic development initiatives to promote job creation, poverty reduction, and enhanced well-being, while empowering women, youth and vulnerable groups, and ensuring their inclusion as decision makers and beneficiaries.

The LED strategy prioritizes agriculture, tourism, and mining as the key economic drivers, highlighting their underdeveloped status. The municipality actively supports the development of Small, Medium, and Micro Enterprises (SMMEs) and has established platforms such as the LED forum, Local Tourism Organization, and Contractor Development Programme to facilitate information sharing, capacity building, and marketing.

In collaboration with key stakeholders, the municipality intends to support SMMEs across all sectors through various interventions including training, funding, marketing, and facilitating access to markets and information. Additionally, the municipality has formulated and adopted an Agricultural Development Plan aimed at providing appropriate guidance for the sector's development and transforming subsistence agricultural practices into commercial ventures.

Furthermore, the municipality has adopted economic sector plans such as the tourism plan and mining potential assessment to comprehend and unlock available opportunities, thereby attracting investments into the local economy. Investments in these sectors are envisaged to create sustainable employment opportunities and alleviate poverty levels within the community.

SPATIAL DIRECTIVES: The Winnie Madikizela-Mandela Local Municipality's Local Economic Development (LED) Strategy includes several spatial directives aimed at fostering sustainable economic growth and development. These directives focus on:

- **Spatial Planning**: Developing and implementing spatial plans to guide land use and infrastructure development.
- **Economic Zones**: Establishing economic zones to attract investment and create job opportunities.
- **Infrastructure Development**: Enhancing infrastructure to support economic activities and improve connectivity.
- **Environmental Sustainability**: Ensuring that development projects are environmentally sustainable and promote conservation.
- **Community Engagement**: Involving the community in the planning and implementation of development projects to ensure their needs are met.

2.3.13. WINNIE MADIKIZELA MANDELA LOCAL MUNICIPALITY HOUSING SECTOR PLAN

A housing sector plan is a comprehensive strategy developed by municipalities or government agencies to address housing needs within a specific area or region. These plans typically outline policies, programs, and projects aimed at providing affordable, adequate, and sustainable housing for the population.

The WMMLM has developed a housing sector plan which will be aligned with Spatial Development Frameworks to ensure coordinated and integrated development at the local level. Spatial Development Frameworks focus on specific geographic areas within a municipality and aim to guide development, infrastructure provision, and land use in those areas.

The alignment between housing sector plans and Spatial Development Frameworks in South African municipalities is crucial for several reasons:

- Integrated Development: By aligning housing sector plans with Spatial Development Frameworks, municipalities can ensure that housing developments are integrated with other aspects of urban development, such as transportation, infrastructure, and amenities. This integrated approach fosters sustainable and cohesive communities.
- Targeted Interventions: Spatial Development Frameworks identify areas with specific development needs or opportunities. By aligning housing sector plans with Spatial Development Frameworks, municipalities can target housing interventions to areas where they are most needed or where they can have the greatest impact.
- Efficient Resource Allocation: Aligning housing sector plans with Spatial Development Frameworks helps municipalities allocate resources more efficiently by prioritizing investments in housing and related infrastructure based on the development priorities identified in Spatial Development Frameworks.
- Community Engagement: Spatial Development Frameworks often involve extensive community engagement to ensure that development priorities reflect the needs and aspirations of local residents. By aligning housing sector plans with Spatial Development Frameworks, municipalities can leverage this community input to inform housing policies and projects.

SPATIAL DIRECTIVES: The Municipal Housing Sector Plan provide an insight into the housing demand for the municipality. According to the MHSP, the housing demand current sits at 48 447 units based on low-income, middle income and high-income housing. The SDF therefore needs identify land for the development of housing to meet the current and future demand for housing and human settlements in the municipality.

2.3.14. WINNIE MADIKIZELA MANDELA LOCAL MUNICIPALITY COASTAL MANAGEMENT PROGRAMME

The coastal zone serves as the dynamic interface between marine and terrestrial environments, characterized by its diverse, invaluable, and complex natural and social attributes. Coastal ecosystems are unique, providing essential ecosystem goods and services, such as natural resources that sustain livelihoods and coastal and ocean recreation that enhance quality of life. Consequently, the coastline becomes a focal point for urban settlement and human activities, varying in social, economic, and ecological character.

In the context of the Alfred Nzo District Municipality (ANDM) and the Mbizana Local Municipality (MLM), the coastal area remains largely pristine and ecologically sensitive due to the Transkei Decree (Decree Number 9 of 1992), which regulated development within the 1 km wide Wild Coastal corridor. The Mbizana Local Municipality coastline retains high biodiversity of international importance, recognized as the Pondoland Centre of Endemism.

Given its inherent complexities, the coastal zone requires specialized management as prescribed by the Integrated Coastal Management (ICM) Act. The objectives of this Act include:

- Determining the coastal zone of South Africa.
- Providing for coordinated and integrated management of the coastal zone by all spheres of government according to principles of cooperative governance.
- Preserving, protecting, extending, and enhancing the status of coastal public property as held in trust by the State for all South Africans, including future generations.
- Securing equitable access to the opportunities and benefits of coastal public property.
- Fulfilling South Africa's obligations under international law regarding coastal management and the marine environment.

Coastal Management Programmes (CMPs) are key tools prescribed by the ICM Act and must be prepared by all three spheres of government. Input and direction from the National CMP, the National Estuarine Management Protocol, and the Eastern Cape CMP have specifically guided the development of this Municipal CMP.

SPATIAL DIRECTIVES: The Coastal Management Plan includes several spatial directives aimed at preserving and enhancing the coastal environment. These directives focus on:

- Protecting natural environments: Measures to safeguard the coastal ecosystems and biodiversity.
- Designating coastal access land: Identifying and regulating areas for public access to ensure sustainable use.
- Integrated Development Planning: Aligning municipal planning with coastal management objectives to promote sustainable development.
- Establishing a Municipal Coastal Committee: Creating a dedicated body to oversee and implement coastal management initiatives.
- Regulating public access: Managing and controlling public access to coastal areas to prevent environmental degradation.

2.3.15. KUBHA/MAGUSHENI LOCAL SPATIAL DEVELOPMENT FRAMEWORK

The Kubha/Magusheni LSDF acts as a strategic spatial framework, guiding the optimal distribution of land uses, spatial priorities, and strategic infrastructure within the study area to fulfil the vision, goals, and objectives of the municipal IDP and SDF.

The Municipality's SDF outlines a long-term (20+ years) vision and plan, providing a spatial planning context for the IDP, which is reviewed and updated every 5 years. This annual and 5-year review process ensures that the SDF remains relevant and adaptable to changing trends and circumstances.

2.3.16. WINNIE MADIKIZELA MANDELA LOCAL MUNICIPALITY LAND USE SCHEME

A Land Use Scheme (LUS) is a regulatory tool used by municipalities to manage land development and land use within their jurisdiction. It typically includes zoning regulations and other provisions that control how land can be used, developed, and subdivided. The purpose of a Land Use Scheme is to ensure orderly and sustainable development, promote the efficient use of land, and protect public health and safety, among other goals. It often includes detailed maps that designate different zones for residential, commercial, industrial, agricultural, and other uses, along with specific rules and guidelines for development within each zone.

The WMMLM developed and adopted a land use scheme in 2021 provides according to the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013).

SPATIAL DIRECTIVES: The relationship between a Land Use Scheme and a Spatial Development Framework (SDF) is quite interconnected and complementary:

- Land Use Scheme: This is a regulatory tool that specifies how land within a municipality can be used, developed, and subdivided. It includes zoning regulations and guidelines for different land uses such as residential, commercial, industrial, and agricultural areas.
- Spatial Development Framework (SDF): This is a broader, strategic plan that outlines the vision and long-term development goals for a region. It includes policies, principles, and guidelines for land use, infrastructure development, and environmental protection.

The Land Use Scheme is essentially a detailed implementation tool that operationalizes the broader goals and policies set out in the SDF. The SDF provides the overarching vision and strategic direction, while the Land Use Scheme provides the specific regulations and guidelines to achieve that vision. In essence, the Land Use Scheme translates the strategic goals of the SDF into actionable regulations and guidelines, ensuring that development is orderly, sustainable, and aligned with the long-term vision for the region.

2.3.17. WINNIE MADIKIZELA MANDELA LOCAL MUNICIPALITY INTEGRATED WASTE MANAGEMENT PLAN (IWMP)

Integrated Waste Management Planning is a comprehensive approach that aims to manage and optimize waste management practices, ensuring they deliver environmental, social, health, and economic benefits that are sustainable and acceptable to the public and all levels of government. This planning addresses every crucial intermediary step within the internationally recognized “waste hierarchy,” where each step influences the management required at the next. The primary elements in the waste management hierarchy include:

- Waste generation (generation areas and waste stream analysis)
- Waste prevention and minimization
- Waste separation
- Waste collection, transfer, and transport
- Waste reduction, re-use, and recycling
- Waste treatment
- Disposal of waste in landfills as a last resort

The development of an Integrated Waste Management Plan (IWMP) is mandated for certain government entities under Section 11 of the National Environmental Management: Waste Act, 2008 (Act 59 of 2008) (NEMWA), to ensure proper waste planning and management. The IWMP is compiled following the "Guideline for the Development of Integrated Waste Management Plans (IWMPs)" (DFFE, 2012) and in accordance with Section 12 of NEMWA.

The Winnie Madikizela Mandela Local Municipality (WMMLM) has recognized the need to review its existing IWMP. Beyond being a legal requirement under NEMWA, the IWMP will serve as a sector plan within WMMLM’s upcoming Integrated Development Plan (IDP) revision, guiding municipal planning and budgeting related to waste management. The overarching goal is to ensure that waste management within the municipality is sustainable, practical, implementable, and acceptable to all key stakeholders expected to execute the plan. The primary objectives of NEMWA are to protect health, well-being, and the environment by implementing reasonable measures to:

- Minimize the consumption of natural resources
- Avoid and minimize waste generation
- Reduce, re-use, recycle, and recover waste
- Treat and safely dispose of waste as a last resort
- Prevent pollution and ecological degradation
- Ensure ecologically sustainable development while promoting justifiable economic and social development
- Promote and ensure the effective delivery of waste services

- Remediate land where contamination presents, or may present, significant health or environmental risks
- Achieve integrated waste management reporting and planning.

The primary goals of an Integrated Waste Management Plan (IWMP) are to incorporate waste management into, and where feasible, align with, services provided by local municipalities (within the district municipality) to:

- Identify and plan for future waste management needs and requirements.
- Minimize waste management costs by optimizing the efficiency of the waste management system, including infrastructure, labour, and equipment use.
- Identify methods to achieve waste minimization targets through alternative approaches like resource recovery and recycling.
- Minimize adverse social and environmental impacts related to waste management, thereby improving the quality of life for all citizens.

Section 2 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) (NEMWA) mandates the Department and provincial departments responsible for waste management to prepare integrated waste management plans. Section 4(a) specifies that each municipality must submit its integrated waste management plan to the MEC for endorsement and include the approved plan in its Integrated Development Plan, as outlined in Chapter 5 of the Municipal Systems Act. The primary objectives of NEMWA are to protect health, well-being, and the environment by implementing reasonable measures to:

- Minimize the consumption of natural resources
- Avoid and minimize waste generation
- Reduce, re-use, recycle, and recover waste
- Treat and safely dispose of waste as a last resort
- Prevent pollution and ecological degradation
- Ensure ecologically sustainable development while promoting justifiable economic and social development
- Promote and ensure the effective delivery of waste services
- Remediate land where contamination presents, or may present, significant health or environmental risks
- Achieve integrated waste management reporting and planning

To comply with NEMWA and achieve its primary objectives, the Winnie Madikizela-Mandela Local Municipality (WMMLM) is developing an Integrated Waste Management Plan (IWMP). The main objective of the IWMP for WMMLM is to fulfil the goals of NEMWA and other relevant legislation while ensuring that sustainable, cost-effective, environmentally, socially, and economically feasible, and practical solutions to the "waste management problem" are developed, implemented, and monitored.

SPATIAL DIRECTIVES: The Winnie Madikizela Mandela Local Municipality's Integrated Waste Management Plan (IWMP) includes several spatial directives aimed at improving waste management practices. These directives typically focus on:

- Zoning for Waste Management Facilities: Identifying and designating specific areas for waste collection, recycling centres, and disposal sites to ensure they are appropriately located and do not negatively impact residential or sensitive environmental areas.
- Land Use Planning: Integrating waste management considerations into broader land use planning to ensure that waste facilities are compatible with surrounding land uses and do not cause environmental degradation.
- Infrastructure Development: Planning and developing the necessary infrastructure for waste management, including roads, transfer stations, and recycling facilities, to ensure efficient waste collection and processing.
- Environmental Protection: Implementing measures to protect environmentally sensitive areas from the adverse impacts of waste

management activities, such as buffer zones around natural habitats and water bodies.

- **Community Involvement**: Engaging with local communities to identify suitable locations for waste management facilities and to ensure that the facilities do not negatively impact the quality of life for residents.

2.4. EMERGING STRATEGIC DEVELOPMENT AREAS

Emerging Strategic Development Areas can be defined as a specific area in the municipality identified as having significant potential for growth, development, and investment. These areas are designated within the framework of broader regional or municipal planning strategies to optimize land use, enhance infrastructure, stimulate economic activities, and address specific developmental priorities. Key characteristics of Emerging Strategic Development Areas include:

- Potential for Growth: Identified for their capacity to accommodate future population and economic growth.
- Focus on Infrastructure: Prioritized for investments in infrastructure, such as transportation, utilities, and public services.
- Economic Opportunities: Targeted for commercial, industrial, or mixed-use developments to boost local economies.
- Environmental Considerations: Planned with sustainability and environmental impact in mind, aiming to balance development with ecological preservation.
- Integration with Planning Policies: Aligned with broader spatial development policies and objectives to ensure cohesive and coordinated growth.

The following areas have been identified as Emerging Strategic Development Areas due to the aforementioned characteristics:

- **Wild Coast:** Located along the coast of the municipality, the area represents a region of significant ecological, cultural, and socio-economic importance. Characterized by its rugged, undulating coastline, pristine beaches, and rich biodiversity, the Wild Coast serves as a vital ecological corridor supporting numerous species of flora and fauna. The area's unique coastal and terrestrial ecosystems offer critical habitats for both endemic and endangered species, contributing to its designation as a biodiversity hotspot.

- **Redoubt:** This area is located along the R61 regional route, approximately 18km from Bizana Town. The area is characterised by high density rural settlements and small to medium scale commercial development serving the surrounding settlements.

Ebenezer: Located in the southern region of the WMMLM along the R61, the area is a densely populated rural settlement with high growth potential.

SPATIAL ANALYSIS

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3. SPATIAL ANALYSIS

1.5. CROSS BORDER ANALYSIS

Cross-border planning involves creating institutional frameworks to achieve outcomes that benefit all parties involved. It focuses on facilitating collective action concerning shared natural, built, and human environments, which are often limited by territorial politics. Additionally, it emphasizes the economic development potential of projects and interventions located at or along municipal borders, aiming to promote uniform and consistent economic growth. Spatial planning principles require municipalities to clearly demonstrate how their Spatial Development Framework (SDF) aligns with the planning efforts of neighbouring municipalities.

Spatial planning assists municipalities and other authorities in guiding their development planning processes. It is a continuous process in the physical space that seemingly has no end. However, for the Spatial Development Framework (SDF), the municipal boundary is the indicative point where the SDF typically concludes its business. It is important to note that municipal boundaries are primarily for administrative purposes. Ideally, such boundaries should not affect the spatial planning process. Communities and the physical environment should not be negatively impacted by administrative boundaries, especially regarding the delivery of basic services.

Communities should receive consistent and equitable services from the government, regardless of municipal boundaries. The government should present itself uniformly in its various plans. Cross-border municipal planning is essential to coordinate service delivery to communities affected by cross-border planning. Institutional structures should be established to ensure that municipalities plan collaboratively for affected areas. Evidence has shown that such areas may undergo municipal boundary alignments, either consolidating them under one municipal area or dividing them into two municipal areas. This highlights the importance of tangible spatial plans that transcend administrative and political boundaries.

According to national and provincial policies and legislation (MSA-S26 (d), MSA Regs S2 (4) (h)), municipalities are required to provide a clear indication of how their SDF is aligned with the planning efforts of neighbouring municipalities. Winnie Madikizela Mandela Local Municipality has a mandate to ensure that its Integrated Development Plan (IDP) complies with planning legislation and policies, facilitating the development of an SDF as a spatial representation of the IDP. The municipal SDF, in turn, directs and guides strategic investments that are developmental and beneficial within the district municipality and across neighbouring district and local municipalities.

Moreover, it is reiterated that Winnie Madikizela Mandela Local Municipality forms an integral part of a larger system of local governance and the regional economy. It influences development in adjoining regions. Cross-border planning issues have become increasingly significant, urging relevant neighbouring authorities to explore joint operational potential. The focus is on strategic or shared development issues that would benefit from a joint approach and engaging with neighbouring municipalities.

This section aims to ensure harmony between the proposals suggested by Winnie Madikizela Mandela Local Municipality's Spatial Development Framework (SDF) and those of its neighbouring municipalities. Winnie Madikizela Mandela Local Municipality located along the north-eastern border of the ANDM and borders the KwaZulu Natal province. The municipality shares boundaries with several municipalities in both the Eastern Cape and KwaZulu Natal provinces. The WMMLM shares borders with the following local municipalities:

- Greater Kokstad Municipality (KZN)
- Ingquza Hill Local Municipality (EC)
- Ntabankulu Local Municipality (EC)
- Ray Nkonyeni Municipality (KZN)
- uMuziwabantu Local Municipality (KZN)
- uMzimvubu Local Municipality (EC).

The existing status assessment for cross-border issues with the aforementioned neighbouring municipalities will broadly cover various aspects to enhance relationships. It is crucial that alignment goes beyond physical and environmental aspects and also considers the following:

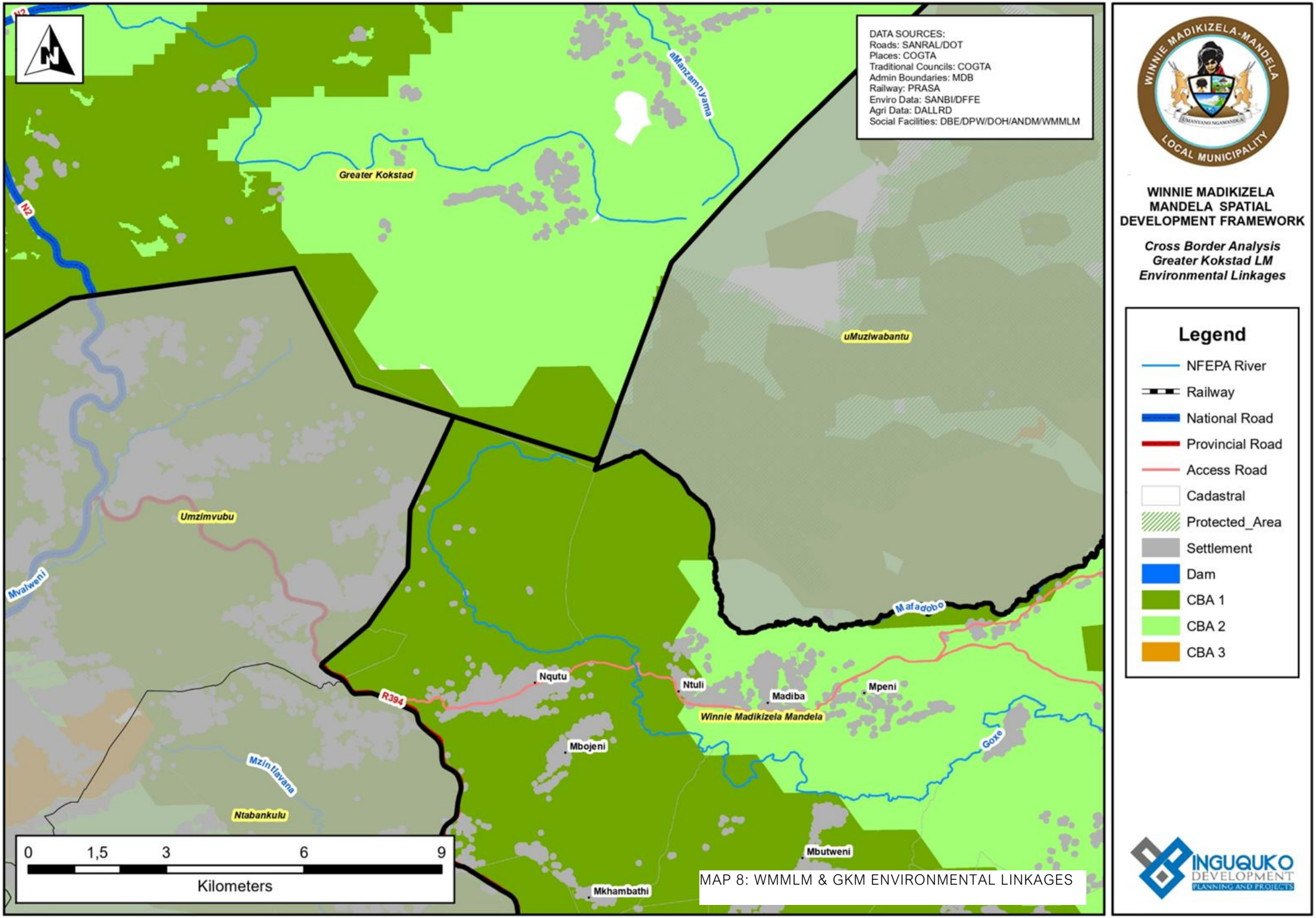
- **Culture and Values**: Fostering connections between cross-border communities.
- **Trade Linkages**: Facilitating the movement of goods and services, including the informal sector.
- **Intergovernmental Ties**: Strengthening forums and collaborative efforts between governments.
- **Cooperation of Municipal Services**: Ensuring joint fire and emergency responses to outlying areas.
- **Tourism Opportunities and Routes**: Developing tourism attractions and routes.
- **Developing Activity Corridors and Transportation Routes**: Enhancing infrastructure such as the R61 and the N2 roads.
- **Access to Social Facilities**: Improving access to schools, clinics, and other essential services.
- **Raw Resources**: Managing water, minerals, and other natural resources.
- **Environmental Events/Issues**: Addressing climate change, pollution, and other environmental concerns.
- **Agricultural Benefits**: Promoting agricultural corridors and market access.

1.5.1. GREATER KOKSTAD MUNICIPALITY

The Greater Kokstad Local Municipality, classified as a Category B municipality, is located within the Harry Gwala District of KwaZulu-Natal. It shares borders with Matatiele Local Municipality and Lesotho to the west, Dr Nkosazana Dlamini Zuma Local Municipality to the north, Umuziwabantu Local Municipality to the southeast, and the Eastern Cape province to the east. Positioned along the northern boundary of Winnie Madikizela Mandela Local Municipality (WMMLM), Greater Kokstad Municipality does not have major routes connecting it directly to WMMLM.

However, the two municipalities are linked by smaller local and district roads, which facilitate connectivity between the settlements south of Greater Kokstad Municipality and those north of WMMLM. These road linkages play a crucial role in promoting interaction and access between the communities, despite the absence of major highways. The environmental linkages between the two municipalities are significant, particularly the Goxe River, which flows through the settlements of Ntuli, Nquthu, and Madiba. This river is a vital water source for these communities, supporting both ecological balance and local livelihoods.

Broad land uses in the border region between Greater Kokstad Municipality and WMMLM include grassland, forest land, and cultivated land. Grasslands and forested areas provide essential ecological functions, including habitat for wildlife, carbon sequestration, and water regulation. Cultivated land supports both commercial and subsistence agriculture, contributing to the local economy and food security. Additionally, watercourses, including small wetlands along the Goxe River, play a crucial role in maintaining biodiversity and providing water for agricultural and domestic use. Settlements in the border region, such as Nquthu, Madiba, Mpeni, and Mbojeni, are home to communities that rely on these natural resources for their daily needs and livelihoods.



MAP 8: WMMLM & GKM ENVIRONMENTAL LINKAGES

WINNIE MADIKIZELA-MANDELA LOCAL MUNICIPALITY

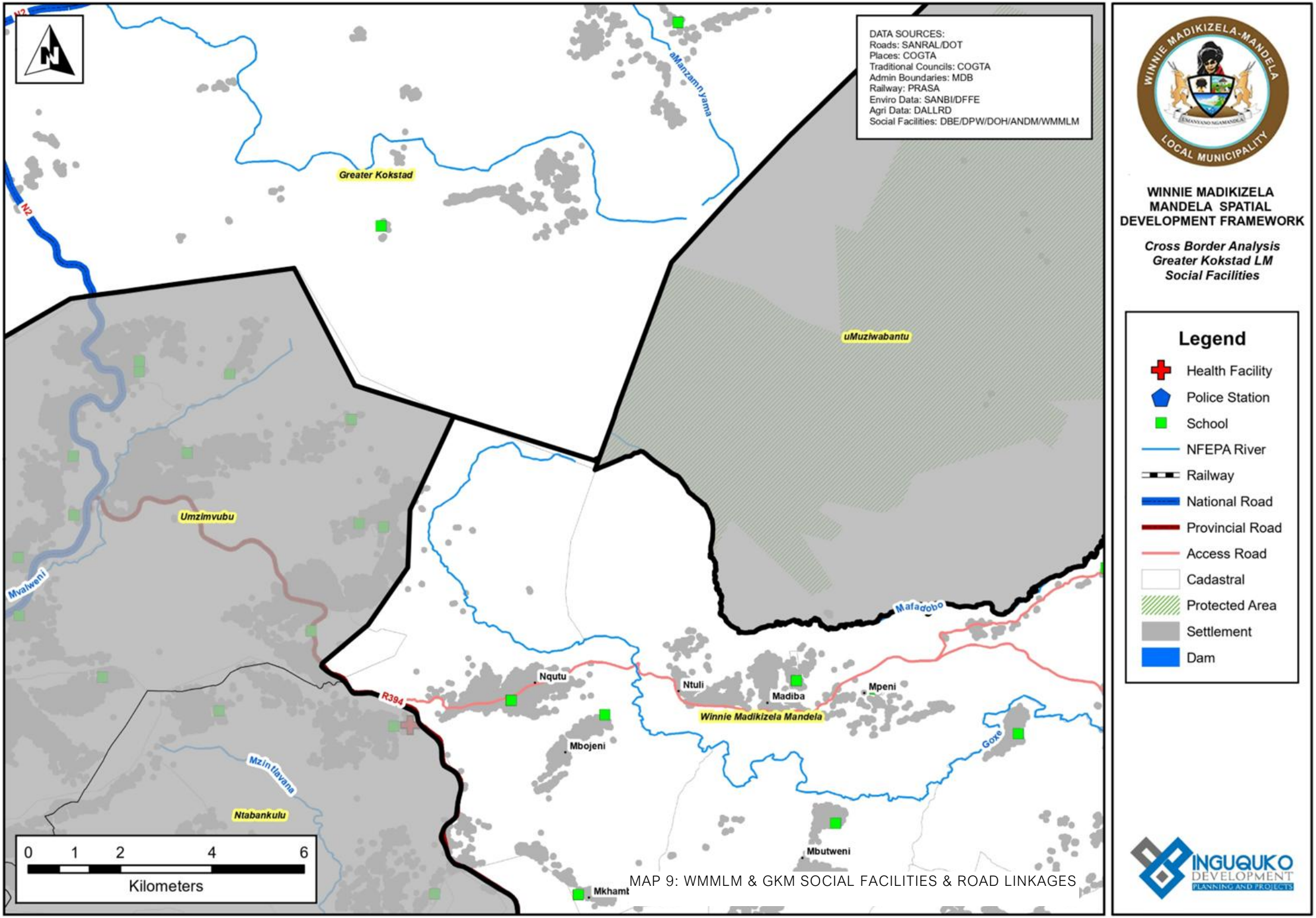
WINNIE MADIKIZELA MANDELA SPATIAL DEVELOPMENT FRAMEWORK

Cross Border Analysis
Greater Kokstad LM
Environmental Linkages

Legend

- NFEPA River
- Railway
- National Road
- Provincial Road
- Access Road
- Cadastral
- Protected_Area
- Settlement
- Dam
- CBA 1
- CBA 2
- CBA 3

INGUQUKO DEVELOPMENT PLANNING AND PROJECTS



WINNIE MADIKIZELA MANDELA SPATIAL DEVELOPMENT FRAMEWORK

Cross Border Analysis
Greater Kokstad LM
Social Facilities

Legend

- Health Facility
- Police Station
- School
- NFEPA River
- Railway
- National Road
- Provincial Road
- Access Road
- Cadastral
- Protected Area
- Settlement
- Dam

MAP 9: WMMLM & GKM SOCIAL FACILITIES & ROAD LINKAGES

1.5.2. RAY NKONYENI MUNICIPALITY

Ray Nkonyeni Local Municipality (formerly known as Hibiscus Coast Local Municipality) is a Category B municipality located within the Ugu District of KwaZulu-Natal Province. It is the largest of the four municipalities in the district, accounting for a third of the district's geographical area. The municipality spans approximately 90 km of coastline, encompassing 21 beaches, and extends 30 km inland, covering a substantial rural area overseen by six tribal authorities. With its administrative seat in Port Shepstone, Ray Nkonyeni Municipality serves as the district's most concentrated economic hub.

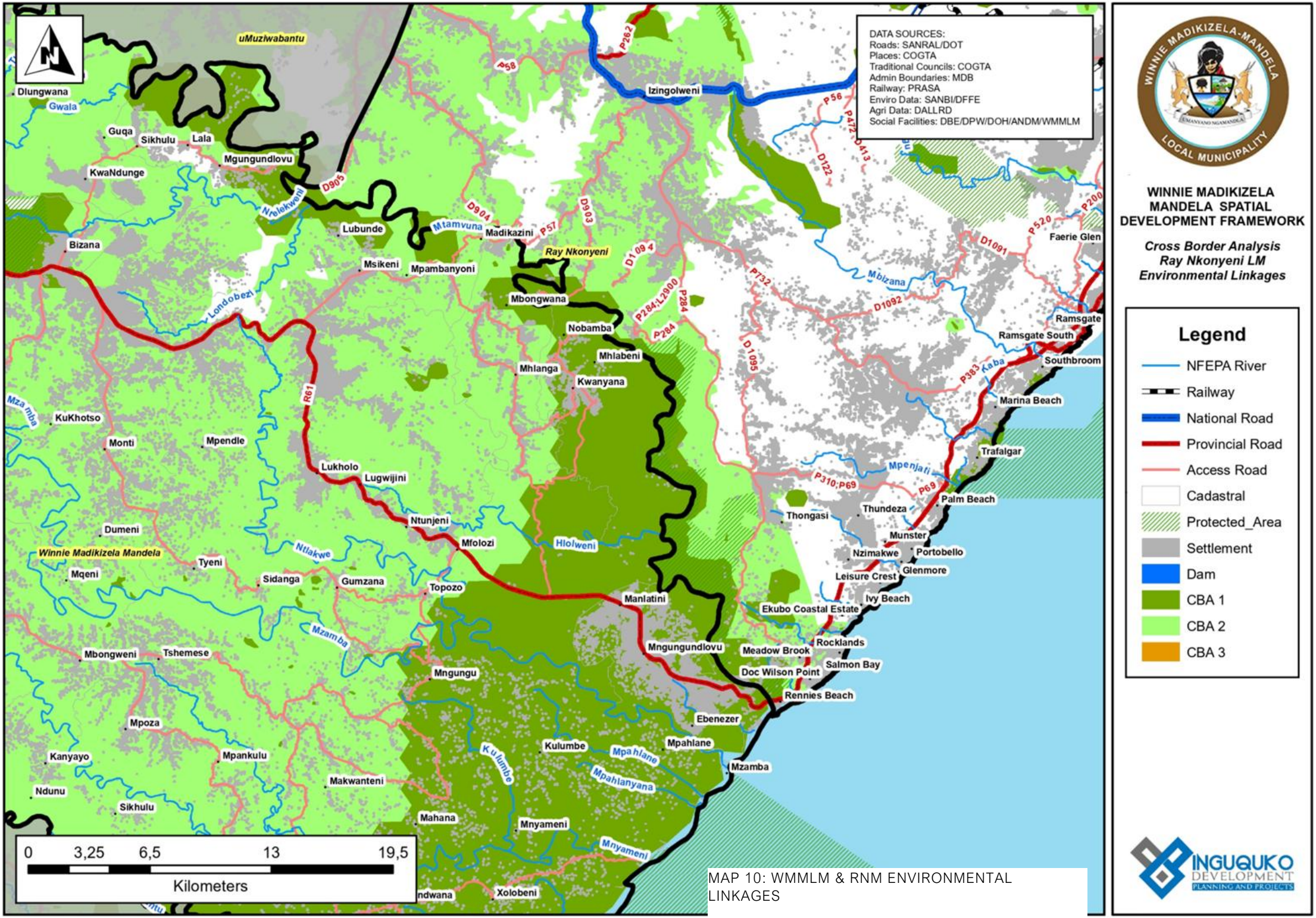
The major roads linking Ray Nkonyeni Municipality and Winnie Madikizela Mandela Municipality include the R61 regional route, which serves as a significant connector between the two regions. In addition to the R61, there are several lower-order provincial, local, and district roads that facilitate local and regional connectivity, ensuring the smooth movement of people, goods, and services. These roads are essential for economic activities, social interactions, and accessing essential services.

The bordering region of the municipalities is characterized by biodiversity that is identified as critical due to the presence of various watercourses, estuaries, and rivers. These environmental linkages are vital for maintaining the ecological balance and providing water resources for both municipalities. Rivers such as the Mzimkhulu River and numerous smaller streams and estuaries contribute to the rich biodiversity of the area, supporting a wide range of flora and fauna.

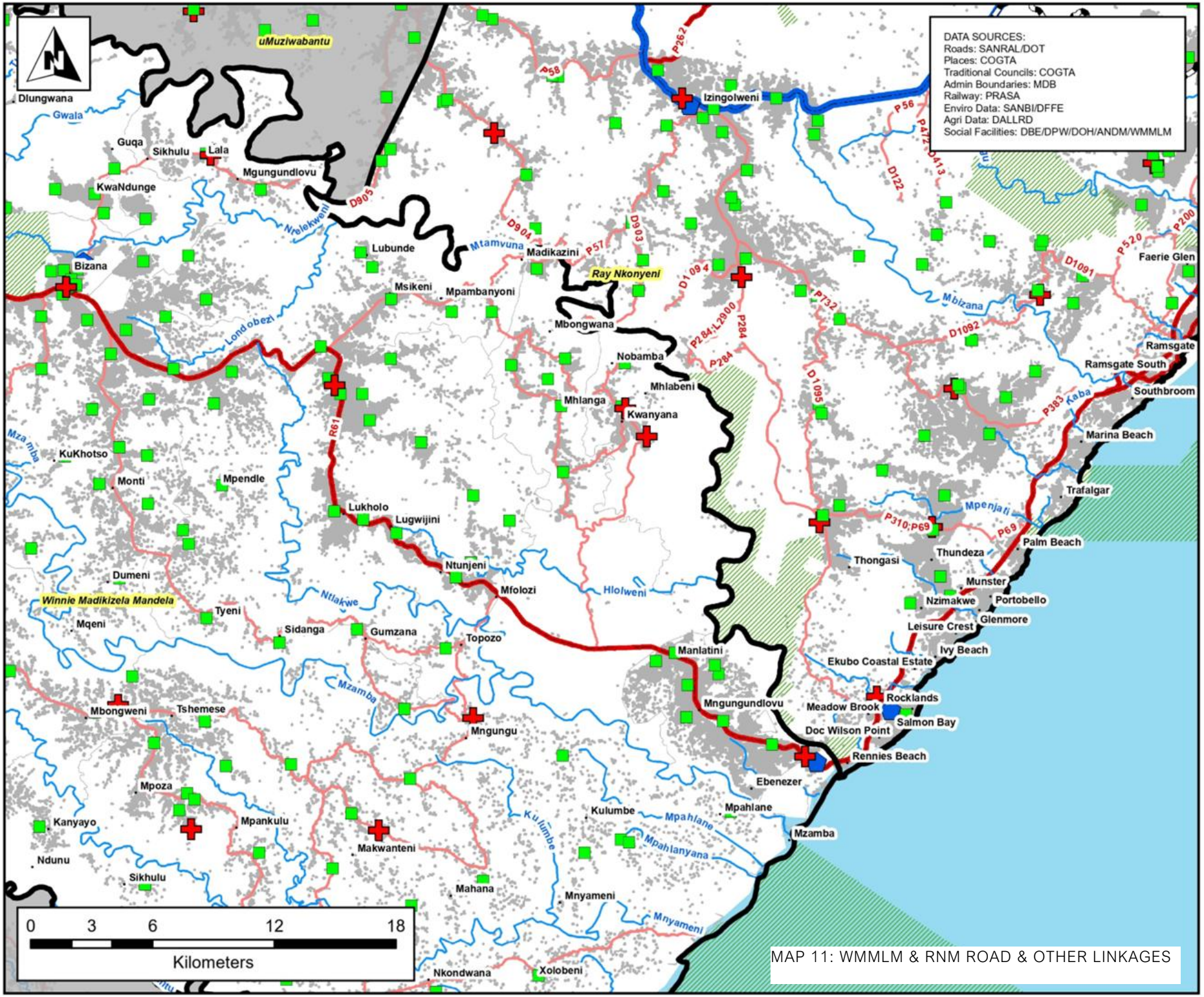
Land uses in the vicinity of the border between Winnie Madikizela Mandela Local Municipality (WMMLM) and Ray Nkonyeni Municipality (RNM) include diverse activities and landscapes. Notable areas in RNM include Rennies Beach, Doc Wilson, Salmon Bay, and Rocklands, which are popular coastal destinations. In WMMLM, Mzamba, Ebenezer, and Mgungundlovu are key locations near the border. The land use in these areas comprises cultivated land, forest land, grassland, and wetlands, reflecting the region's agricultural and ecological diversity.

A significant factor in the cross-border analysis between the two municipalities is the Wild Coast Sun Resort, a major tourism node that provides economic benefits for both municipalities. The resort attracts tourists from various regions, boosting local economies through tourism-related activities and services. This shared tourism asset highlights the importance of collaborative planning and management to maximize economic opportunities and ensure sustainable development in the region.

By considering these factors, cross-border planning can effectively address the unique challenges and opportunities presented by the interconnected nature of Ray Nkonyeni Municipality and Winnie Madikizela Mandela Municipality, promoting harmonious and sustainable development for the benefit of their communities.



MAP 10: WMMLM & RNM ENVIRONMENTAL LINKAGES



MAP 11: WMMLM & RNM ROAD & OTHER LINKAGES

WINNIE MADIKIZELA-MANDELA LOCAL MUNICIPALITY

WINNIE MADIKIZELA MANDELA SPATIAL DEVELOPMENT FRAMEWORK

Cross Border Analysis
Ray Nkonyeni LM
Social Facilities

Legend

- Health Facility
- Police Station
- School
- NFEPA River
- Railway
- National Road
- Provincial Road
- Access Road
- Cadastral
- Protected_Area
- Settlement
- Dam

INGUQUKO DEVELOPMENT PLANNING AND PROJECTS

1.5.3. UMUZIWABANTU LOCAL MUNICIPALITY

The Umuziwabantu Local Municipality, a Category B municipality, is situated on the western boundary of the Ugu District in KwaZulu-Natal. It lies at the foot of the Ingeli Mountain Range, with the Umtamvuna River marking its southern boundary. The municipality shares borders with the Eastern Cape to the north, west, and south, and with uMzumbe and Ray Nkonyeni Municipalities to the east. It is one of four municipalities within the district.

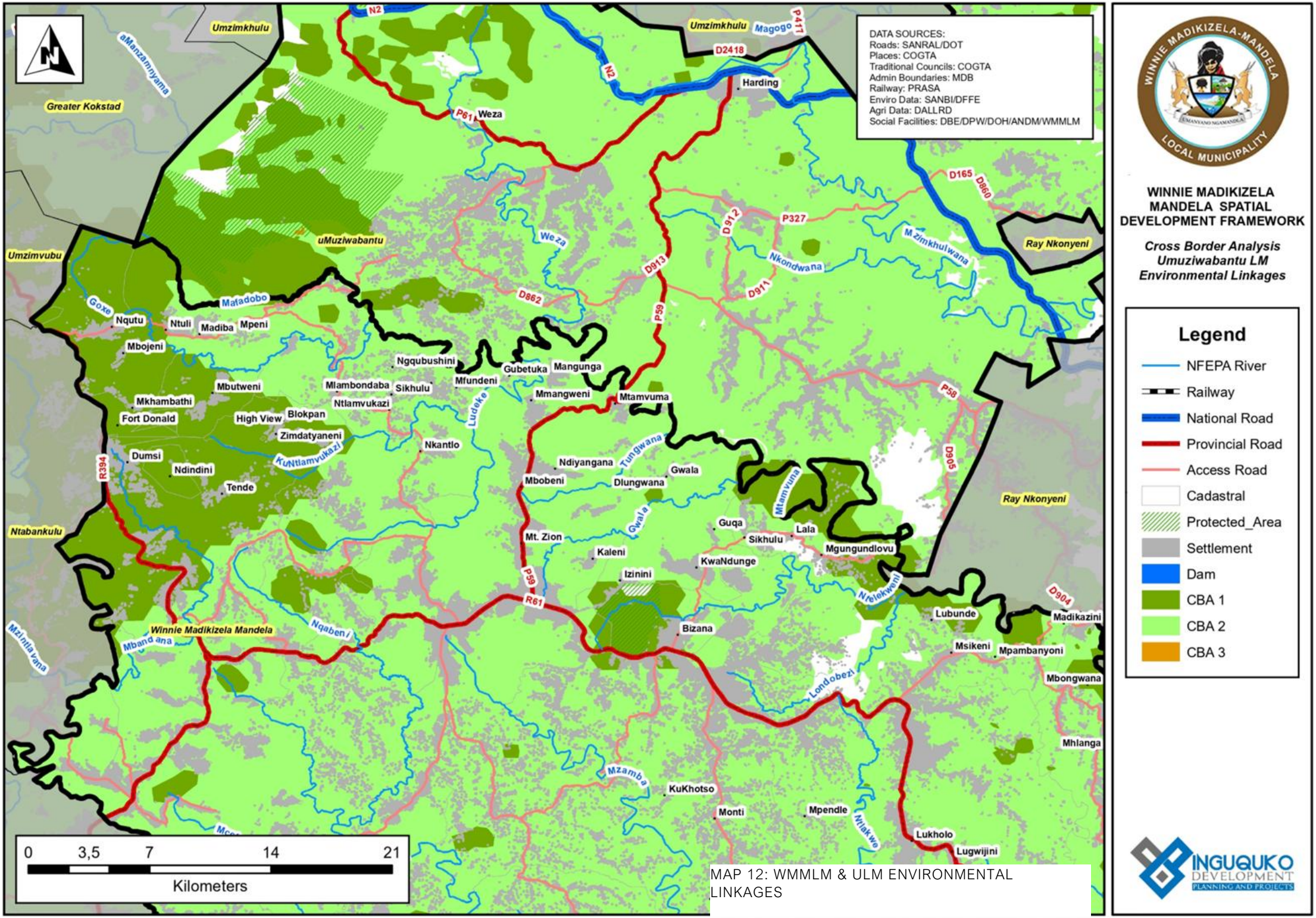
Umuziwabantu Municipality primarily comprises a rural area, featuring the urban development of the town of Harding, farmland, commercially grown forests, and traditional authority areas. The town of Harding serves as the administrative seat of the municipality. Additionally, 56% of the municipal area is occupied by individually owned commercial farms and the Weza afforestation region. The six tribal authority areas—KwaMachi, KwaJala, KwaMbotho, KwaFodo, Dumisa, and Bashweni—make up 42% of the municipality's land.

The boundaries between Winnie Madikizela Mandela and Umuziwabantu Municipalities have several significant linkages that are crucial to spatial planning. One of the primary connections is the P59 provincial road, which links the settlements of Mount Zion, Mbobeni, Ndiyangana, and Mtamvuna in Winnie Madikizela Mandela Municipality with Harding in Umuziwabantu Municipality. This road is vital for facilitating the movement of people, goods, and services between the municipalities, promoting economic and social interactions. Additionally, there is a network of several local and district roads that further enhance connectivity between the two regions, ensuring accessibility to various settlements and fostering regional integration.

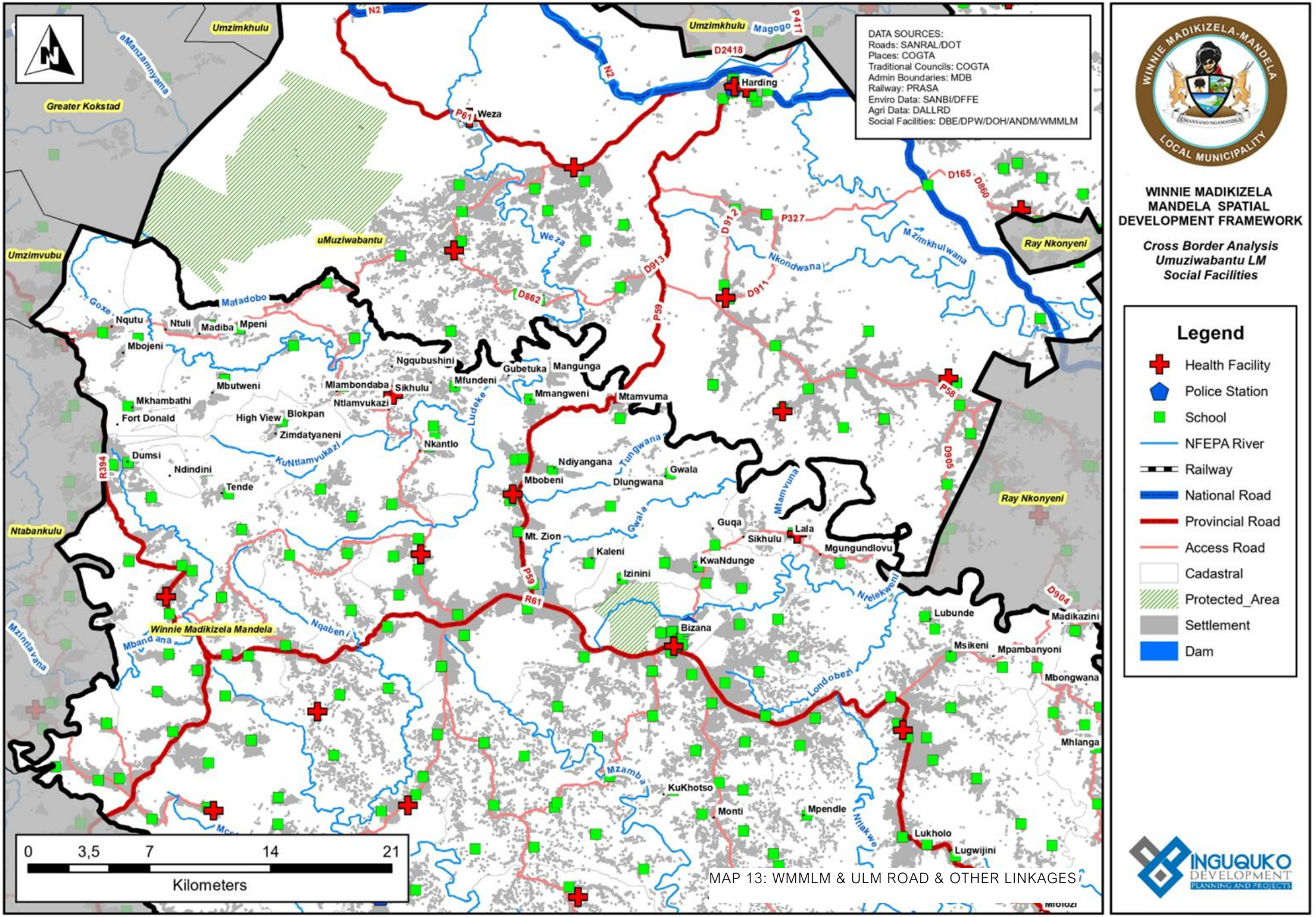
Environmental linkages between the municipalities are characterized by several critical biodiversity areas. The Ludeke, Weza, Mafadobo, Tungwanna, Gwala, and Goxe Rivers are identified as National Freshwater Priority Areas (NFEPA) rivers, serving as essential water sources for the bordering settlements. These rivers play a crucial role in maintaining the ecological balance and supporting the local biodiversity, providing habitat for various species and sustaining agricultural activities.

The land uses in the border vicinity between Winnie Madikizela Mandela and Umuziwabantu Municipalities include a mix of built-up areas, cultivated land, forest land, and grassland. The built-up areas consist of rural settlements where communities engage in daily activities and access basic services. Cultivated land is used for both commercial and subsistence agriculture, supporting the local economy and providing food security. Forest land and grassland contribute to the region's natural landscape, offering resources such as timber and grazing areas for livestock.

Overall, the cross-border linkages between Winnie Madikizela Mandela and Umuziwabantu Municipalities highlight the importance of coordinated spatial planning to ensure sustainable development, environmental conservation, and economic growth. By addressing these linkages, planners can promote a harmonious and integrated approach to regional development, benefiting the communities and ecosystems in both municipalities.



MAP 12: WMMLM & ULM ENVIRONMENTAL LINKAGES



MAP 13: WMMLM & ULM ROAD & OTHER LINKAGES

1.5.4. INGQUZA HILL LOCAL MUNICIPALITY

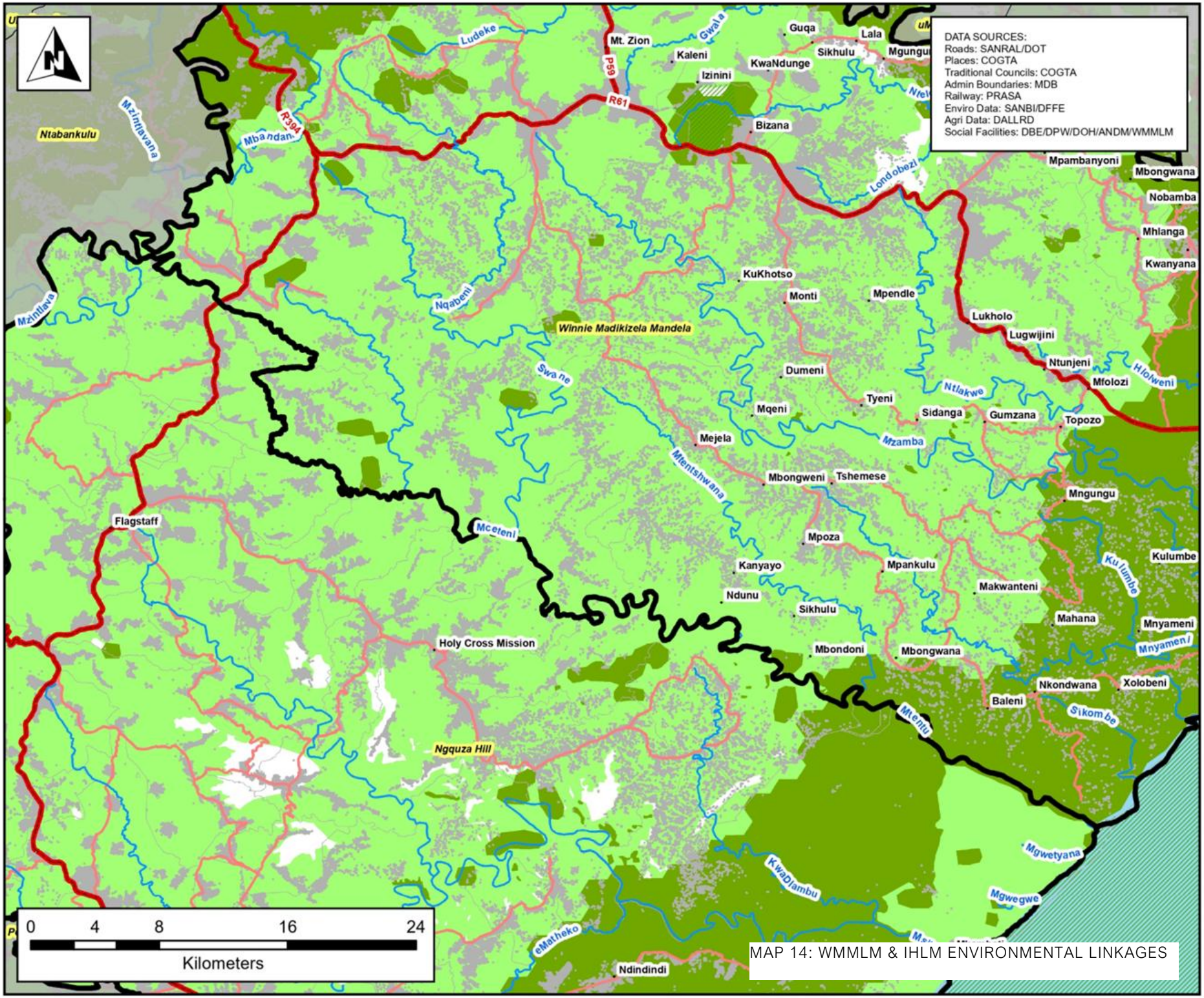
Ingquza Hill Local Municipality (formerly known as Qaukeni Local Municipality) is a Category B municipality situated within the OR Tambo District in the Eastern Cape Province. It shares borders with Ntabankulu and Winnie Madikizela Mandela Local Municipalities to the north, and with Port St Johns Local Municipality and the Indian Ocean to the south. Ingquza Hill is one of the five municipalities in the district, covering nearly a quarter of its geographical area.

Ingquza Hill Local Municipality is situated on the southern border of Winnie Madikizela Mandela Local Municipality. These two municipalities are interconnected through several significant environmental and biodiversity linkages. Among these linkages are the Mceteni, Mntentu, and Mzintlava rivers, which are identified as National Freshwater Ecosystem Priority Areas (NFEPA). These rivers play a crucial role in maintaining the ecological balance and providing water resources for the bordering communities. The border region between the two municipalities is characterized by Critical Biodiversity Areas (Category 2), which are inherently environmentally sensitive and require careful management to preserve their ecological integrity.

The major road linking Ingquza Hill and Winnie Madikizela Mandela Municipalities is the R394, which connects the town of Flagstaff in Ingquza Hill to the neighbouring regions. In addition to the R394, there is a network of smaller local and district roads that facilitate connectivity between the rural settlements along the border of the two municipalities. These roads are vital for promoting social and economic interactions, as well as ensuring access to essential services.

The settlements along the border of Ingquza Hill and Winnie Madikizela Mandela Municipalities share several social facilities, including schools, police stations, and health facilities. This shared infrastructure fosters a sense of community and cooperation between the municipalities, ensuring that residents have access to necessary services regardless of administrative boundaries.

The land uses in the border region include built-up areas in the form of rural settlements, cultivated land used for both commercial and subsistence agriculture, forest land, and grassland. These diverse land uses reflect the economic activities and natural resources that are essential to the livelihoods of the local communities. By considering these factors, spatial planning can address the unique challenges and opportunities presented by the interconnected nature of Ingquza Hill and Winnie Madikizela Mandela Municipalities, promoting sustainable development and environmental conservation for the benefit of their residents.



MAP 14: WMMLM & IHLM ENVIRONMENTAL LINKAGES

WINNIE MADIKIZELA-MANDELA LOCAL MUNICIPALITY

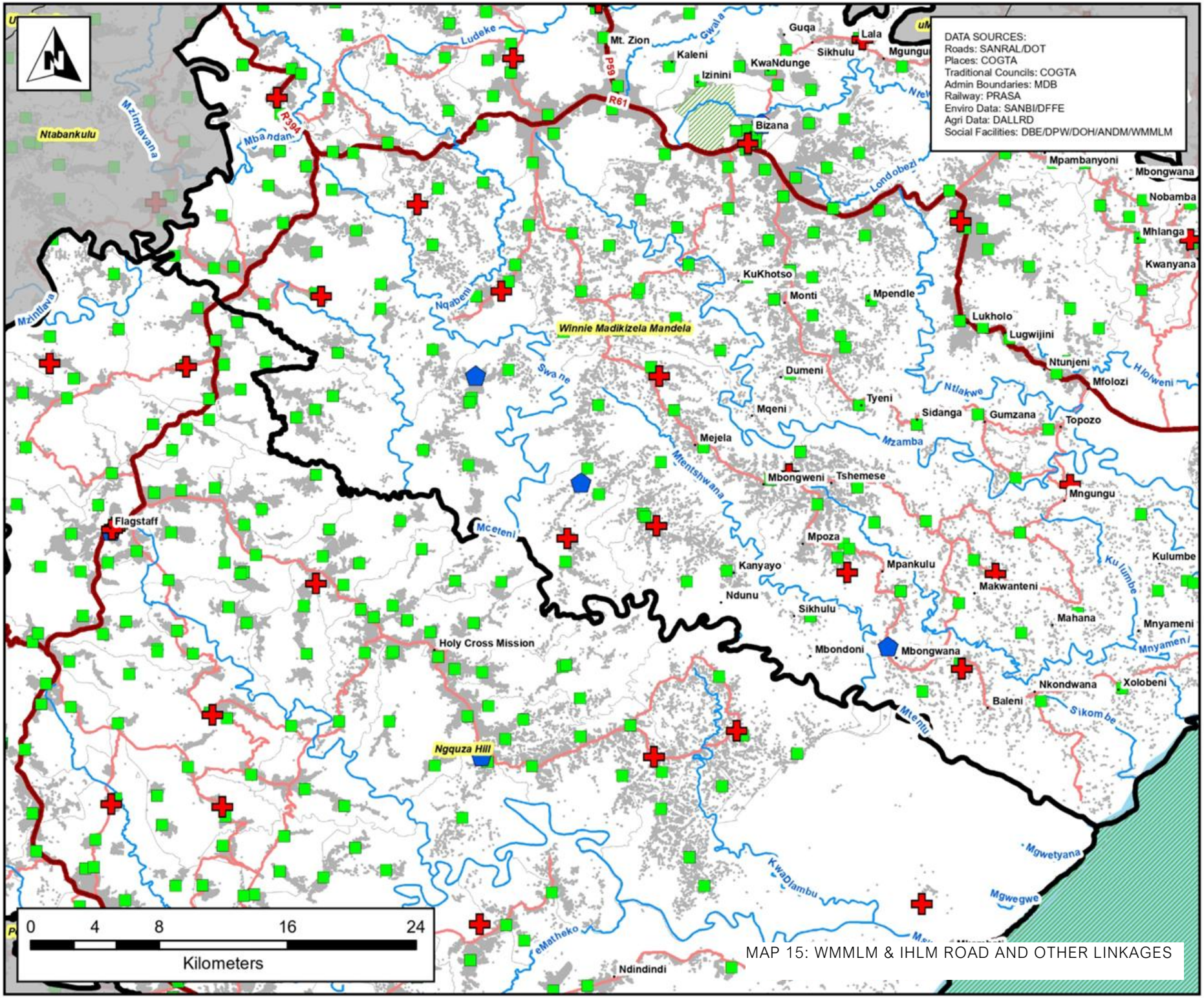
WINNIE MADIKIZELA MANDELA SPATIAL DEVELOPMENT FRAMEWORK

Cross Border Analysis
Ingquza Hill LM
Environmental Linkages

Legend

- NFEPA River
- Railway
- National Road
- Provincial Road
- Access Road
- Cadastral
- Protected_Area
- Settlement
- CBA 1
- CBA 2
- CBA 3

INGUQUKO DEVELOPMENT PLANNING AND PROJECTS



MAP 15: WMMLM & IHLM ROAD AND OTHER LINKAGES

WINNIE MADIKIZELA-MANDELA LOCAL MUNICIPALITY

WINNIE MADIKIZELA MANDELA SPATIAL DEVELOPMENT FRAMEWORK

Cross Border Analysis
Ingquza Hill LM
Social Facilities

Legend

- Health Facility
- Police Station
- School
- NFEPA River
- Railway
- National Road
- Provincial Road
- Access Road
- Cadastral
- Protected_Area
- Settlement
- Dam

INGUQUKO DEVELOPMENT PLANNING AND PROJECTS

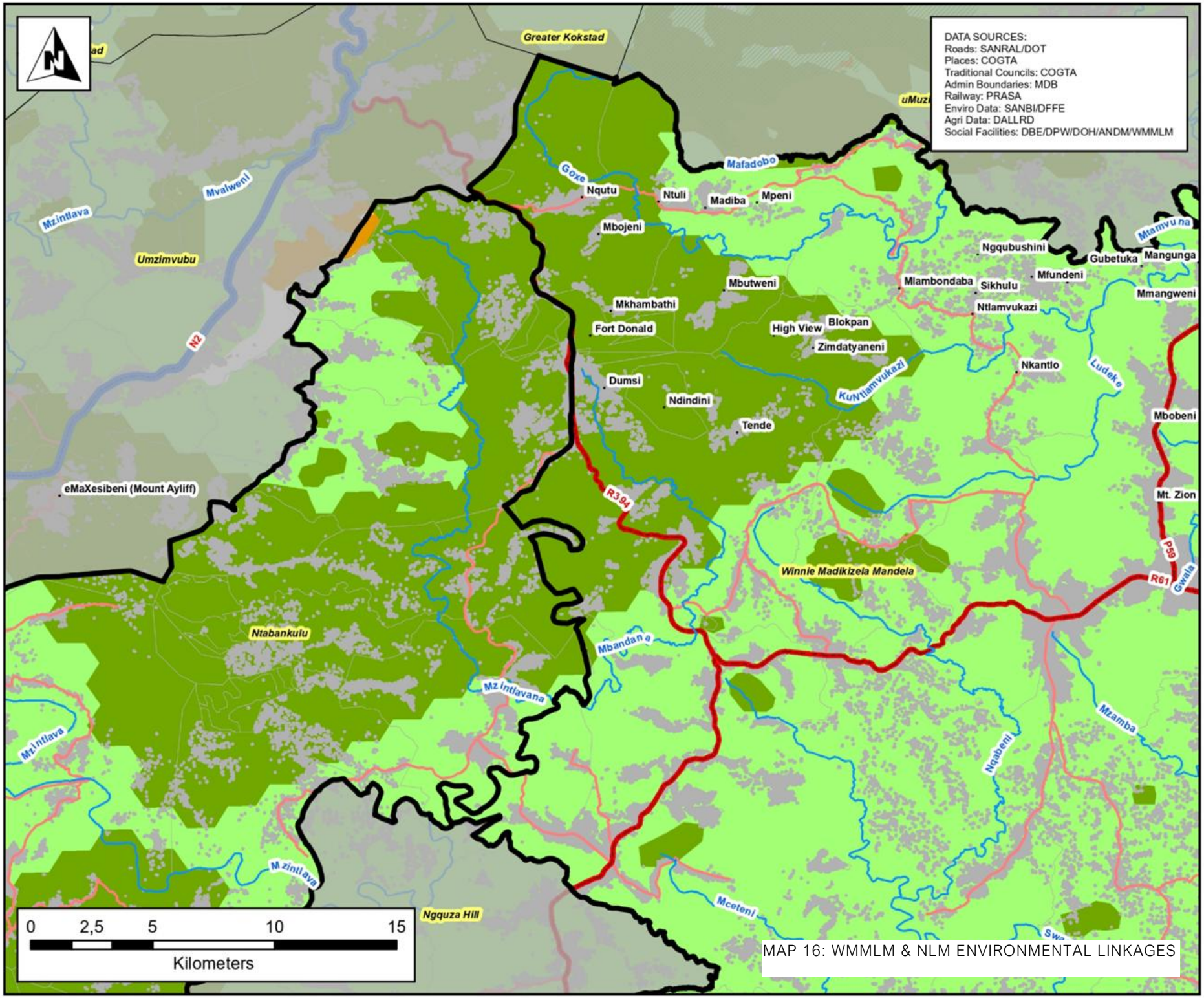
1.5.5. NTABANKULU LOCAL MUNICIPALITY

Ntabankulu Local Municipality is a Category B municipality located within the Alfred Nzo District in the Eastern Cape Province. It is the smallest of the four local municipalities in the district, comprising 13% of its geographical area. Formerly part of the OR Tambo District Municipality, Ntabankulu was transferred to the Alfred Nzo District Municipality following the 2011 municipal election.

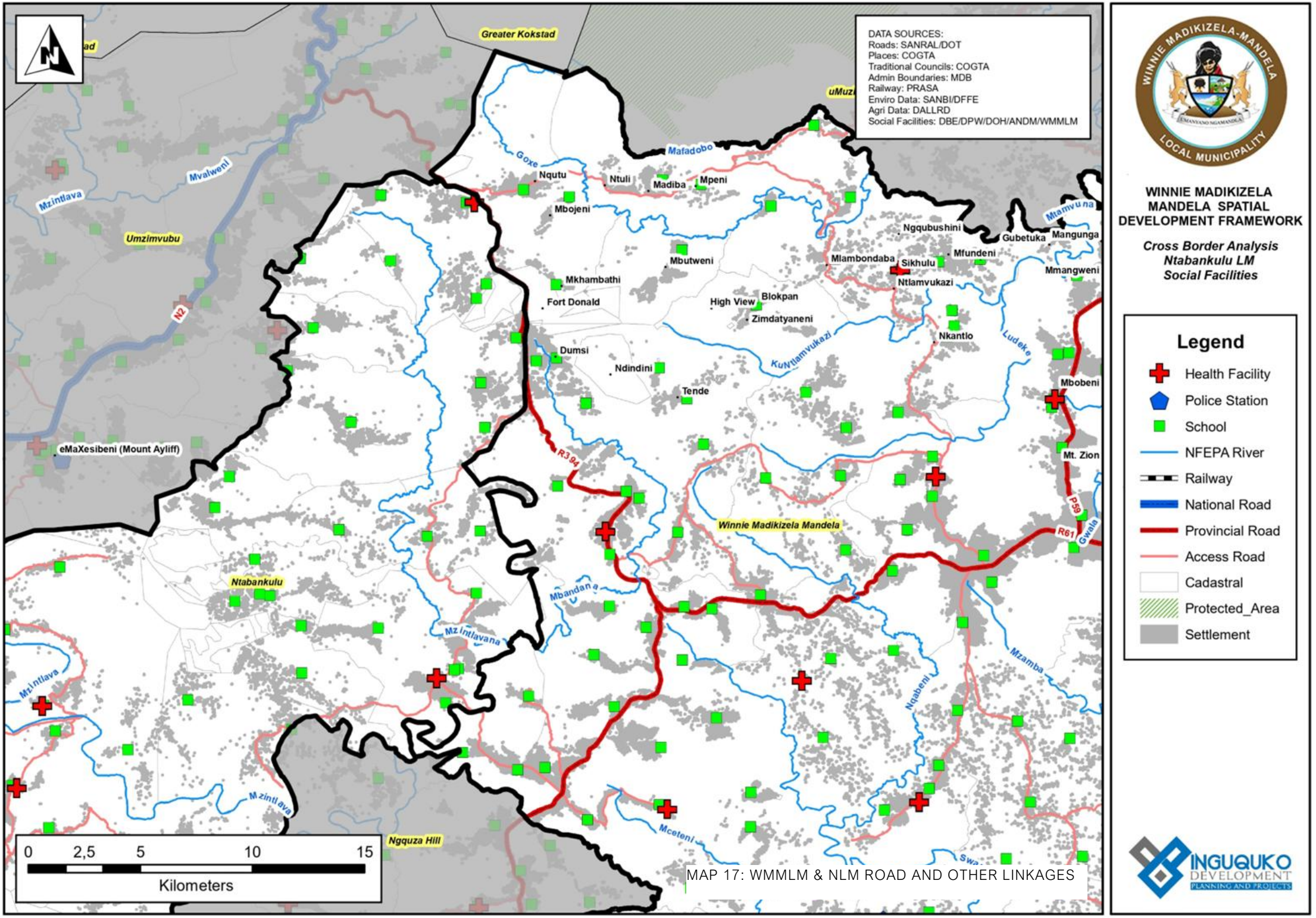
Ntabankulu Local Municipality is situated on the north-western border of Winnie Madikizela Mandela Local Municipality (WMMLM). The two municipalities are connected by the R394 provincial road, which serves as a major transportation route linking directly to the N2 national road. This road is vital for facilitating the movement of goods, services, and people between the municipalities, enhancing economic and social interactions.

Environmental linkages between Ntabankulu and WMMLM include two significant rivers, the Mbandana and Mzintlavana rivers, both identified as National Freshwater Ecosystem Priority Areas (NFEPA). These rivers provide essential water resources for the bordering settlements and play a crucial role in maintaining ecological balance and supporting local biodiversity.

The land uses in the border region are diverse, encompassing several rural settlements such as Fort Donald, Mkhambathini, Dumsi, and Nquthu. These settlements rely on the local environment for their livelihoods and access to essential services. In addition to rural settlements, the land is utilized for various purposes, including grassland, forest land, and cultivated land. Grasslands and forested areas contribute to the region's natural landscape, providing habitat for wildlife and resources such as timber and grazing areas. Cultivated land supports both commercial and subsistence agriculture, playing a significant role in the local economy and food security.



MAP 16: WMMLM & NLM ENVIRONMENTAL LINKAGES



MAP 17: WMMLM & NLM ROAD AND OTHER LINKAGES

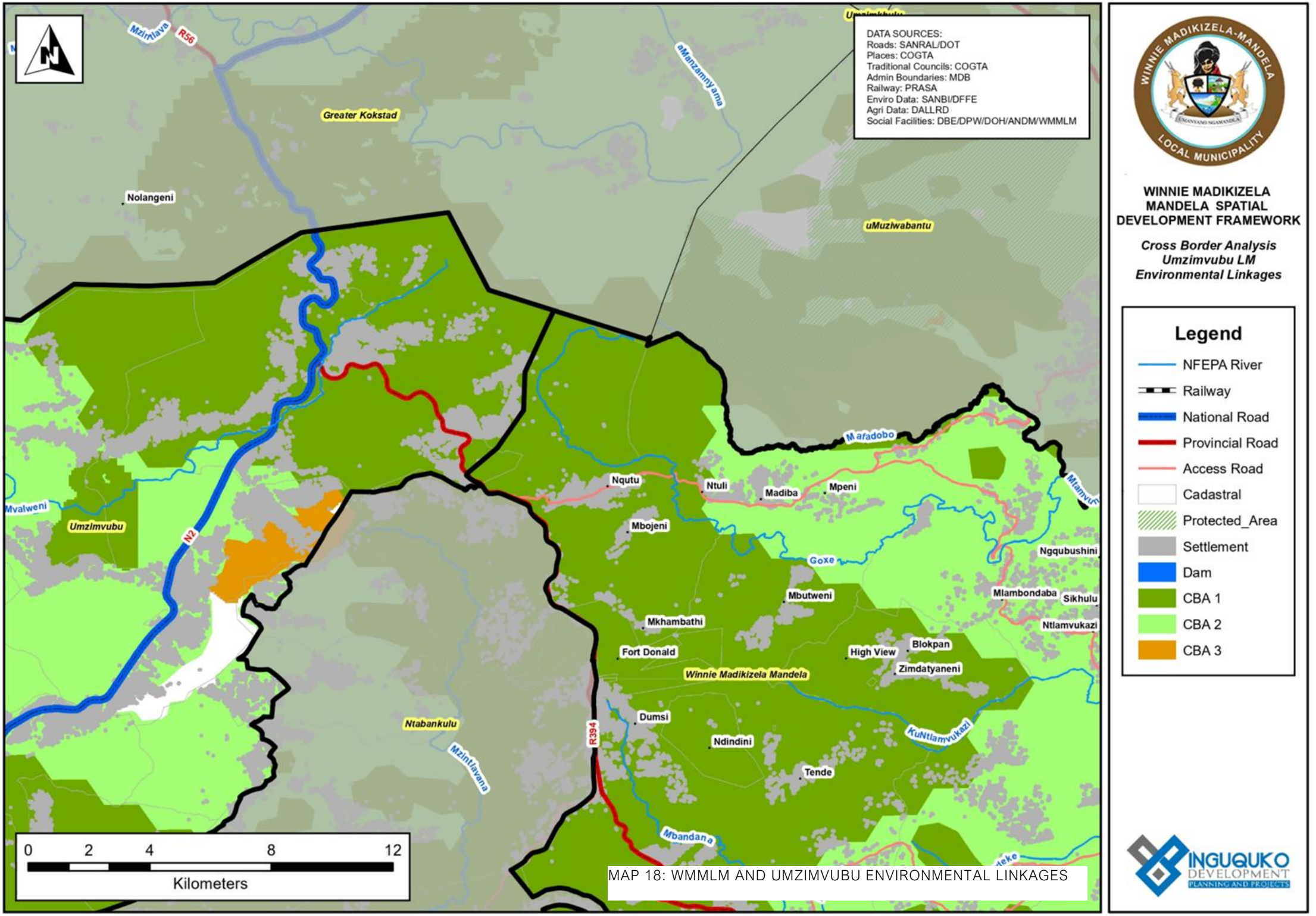
1.5.6. UMZIMVUBU LOCAL MUNICIPALITY

Umzimvubu Local Municipality is a Category B municipality located within the Alfred Nzo District in the north-western part of the Eastern Cape Province. It borders KwaZulu-Natal to the north, the OR Tambo District Municipality to the south and east, and Matatiele to the west. As one of four municipalities in the district, it is predominantly rural with most of the population residing in rural areas. The landscape is largely characterized by dispersed low-density traditional settlements, except for the areas around the two urban centres. Over the years, there has been significant migration towards these towns, driven by residents' preference to live close to transport routes and urban centres.

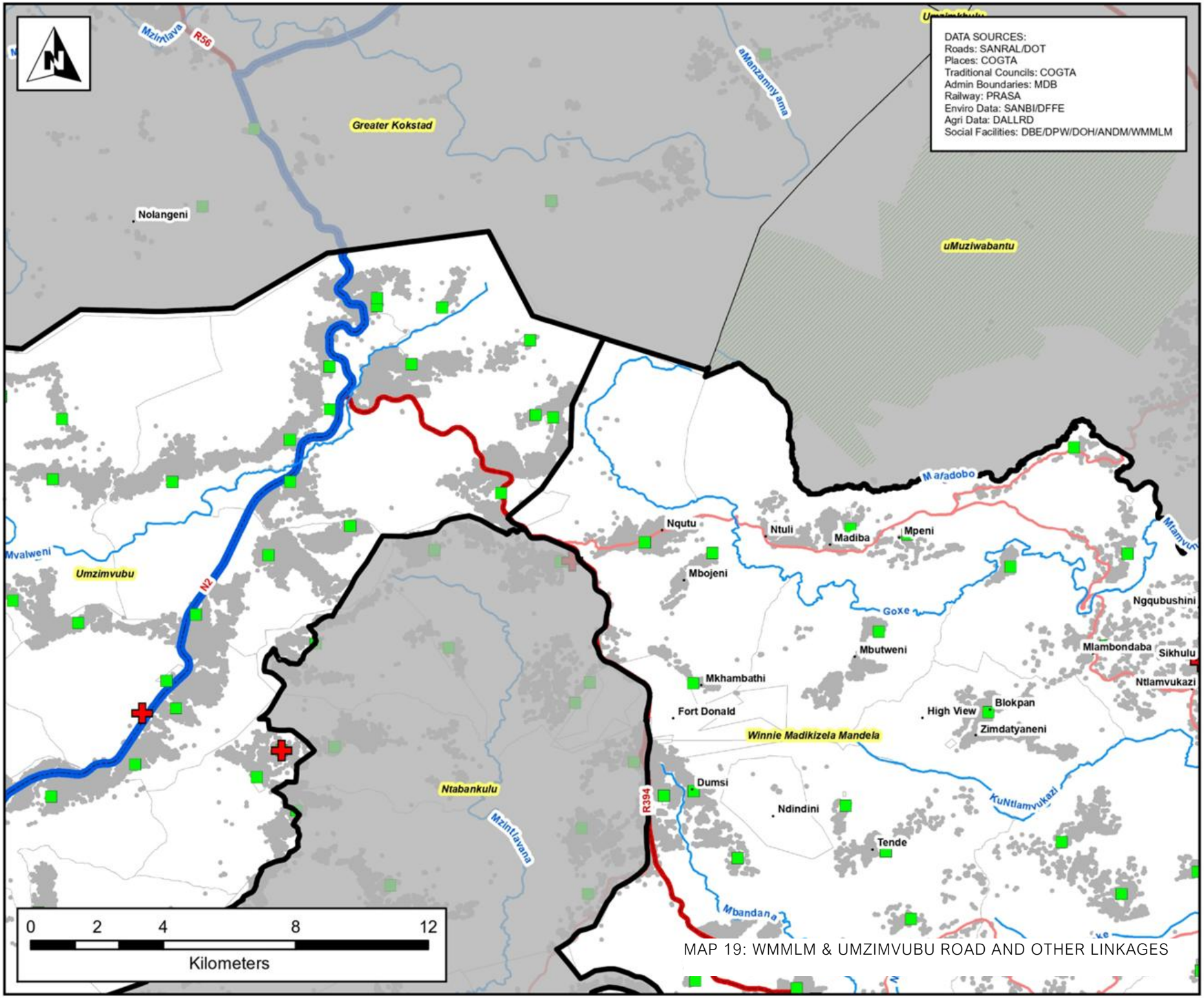
The Umzimvubu Municipality is located on the northern border of Winnie Madikizela Mandela Local Municipality (WMMLM) and is connected by the R394 provincial road. This important transportation route branches off from the N2 in Umzimvubu and links up with the R61 in WMMLM, facilitating both freight and passenger transportation. The R394 is vital for the efficient movement of goods and people between the two municipalities, supporting economic activities and access to services.

The border region between Umzimvubu and WMMLM is highly sensitive from a biodiversity standpoint, with critical biodiversity areas extending throughout the entire region. These areas are home to diverse ecosystems and species, necessitating careful management and conservation efforts to preserve their ecological integrity.

Land uses in the border region are varied and include built-up areas in the form of rural settlements such as those found along the R394. These settlements are essential for providing housing and community services to the local population. Additionally, the region features forest land, which plays a crucial role in maintaining ecological balance, providing habitat for wildlife, and supporting sustainable forestry practices. Grassland areas contribute to the region's natural landscape, offering grazing land for livestock and supporting biodiversity.



MAP 18: WMMLM AND UMZIMVUBU ENVIRONMENTAL LINKAGES



MAP 19: WMMLM & UMZIMVUBU ROAD AND OTHER LINKAGES

WINNIE MADIKIZELA MANDELA SPATIAL DEVELOPMENT FRAMEWORK

Cross Border Analysis
Umzimvubu LM
Social Facilities

Legend

- Health Facility
- Police Station
- School
- NFEPA River
- Railway
- National Road
- Provincial Road
- Access Road
- Cadastral
- Protected_Area
- Settlement
- Dam

INGUQUKO DEVELOPMENT PLANNING AND PROJECTS

1.5.7. IMPLICATIONS ON WMMLM SDF

The following implications can be drawn in relation to the wider environment that Winnie Madikizela Mandela Local Municipality exists within and around in:

- It boasts strong connectivity and linkages with neighbouring local municipalities through a well-developed road network, including the R61 and other provincial routes.
- A need to invest in small rural towns rehabilitation programme
- A continuum of densely populated rural settlements from Ray Nkonyeni, Ingquza Hill, Greater Kokstad, Umuziwabantu and Umzimvubu may eventually merge with the existing cross-border rural settlement network within the area.
- It encompasses several environmentally sensitive areas and sites, including protected conservation areas and other unprotected biodiversity management regions.
- Harmonisation of environmental corridors centred around the NFEPA rivers.
- Strengthening tourism / eco-tourism linkages centred around the Wild Coast
- Agricultural land management at a cross-border level

1.6. SETTLEMENT TYPOLOGIES

1.6.1. FORMAL URBAN SETTLEMENTS

Bizana town, the primary urban center in the Winnie Madikizela-Mandela municipality, functions as the administrative hub for the area. It encompasses various land uses, including residential, retail, commercial, service industry, civic facilities, and limited light industrial activities. Residential activity in Bizana is generally scattered and isolated, with the main residential suburb situated to the east of the town.

This suburb features low-density housing units with a height of two storeys. To the north of Bizana, there is a mix of informal settlements and low-cost housing, while the east also has low-cost housing, and the south of the town comprises low-density rural settlements. Bizana town notably lacks open spaces, public squares, recreational facilities, or social venues. The centrally located taxi rank is the only place where people gather for entertainment activities.

1.6.2. PERI-URBAN SETTLEMENTS

Mzamba is a settlement situated along the R61, bisected by the Mzamba River which flows into the Indian Ocean on the southern side of the municipality. It is located at the entry point of Winnie Madikizela-Mandela Municipality from KwaZulu-Natal. Due to its nature, Mzamba is designated as a secondary node, intended to be small, low-key, and emerging centres at major arterial route intersections or along these routes.

The node's strategic location at the entry point from KwaZulu-Natal and along a public transport route makes it significant. Mzamba comprises ten rural villages, with Ebenezer and Sea View experiencing development pressures. These villages feature mixed uses, particularly along the R61, necessitating controlled future development.

In Ebenezer, land uses include the Mzamba Police Station, AmaDiba clinic, Ebenezer Community Hall, Ebenezer Primary School, local shops, places of worship, an informal taxi rank, and residential accommodations like bed and breakfasts. In Sea View, existing land uses include a shopping complex with a supermarket, internet café, petrol filling station, brick making, and other small shops, along with a hardware store, sports field, places of worship, community hall, informal taxi rank, traditional court, and primary and secondary schools. The main tourist attraction of the municipality, the Wild Coast Sun, is located within this node and comprises a casino, golf course, estuary beaches, camp sites, hotel accommodations, and restaurants.

1.6.3. RURAL SETTLEMENTS

Rural settlements in the Winnie Madikizela-Mandela municipality are predominantly situated on Traditional Council and state-owned land. These settlement patterns reflect the area's general rural character, characterized by expansive, scattered settlements. The location of these settlements is influenced by historical factors and livelihood strategies such as access to arable land, reliable water sources, and grazing land. As these rural settlements grow and expand, access to public facilities like schools and clinics, public transportation routes, and bulk services are becoming increasingly important. Key features of rural settlements in the Winnie Madikizela-Mandela municipality include:

- Lack of spatial structure or spatial planning principles, resulting in scattered households with large gaps and unsystematic development with limited linkages between settlements.
- Land allocation is based on traditional land allocation systems, leading to varying site sizes for different land uses.
- Land use management relies on the memory of community members.

The nature of these rural settlements presents significant challenges for policymakers and service delivery agencies. Communities have expressed a need for services such as roads, water, and electricity. Although the government has made significant progress in this regard, the process has been expensive. The lack of spatial structure has led to inefficiencies and relatively high service delivery costs. Additionally, some households have settled on unsuitable land, including steep slopes, floodplains, areas with unfavourable geotechnical conditions, and wetlands. The key challenge is to direct the location of these settlements and manage their expansion effectively.

Mnyameni is presently classified as a third-order node, with a proposal in place for its potential upgrade to a second-order node. The area is set to undergo Phased Mnyameni Tourism Development, which will include luxury chalet facilities, a restaurant, dining and entertainment options, a mini-conference facility for up to 120 people, and boat accommodations for day and overnight trips. The existing illegal boat launching site has been identified for upgrading and legalization. Additionally, the node boasts an estuary with excellent fishing waters and a campsite next to the estuary, currently operated by the DEA.

These areas have been designated as nature tourism development zones, offering local residents in the study area opportunities to engage in the market as entrepreneurs or employees. Ecotourism developments in these areas are typically found in secluded locations and take the form of camps, small clusters, or specialized lodge facilities. Despite their rustic and secluded nature, these tourism developments would still provide a high standard of accommodation and service. Key areas include:

- **Mtentu Estuary**: This estuary serves as a nursery for marine species and offers opportunities for activities such as canoeing, exploring indigenous forests, and camping.
- **Sikombe Estuary**: Currently underutilized, Sikombe Estuary presents opportunities for canoeing. However, illegal cottages in close proximity to the estuary interfere with the marine habitat.

Proposed interventions for the identified third-order nodes include:

- Extending the Mkambati Nature Reserve and refurbishing the Mtentu tented camp.
- Redeveloping the Mzamba to Mtentu or Mtentu to Mzamba overnight hiking trails.
- Developing the Sikombe Campsite.
- Developing Sikombe Tourist Chalets.

1.7. SETTLEMENT HIERARCHY

The CSIR (Council for Scientific and Industrial Research) has developed a comprehensive settlement typology for South Africa, which categorizes settlements based on their characteristics and functions. Here are some of the key settlement types identified by the CSIR:

- **Metropolitan Areas**: These are large urban areas with high population densities and significant economic activities. They serve as major hubs for commerce, industry, and services.
- **Secondary Cities**: These are smaller urban areas that play a crucial role in regional economies. They provide essential services and facilities to surrounding areas and often serve as administrative centres.
- **Service Towns**: These towns provide a range of services and facilities to the surrounding rural areas. They typically offer healthcare, education, retail, and administrative functions.
- **Local Towns**: These are smaller towns that serve the local population with basic services and amenities. They often have a limited range of economic activities.
- **Rural Settlements**: These are areas with low population densities, primarily engaged in agricultural activities. They often lack access to basic services and infrastructure.
- **Informal Settlements**: These are unplanned and often unauthorized settlements that lack formal infrastructure and services. They are typically characterized by poor living conditions and limited access to basic amenities.
- **Mining Towns**: These towns are established around mining activities and are heavily dependent on the mining industry for their economic activities.
- **Tourism Nodes**: These are areas with significant tourism potential, offering various attractions and facilities for tourists. They play a vital role in the local economy by attracting visitors and generating revenue.

1.7.1. SERVICE TOWN

Bizana is identified as a service town which defined by the Council for Scientific and Industrial Research (CSIR) has a settlement that provides a range of services and facilities to the surrounding rural areas. These towns typically offer essential services such as healthcare, education, retail, and administrative functions. Service towns play a crucial role in supporting the local economy and improving the quality of life for residents in the surrounding rural areas by providing access to necessary services and amenities.

1.7.2. HIGH DENSITY RURAL SETTLEMENTS

High-density rural settlements are areas with concentrated populations in rural settings. These settlements often result from historical factors and livelihood strategies, such as access to arable land, water sources, and grazing land. They are characterized by a lack of formal spatial planning, leading to scattered households with large gaps between them and unsystematic development. These areas typically lack access to basic services and infrastructure, posing significant challenges for policymakers and service delivery agencies. These settlements include settlements surrounding the Bizana area including, but not limited to:

- KuKhotso
- Monti
- Mejela
- Kanleni
- Mount Zion
- Mbobeni
- Guqa
- Mpambanyoni

- Msikeni

1.7.3. DENSE RURAL SETTLEMENTS

According to the CSIR (Council for Scientific and Industrial Research), dense rural settlements are areas characterized by high population densities in rural settings. These settlements often result from historical factors and livelihood strategies, such as access to arable land, water sources, and grazing land. They are typically marked by a lack of formal spatial planning, leading to scattered households with large gaps between them and unsystematic development. These areas usually lack access to basic services and infrastructure, posing significant challenges for policymakers and service delivery agencies. These settlements include, but are not limited to:

- Mejela
- High View
- Mbojeni
- Tende
- Mkhambathini
- Nquthu
- Mfundeni

1.7.4. SPARSE RURAL SETTLEMENTS

Sparse rural settlements are areas characterized by low population densities and widely dispersed households. These settlements typically lack formal spatial planning and infrastructure, resulting in scattered development with large gaps between households. The primary economic activities in these areas are often agriculture and subsistence farming. Due to their dispersed nature, sparse rural settlements face significant challenges in accessing basic services and infrastructure, making service delivery costly and inefficient. These settlements include, but are not limited to:

- Mngungu
- Kulumbe
- Baleni
- Mbondoni
- Mfolozi

1.8. SETTLEMENT DENSITY

1.8.1. HIGH DENSITY SETTLEMENTS

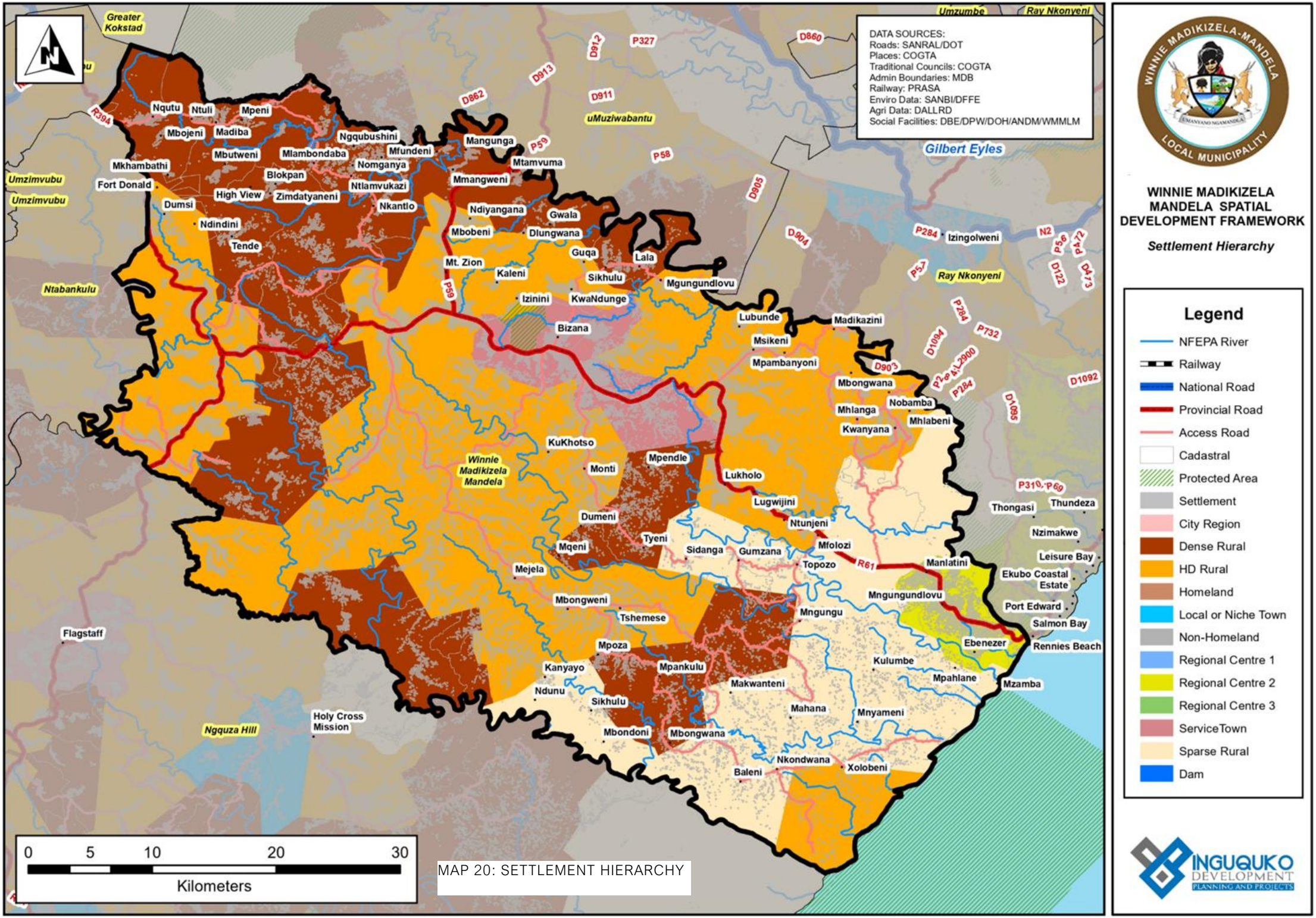
The high-density settlements are settlements identified as being more than 100 dwelling units per hectare. These are settlements located mainly along the road networks of the municipality. These settlements include Bizana town and surrounds, as well as other densely populated rural settlements.

1.8.2. MEDIUM DENSITY SETTLEMENTS

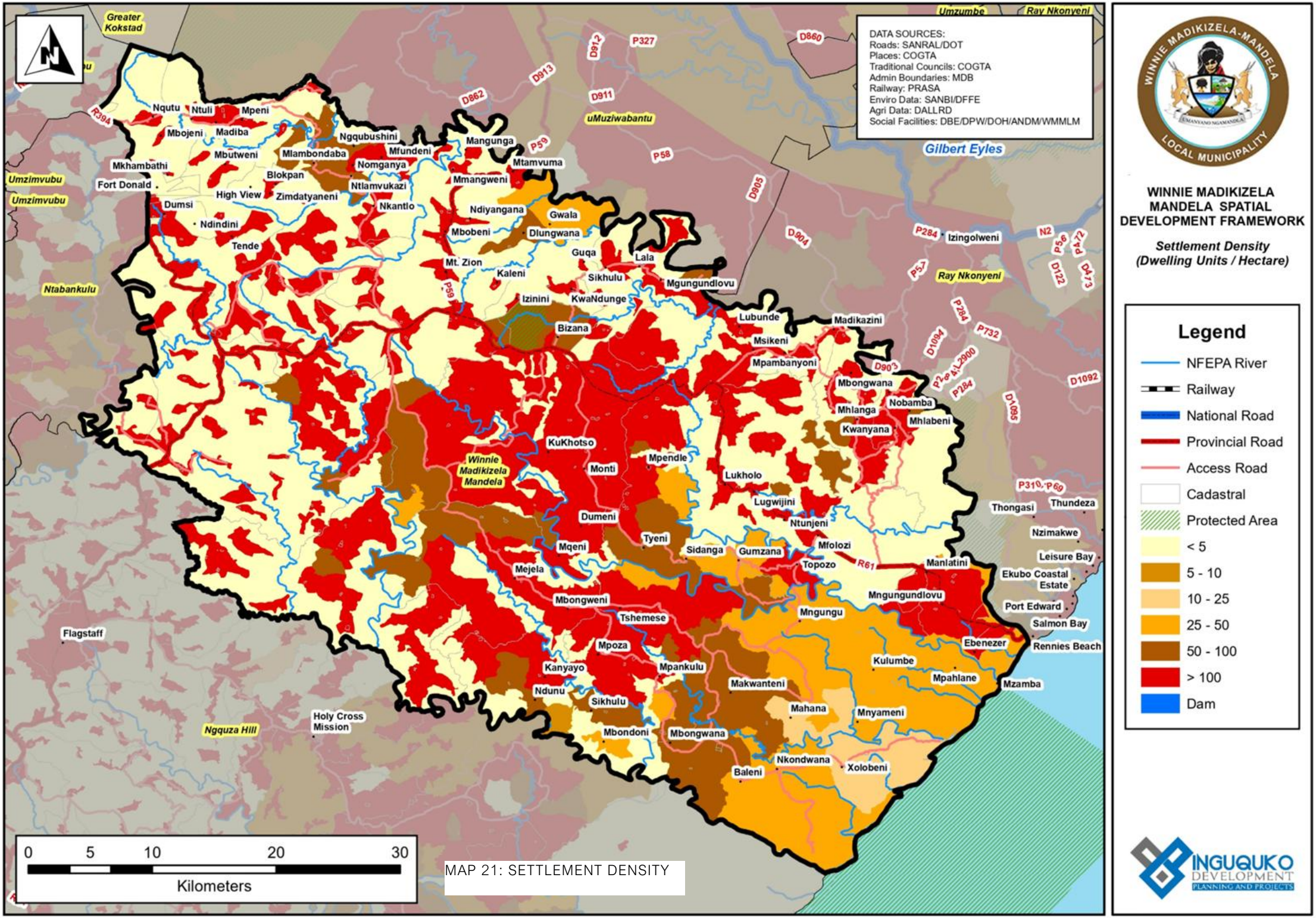
Medium density settlements are identified as being between 25-50 and 5-100 dwelling units per hectare. These are settlements mainly located in the south-eastern regions of the municipality and along the coast.

1.8.3. LOW DENSITY SETTLEMENTS

Low density settlements are identified as being less between 5-10 dwelling units per hectare and less than 5 dwelling units per hectare. These settlements are mainly located in the northern region of the municipality bordering Ntabankulu LM, uMuziwabantu LM, and Umzimvubu LM.



MAP 20: SETTLEMENT HIERARCHY


DATA SOURCES:
Roads: SANRAL/DOT
Places: COGTA
Traditional Councils: COGTA
Admin Boundaries: MDB
Railway: PRASA
Enviro Data: SANBI/DFFE
Agri Data: DALLRD
Social Facilities: DBE/DPW/DOH/ANDM/WMMLM
WINNIE MADIKIZELA MANDELA SPATIAL DEVELOPMENT FRAMEWORK
Settlement Density (Dwelling Units / Hectare)
Legend
NFEPA River
Railway
National Road
Provincial Road
Access Road
Cadastral
Protected Area
< 5
5 - 10
10 - 25
25 - 50
50 - 100
> 100
Dam
0 5 10 20 30
Kilometers
Greater Kokstad
Umzimvubu
Ntabankulu
Flagstaff
Ngquza Hill
Holy Cross Mission
Fort Donald
Gilbert Eyles
uMuziwabantu
Ray Nkonyeni
Umzumbe
Winnie Madikizela Mandela
Nqutu
Ntuli
Mpeni
Mbojeni
Madiba
Mbutweni
Mkhambathi
Blokpan
High View
Zimdatyaneni
Dumsi
Ndindini
Tende
Ngqubushini
Mlambondaba
Mfundeni
Nomganya
Ntlamvukazi
Nkantlo
Mangunga
Mtamvuma
Mmangweni
Ndiyangana
Mbobeni
Gwala
Dlungwana
Guqa
Lala
Mt. Zion
Kaleni
Sikhulu
Izinini
KwaNdunge
Mgungundlovu
Bizana
Lubunde
Madikazini
Msikeni
Mpambanyoni
Mbongwana
Nobamba
Mhlanga
Mhlabeni
Kwanyana
KuKhotso
Monti
Mpendle
Lukholo
Lugwijini
Ntunjeni
Dumeni
Tyeni
Mqeni
Sidanga
Gumzana
Mfolozi
Topozo
Manlatini
Mejela
Mbongweni
Tshemese
Mngungu
Mngungundlovu
Mpoza
Kanyayo
Mpankulu
Ndunu
Sikhulu
Makwanteni
Mahana
Mnyameni
Kulumbe
Mpahlane
Ebenezer
Mbondoni
Mbongwana
Nkondwana
Xolobeni
Baleni
Izingolweni
Thongasi
Thundeza
Nzimakwe
Leisure Bay
Ekubo Coastal Estate
Port Edward
Salmon Bay
Rennies Beach
Mzamba
R394
R61
P327
P58
P59
P284
P732
P310
P69
D862
D913
D911
D860
D905
D904
D1094
D1092
D1095
D122
D473
N2
MAP 21: SETTLEMENT DENSITY

1.9. BROAD LAND USE PATTERNS (LAND COVER ANALYSIS)

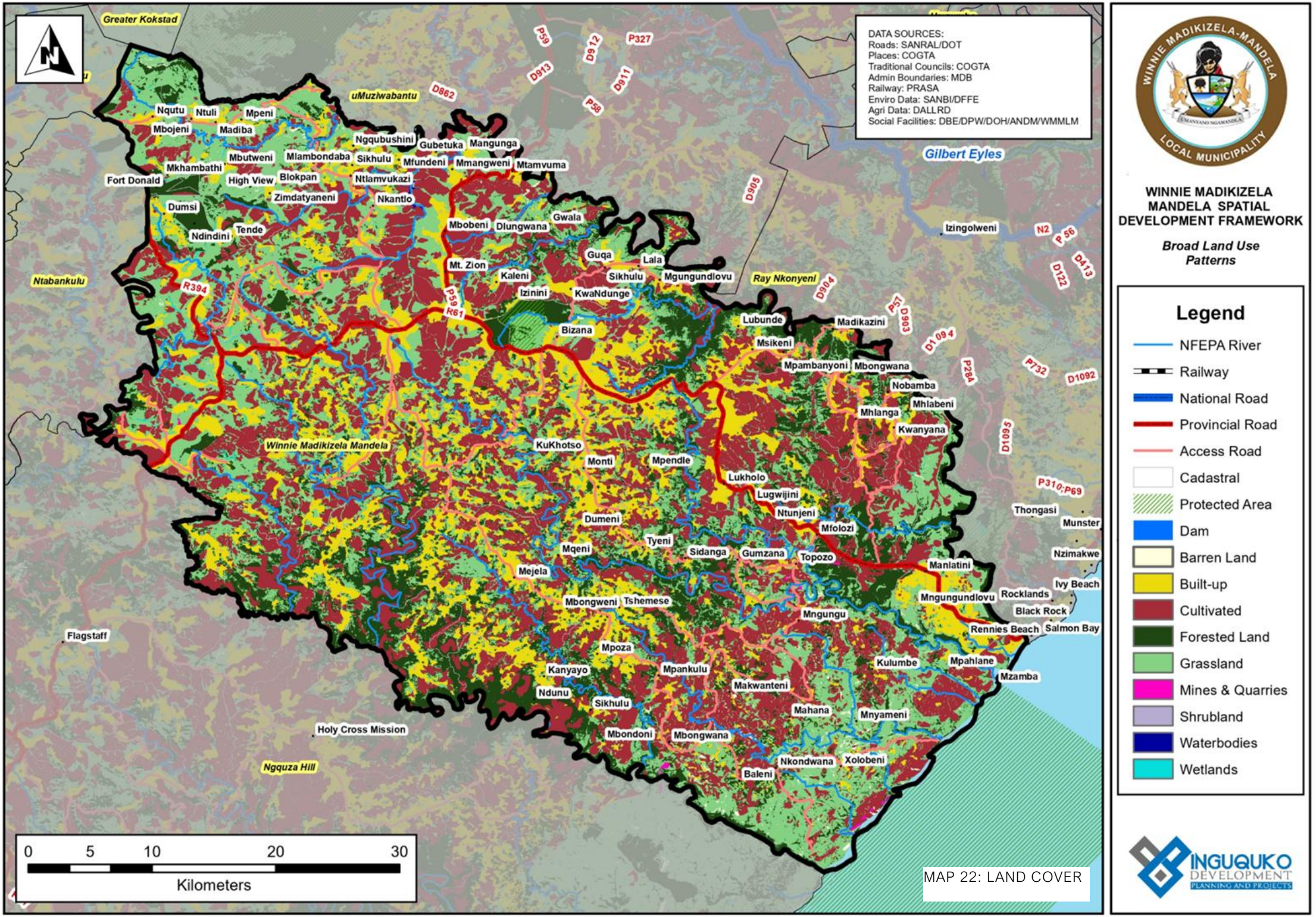
While land uses in the municipality vary from residential, commercial and industrial, from a regional standpoint, the broad land uses thereof comprise of the following:

Built up areas – These areas are defined as regions that have been developed with artificial structures. These areas include residential, commercial, industrial, and transport-related infrastructure. Built-up land is characterized by the presence of buildings, roads, and other man-made constructions that alter the natural landscape identified as being between 25-50 and 5-100 dwelling units per hectare. These are in the form of the urban settlements in and around Bizana town, as well as the densely and sparsely populated rural settlements and peri-urban settlements in the municipality.

Cultivated areas - cultivated areas are defined as regions where land is actively used for agricultural purposes. This includes areas dedicated to the cultivation of crops, orchards, vineyards, and other forms of commercial agriculture. These areas are characterized by human intervention and management, such as ploughing, planting, and harvesting, to produce food and other agricultural products. Although there is limited commercial agriculture in the municipality, subsistence agriculture is ubiquitous along most settlements

Forest land – These are areas defined as areas with natural or planted woody vegetation of any height greater than 2.5 meters, where the canopies cover more than 5% of the land area. This classification includes land that may be temporarily barren but shows evidence of recent tree cover. However, it excludes fynbos and karoo shrubland, as well as tree crops cultivated for the production of food or beverages, such as tea plantations, vineyards, and orchards of fruit and nut crop.

Grassland – These area areas dominated by grasses and other herbaceous vegetation, with few or no trees. These regions typically experience summer rainfall and have a range of elevations, from lowlands to high plateaus. Grasslands are important for biodiversity, providing habitat for various plant and animal species, and they play a crucial role in supporting agricultural activities such as grazing and crop production. These are found mainly along the coastal region of the municipality, as well as in the hinterland in the northern regions.

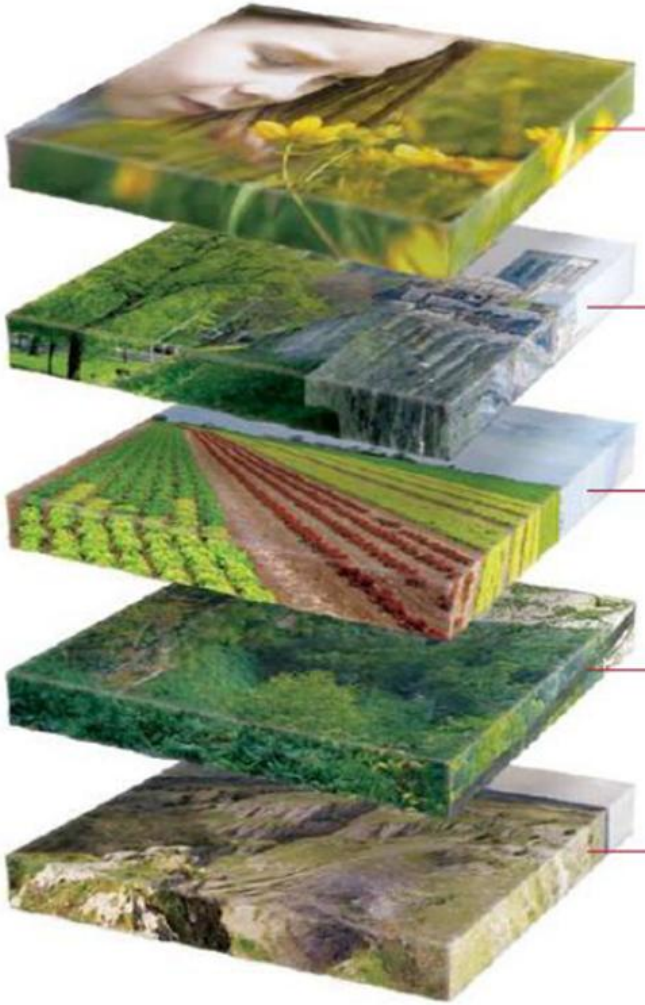


MAP 22: LAND COVER

What is Landscape?

Landscape is more than just 'the view'. It is about the relationship between people, place and nature. It is the ever-changing backdrop to our daily lives. It can mean a small patch of urban wasteland as much as a mountain range, and an urban park as much as a lowland plain.

Landscape results from the way that different components of our environment – both natural and cultural – interact together and are perceived by us. People value landscape for many different reasons. It is therefore important to understand what the landscape is like today, how it came to be like that and how it may change in the future.



Experience

Landscape is more than the sum of physical features that make up our environment. How we perceive the landscape can have an important influence on how we use or value its character and resources.

History

Virtually all landscapes in England have been shaped by human activity throughout history. It is therefore important to understand past patterns, the extent to which they have survived and how different stages in history have contributed to the character of today's landscape.

Land Use

Land use includes all of the various uses that people make of the landscape, such as settlement, farming and field enclosure, energy production and forestry. The character of the English landscape is particularly influenced by the present-day pattern of these features, as well as their historical legacy.

Wildlife

The variety of plants and animals in the English landscape (known as 'biodiversity') has been shaped over thousands of years by a complex set of social, historical and economic factors, all operating against the physical backdrop of the landscape itself. The types and abundance of wildlife can play a significant role in shaping the character - and in some cases the function - of each particular landscape.

Natural Form

Natural form includes geology, landform, river and drainage systems, soils and vegetation cover. The shape of the land, or landform, is often the main influence on the character of the landscape, especially in upland areas. Rivers and drainage systems also have an important part to play in shaping the landscape, while geology, soils and vegetation cover can determine the 'usefulness' of the land for agriculture, settlement and other functions.

1.10.1. LANDSCAPE

A landscape consists of the visible features of land, encompassing physical aspects such as mountains, hills, trees, water bodies, land cover, human-made structures, and weather conditions. The Winnie Madikizela Mandela Municipal Area does not boast an ambitious built environment or prominent landscape characteristics. However, there are a few natural attractions scattered throughout various parts of the municipal area. These are:

- Mnyameni Gorge
- Mnyameni River
- Mzamba Beach
- Wild Coast Sun

IMAGE 1: MNYAMENI GORGE

IMAGE 2: MNYAMENI GORGE

IMAGE 3: MNYAMENI RIVER

IMAGE 4: MNYAMENI HOME STAY B&B

IMAGE 5: MZAMBA BEACH

IMAGE 6: WIL COAST SUN

1.11. LAND LEGAL ASSESSMENT

Landownership in the reflects a large proportion of the municipality being under private ownership, with other parcels being owned by state-owned enterprises, the state (provincial, and national government), and the municipality.

1.12. LAND REFORM

A number of erven in the town are subject to land claims under Section 11 (7) (A) of the Restitution of Land Rights Act (Act 22 of 1994 – as amended). According to this legislation, no person may sell, lease, donate, subdivide, or develop land that is the subject of a land claim. This restriction is currently hindering much-needed development within the town. Consequently, it is crucial to resolve outstanding land claims promptly, or, in cases where land is required for essential facilities and services, for the commissioner to grant permission for such development applications to proceed. The Department of Rural Development and Land Reform, along with Ntshamathe, has appointed a service provider to survey and register land portions to finalize the land claims process.

Various individuals, groups, and communities have lodged restitution claims for different portions of land within the municipal area. The nature of these claims varies, with most being community claims involving large tracts of land. Some of these land claims fall within the Integrated Sustainable Rural Development Program (ISRDP) nodal points and include the following types:

- Betterment claims
- Commonage claims
- Forestry claims
- Conservation claims
- Sugar cane claims

1.12.1. UNRESOLVED LAND CLAIMS

While there are no new resolved land claims, there remain issues between communities and the Community Property Association (CPA), which hinder development and forward planning. These unresolved issues are delaying the primary objective of land restitution, which is to develop the community. Currently, only the Izinini CPA is fully functional and maintains a positive relationship with its community.

1.12.2. RESOLVED LAND CLAIMS

Below are all the resolved land claims in the municipality:

- North Pondoland Community Claim (Sugar Estate)
  - Mgungundlovu/Kimbili Wild Coast
  - Izinini
  - Ntshamathe

TABLE 1: URBAN AND RURAL LAND RESTITUTION CLAIMS

PROJECT	REFERENCE	STATUS	LOCATION
Mhlanga Community/ Chief Mandlenkosi Sontsele	6/2/2/D/967/0/0/12	Finalization	Mhlanga Section A locality no. 13 at Ntshamathe A/A in Bizana
Ndabakhe Mnisi/Ncura Community	6/2/2/D/974/0/0/7	S 42D	Ncura, Bukweni AA
Vuyani Mabude	6/2/2/D/967/0/0/22	Research	Esikhumbeni A/A
Nkosiphendule Wiseman Mqhaka/Nomlacu Community	6/2/2/D/967/0/0/23	Research	Nomlacu Section A
Makhaola Bolofo	6/2/2/D/967/0/0/1		Lot 161
Peter Pretorius	6/2/2/D/967/0/0/2	Research	Mngungu Trading store
Mgungundlovu Community	6/2/2/D/967/0/0/3	Court Referral	Farm 1 - D.T.
Zeblon Mhlongo	6/2/2/D/967/0/0/14		Mgungundlovu No. 24
Gretta Pholo	6/2/2/D/967/0/0/16	Research	Ntshangese A/A Dumsi locality
Pieter Johannes Christian Pretorius	6/2/3/D/967/2108/195/2		Erf 93; Erf 94 and Mngungu Trading site in Madiba AA
Belina Gasa	6/2/2/D/967/0/0/21	Research	Trust land - Mfolozi Area
Etyeni Community	6/2/2/D/967/0/0/20		Etyeni Location 19
Muziwandile Tobo	6/2/2/D/967/0/0/19	Research	Mzamba Sikelweni A/A
Willie Smith	6/2/2/D/967/0/0/18	Court Referral	Umngungundlovu A/A Fram D Location 24
Herbert Tshutsha	6/2/2/D/967/0/0/17	Research	Lorolweni 124 Amadiba A/A
Nomlacu Community	6/2/2/D/967/0/0/15	Research	Nomlacu Section A
Mahlubandile Msalela	6/2/2/D/967/0/0/13	Verification	Unspecified Land
Esikhumbeni Community	6/2/2/D/967/0/0/7	S 42D	Unspecified Land
Mhlanga Community	6/2/2/D/967/0/0/8	Finalization	Ntshamate Loc 13
Mzamba Community	6/2/2/D/967/0/0/10	S 42D	Sikhumbeni Admin
Winfred Sogoni	6/2/2/D/967/0/0/9	S (6) (2) B	Amantshangase Location No. 25
Zolile H Sikotoyi	6/2/2/D/967/0/0/11	Verification	Unspecified Land

Source: WMMLM Integrated Development Plan, 2024/25

1.13. LAND USE MANAGEMENT

The WMMLM is subject to a land use scheme which has been amended in 2021 in terms of the Spatial Planning and Land Use Management Act. 2013 (Act 16 of 2013). The LUS functions as a development control planning tool and regulates land use. The current scheme covers all the urban areas. It is unclear when the municipality will commence the process of a wall-to-wall scheme. The introduction of the scheme within the entire municipal area should:

- Involve the participation of local communities in Winnie Madikizela Mandela Local Municipality (WMMLM), particularly traditional councils and other structures responsible for spatial planning.
- Include the development of maps, systems, and procedures for effective decision-making to guide traditional councils in the execution of this function.

1.14. TRANSPORTATION NETWORK

The municipality is responsible for constructing, maintaining, and upgrading local access roads and stormwater infrastructure. Other roads fall under the jurisdiction of the Provincial Department of Transport and the South African National Roads Agency Limited (SANRAL). The Regional Road (R61) enhances accessibility to the Winnie Madikizela-Mandela Local Municipality by linking the Western Cape and KwaZulu-Natal. Throughout WMMLM, the predominant road surface type is gravel. Local gravel access roads that connect district roads with various rural villages are generally in fair to poor condition.

1.14.1. REGIONAL ROAD NETWORK

The regional road network within the Winnie Madikizela-Mandela Municipality (WMMLM) is vital for ensuring connectivity and accessibility to key economic nodes in the surrounding region. A major transportation artery is the Regional Road (R61), which links the municipality to the Western Cape and KwaZulu-Natal, thereby enhancing the flow of goods and services. This road is crucial for economic activities as it provides access to larger markets and facilitates trade. Additionally, the network of district and local gravel roads, while in varying conditions, plays a significant role in connecting rural villages to the main transportation routes. These roads are essential for the mobility of residents and the transportation of agricultural products to urban centres. Overall, the regional road network in WMMLM serves as a lifeline for the municipality's economic development and integration with the broader regional economy.

1.15. NON-MOTORISED TRANSPORT INFRASTRUCTURE

Non-Motorised Transport (NMT) encompasses all forms of transport that rely on human power, such as walking, cycling, animal-powered transport, skates, skateboards, push scooters, hand carts, and wheelchairs. NMT is anticipated to play a crucial role in delivering affordable, sustainable, and environmentally friendly transportation systems in both developing and developed countries. For a significant portion of the population, particularly in rural and low-income areas, NMT is the sole mode of transport available to access employment, schools, service centres, and commercial nodes.

SOCIOECONOMIC ANALYSIS

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4. SOCIOECONOMIC ANALYSIS

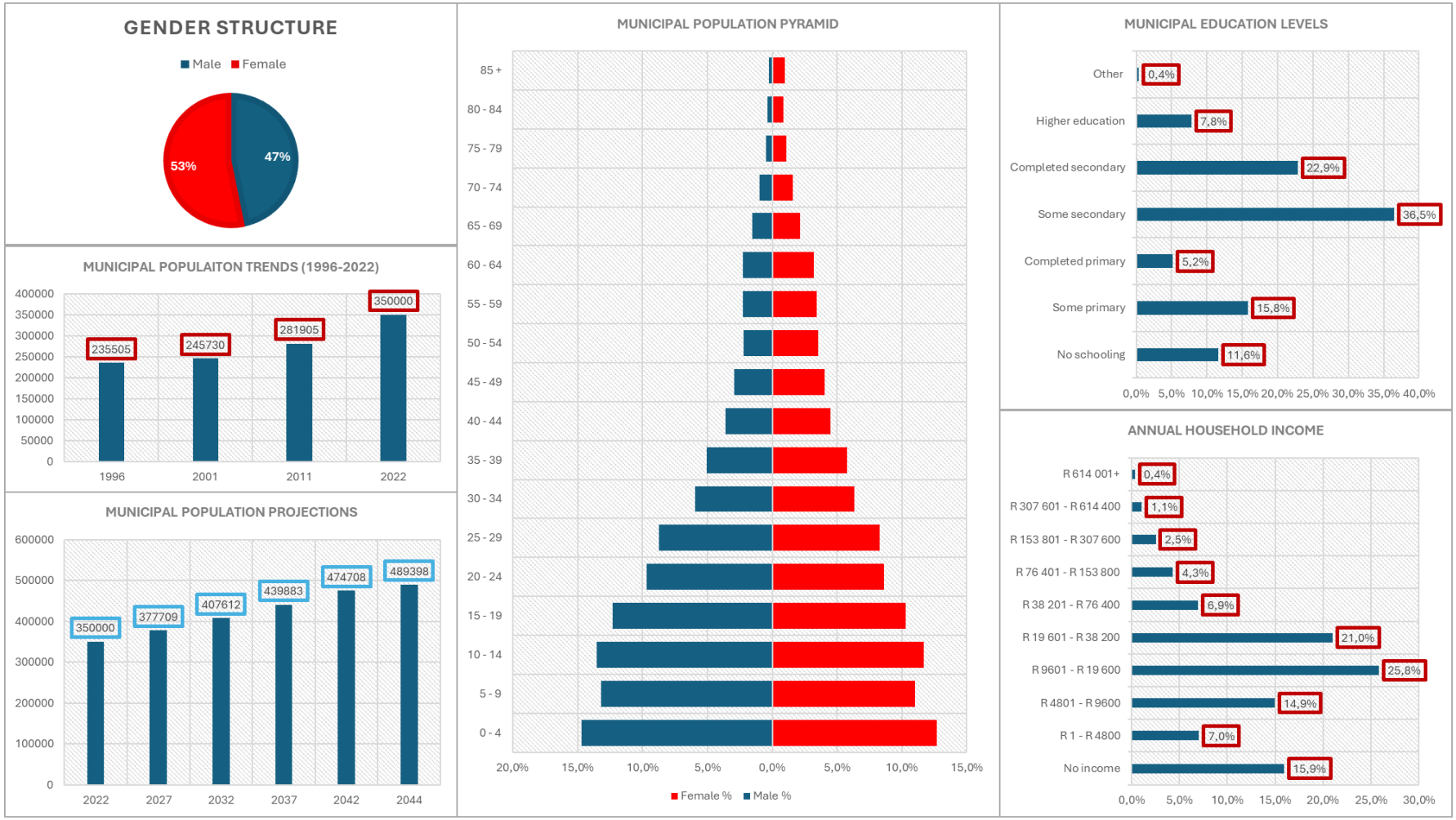
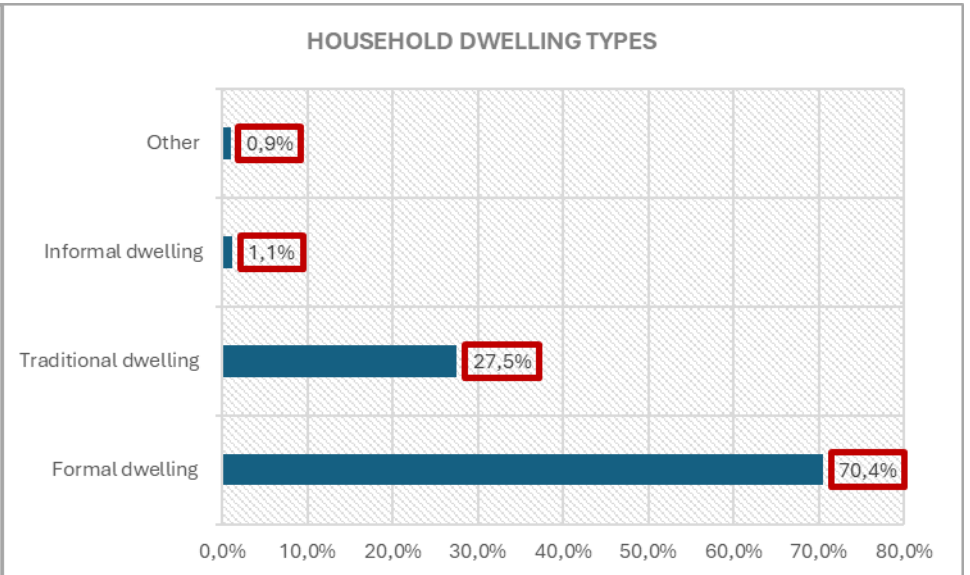
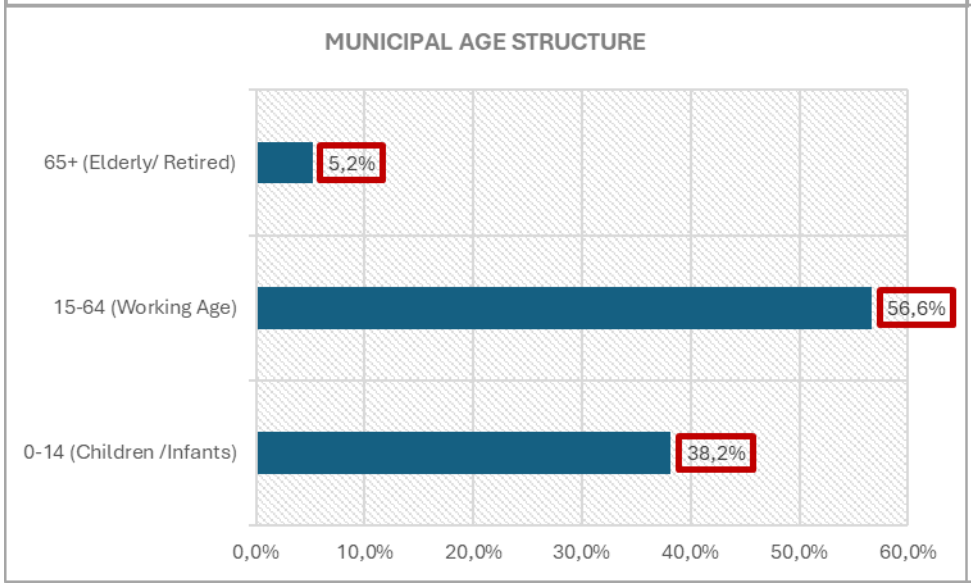


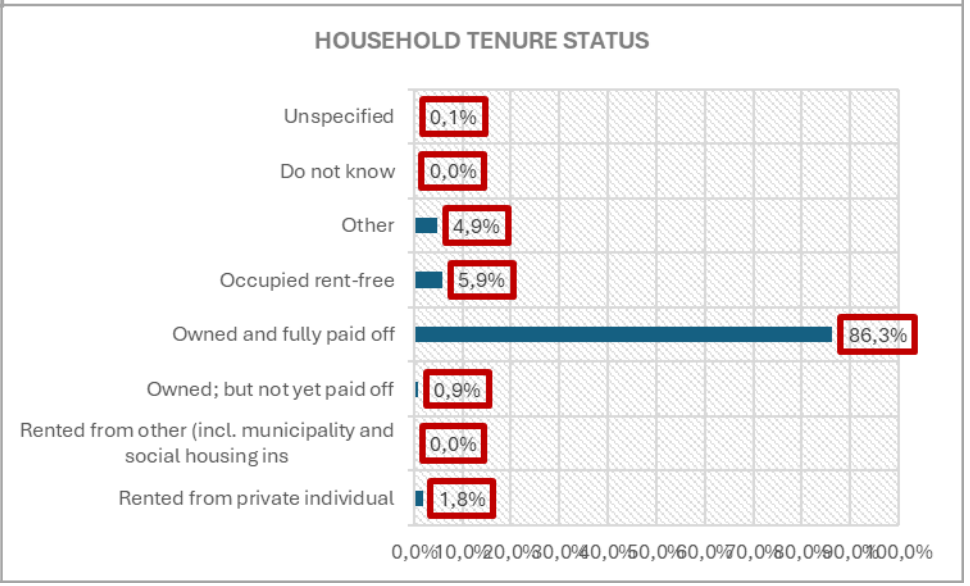
FIGURE 6: MUNICIPAL SOCIOECONOMIC AND DEMOGRAPHIC PROFILE

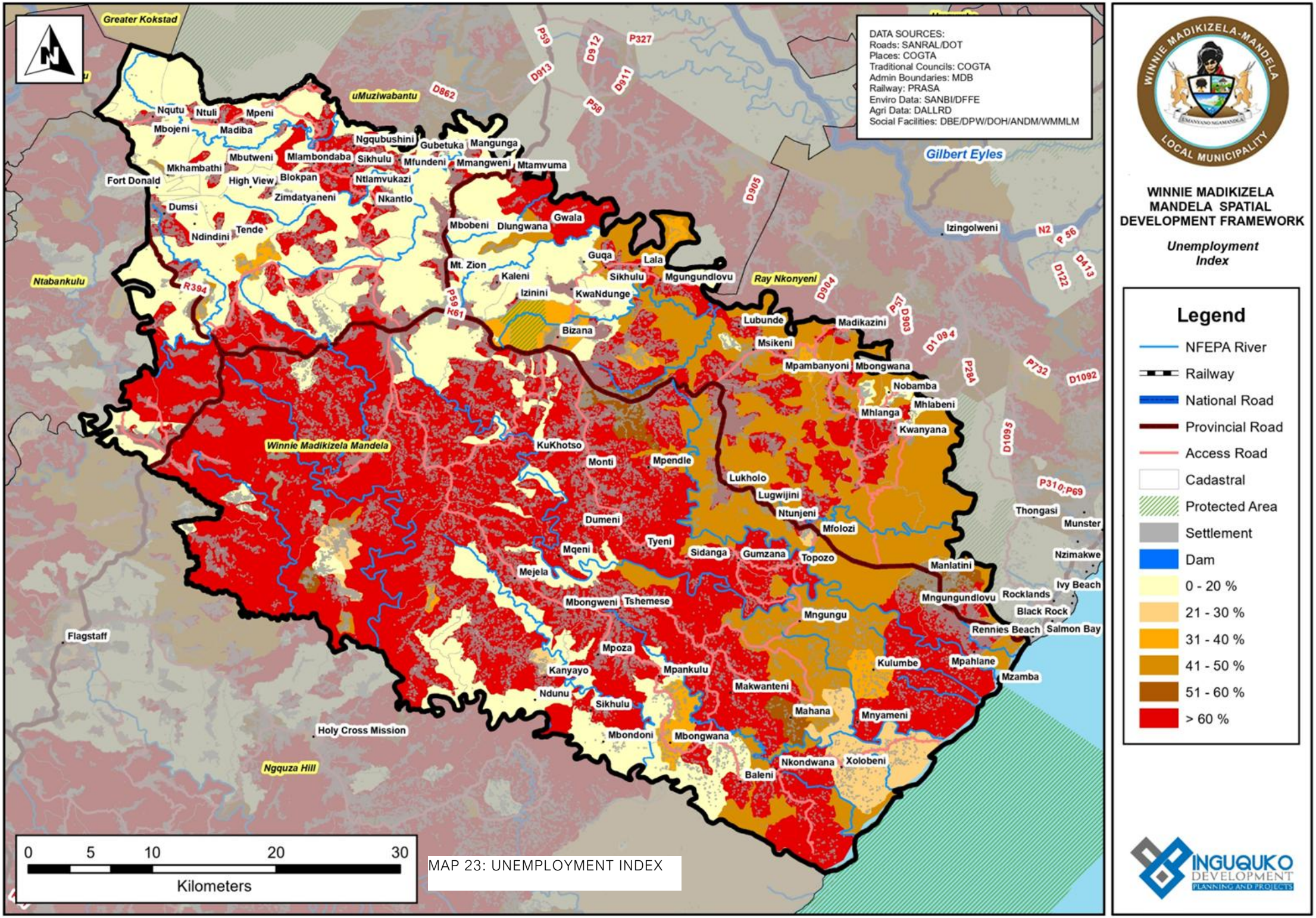
Source: Census 2022 & 2011

Unemployment Rate	45,96%
Labour force participation rate	27,95%
Labour absorption rate	15,07%

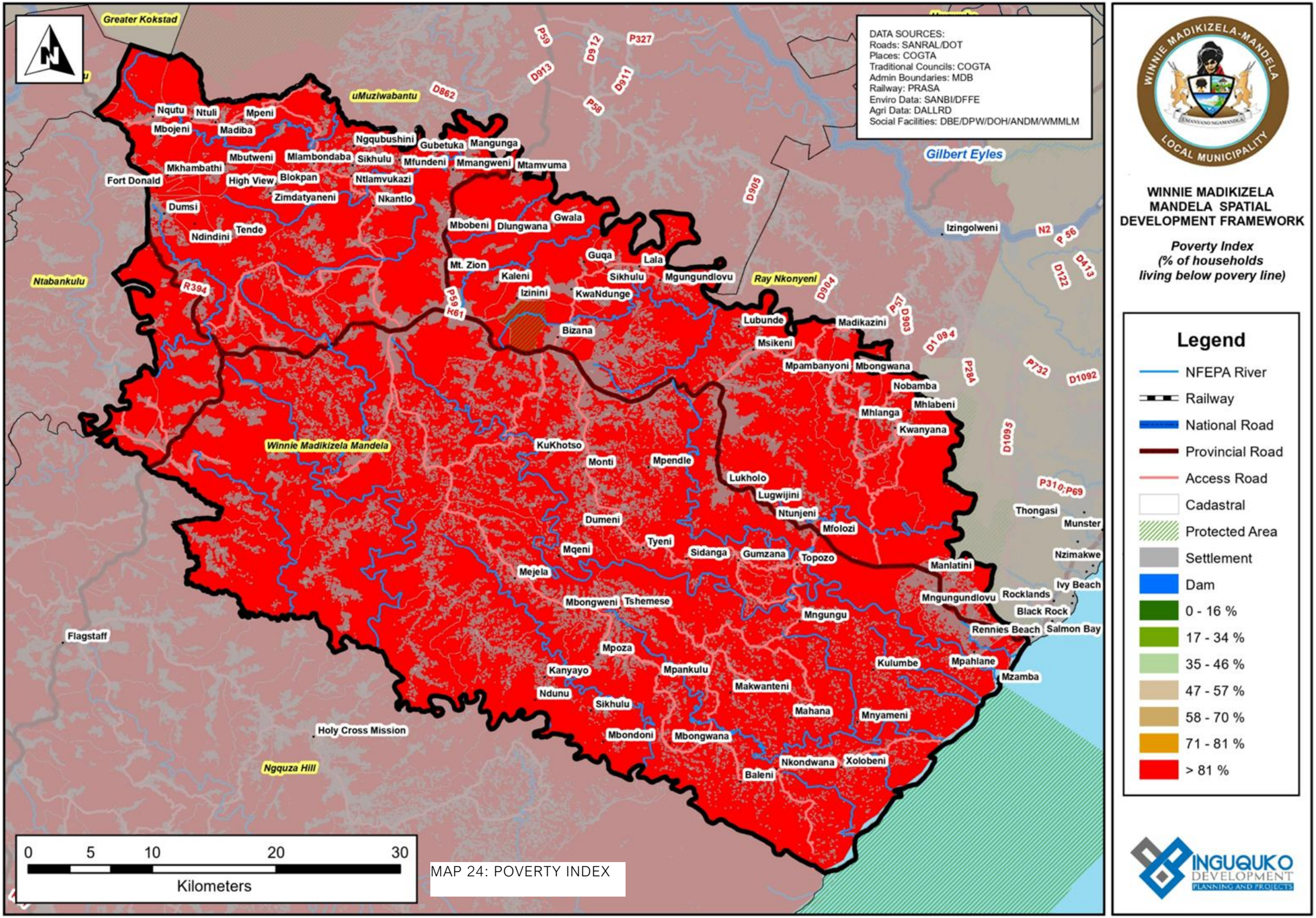








MAP 23: UNEMPLOYMENT INDEX



MAP 24: POVERTY INDEX

The above figure provides a comprehensive overview of demographic and socio-economic statistics for Winnie Madikizela Mandela Local Municipality and offers valuable insights for spatial planning. Firstly, the Gender Structure indicates a population with 53% females and 47% males. This gender imbalance suggests the need for targeted social services, healthcare, childcare facilities, and employment opportunities tailored to women. Secondly, the Municipal Population Trends (1996-2022) reveal a steady increase in population from 235,005 in 1996 to 350,000 in 2022. This growth necessitates expanded infrastructure, housing, and public services to accommodate the increasing population, and urban planning must address these demands to prevent overcrowding. The Municipal Population Projections (2022-2044) show continued population growth, reaching 483,208 by 2044, highlighting the need for long-term planning in transportation, healthcare, education, and housing to support the growing population.

The Municipal Population Pyramid shows a youthful population, with a significant percentage under the age of 30. This demographic trend implies a future demand for educational facilities, job creation, and recreational amenities, necessitating the SDF to prioritize youth development programs and create opportunities for young people. The Municipal Education Levels indicate that 36.5% of the population has some secondary education, while only 2.8% have higher education. This suggests a need for improved access to higher education and vocational training to enhance the workforce's skill set, urging the SDF to include strategies to improve educational infrastructure. Finally, the Annual Household Income distribution reveals a significant portion of the population earning between R1 - R4800 (15.9%) and R4801 - R9600 (14.9%), highlighting the prevalence of low-income households. This necessitates policies focused on poverty alleviation, affordable housing, and economic development.

Furthermore, figure 2 provides insights into employment status, household dwelling types, municipal age structure, and household tenure status.

- Employment Status: The chart reveals that 49.4% of the population is not applicable for employment, which could include individuals such as students, homemakers, or retirees. A significant portion, 33.3%, is categorized as "Other not economically active," indicating a large number of people who are not participating in the labour market for reasons other than being discouraged work-seekers (5.2%) or unemployed (5.3%). Only 6.9% of the population is employed, highlighting a potential issue with job availability or economic activity in the area.
- Household Dwelling Types: This chart shows that the majority of households (70.4%) live in formal dwellings, suggesting a relatively high standard of living in terms of housing. However, 27.5% of households reside in traditional dwellings, and a small percentage live in informal dwellings (1.1%) or other types of housing (0.9%). This distribution indicates a need for improved housing infrastructure and development to accommodate all residents adequately.
- Municipal Age Structure: The chart indicates that the largest age group is the working-age population (15-64 years), comprising 56.6% of the total population. Children and infants (0-14 years) make up 38.2%, while the elderly (65+ years) constitute 5.2%. This age distribution suggests a relatively young population, which could imply a growing demand for educational facilities, employment opportunities, and other services catering to younger individuals.
- Household Tenure Status: The chart shows that a significant majority of households (86.3%) own their homes and have fully paid off their mortgages. A smaller percentage (5.9%) live in occupied rent-free housing, while 4.9% fall under the "Other" category. Only 1.8% of households rent from private individuals, and negligible percentages are unspecified (0.1%) or own but have not yet paid off their homes (0.9%). This high rate of homeownership indicates a stable housing market but also suggests potential barriers to entry for new residents or younger individuals looking to establish their own households.

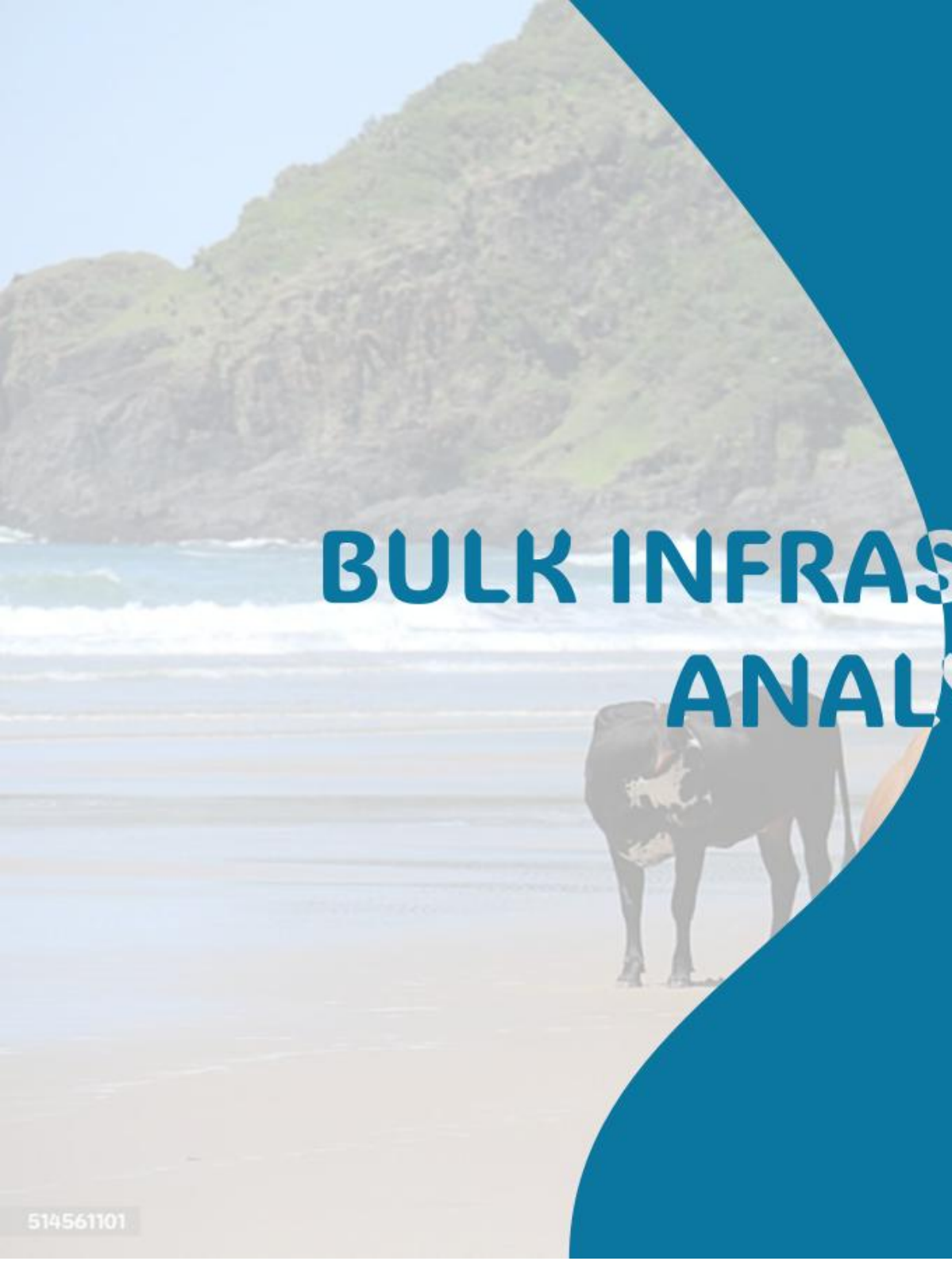
1.16. IMPLICATIONS FOR THE WMMLM SDF

The implications of these findings for the Winnie Madikizela Mandela Local Municipality Spatial Development Framework (SDF) are significant. The high percentage of non-economically active individuals and low employment rate highlight the need for economic development initiatives to create job opportunities.

The housing data suggests a need for diverse housing options to accommodate different socio-economic groups. The age structure indicates a growing demand for services catering to a younger population, such as schools and recreational facilities.

Lastly, the high homeownership rate suggests a stable housing market but also points to the need for affordable housing options for new and younger residents. Integrating these insights into the SDF will promote regional cohesion, environmental conservation, and balanced economic development, ultimately fostering a more sustainable and resilient future for the municipality.

These statistics suggest that the Winnie Madikizela Mandela Local Municipality must focus on sustainable growth, improved educational opportunities, economic development, and targeted social services to address the needs of its diverse and growing population. Integrating these insights into the SDF will promote regional cohesion, environmental conservation, and balanced economic development, ultimately fostering a more sustainable and resilient future for the municipality.



BULK INFRASTRUCTURE ANALYSIS

4. BULK INFRASTRUCTURE ASSESSMENT

4.1. WATER AND SANITATION

4.1.1. WATER INFRASTRUCTURE

According to the WMMLM Integrated Development Plan (2024/25), Water service delivery is one of the primary functions of the Alfred Nzo District Municipality. Alfred Nzo District Municipality serves as both the Water Services Authority (WSA) and Water Services Provider (WSP) for the Winnie Madikizela-Mandela Local Municipality, as adopted under Section 78 of the Municipal Systems Act (MSA). Currently, there is no service level agreement between the WMMLM and the District Municipality regarding water provisioning. Primary discussions occur quarterly through the District Wide Infrastructure Forums (DWIF).

In terms of water service provision in the Winnie Madikizela-Mandela community, our analysis indicates that backlogs for water services remain high, exceeding 50% of the total households. Out of the total household population of 62,479, an estimated 38,372 households (61.4%) do not have access to water, while 38.6% have access.

The District Municipality is in the process of developing the following plans:

- Water Services Master Plan, aligned with the Regional Bulk Water Implementation Readiness Study currently being conducted by the DM.
- Groundwater Management Plan.

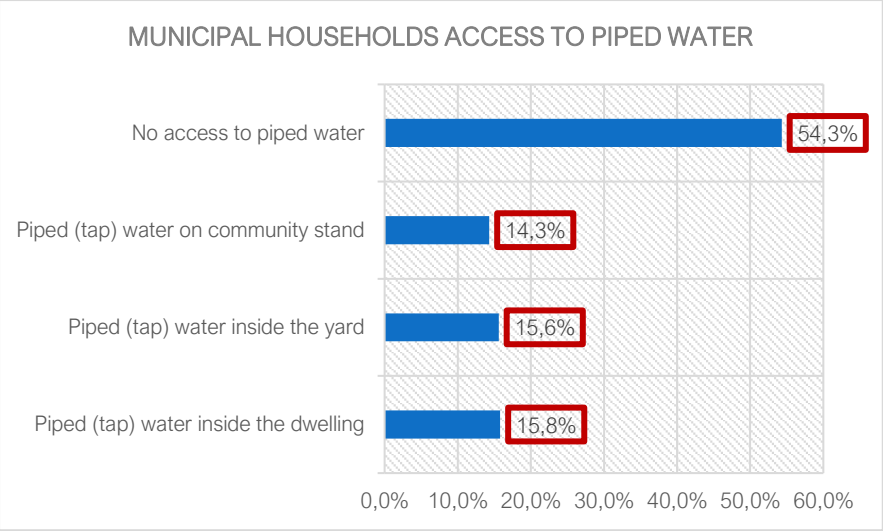
In Winnie Madikizela-Mandela, the ongoing implementation of the Greater Mbizana Regional Scheme is expected to address at least 85% of the backlogs upon completion and connection to the existing infrastructure. According to the ANDM's water service levels and requirements, in 2015, the need was 70Ml/day, projected to increase to 128Ml/day by 2035. The WMM LM is identified as the largest water consumer in the ANDM, requiring 51.9% of the ANDM's water supply.

TABLE 2: WATER BACKLOGS

TOTAL HOUSEHOLDS	HOUSEHOLDS		PERCENTAGE	
	SERVED	UNSERVED	SERVED	UNSERVED
62 479	24 107	38 372	38.6%	61.4%

Source: WMMLM Integrated Development Plan, 2024/25

The Ludeke Dam now delivers 14.5Ml/day, while the Nomlacu Water Treatment Works (WTW) provides 10Ml/day. Additionally, a 12km rising main and 4 command reservoirs have been completed. Once augmented, possibly using water from the Umtamvuna River, the dam's capacity will be able to serve 100% of the WMM Local Municipality (LM) population. The Nomlacu WTW is designed for 10Ml/day but can be upgraded to 20Ml/day, covering 100% of the WMM LM. Currently, the 10Ml/day output serves 48% of the WMM LM, which includes the entirety of Phase-1 (A & B). Phase-1 reticulation will cover 48% of the entire WMM LM population. However, bulk pipeline and secondary bulk infrastructure need to be provided first.



GRAPH 1: MUNIICPAL HOUSEHOLDS' ACCESS TO PIPED WATER
Source: Census, 2022

The above graph reveals that 54.3% of households lack access to piped water according to Census 2022 statistical data. This substantial percentage indicates a critical need for infrastructural development to ensure equitable water distribution. Moreover, only 15.8% of households have piped water inside their dwellings, while 15.6% have it inside their yards, and 14.3% rely on community stands. This data underscores the necessity for comprehensive spatial planning to address water supply disparities. Enhancing water infrastructure is crucial for improving public health, sanitation, and overall quality of life. By prioritizing the expansion of water systems, spatial planners can foster sustainable development and elevate living standards across the WMMLM.

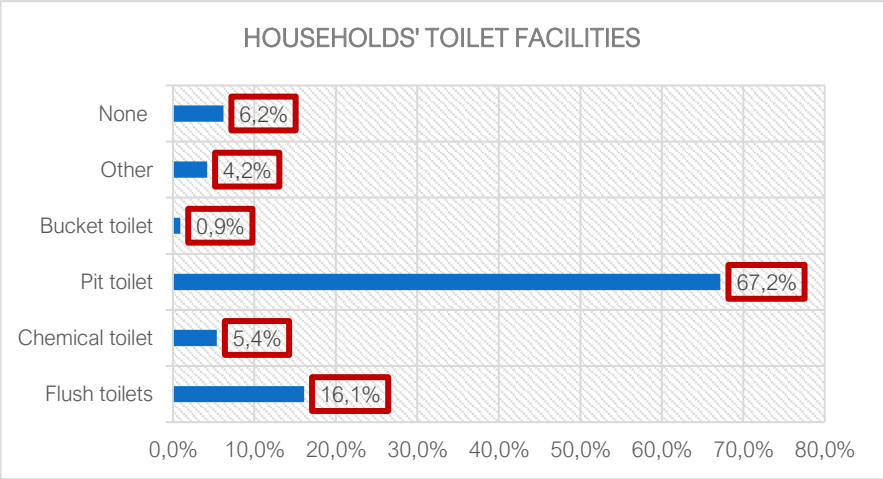
4.1.2. SANITATION INFRASTRUCTURE

Sanitation service delivery falls under the jurisdiction of the District Municipality (Alfred Nzo DM), with the local municipality mainly being the beneficiary of these services. Out of a total household population of 62,479, an estimated 42.9% of households lack access to RDP sanitation, while 35,642 households (57.1%) have access to RDP sanitation (Ventilated Improved Pit-latrines or VIP Toilets), according to the Stats SA Community Survey 2016. Although the WMMLM is neither a Water Services Authority (WSA) nor a Water Services Provider (WSP), we maintain communication with the District Municipality regarding all sanitation projects to keep our communities informed.

TABLE 3: SANITATION BACKLOGS

TOTAL HOUSEHOLDS	HOUSEHOLDS		PERCENTAGE	
	SERVED	UNSERVED	SERVED	UNSERVED
62 479	35 642	26 837	57.1%	42.9%

Source: WMMLM Integrated Development Plan, 2024/25

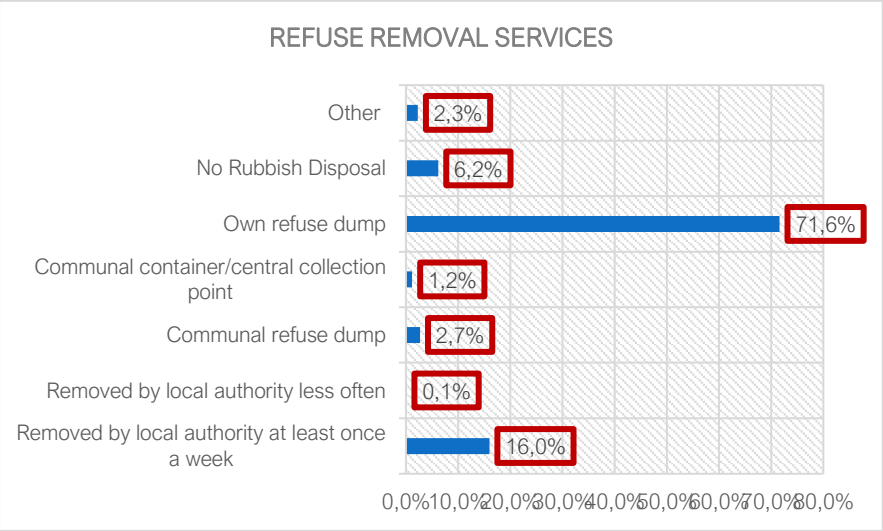


GRAPH 2: HOUSEHOLDS ACCESS TO TOILET FACILITIES

Source: Census, 2022

The above graph reveals that the majority of households (67.2%) in the Winnie Madikizela Mandela Local Municipality rely on pit toilets, while only 16.1% have access to flush toilets. This significant dependence on pit toilets indicates an urgent need for improved sanitation infrastructure. The presence of 6.2% of households with no toilet facilities further underscores this necessity. These statistics suggest that many areas within the municipality may face challenges related to public health and environmental management. For effective spatial planning, prioritizing the development and expansion of modern, hygienic toilet facilities, such as flush toilets, would be crucial. This would enhance living conditions, reduce health risks, and promote sustainable development within the municipality.

4.2. WASTE MANAGEMENT



GRAPH 3: REFUSE REMOVAL SERVICES

Source: Census, 2022

The above graph highlights the distribution of different refuse removal methods within the Winnie Madikizela Mandela Municipality. The most significant observation is that the majority of residents, 71.6%, rely on their own refuse dumps for waste disposal. In contrast, only 16% of the population benefits from weekly waste removal services provided by local authorities. The remaining methods, such as communal refuse dumps, communal collection points, and less frequent local authority removals, account for minimal percentages. This disparity in refuse removal methods has critical implications for spatial planning.

The heavy reliance on personal refuse dumps suggests inadequate waste management infrastructure, which could lead to environmental and public health issues due to improper waste disposal practices. Spatial planners need to focus on enhancing waste management systems by increasing access to communal collection points and improving local authority services. Moreover, the 6.2% of the population without any rubbish disposal services highlights a significant gap that must be addressed to ensure equitable and environmentally sustainable waste management across the municipality. These insights underscore the necessity for strategic spatial planning to create a more efficient, accessible, and environmentally friendly waste management framework.

4.3. ELECTRICITY INFRASTRUCTURE

4.3.1. BULK ELECTRICITY INFRASTRUTURE

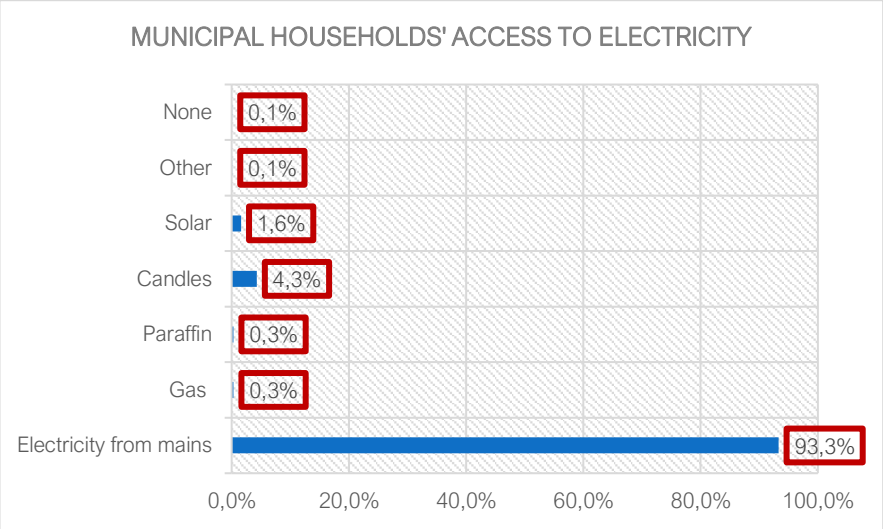
According to the WMMLM IDP for 2024/25, the Winnie Madikizela-Mandela Local Municipality holds a NERSA-approved electricity distribution license (NER/D/EC 132/2016/17). The municipality is responsible for providing and maintaining electricity for the residents of the town, which serves as the seat

of the local municipality. Meanwhile, Eskom supplies electricity to the remainder of the municipal area, starting from the outskirts of the town and extending to the municipal boundary.

The WMMLM, in collaboration with Eskom, has begun focusing on electrifying new extensions using INEP funding from the Department of Minerals and Energy. The municipality is responsible for electrifying households, and once the project is completed, it is handed over to Eskom for operation and maintenance. Additionally, Eskom is electrifying under Schedule 6B, which is also funded by the DMRE. On an annual basis, Eskom connects electricity under the Type 1 Infills program for houses that do not require infrastructure installation.

4.3.2. ALTERNATIVE & RENEWABLE ENERGY

The Winnie Madikizela Mandela Local Municipality is collaborating with the Department of Energy to install solar-backed electricity in villages where grid electricity will take more than three years to be installed or where the terrain makes it challenging for grid infrastructure. In areas where electricity will not be provided soon, the municipality is currently offering solar systems with assistance from the Department of Energy. Additionally, the municipality is exploring alternative power supply sources beyond the grid. To facilitate this, the municipality has issued an Expression of Interest for Alternative Energy Generation, inviting various approaches for generating electricity as part of its market research initiatives.



GRAPH 4: MUNICIPAL HOUSEHOLDS' ACCESS TO ELECTRICITY

Source: Census, 2022

The above graph indicates that a significant majority (93.3%) of households in the Winnie Madikizela Mandela Local Municipality have access to electricity from the mains. However, a smaller portion of households still rely on alternative sources: 4.3% use candles, 1.6% use solar power, and a combined 0.7% depend on paraffin, gas, and other sources.

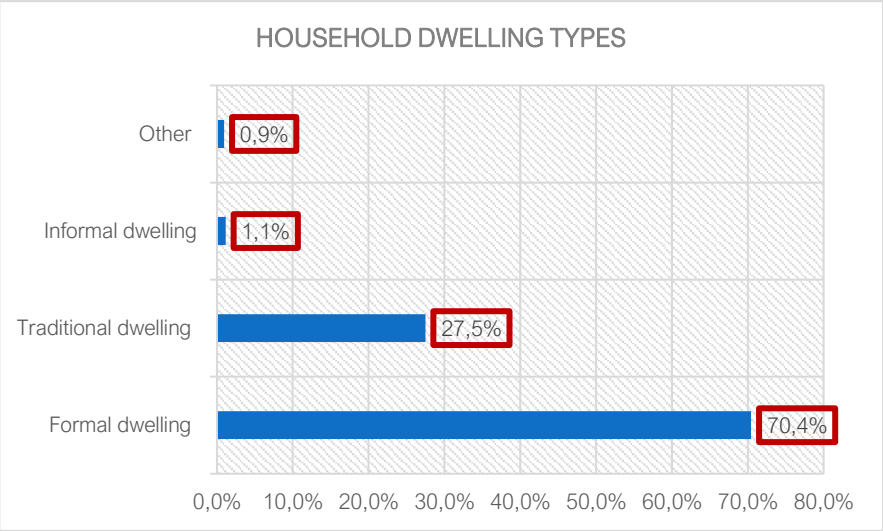
This disparity suggests that while the majority of the population benefits from reliable electricity, there's a pressing need to address the energy access gap for the remaining households. In terms of spatial planning, this data highlights the necessity for targeted interventions to extend mains electricity to underserved areas. Improving access to reliable and safe energy sources will enhance living standards, promote economic development, and support environmental sustainability. Strategic planning and resource allocation are

vital to ensure that all households within the municipality achieve equitable access to electricity.

4.4. HOUSING AND HUMAN SETTLEMENTS

4.4.1. CURRENT HOUSING SITUATION

Section 21 of the Spatial Planning and Land Use Management Act (SPLUMA) outlines the requirements for municipal spatial development frameworks. It emphasizes the need for municipalities to include plans and policies that address housing and human settlements. This includes ensuring that spatial planning promotes sustainable and equitable development, addresses past spatial imbalances, and integrates housing with other essential services and infrastructure. The goal is to create inclusive, safe, and resilient human settlements that provide adequate housing and improve the quality of life for all residents.



GRAPH 5: HOUSEHOLD DWELLING TYPES

Source: Census, 2022

The above graph highlights that the majority (70.4%) of households in the Winnie Madikizela Mandela Local Municipality live in formal dwellings, while 27.5% reside in traditional dwellings. A small fraction of households live in informal dwellings (1.1%) and other types of dwellings (0.9%). This predominance of formal dwellings implies that a significant portion of the population benefits from structured and regulated housing, which has positive implications for infrastructure development and urban planning. However, the sizable proportion of traditional dwellings suggests that cultural and historical factors play a substantial role in housing choices. Spatial planning efforts should account for this by integrating and preserving traditional housing styles while also ensuring that infrastructure and services are evenly distributed. Addressing the needs of the smaller fraction living in informal and other types of dwellings remains critical to achieving comprehensive and equitable development within the municipality.

4.4.2. HOUSING BACKLOG

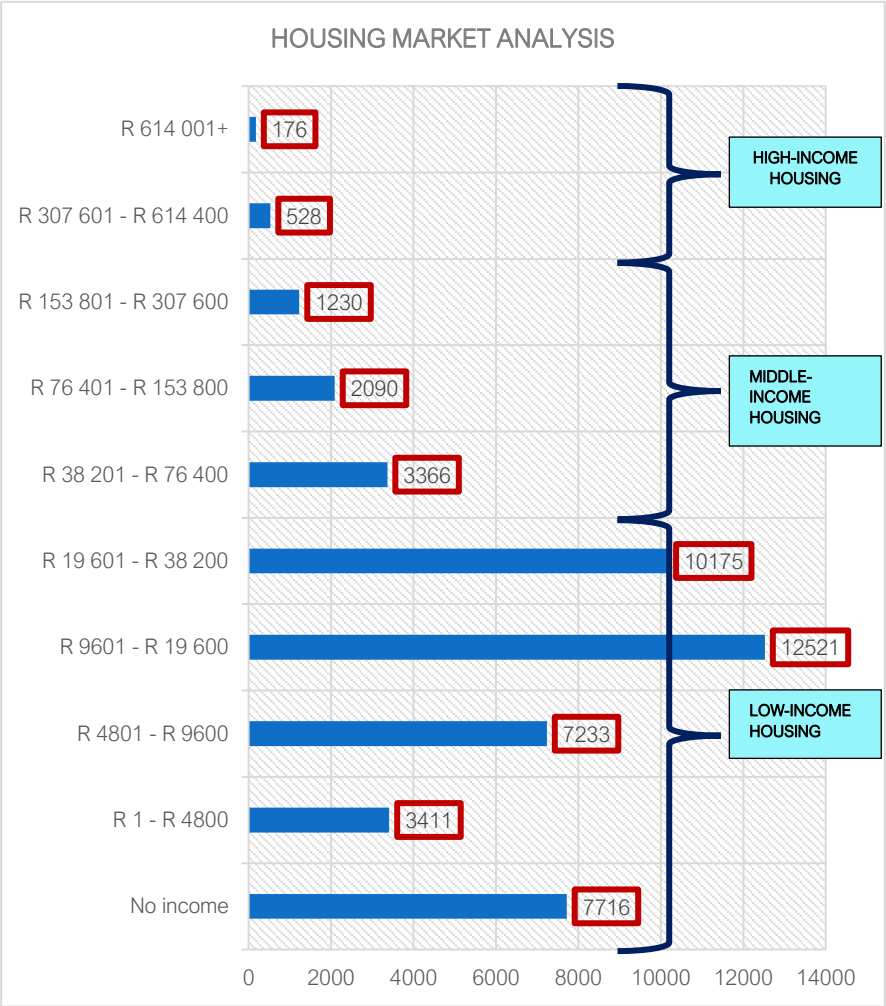
The WMMLM has a housing sector plan which identifies the housing backlog in each of the wards in the municipality. Recent statistical data (Census 2022) suggests that the housing backlog (all housing that is not identified as formal) stands at 18 472 housing units.

4.4.3. PROJECTED HOUSING DEMAND

4.4.3.1. HOUSING DEMAND BY INCOME GROUP

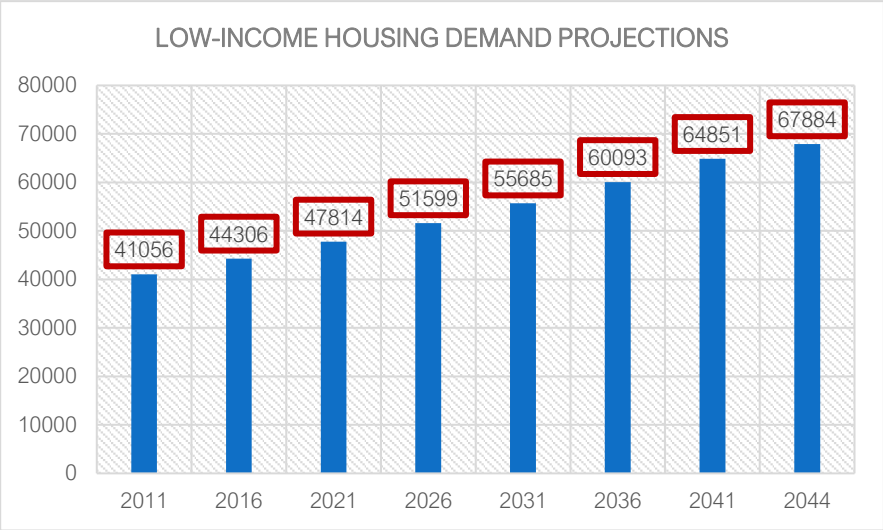
Section 21 of the Spatial Planning and Land Use Management Act (SPLUMA) requires municipal spatial development frameworks (SDFs) to address future housing needs. Specifically, it mandates that SDFs include population growth estimates for the next five years and identify, quantify, and provide location requirements for engineering infrastructure and services provision for existing and future development needs.

As such, it is imperative the housing demand is looked at from a current and future standpoint.

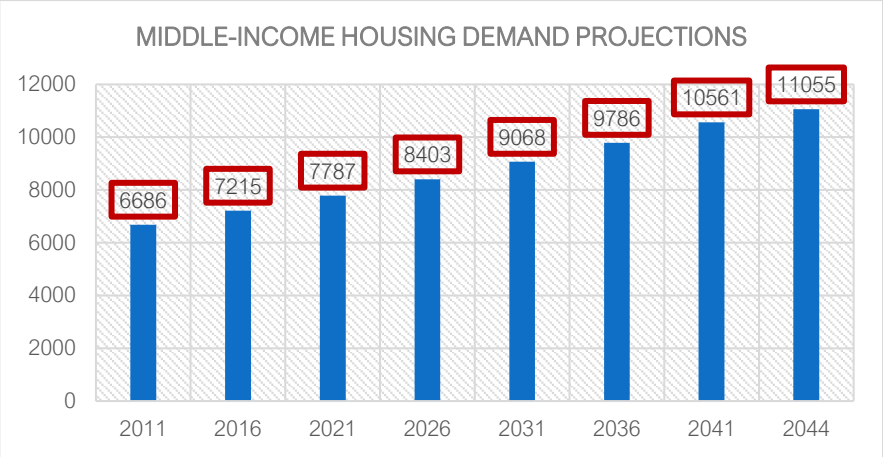


GRAPH 6: HOUSING MARKET ANALYSIS

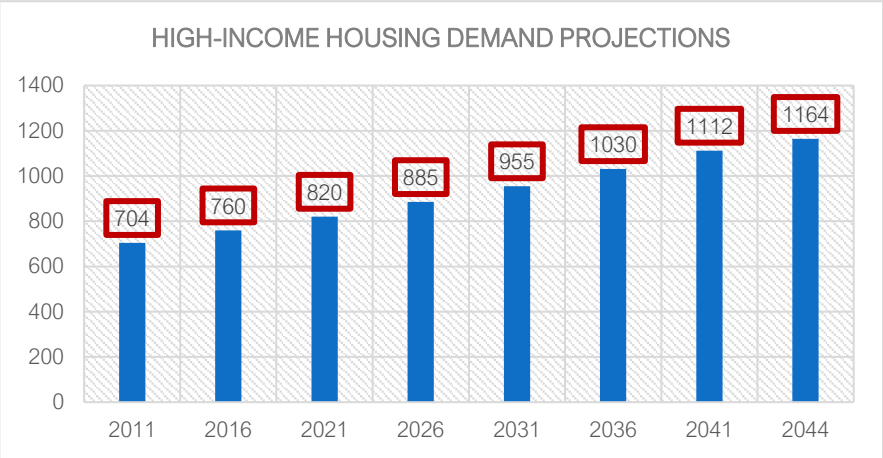
LIMITATIONS: One limitation in determining the projected housing demand by income is that annual housing income statistics are only available for Census 2011 and subsequent years. Despite this constraint, the exercise provides the municipality with valuable insights into future housing demands. By analysing these statistics, the municipality can better anticipate and plan for the housing needs of its population, even though the data may not be entirely up-to-date.



GRAPH 7: LOW-INCOME HOUSING DEMAND PROJECTIONS



GRAPH 8: MIDDLE-INCOME HOUSING DEMAND PROJECTIONS



GRAPH 9: HIGH-INCOME HOUSING DEMAND PROJECTIONS

4.4.4. LAND IMPLICATIONS ON THE HOUSING DEMAND

TABLE 4: LAND IMPLICATIONS ON HOUSING DEMAND

INCOME GROUP	NUMBER OF HOUSEHOLDS	BASIS	LAND DEMAND
Low-Income	67 884	Based on the min. erf size of 250m²	1 697ha
Middle-Income	11 055	Based on the min. erf size of 600m²	663ha
High Income	1 164	Based on the min. erf size of 1000m²	116ha
TOTAL			2 476 Hectares

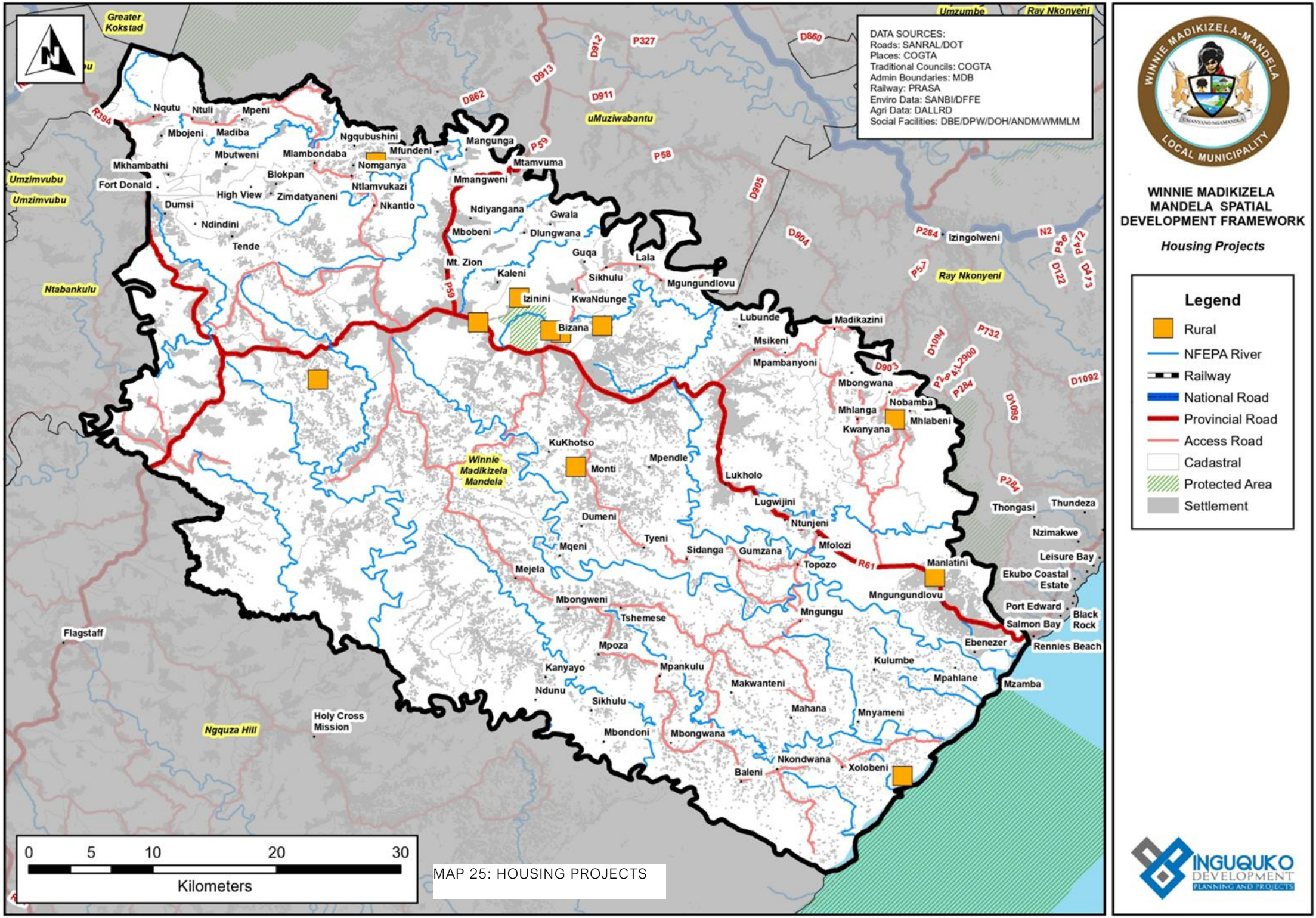
The table above outlines the land demand for different income groups in the Winnie Madikizela Mandela Local Municipality. With 67,884 low-income households requiring 1,697 hectares of land, 11,055 middle-income households needing 663 hectares, and 1,164 high-income households needing 116 hectares, the total land demand sums up to 2,476 hectares. This data indicates that a significant portion of land must be allocated to meet the housing needs of various income groups. Spatial planning in the municipality must consider this diverse demand to ensure equitable distribution of resources and infrastructure. Prioritizing land allocation for low-income households, which represent the majority, will be crucial in addressing housing disparities and promoting inclusive development. This comprehensive approach can enhance living conditions and support sustainable growth within the municipality.

4.4.5. HOUSING SUPPLY IN THE MUNICIPALITY

TABLE 5: HOUSING PROJECTS

PROJECT NAME	PROGRESS TO DATE	CHALLENGES	INTERVENTIONS/REMEDIALS ACTIONS	COMMENTS
Alfred Nzo 1119 (200) Mbizana Destitute	➢ Units Not Yet Started - 198 ➢ Foundations-2 ➢ Wall plates- 0 ➢ Roof - 0 ➢ Finishes -0 ➢ Completions-	Lack of financial resources as such the contractor engaged funding institutions to boost their cashflows.	The contractor has secured bridging finance from Tusk.	Contractor has started casting slabs on site.
Ebenezer 1000(200)56 in various Wards of WMM L.M	➢ Units Not yet Started 27 ➢ Foundation -29 ➢ Wall plates- 20 ➢ Roof -19 ➢ Finishes -10	Poor performance of contractor	Notice of default to initiate termination started.	Contractor yielded 10 completions for the month of February.
Ebenezer 1000(200) (133)Ward 22 & 23	➢ Units Not yet Started-133 ➢ Foundation- 0 ➢ Wall plates- 0 ➢ Roof -0 ➢ Finishes -0 ➢ Completions-0	None	None	Contract was finalised in February 2025. Project inception done 28 Feb 2025
Ebenezer 1000(200) (195)Ward 21; 29 and 14	➢ Units Not yet Started-195 ➢ Foundation- 0 ➢ Wall plates- 0 ➢ Roof -0 ➢ Finishes -0 ➢ Completions-0	None	None	First batch of 85 will be done as a quick win. NHBRC pre-approval done. Final approval once the contractor signs the contract. Contract is being finalised and to be concluded in March 2025.

PROJECT NAME	PROGRESS TO DATE	CHALLENGES	INTERVENTIONS/REMEDIALS ACTIONS	COMMENTS
Ebenezer 1000(250)201 ward 15;19 & 20	➢ Units not yet started-201 ➢ Foundation- 0 ➢ Wall plates- 0 ➢ Roof -0 ➢ Finishes -10 ➢ Completions-10	None	None	Project inception done 28 Feb 2025. Contract is being finalised and to be concluded in March 2025.
Nkantolo 1000(Silangwe)500(174)	➢ Units not yet started-142 ➢ Foundation- 32 ➢ Wall plates- 32 ➢ Roof -32 ➢ Finishes -33 ➢ Completions-33	More remedial works that assessed, this is due to disaster that has affected the villages causing damages to units on various stages	The damage quantified and request that amount on contingency be utilised to complete the units.	Project already have 33 completions
Nkantolo MPCC	The site handed over to the Contractor on 28 Jan 2025 and work commenced	None	None	None
Zinini 150(140)	The consultant is currently doing verification of beneficiaries. Geotechnical Investigation done. Project to be enrolled with NHBRC by end March 2025	None	None	Department finalising contractual documents to be finalised in March 2025.
Mbizana 160 Destitute	The consultant is currently doing verification of beneficiaries. Geotechnical Investigation to commence 3rd week March 2025	None	None	Department finalising contractual documents to be concluded in March 2025.



MAP 25: HOUSING PROJECTS

To meet the housing demand in the Winnie Madikizela Mandela Local Municipality, several strategies can be implemented:

- Land Allocation: Prioritize allocating land for low-income households, as they represent the majority of the demand. Ensure that land distribution is equitable and strategically located to support access to essential services and infrastructure.
- Public-Private Partnerships: Encourage collaborations between the municipality and private developers to leverage resources and expertise. This can help accelerate housing projects and ensure high-quality construction standards.
- Government Subsidies and Incentives: Implement subsidy programs and financial incentives to support low- and middle-income households in acquiring affordable housing. This can include grants, low-interest loans, and tax breaks.
- Upgrading Informal Settlements: Invest in upgrading existing informal settlements to provide residents with improved living conditions. This can involve enhancing infrastructure, sanitation, and access to utilities.
- Sustainable Housing Solutions: Promote the development of environmentally sustainable housing projects. Incorporate green building practices, renewable energy sources, and water-efficient technologies to create resilient and energy-efficient communities.
- Mixed-Use Developments: Encourage mixed-use developments that combine residential, commercial, and recreational spaces. This can create vibrant, self-sufficient neighbourhoods and reduce the need for long commutes.
- Community Involvement: Engage with local communities to understand their specific housing needs and preferences. Involving residents in the planning process can lead to more tailored and accepted housing solutions.
- Infrastructure Development: Ensure that new housing projects are supported by adequate infrastructure, including roads, water supply, sewage systems, and public transportation. This is essential for creating liveable and functional communities.

IMAGE 7: EXAMPLE OF INFORMAL SETTLEMENTS UPGRADING

SOCIAL INFRASTRUCTURE ASSESSMENT (PUBLIC FACILITIES

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5. SOCIAL INFRASTRUCTURE ASSESSMENT (PUBLIC FACILITIES)

5.1. HEALTH FACILITIES

According to the IDP, the Winnie Madikizela-Mandela Local Municipality (WMMLM) operates two hospitals: Greenville Hospital and the Oliver and Adelaide Tambo Regional Hospital. Additionally, there is a Community Health Centre located in Mbongweni at Ward 14. WMMLM also runs 21 clinics spread across various areas, including:

- Oliva and Adelaide Tambo Regional Gateway Clinic – Ward 01
- Tsawana Clinic – Ward 06
- Sikelo Clinic – Ward 05
- Mfundambini Clinic – Ward 09
- Ndela Clinic – Ward 12
- Imizizi Clinic – Ward 20
- Greenville Council – Ward 21
- Amadiba Clinic – Ward 24
- Umngungu Clinic – Ward 28
- Makhwantini Clinic – Ward 25
- Baleni Clinic – Ward 25
- Daliwonga Clinic – Ward 16
- Amandengane Clinic – Ward 15
- Hlamandane Clinic – Ward 04
- Khanyayo Clinic – Ward 15
- Amantshangase Clinic – Ward 03
- Qasa Clinic – Ward 11
- Amalongwana Clinic – Ward 10
- Mpetsheni Clinic – Ward 14
- Qobo Clinic – Ward 27
- Ntlenzi Clinic – Ward 08

5.2. EDUCATION FACILITIES

5.2.1. SCHOOLS

According to the Department of Education Masterlist, the WMMLM has 222 schools comprising of the following:

TABLE 6: SCHOOLS

TYPE	NO. OF SCHOOLS
Combined Schools	44
Primary Schools	138
Secondary/High Schools	40
Total	222

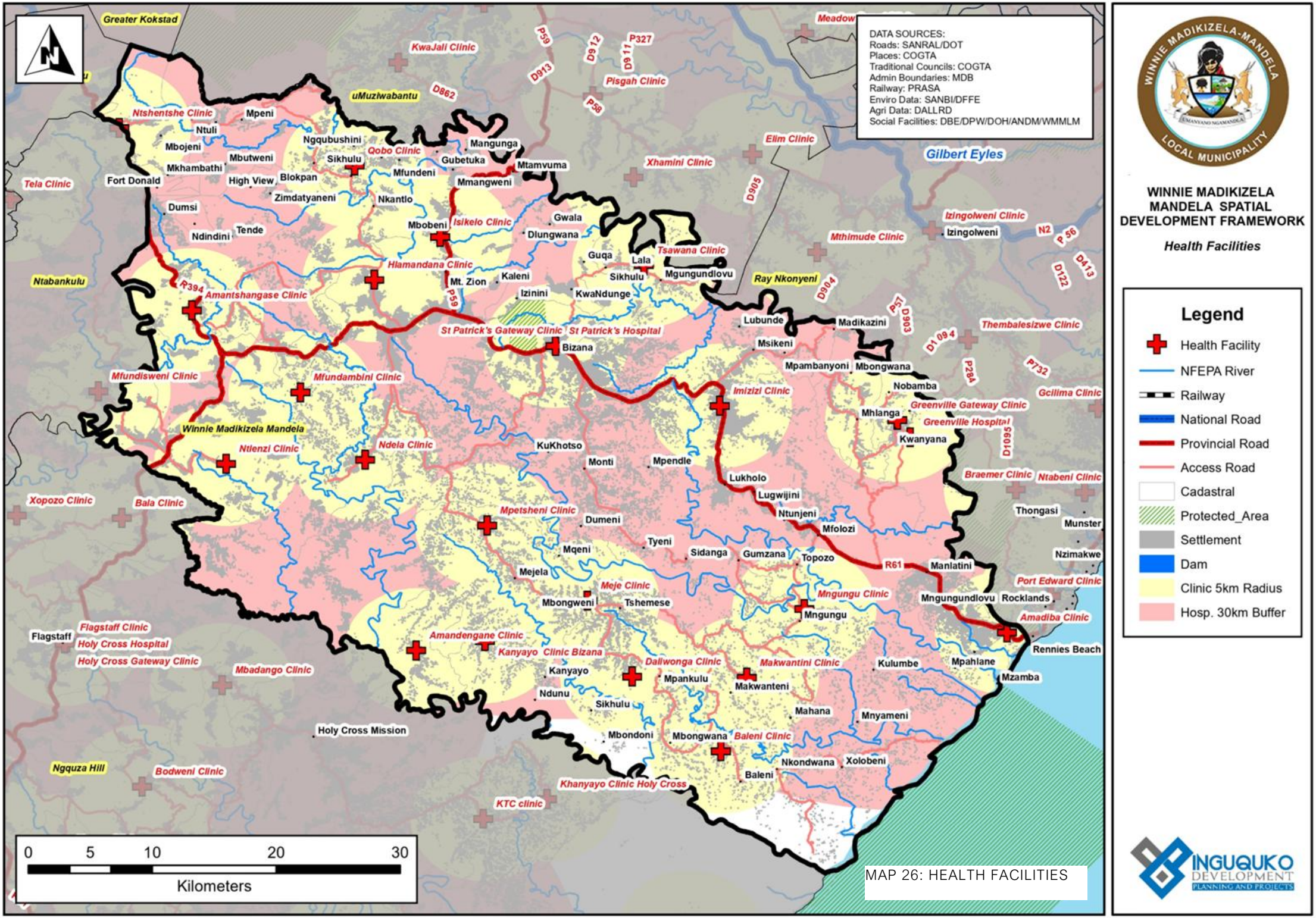
Of the 222 schools in the municipality 8 are private schools, while the others are government schools.

5.2.2. EARLYHOOD DEVELOPMENT CENTRES (ECD)

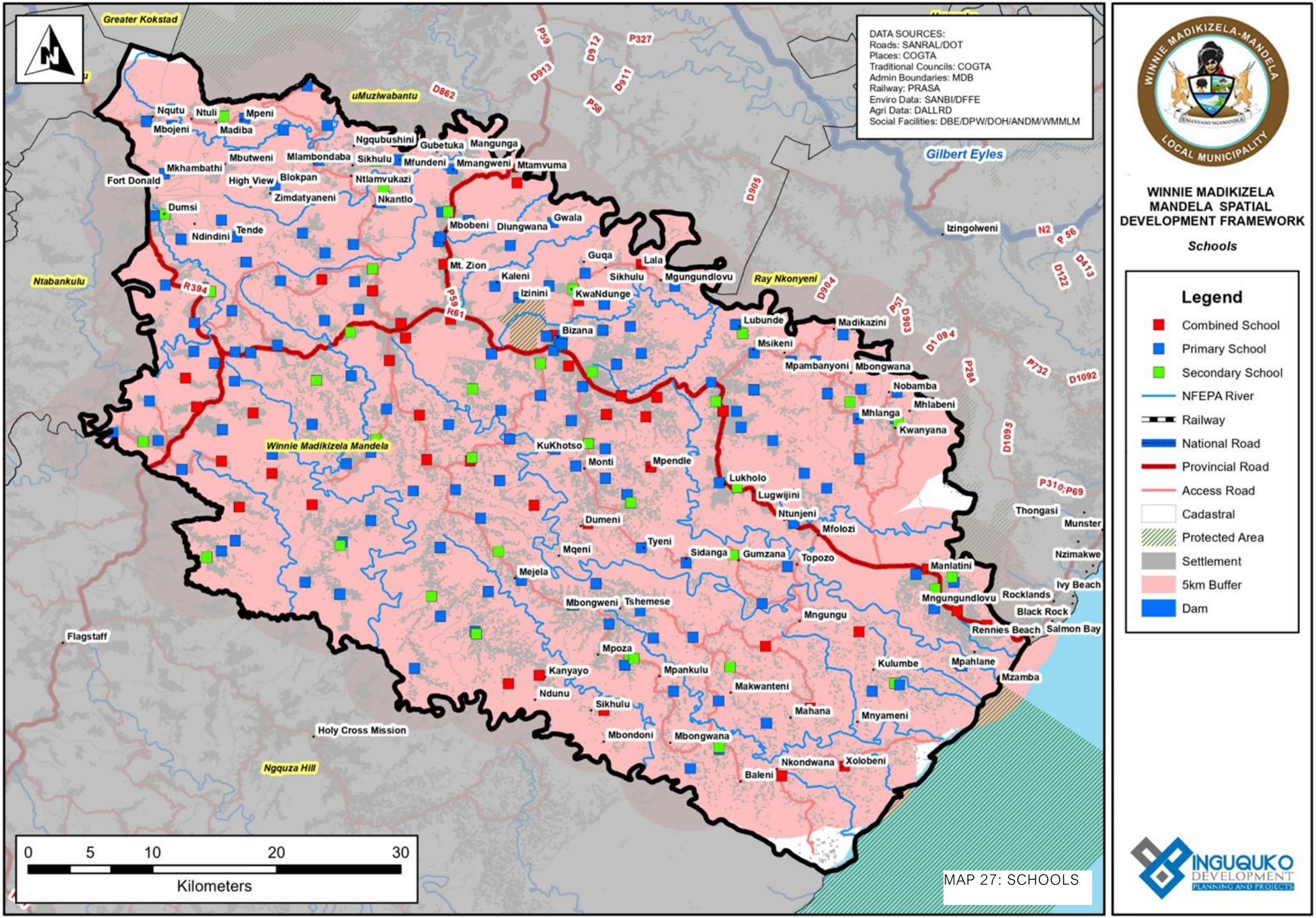
The municipality has 262 ECD centres in WMMLM.

TABLE 7: REGISTRATION STATUSES

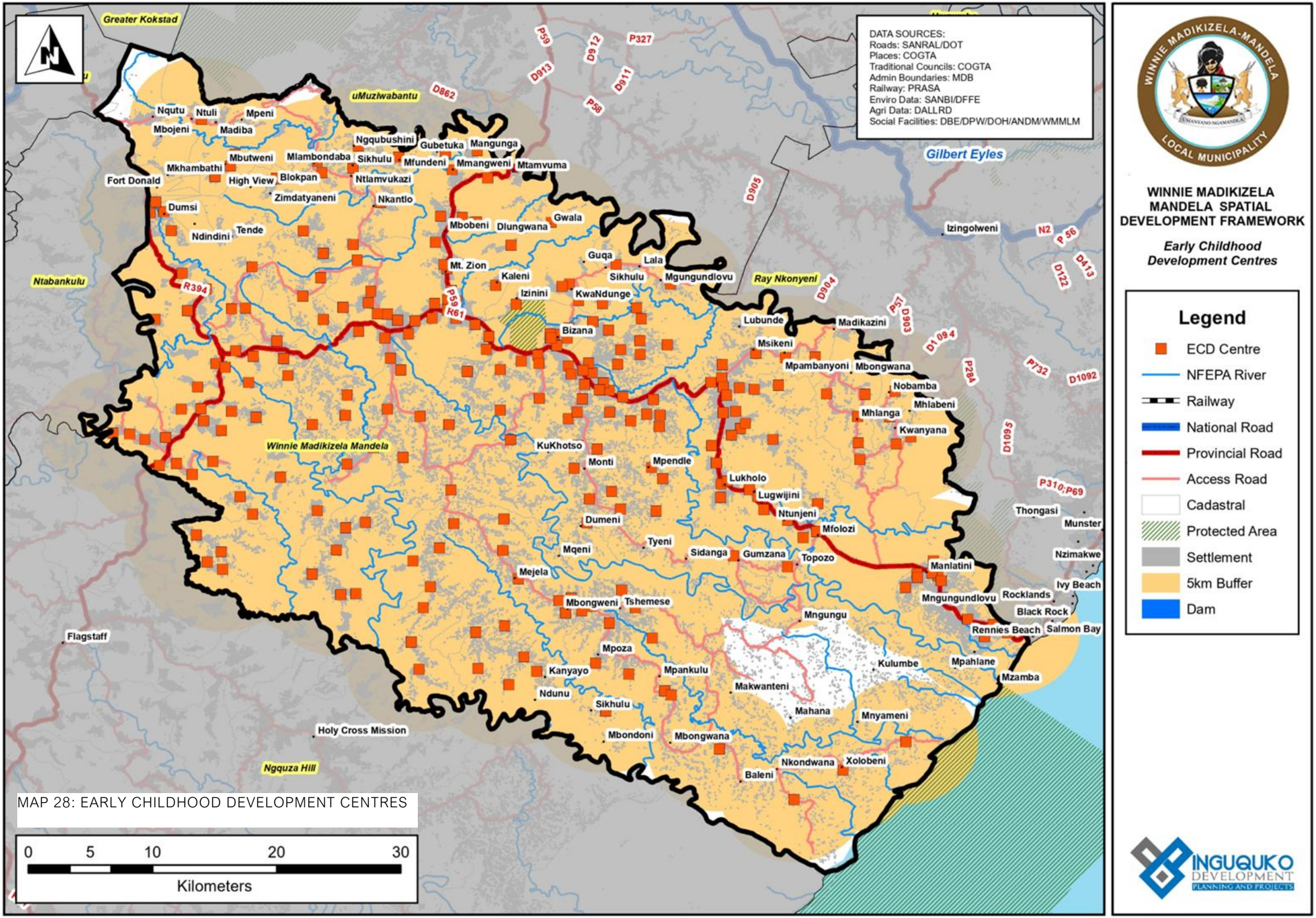
REGISTRATION TYPE	NO. OF CENTRES
Fully registered	47
Conditionally registered	39
In process	20
Lapsed registration	2
Not registered	153
Total	262



MAP 26: HEALTH FACILITIES



MAP 27: SCHOOLS



MAP 28: EARLY CHILDHOOD DEVELOPMENT CENTRES

5.3. POLICE STATIONS

The WMMLM IDP 2024/25 states that the municipality has five police stations within its jurisdiction: Bizana, Mzamba, Mpisi, Ndengane, and Qhasa. This is contrary to policy provisions stating that a new police station may be required when there is a new settlement, a drastic increase in population density, a rise in crime rate, as well as travel distance and per capita costs to access police stations. On average, one police station serves an area of 701.5 km² and 58,831 people. The establishment of an additional police station at Qhasa Location in Ward 11 has helped reduce crime and alleviate the workload from other police stations. Qhasa now falls under WMMLM's jurisdiction for demarcation and policing, making reporting easier.

Due to the distance between police stations and most communities, the South African Police Service (SAPS) has organized a mobile SAPS truck equipped as a contact point that roves all the wards to bring services closer to the communities. It also serves as a center for various departments, including the Municipal Desk for Proof of Residence.

The department has identified Gender-Based Violence, Murder, and Stock Theft as leading crimes in WMMLM, along with housebreaking, assault, rape, and armed robbery due to the increased number of cases reported. To address these issues, the department has established a maximum of 73 Community Policing Forums across all stations: 11 under Mpisi Police Station, 4 under Ndengane Police Station, 5 under Qhasa Police Station, 31 under Bizana Police Station, and 22 under Mzamba Police Station. The following challengaes have been identified:

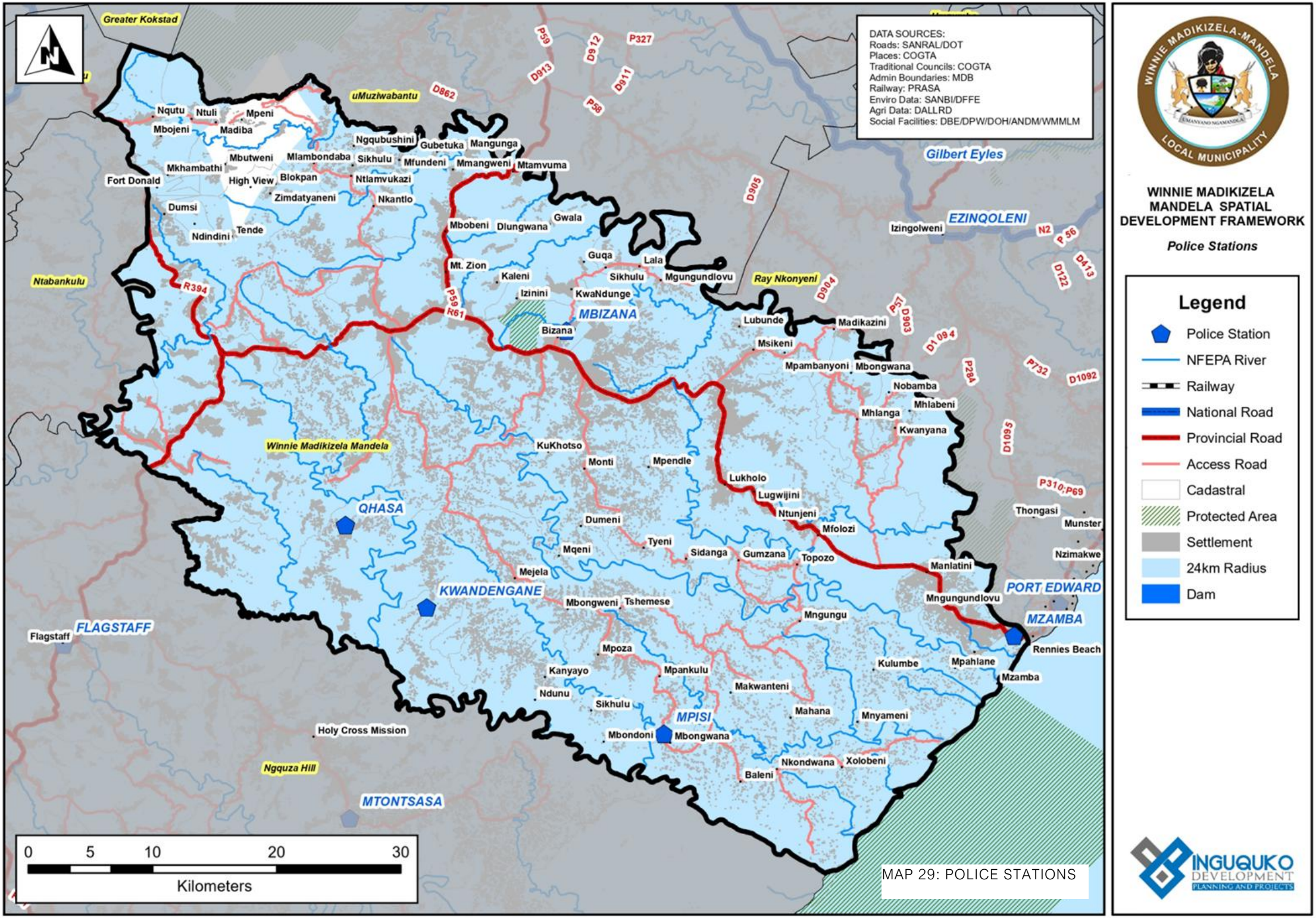
- No uniforms provided for CPF members
- Poor conditions of access roads
- Inadequate street lighting in town
- Poor conditions of access bridges
- Lack of personnel, transport, and maintenance of police stations.

5.4. SPORTS AND RECREATION

According to the municipality's IDP, there are 2 formal sports fields in WMMLM.

5.5. COMMUNITY HALLS

The municipality has 34 community halls.



MAP 29: POLICE STATIONS

5.6. PUBLIC FACILITIES NEEDS ASSESSMENT

Tabulated below is a needs assessment to determine the requirements of social/public facilities in the municipality. The assessment will be based on the Council for Scientific and Industrial Research Guidelines for the Provision of Social Facilities in South African Settlements, 2015. The assessment is also based on the household's population of the municipality which stands at 62 479 according to Census 2022.

TABLE 8: PUBLIC FACILITIES NEEDS ASSESSMENT

FACILITY	CURRENT	ASSESSMENT		
		REQUIRED	BACKLOG	SURPLUS
HEALTH FACILITIES				
Hospitals	2	1	0	1
Clinic	21	3	0	18
SAFETY AND SECURITY				
Police Stations	5	1	0	4
EDUCATION FACILITIES				
Primary School	138	9	0	129
Secondary School	40	5	0	35
ECD Centres	262	21	0	241
SOCIAL/GATHERING FACILITIES				
Community Halls	34	4	0	30

BIOPHYSICAL ANALYSIS

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6. BIOPHYSICAL ANALYSIS

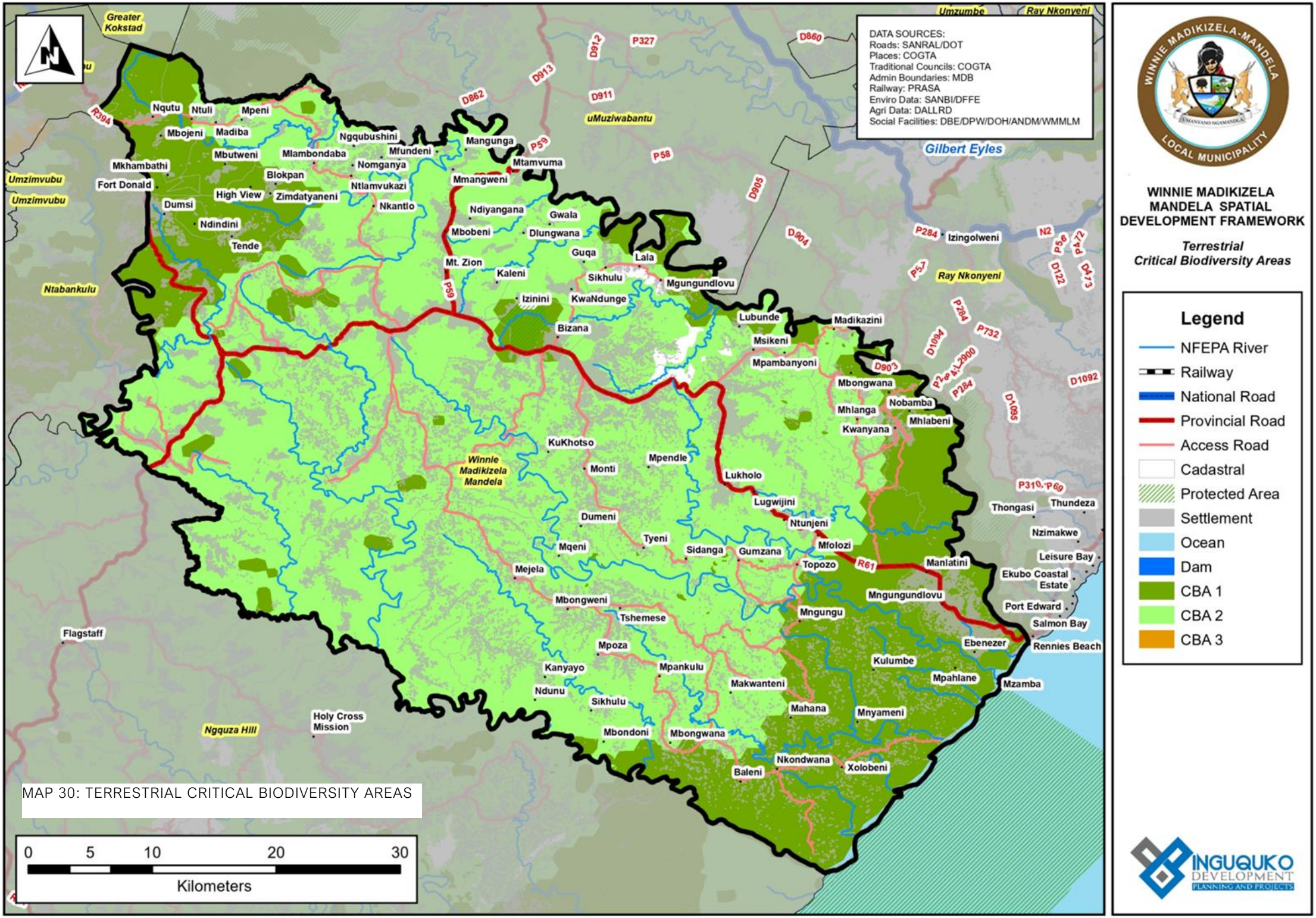
6.1. CRITICAL BIODIVERSITY AREAS

Critical Biodiversity Areas (CBAs) are regions that must be maintained in a healthy ecological state to achieve biodiversity targets for ecosystem types, species of special concern, or ecological processes. CBAs can fulfil biodiversity targets for terrestrial, aquatic features, or both. Alongside protected areas, the portfolio of CBAs identified in a biodiversity plan collectively aims to meet biodiversity targets for representing ecosystem types and species of special concern. Additionally, they may also address biodiversity targets for certain ecological processes.

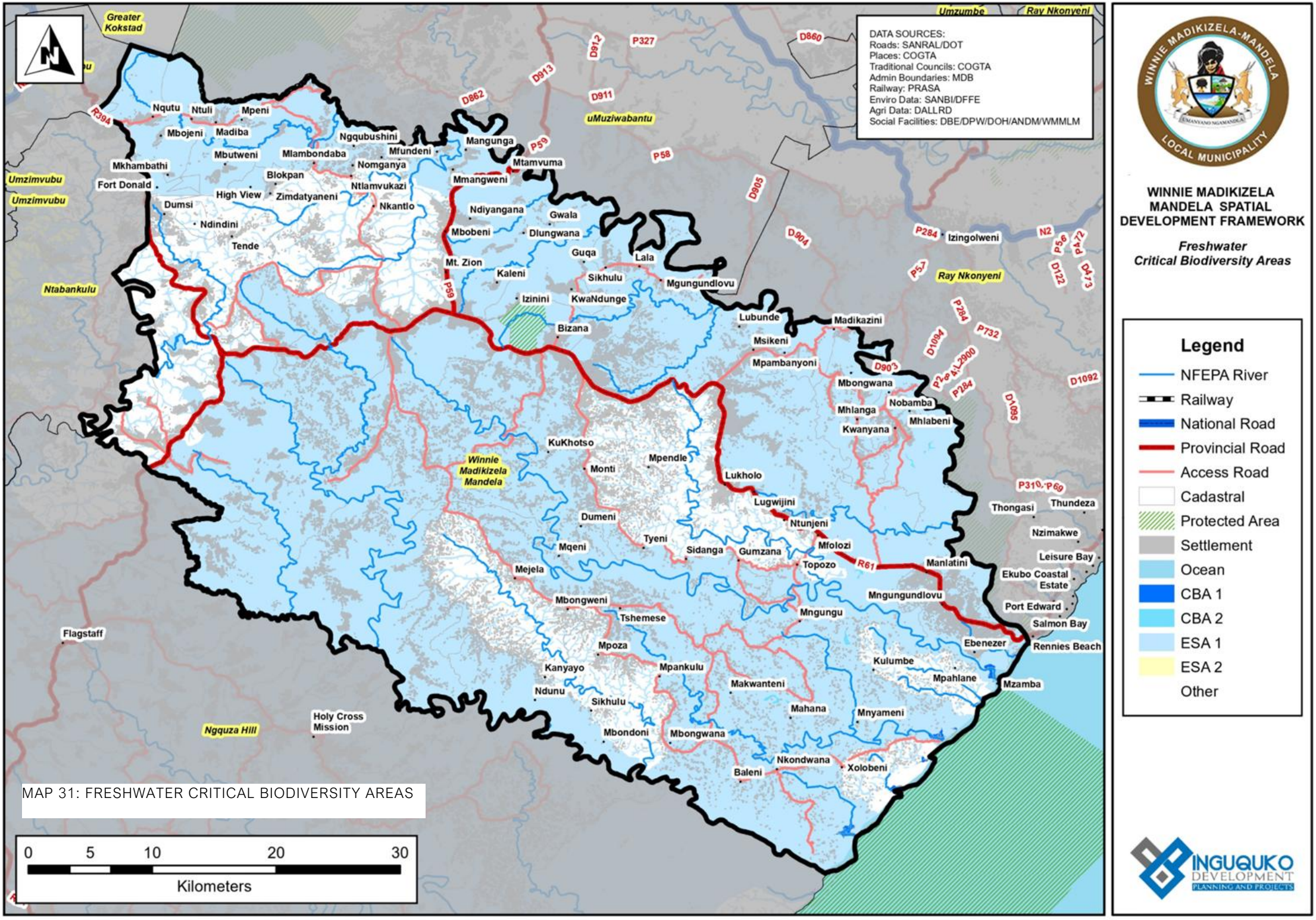
TABLE 9: TERRESTRIAL CRITICAL BIODIVERSITY AREAS DEVELOPMENT GUIDELINES

CBA CATEGORY	LAND MANAGEMENT GUIDELINES	PERMITTED USES
CBA 1 - These are areas that are irreplaceable or near-irreplaceable (i.e. high selection frequency) for meeting biodiversity targets. There are no or very few other options for meeting biodiversity targets for the features associated with these areas.	• Further loss of natural habitat in CBA 1 should be avoided • Where possible, CBA 1 should be rezoned for conservation or an appropriate zoning. • Degraded or disturbed areas within CBA 1 should be prioritized for rehabilitation through programs such as Working for Water and Working for Wetlands. • Infrastructure installation within CBA 1 is undesirable and should only be considered if alternative alignments and options have been assessed and found to be non-viable. • Stormwater flow should be managed to prevent degradation. Infrastructure developments should be limited to existing degraded or modified footprints, if present. • At a minimum, a Basic Assessment (BA) should be conducted for any development that intensifies land use. If land use intensification is approved, an Environmental Management Plan (EMP) must be developed to minimize impacts on threatened species.	Preserve in a natural or near-natural state to ensure the retention of biodiversity patterns and ecological processes: • Natural Landscapes • Environmental Conservation • Extensive Game Farming • Extensive Livestock Production • Discourage additional settlements
CBA 2 - These are areas that have been selected as the best option for meeting biodiversity targets, based on complementarity, efficiency, connectivity and/or avoidance	Minimize the loss of natural habitat in CBA 2: • If additional infrastructure is needed in CBA 2, the needs of threatened species must be considered. • A Basic Assessment (BA) should be conducted for any development that intensifies land use. If approved, an Environmental Management Plan (EMP) must be developed to minimize impacts on threatened species.	• Maintain in a natural or near-natural state to ensure the retention of biodiversity patterns and ecological processe • Near-natural landscape • Environmental Conservation • Extensive Game Farming • Extensive Livestock Production

CBA CATEGORY	LAND MANAGEMENT GUIDELINES	PERMITTED USES
of conflict with other land or resources uses.	• Infrastructure developments should be restricted to existing degraded or modified areas, if available. • Degraded or disturbed areas within CBA 1 should be prioritized for rehabilitation through programs like Working for Water and Working for Wetlands. • Manage stormwater flow to prevent degradation.	• Arable Land - Dryland and Irrigated Crop Cultivation (compatible only if undertaken with specific restrictions) • Public or Private Open Space, including recreational areas and parks • Allow pre-existing settlements • Discourage new settlements
ESA 1 - These are ESAs that are currently in either good or fair ecological condition, for which the objective is to retain them in at least fair ecological condition.	Stormwater flow should be managed to prevent degradation: • Infrastructure should be designed to minimize impacts on ecological processes. For example, ensure that the hydrological functioning of runoff flow rate, quantity, and quality are not compromised, and that landscape connectivity is not disrupted, such as by avoiding unnecessary fencing.	Preserve ecological functions within both local and broader landscapes: • Environmental Conservation • Low-Impact Tourism / Recreational Activities and Accommodation • Extensive Game Farming • Extensive Livestock Production • Specific forms of low-density housing • Arable Land - Dryland and Irrigated Crop Cultivation
ESA 2 - These are ESAs that are currently in severely modified ecological condition (e.g. cultivated areas in riparian zones) but that nevertheless retain sufficient ecological functioning to fulfil the purpose for which the ESA was selected		Preserve ecological functions within both the local and broader landscapes: • Intensive Agriculture • Low-Impact Tourism / Recreational Activities and Accommodation • Extensive Game Farming • Extensive Livestock Production • Public or Private Open Spaces, including recreational areas and parks • Local Agri-Economic Development • Specific forms of low-density housing



MAP 30: TERRESTRIAL CRITICAL BIODIVERSITY AREAS



MAP 31: FRESHWATER CRITICAL BIODIVERSITY AREAS

WINNIE MADIKIZELA MANDELA SPATIAL DEVELOPMENT FRAMEWORK

Freshwater Critical Biodiversity Areas

Legend

- NFEPA River
- Railway
- National Road
- Provincial Road
- Access Road
- Cadastral
- Protected Area
- Settlement
- Ocean
- CBA 1
- CBA 2
- ESA 1
- ESA 2
- Other

INGUQUKO DEVELOPMENT PLANNING AND PROJECTS

6.2. PROTECTED AREAS

Several legislative Acts, both past and present, have facilitated the declaration of areas as being of biodiversity or cultural significance and in need of protection. These include the National Forest Act, Mountain Catchment Act, World Heritage Convention Act, Marine Living Resources Act, and various Provincial Conservation Ordinances and Acts. The Protected Areas Act (NEMPA) acknowledges all these areas as Protected Areas, necessitating their protection and management. The municipality has a total of 2 protected areas namely:

- Bizana Nature Reserve
- Pondoland Marine Protected Area (located along the municipality's coastline).

Notwithstanding the abovementioned protected areas, there exiting 3 other protected areas which impact on the municipality, although located outside of the municipality's borders. These are the Ngele Nature Reserve and Weza Protected Environment in Umuziwabantu LM. These impact the municipality due to their 5lkm buffers traversing into the municipality.

A 5 km buffer zone around protected areas is established to mitigate the negative impacts of external activities on these areas. These buffer zones are designed to reduce or mitigate the adverse effects of development, land use changes, and other activities occurring outside the protected areas1. The goal is to better integrate protected areas into their surrounding landscapes, ensuring the ecological integrity and biodiversity conservation of these regions. The buffer zones also help to minimize disturbances to wildlife, prevent habitat fragmentation, and maintain connectivity between protected areas and their surrounding environments.

Buffer zones around protected areas have a significant impact on spatial planning. These zones help to mitigate the negative effects of external activities on protected areas by creating a transition zone that reduces habitat fragmentation and maintains ecological connectivity. Spatial development frameworks (SDFs) often integrate these buffer zones to ensure that land use planning around protected areas is sustainable and minimizes environmental impacts. This integration helps to balance conservation goals with development needs, promoting a harmonious relationship between human activities and natural ecosystems

6.2.1. TRANSKEI DECREE CONSERVATION ZONE

The Transkei Decree, particularly Decree No. 9 of 1992, was a legislative act passed by the former Republic of Transkei, a nominally independent Bantustan created under South Africa's apartheid regime. Transkei was declared "independent" in 1976, although this status was not recognized internationally. The decree established a 1 km-wide coastal conservation area along the Wild Coast, which remains legally significant even after Transkei was reincorporated into South Africa in 1994.

This decree has had lasting implications, especially in terms of land use and development. It restricts development within the designated conservation zone, effectively preserving the natural environment but also limiting economic opportunities for local communities. The lack of tenure reform and administrative clarity has further complicated land rights and development planning in the region

The Transkei Environmental Conservation Decree No. 9 of 1992, while aimed at preserving the natural beauty and ecological integrity of the Wild Coast, has inadvertently imposed significant limitations on the economic development of local communities.

By designating a 1-kilometre-wide coastal conservation zone where development is heavily restricted, the decree has curtailed opportunities for infrastructure expansion, tourism development, and commercial ventures such

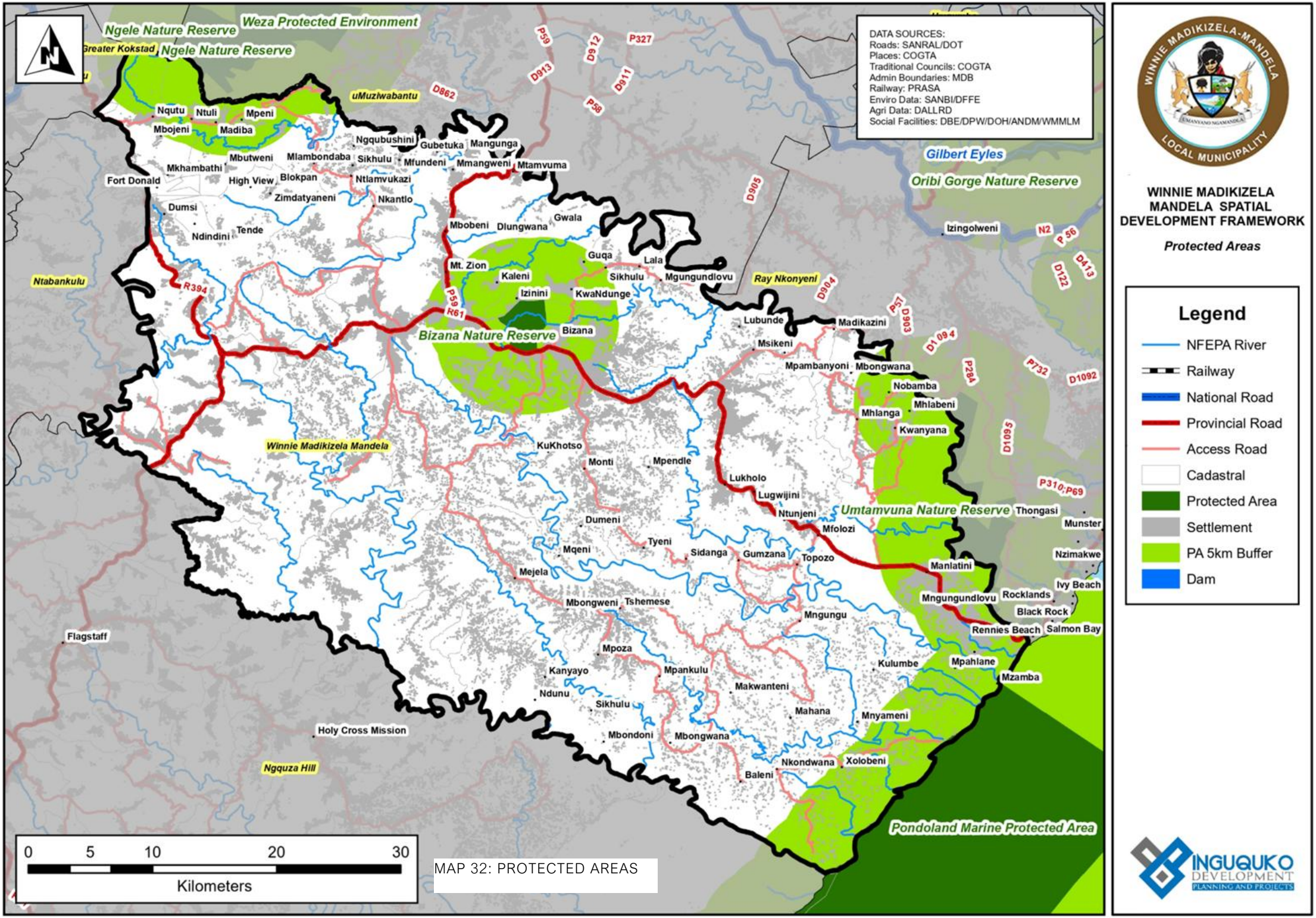
as agriculture and mining. These restrictions have made it difficult for residents to leverage the region's natural assets for economic gain. Furthermore, the legal and bureaucratic complexities associated with obtaining development approvals have discouraged potential investors, leading to a lack of job creation and economic stimulation. In some cases, traditional practices like sand mining have been criminalized, further marginalizing communities that rely on natural resources for their livelihoods.

Compounding the issue is the absence of compensation or alternative development strategies for affected communities, leaving them caught between environmental protection and economic stagnation. As a result, while the decree has succeeded in conserving the environment, it has also contributed to persistent poverty and underdevelopment in one of South Africa's most rural and historically disadvantaged regions.

There has been growing momentum to repeal the Transkei Environmental Conservation Decree No. 9 of 1992, driven by widespread concern over its impact on local economic development and land rights. In response to public pressure and advocacy—including petitions from affected communities and civil society organizations—the Eastern Cape government has initiated formal steps to repeal the decree.

As of April 2025, the provincial legislature is in the process of finalizing the Eastern Cape Environmental Management Act regulations, which are expected to replace the outdated decree. These new regulations aim to modernize environmental governance while also addressing the socio-economic constraints imposed by the original law.

This legislative shift marks a significant development in the long-standing struggle of rural communities along the Wild Coast, who have argued that the decree has hindered investment, criminalized traditional practices, and perpetuated poverty. The repeal process is seen as a step toward balancing environmental protection with inclusive development and land reform.



MAP 32: PROTECTED AREAS

WINNIE MADIKIZELA MANDELA SPATIAL DEVELOPMENT FRAMEWORK

Protected Areas

Legend

- NFEPA River
- Railway
- National Road
- Provincial Road
- Access Road
- Cadastral
- Protected Area
- Settlement
- PA 5km Buffer
- Dam

INGUQUKO DEVELOPMENT PLANNING AND PROJECTS

6.3. HYDROLOGICAL CHARACTERISTICS

Rivers represent the lowest points in the landscape and are often the recipients of cumulative impacts from all over their catchments. Numerous pressures on river ecosystems tend to interact and amplify one another, including flow alterations, pollution, riverbank destruction, and the presence of invasive alien species. Given that rivers are linear ecosystems affected by land use and activities throughout their catchments, relying solely on protected areas is typically insufficient for safeguarding river ecosystems. Implementing good land-use practices, such as preserving natural vegetation along riverbanks, can significantly enhance the ecological integrity of all rivers.

6.3.1. NFEPA RIVERS

The National Freshwater Ecosystem Priority Areas (NFEPA) project was a significant initiative aimed at conserving South Africa's freshwater ecosystems. These rivers, often referred to as NFEPA rivers, were identified as essential for maintaining biodiversity and ensuring the sustainable use of water resources. The project aimed to guide sustainable development by highlighting areas that needed protection and sustainable management. These rivers are integral to the ecological integrity of the country's water systems, supporting a wide range of aquatic life and providing essential ecosystem services such as water purification, flood regulation, and habitat for numerous species.

NFEPA rivers are categorized based on their ecological status, from those that are pristine and undisturbed to those that are degraded and in need of restoration. The primary goal is to protect the high-quality rivers while improving the condition of those that have been negatively impacted by human activities. This involves implementing best management practices, such as maintaining natural vegetation along riverbanks, controlling pollution sources, and regulating water use to ensure that the ecological needs of the rivers are met.

Moreover, the project emphasizes the importance of integrated water resource management (IWRM), which involves the coordinated development and management of water, land, and related resources. This approach aims to maximize economic and social welfare without compromising the sustainability of vital ecosystems. By prioritizing the protection and sustainable management of NFEPA rivers, South Africa can ensure the long-term health and resilience of its freshwater ecosystems, which are crucial for the well-being of both people and nature.

This emphasis on sustainable land-use practices and the restoration of degraded areas is vital for maintaining the ecological balance and enhancing the resilience of river systems. Through the collaborative efforts of government agencies, local communities, and conservation organizations, the NFEPA project strives to safeguard these critical water resources for future generations.

The National Freshwater Ecosystem Priority Areas (NFEPA) project has identified several rivers in South Africa as critical for maintaining the country's biodiversity and ecological health. Among these, the Nqabeni, Londobezi, Sikombe, Mceteni, Ntelekweni, Hlolweni, Mtamvuna, Mpahlanyana, Mtentwana, Tungwana, Swane, KuNtlamvukazi, Mzamba, Mtentu, and Mtentshwana rivers are of particular importance. These rivers are essential for supporting a diverse range of aquatic species, providing clean water for human consumption, and sustaining various ecosystem services.

The Nqabeni River, located in the Eastern Cape, is a vital watercourse that supports numerous endemic species. Its pristine waters and surrounding riparian habitats are crucial for maintaining the ecological balance in the region. Similarly, the Londobezi River, with its unique hydrological characteristics, plays a significant role in regulating the local climate and providing habitat for various fish species.

The Sikombe River, nestled in the KwaZulu-Natal province, is known for its high-water quality and rich biodiversity. Conservation efforts in this area focus on preserving the natural vegetation along the riverbanks and preventing pollution from agricultural activities. The Mceteni River, another important NFEPA river, is characterized by its diverse aquatic flora and fauna. Efforts to

protect this river include controlling invasive species and maintaining the natural flow regime.

The Ntelekweni and Hlolweni rivers are crucial for supporting local communities and wildlife in their respective catchments. These rivers are under constant threat from human activities such as agriculture and urbanization, making it essential to implement sustainable land-use practices to ensure their long-term health. The Mtamvuna River, a major watercourse in KwaZulu-Natal, is renowned for its scenic beauty and ecological significance. It provides a habitat for several endangered species and is a key source of water for the surrounding areas.

The Mpahlanyana, Mtentwana, and Tungwana rivers are smaller yet equally important water bodies that contribute to the overall health of the larger river systems they are part of. These rivers are often targeted for conservation efforts aimed at restoring degraded areas and improving water quality. The Swane River, with its meandering course and lush riparian zones, is a critical habitat for various bird species and other wildlife.

The KuNtlamvukazi River, although lesser known, plays a significant role in maintaining the hydrological balance in its catchment area. Conservation initiatives here focus on preserving the natural vegetation and preventing soil erosion. The Mzamba River, located in the Eastern Cape, is an important water source for local communities and supports a variety of aquatic life. Efforts to protect this river include monitoring water quality and promoting sustainable farming practices.

The Mtentu and Mtentshwana rivers are vital components of the freshwater ecosystem in their regions. These rivers provide essential ecosystem services such as water purification, flood regulation, and habitat provision for numerous species. Conservation efforts for these rivers focus on maintaining their ecological integrity and preventing further degradation caused by human activities.

6.3.2. WETLANDS

A wetland comprises several hydrological zones: (i) the permanent zone, which is always waterlogged; (ii) the seasonal zone, which is waterlogged during certain seasons; and (iii) the temporary zone, which is waterlogged for a short period each year. While not all wetlands contain all three zones, the outer boundary of a wetland is always defined as the outer edge of the temporary zone, which is determined through wetland delineation based on flora and hydromorphic soils.

Wetland ecosystems are crucial for purifying water and regulating water flows. They act as sponges, storing water and releasing it slowly, filtering pollutants, and mitigating the impacts of droughts and floods. They also support a rich diversity of species, which hold both intrinsic and economic value. Numerous relatively small wetland areas are scattered throughout WMMLM. Similar to rivers, the development buffer around wetlands depends on the local situation, such as the type of activity, and may extend beyond the statutory 20 meters. Note that for activities within 32 meters of the edge of a wetland, environmental

authorization is required from the relevant environmental authorities (NEMA EIA regulations 2010). Pressures experienced within the wetlands include:

- Reduced runoff from forestry areas due to high rainwater retention capacity, leading to soil erosion.
- Reduced water quality due to pollution.
- Increased runoff.
- Increased stormwater peak flow intensity as well as an increase in total annual stormwater runoff.
- Water scarcity in areas dependent on groundwater.
- Groundwater pollution due to poorly managed industrial practices.
- Groundwater abstraction.
- Siltation of wetlands.
- River pollution from the drainage of pit latrines into rivers.

6.3.3. WATERCOURSE BUFFER ZONES

Identifying and delineating buffer zones along watercourses such as rivers, streams, wetlands, and tributaries are crucial for maintaining the health and integrity of aquatic ecosystems. Buffer zones, which are areas of vegetation situated alongside these water bodies, act as natural barriers that filter pollutants, sediment, and nutrients before they can enter the watercourse. This helps to improve water quality and protect aquatic habitats. Additionally, buffer zones provide essential habitat and corridors for wildlife, supporting biodiversity and ecosystem resilience. They also play a significant role in regulating water flow, reducing the risk of flooding by absorbing excess runoff and slowing down water movement during heavy rains. By protecting and preserving these buffer zones, we ensure the continued provision of vital ecosystem services such as water purification, flood mitigation, and habitat preservation, benefiting both the environment and human communities.

6.3.4. ESTUARIES

An estuary is a coastal area where freshwater from rivers and streams meets and mixes with saltwater from the ocean. This unique environment, characterized by varying salinity levels, supports a diverse range of plant and animal species. Estuaries act as nurseries for many marine organisms, providing safe habitats for young fish, crustaceans, and other wildlife. Additionally, they play a crucial role in filtering pollutants, protecting shorelines from erosion, and supporting commercial and recreational activities. Overall, estuaries are vital ecosystems that contribute significantly to environmental health and biodiversity. According to the South African National Biodiversity Institute (SANBI), South Africa has 299 functional estuaries along its 2798km of coastline, 10 of which are located within the boundary of the Winnie Madikizela Mandela Local Municipality. These estuaries have been categories in terms of their Present Ecological State (PES), which are as follows:

- **Category A**: Largely unmodified and natural. These estuaries are in pristine condition with minimal human impact.
- **Category B**: Largely natural with few modifications. These estuaries have slight human influence but still maintain most of their natural characteristics.
- **Category C**: Moderately modified. These estuaries show clear signs of human impact, but they still retain some natural functions and processes.
- **Category D**: Largely modified. These estuaries have significant human alterations, affecting their natural functions and ecological health.
- **Category E**: Seriously modified. These estuaries are heavily impacted by human activities, leading to a substantial loss of natural functions and biodiversity.
- **Category F**: Critically/extremely modified. These estuaries are in a severely degraded state with very little natural function remaining.

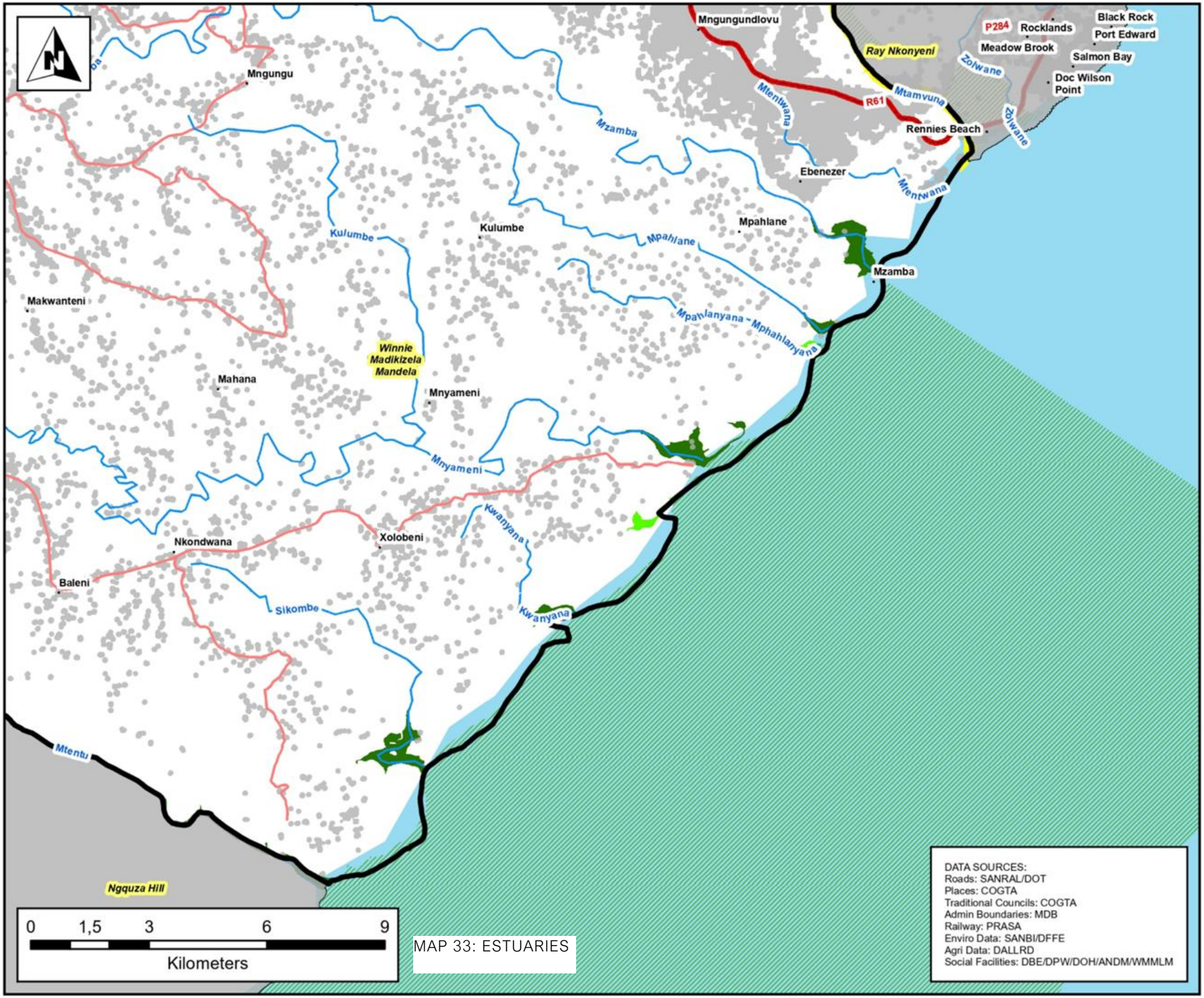
TABLE 10: ESTUARIES IN WINNIE MADIKIZELA MANDELA LOCAL MUNICIPALITY

ESTUARY NAME	DESCRIPTION	CATEGORY	SPATIAL PLANNING/LAND USE GUIDELINES
Mtamvuna Estuary	The Mtamvuna Estuary is a floodplain estuary, situated at the border of KwaZulu-Natal and the Eastern Cape Provinces in South Africa, is a critical ecological region. It forms part of the Mtamvuna River system, flowing into the Indian Ocean near Port Edward. The estuary is characterized by rich biodiversity, including various fish species, birdlife, and mangrove forests, and is partially protected by the Mtamvuna Nature Reserve. The estuary's near-pristine condition indicates minimal human impact, highlighting its importance for conservation and ecological research. Additionally, the estuary supports local fisheries and provides a habitat for numerous estuarine species.	Category C	➢ **Buffer Zones**: Establish buffer zones around the estuary to protect it from direct human impact. These zones should be maintained with natural vegetation to filter runoff and provide habitat for wildlife. ➢ **Sustainable Development**: Promote sustainable development practices that minimize ecological disruption. This includes controlling the type and extent of development within the estuarine area. ➢ **Water Quality Management**: Implement measures to maintain or improve water quality, such as controlling pollution sources and managing stormwater runoff. ➢ **Habitat Restoration**: Encourage habitat restoration projects to enhance the ecological health of the estuary. This can include replanting native vegetation and removing invasive species. ➢ **Monitoring and Research**: Conduct regular monitoring and research to assess the health of the estuary and the effectiveness of management practices. Use this information to adapt and improve management strategies. ➢ **Public Awareness and Education**: Raise public awareness about the importance of estuaries and promote community involvement in conservation efforts.
Mpahlanyane Estuary	The Mpahlanyane Estuary, located in the Eastern Cape of South Africa, is an ecologically significant area characterized by its diverse habitats and rich biodiversity. This estuary supports a variety of aquatic and terrestrial species, contributing to the overall ecological health of the region. The estuary's catchment area includes important wetlands and riparian zones, which play a crucial role in maintaining water quality and providing habitat for numerous species. Despite facing pressures from human activities, the Mpahlanyane	Category B	➢ **Buffer Zones**: Establish and maintain buffer zones with natural vegetation around the estuary to protect it from direct human impact and to filter runoff. ➢ **Controlled Development**: Limit development activities within the estuarine area to ensure

ESTUARY NAME	DESCRIPTION	CATEGORY	SPATIAL PLANNING/LAND USE GUIDELINES
	Estuary remains a vital natural resource that requires careful management and conservation efforts to preserve its ecological functions and biodiversity.		minimal ecological disruption. Any development should be carefully planned and monitored. ➢ **Water Quality Management**: Implement strict measures to maintain high water quality, including controlling pollution sources and managing stormwater runoff. ➢ **Habitat Conservation**: Prioritize the conservation of natural habitats within the estuary, including wetlands, mangroves, and other critical areas. ➢ **Monitoring and Research**: Conduct regular monitoring and research to assess the health of the estuary and the effectiveness of management practices. Use this information to adapt and improve management strategies. ➢ **Public Awareness and Education:** Raise public awareness about the importance of estuaries and promote community involvement in conservation efforts.
Mtentwana Estuary	The Mtentwana Estuary is a floodplain estuary and is part of a region characterized by a transition between warm-temperate and subtropical biogeographic zones. This estuary, along with others in the northern Eastern Cape, exhibits significant biodiversity, particularly in its fish communities. The estuary's ecological health is influenced by its physico-chemical properties and the presence of various fish species. Despite being moderately modified, the Mtentwana Estuary remains an important site for ecological research and conservation efforts1. The estuary's unique location and biodiversity make it a valuable natural resource that requires careful management to maintain its ecological functions	Category B	
Mzamba Estuary	The Mzamba Estuary is a floodplain estuary northern boundary of the Wild Coast in South Africa, is a significant ecological and geological site. This estuary is part of the Pondoland Center of Endemism, known for its unique biodiversity and endemic species. The estuary's catchment area supports a variety of habitats, including coastal forests and wetlands, which are crucial for maintaining the ecological balance. The Mzamba Estuary is also notable for its geological features, such as the Cretaceous deposits and the petrified forest found along its banks. Despite facing threats from potential strip mining for titanium, the estuary remains an important area for conservation and research efforts.	Category A	➢ **Strict Protection**: Implement strict protection measures to prevent any form of development or human activity that could degrade the estuary's natural state. ➢ **Buffer Zones**: Establish extensive buffer zones with natural vegetation around the estuary to protect it from external impacts and to maintain its ecological integrity. ➢ **Water Quality Management**: Ensure the highest standards of water quality management to prevent pollution and maintain the estuary's natural water conditions. ➢ **Habitat Conservation**: Prioritize the conservation of all natural habitats within the estuary, including wetlands, mangroves, and other critical areas.
Mpahlane Estuary	The Mpahlane Estuary is an ecologically significant area characterized by its diverse habitats and rich biodiversity. This estuary supports a variety of aquatic and terrestrial species, contributing to the overall ecological health of the region. The estuary's catchment area includes important wetlands and riparian zones, which play a crucial role in maintaining water quality and providing habitat for numerous species. Despite facing pressures from human activities, the Mpahlane Estuary remains a vital natural resource that requires careful	Category A	

ESTUARY NAME	DESCRIPTION	CATEGORY	SPATIAL PLANNING/LAND USE GUIDELINES
	management and conservation efforts to preserve its ecological functions and biodiversity.		➢ **Monitoring and Research**: Conduct continuous monitoring and research to assess the health of the estuary and to detect any potential threats. Use this information to adapt and improve management strategies. ➢ **Public Awareness and Education**: Promote public awareness and education about the importance of preserving Category A estuaries and encourage community involvement in conservation efforts.
Mnyameni Estuary	The Mnyameni Estuary is a biodiversity hotspot crucial for various marine species. This estuary provides a vital habitat for fish, birds, and invertebrates, supporting breeding and feeding activities. Influenced by both riverine and tidal actions, the Mnyameni Estuary plays an essential role in local ecosystems and traditional livelihoods. Its health and conservation are vital due to its ecological significance and the services it offers to the surrounding communities.	Category A	
Kwanyana Esutary	The Kwanyana Estuary is a critical ecological zone known for its high biodiversity and unique environmental features. This estuary supports a variety of aquatic species, including fish, crustaceans, and birds, making it a crucial breeding and feeding ground. Influenced by both freshwater inflows and tidal movements, the estuarine dynamics contribute to its rich nutrient cycles and sediment deposition patterns. The Kwanyana Estuary also plays a significant role in supporting the livelihoods of local communities through fishing and ecotourism activities. Its conservation is essential due to its ecological importance and the ecosystem services it provides, necessitating ongoing research and sustainable management practices to ensure its health and resilience.	Category A	
Sikombe Estuary	The Sikombe Estuary, located along the southeastern coast of South Africa, is an ecologically significant area known for its diverse range of habitats and species. This estuary supports a variety of aquatic and terrestrial organisms, including fish, crustaceans, birds, and mangrove forests. The estuarine environment is influenced by both freshwater inputs from rivers and tidal actions from the ocean, creating a dynamic ecosystem with complex nutrient and sediment interactions. The Sikombe Estuary provides essential ecosystem services, such as water filtration, carbon sequestration, and habitat for breeding and feeding. It also plays a crucial role in supporting local communities through fisheries and ecotourism. The conservation and sustainable management of the Sikombe Estuary are vital to maintaining its ecological health and the benefits it provides to both the environment and human populations.	Category A	
Mtentu Esutary	The Mtentu Estuary is an ecologically valuable area known for its pristine and diverse environments. This estuary is home to a wide range of species, including fish, crustaceans, birds, and unique plant life, such as mangroves and salt marsh vegetation. Influenced by both riverine and tidal processes, the Mtentu	Category A	

ESTUARY NAME	DESCRIPTION	CATEGORY	SPATIAL PLANNING/LAND USE GUIDELINES
	Estuary supports complex ecological interactions and nutrient cycles. It provides essential ecosystem services, including water filtration, flood regulation, and habitat for breeding and feeding. Additionally, the estuary is crucial for local communities, offering resources for fishing and opportunities for ecotourism. The conservation of the Mtentu Estuary is paramount, given its ecological significance and the benefits it provides to both the natural environment and human populations. Sustainable management practices are needed to ensure the health and resilience of this vital ecosystem.		



MAP 33: ESTUARIES

WINNIE MADIKIZELA-MANDELA LOCAL MUNICIPALITY

WINNIE MADIKIZELA MANDELA SPATIAL DEVELOPMENT FRAMEWORK

Estuaries

Legend

- NFEPA River
- Railway
- National Road
- Provincial Road
- Access Road
- Protected Area
- Settlement
- Category A
- Category B
- Category C
- Category D
- Category E
- Category F
- Category Z

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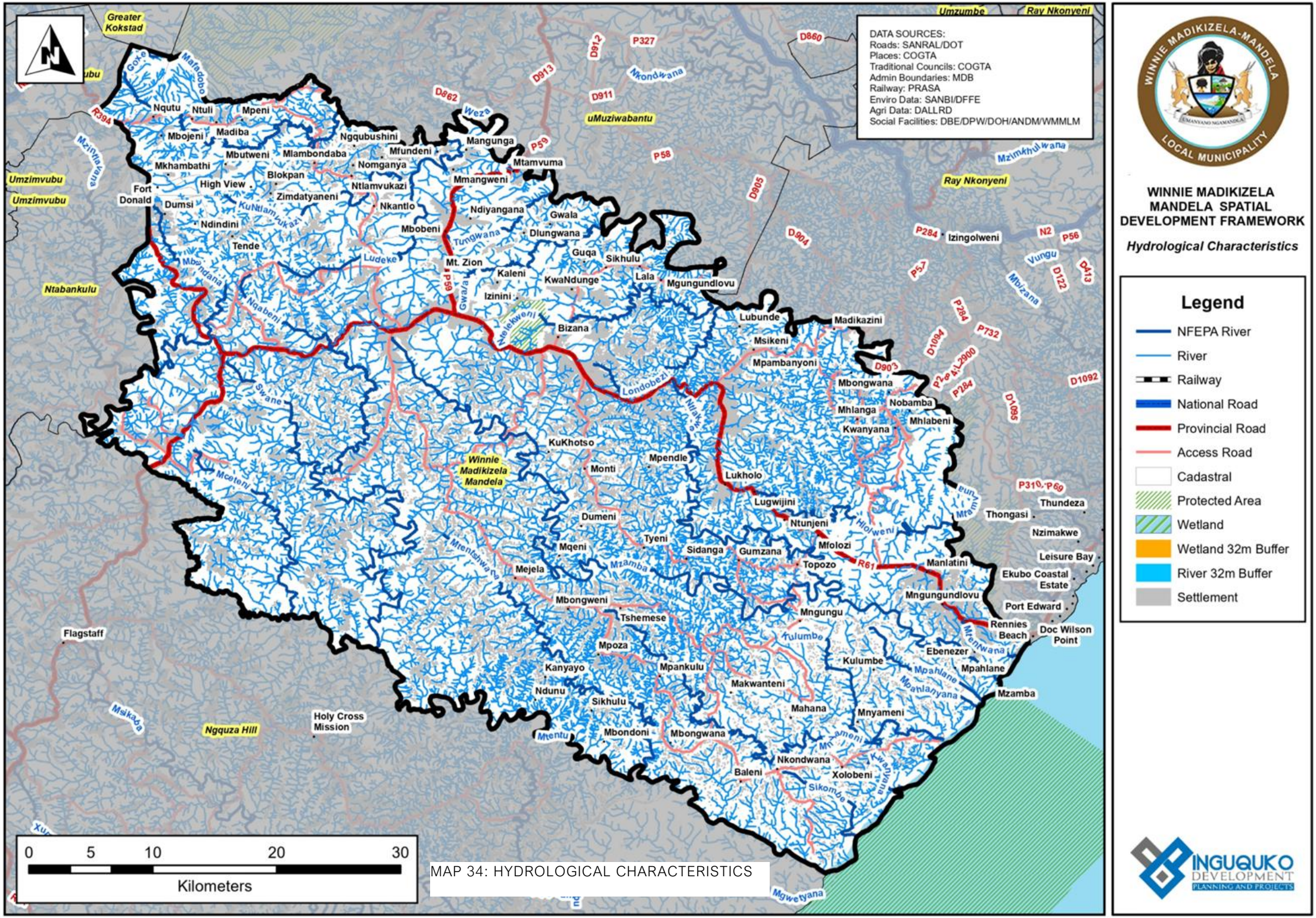


MAP 34: HYDROLOGICAL CHARACTERISTICS

6.4. THREATENED TERRESTRIAL ECOSYSTEMS AND BIODIVERSITY

An ecosystem is a dynamic complex of animal, plant, and micro-organism communities, along with their non-living environment, interacting as a functional unit. The National Department of Environmental Affairs (DEA) has published a list of threatened terrestrial ecosystems (DEA 2011a), classifying them into four categories: Critically Endangered (CR), Endangered (EN), Vulnerable (VU), or protected. The purpose of categorizing these ecosystems is to prioritize conservation areas, reduce the rates of ecosystem and species extinction, and prevent further degradation and loss of their structure, function, and composition (BGIS n.d.).

National threatened ecosystems are identified based on criteria such as:

- Irreversible loss of natural habitat
- Ecosystem degradation and loss of integrity
- Ecosystem occurring in a limited area and under imminent threat
- Presence of threatened plant species
- Fragmentation
- Identification as priority areas for meeting biodiversity targets.

The DEA's primary goal in listing threatened ecosystems is to reduce the rate of ecosystem and species extinction, prevent further degradation, and maintain their structure, function, and composition. For protected ecosystems, the goal is to preserve sites of exceptionally high conservation value. Both threatened and protected ecosystem listings aim to enable proactive management and conservation efforts. While the listing may also raise awareness and have symbolic importance, this is not its primary purpose.

The National Gazette No 34809 of 09 December 2011 Volume 558 outlines the threatened ecosystems located within the Eastern Cape. The table below outlines the threatened terrestrial ecosystems evident within the WMMLM municipality, as noted by the South African National Biodiversity Institute. The criteria used to identify threatened terrestrial ecosystems include thresholds for critically endangered, endangered, and vulnerable ecosystems.

TABLE 11: CONSERVATION CATEGORY GUIDELINES

CONSERVATION CATEGORY	CATEGORY DETERMINANT	IMPLICATIONS
Critically Endangered (CR)	Point beyond which many species may be lost	Any further loss will result in the conservation target not being met & the persistence of vegetation type uncertain
Endangered: High	A higher degree of ecosystem functioning lost - nearing CR status	A further loss will result in the category being upgraded to CR and may result in the conservation target not being met & persistence of vegetation type uncertain.
Endangered: Low	The threshold for conserving ecosystem functioning	
Vulnerable	If habitat loss continues, ecosystem functioning will be compromised.	Caution required
Least Threatened	100% of the ecosystem intact	The sustainable development approach to be in place

Vegetation types offer a valuable representation of terrestrial biodiversity, as most animals, birds, insects, and other organisms are closely linked to specific vegetation types (Rouget et al. 2004).

The Environmental Impact Assessment (EIA) Regulations outline three listing notices that contain activities necessitating an Environmental Authorisation under the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), as well as regulations 6 (1) and 16 (1) of the EIA Regulations, 2014 (Government Notice No. R 982, 04 December 2014). The EIA Regulations include three Listing Notices:

- **Listing Notice 1**: Activities requiring a basic assessment (GNR 327 of 2017).
- **Listing Notice 2**: Activities requiring a scoping and environmental impact report (EIR) (GNR 325 of 2017).
- **Listing Notice 3**: Activities requiring a basic assessment in specifically identified geographical areas only (GNR 327 of 2017).

Listing Notice 3, Activity 12, pertains to the clearance of 300m² or more of vegetation, triggering a basic assessment within any critically endangered or endangered ecosystem listed under S52 of the Biodiversity Act. This means that any development involving the loss of natural habitat in a listed critically endangered or endangered ecosystem will likely require at least a basic assessment under the EIA regulations.

Listing Notice 2, Activity 15, involves the clearance of more than 1 hectare but less than 20 hectares of vegetation, necessitating an Environmental Impact Report (EIR). This indicates that any development involving the removal of over 1 hectare of indigenous vegetation will require a Scoping and Environmental Impact Assessment under the EIA Regulations.

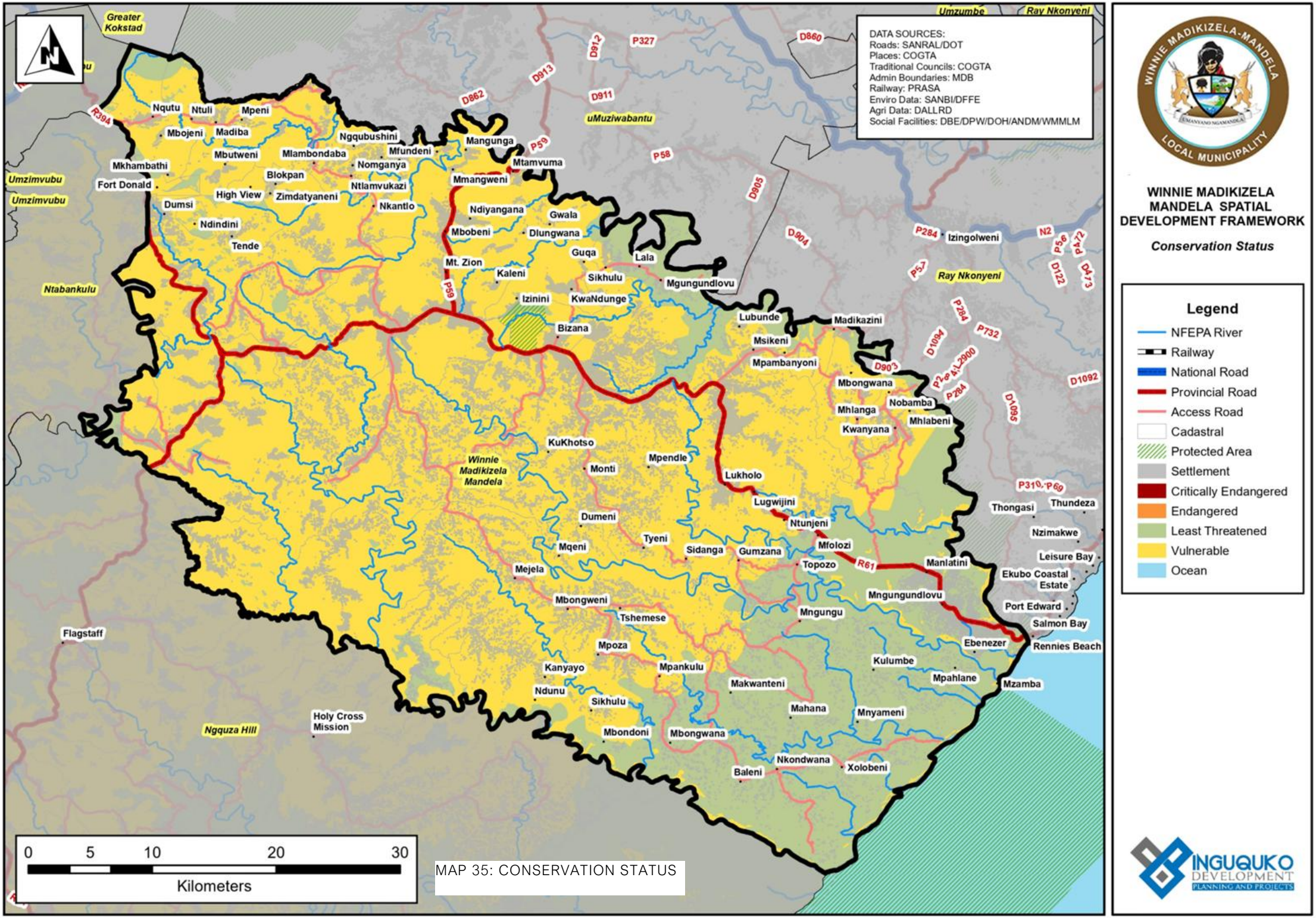
Listing Notice 1, Activity 27, relates to the clearance of an area of 1 hectare or more but less than 20 hectares of indigenous vegetation. Therefore, any development involving the removal of more than 1 hectare, but less than 20 hectares will require a Basic Assessment under the EIA Regulations.

6.5. VEGETATION

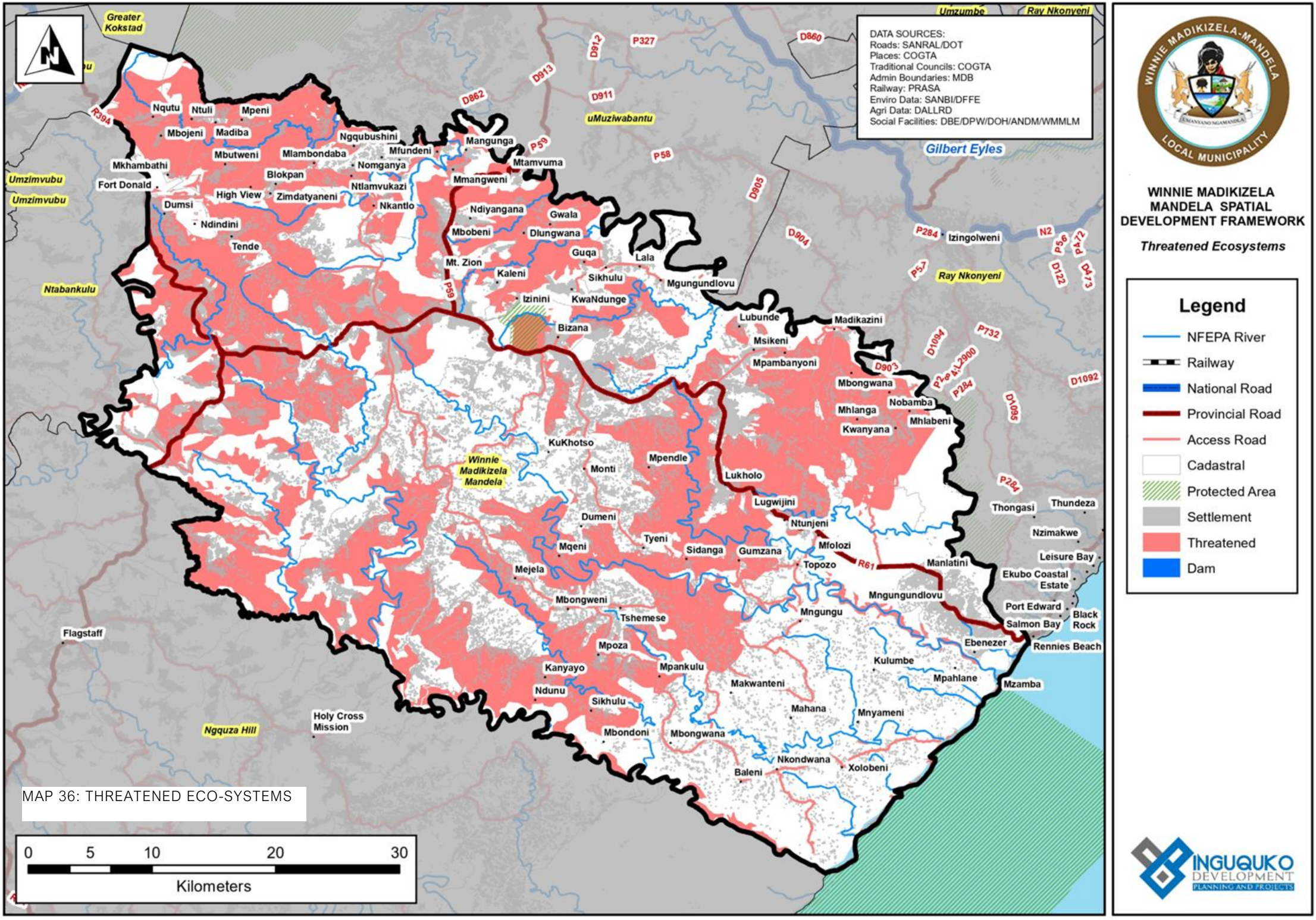
The diverse vegetation types within the Eastern Cape offer a range of unique ecological characteristics and biodiversity. The Drakensberg Foothill Moist Grassland is characterized by a variety of grasses and herbs, thriving in moist conditions at the foothills of the Drakensberg Mountains. The Eastern Valley Bushveld is typified by dense, thorny shrubs and trees, providing a vital habitat for numerous wildlife species. The Midlands Mistbelt Grassland features lush, mist-shrouded grasslands that support an array of endemic plant species. Ngongoni Veld is known for its dense, grassy vegetation interspersed with scattered trees and shrubs, typical of the region's rolling hills.

The Northern Coastal Forest is a rich, biodiverse habitat comprising evergreen trees and a dense understory, supporting a wide variety of fauna. The Pondoland-Ugu Sandstone Coastal Sourveld consists of grassy, herbaceous vegetation growing on nutrient-poor sandstone soils, with several endemic plant species. Scarp Forests are dense, moisture-rich forests found on steep, coastal escarpments, hosting an array of specialized plant and animal species. The Southern Mistbelt Forest is another lush, mist-enshrouded forest with a high level of biodiversity, particularly in ferns and epiphytes.

Subtropical Coastal Lagoons are characterized by brackish water and a mix of aquatic and semi-aquatic vegetation, providing crucial habitat for numerous fish and bird species. Subtropical Dune Thicket consists of dense, thorny vegetation on coastal dunes, protecting inland areas from wind and erosion. Subtropical Estuarine Salt Marshes are found in tidal zones and feature salt-tolerant plants that provide essential ecosystem services, such as filtering pollutants and stabilizing shorelines. Lastly, Subtropical Seashore Vegetation includes hardy, salt-tolerant plants growing in sandy coastal areas, playing a crucial role in dune stabilization and providing habitat for coastal wildlife. Together, these vegetation types contribute to the ecological richness and resilience of the Eastern Cape.



MAP 35: CONSERVATION STATUS



MAP 36: THREATENED ECO-SYSTEMS

6.6. GEOLOGICAL CHARACTERISTICS

The WMMLM, boasts a diverse geological landscape. The region is characterized by a variety of soil and rock types that contribute to its unique natural environment.

The soils in this area are predominantly sandy loams and clay loams, which are well-suited for agriculture. These soils are derived from the weathering of underlying rock formations and are rich in minerals, making them fertile and ideal for subsistence farming. The sandy loams are particularly common in the coastal areas, while the clay loams are more prevalent in the inland regions.

The rock formations in the municipality are primarily composed of gneiss, schist, and granite. Gneiss is a metamorphic rock that is known for its foliated texture and is commonly found in the mountainous regions of the municipality. Schist, another metamorphic rock, is characterized by its platy texture and is often associated with gneiss in the same geological formations. Granite, an igneous rock, is also present in the area and is known for its coarse-grained texture and durability.

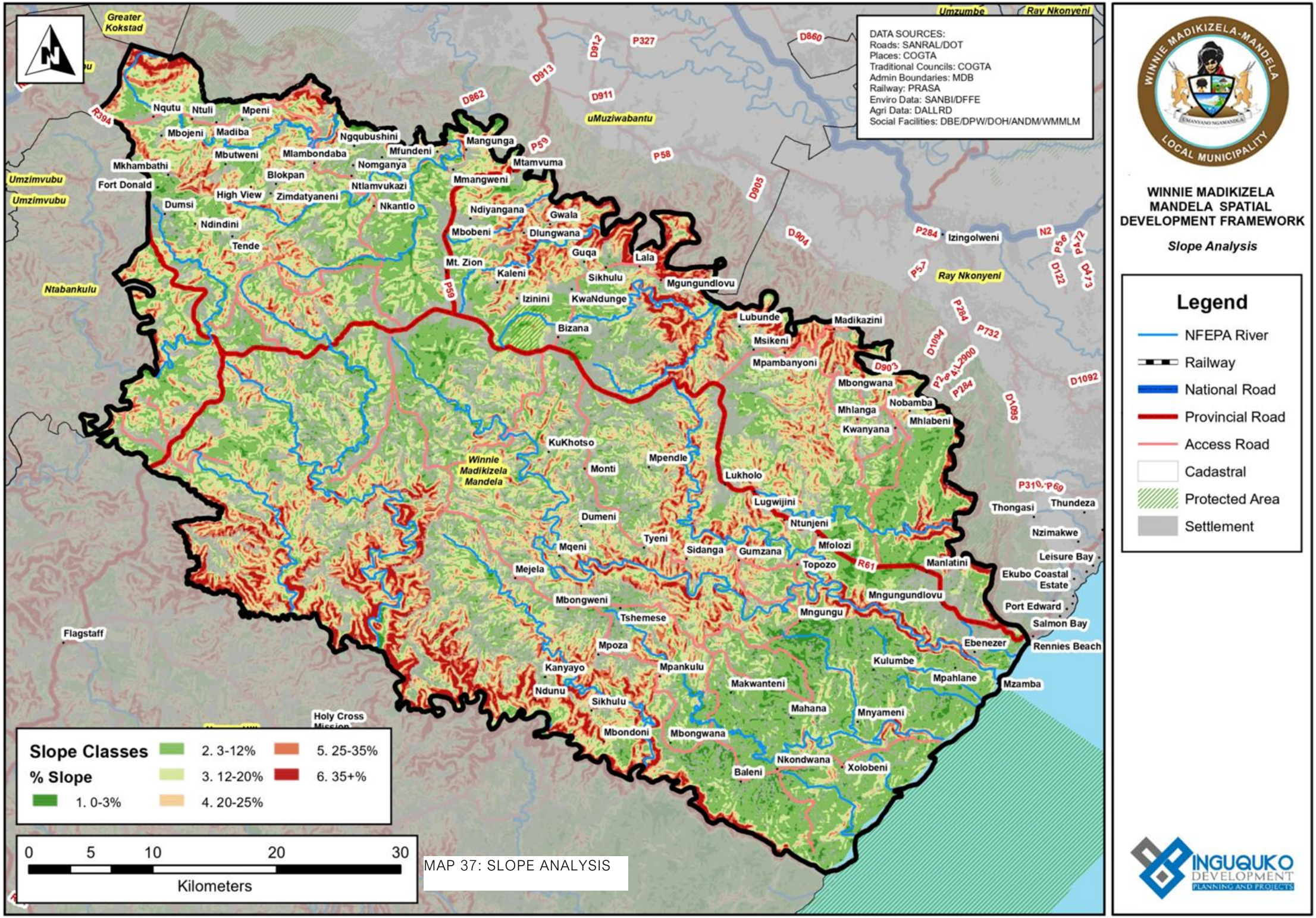
These rock types play a significant role in shaping the landscape and influencing the soil composition of the region. The weathering of these rocks contributes to the formation of the fertile soils that support agriculture and other forms of land use in the municipality.

6.7. TOPOGRAPHY AND SLOPE ANALYSIS

The Winnie Madikizela-Mandela Local Municipality, located in the Eastern Cape Province of South Africa, exhibits a complex topography characterized by a diverse range of elevations and slopes. The northern region is dominated by the Drakensberg Mountains, which present steep gradients and high altitudes, contributing to the region's rugged terrain. These mountains play a crucial role in the municipality's landscape, influencing both natural processes and human activities.

Southward, the topography transitions into the Eastern Valley Bushveld, characterized by more moderate slopes and rolling hills. This area supports mixed farming and is integral to the region's agricultural productivity1. Further inland, the Midlands Mistbelt Grassland features rolling hills with moderate slopes, providing a suitable environment for grassland farming and conservation efforts.

The coastal areas of the municipality, including the Northern Coastal Forest and Pondoland-Ugu Sandstone Coastal Sourveld, are marked by low-lying terrain with minimal slopes. These regions are vital for their biodiversity and are home to a variety of plant and animal species1. The coastal plains are also significant for agriculture, particularly for the cultivation of vegetables and other crops that require well-drained soils.



MAP 37: SLOPE ANALYSIS

WINNIE MADIKIZELA MANDELA SPATIAL DEVELOPMENT FRAMEWORK

Slope Analysis

Legend

- NFEPA River
- Railway
- National Road
- Provincial Road
- Access Road
- Cadastral
- Protected Area
- Settlement

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6.8. AGRICULTURE

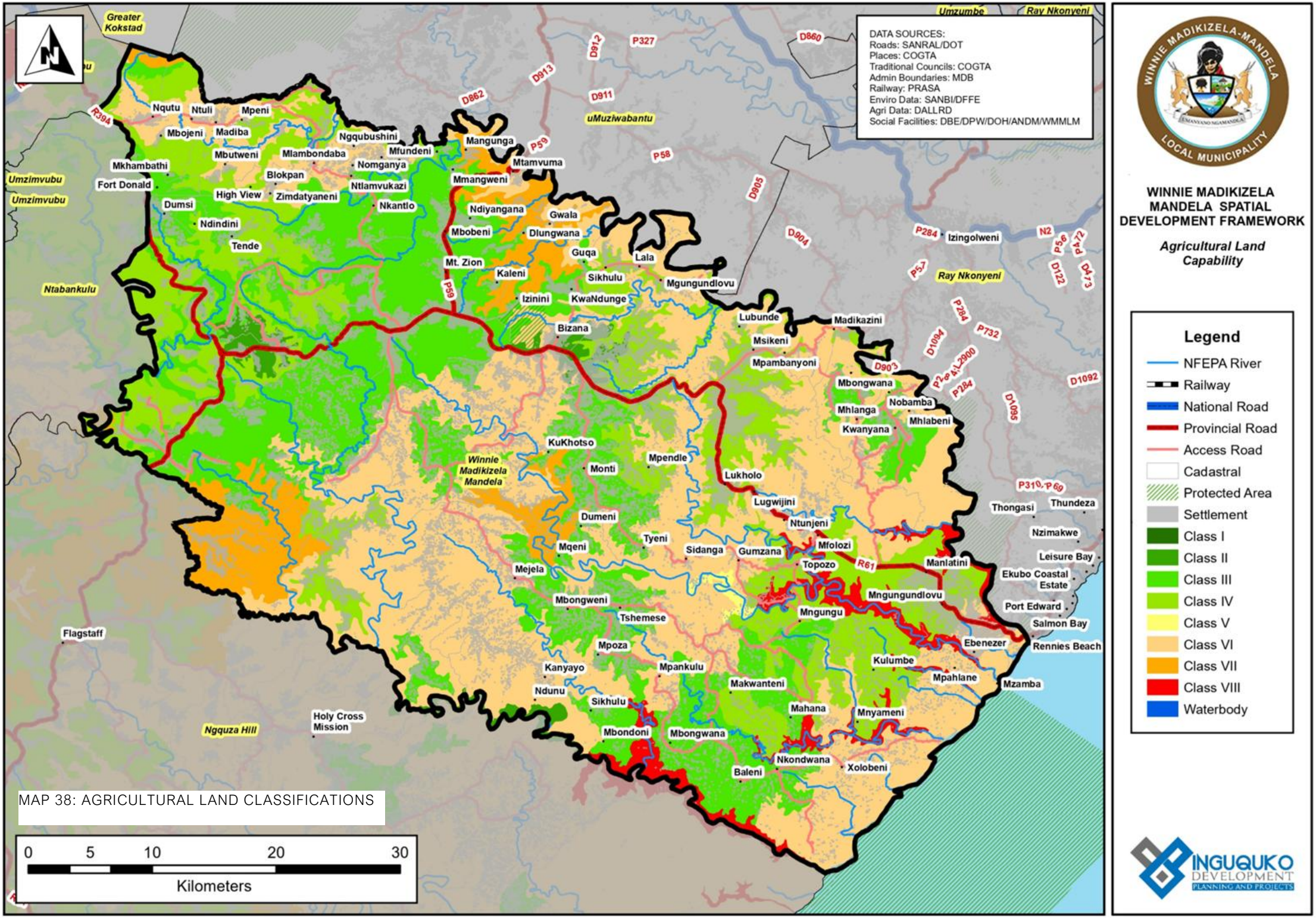
6.8.1. AGRICULTURAL LAND CAPABILITY

The Department of Agriculture, Land Reform and Rural Development has developed an agricultural land capability classification is a system used to evaluate and categorize land based on its suitability for different types of agricultural activities. This classification helps in identifying the most appropriate land uses and management practices for sustainable agricultural production. The system typically considers factors such as soil type, topography, climate, and water availability to determine the potential productivity and limitations of the land. The classification is divided into different classes, ranging from the following:

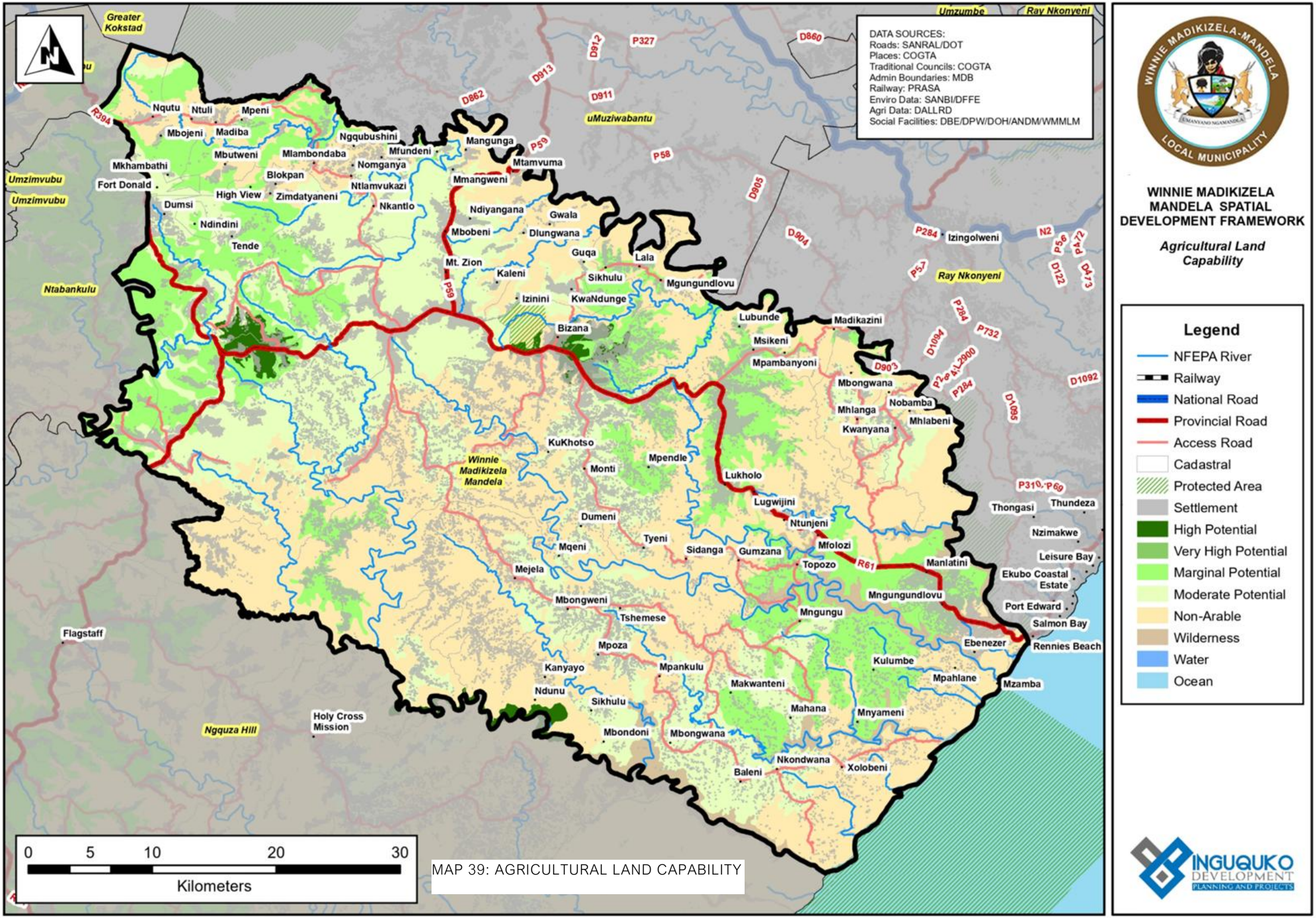
TABLE 12: AGRICULTURAL LAND CAPABILITY CLASSIFICATION SYSYTEM

CLASSIFICATION	DESCRIPTION
Class I – Very High Potential	Class I classification represents the highest potential for agricultural productivity. This class includes land with deep, well-drained soils that are fertile and free from limitations such as steep slopes, erosion risks, or adverse climatic conditions. Class I soils are typically found in flat or gently rolling landscapes, making them ideal for a wide range of crops and intensive farming practices. The characteristics of Class I land make it highly suitable for growing high-value crops, such as vegetables, fruits, and grains, which require optimal growing conditions to thrive. Additionally, this class of land is often used for pasture and livestock farming due to its excellent forage quality and capacity to support healthy grazing systems. In essence, Class I land is the most versatile and productive agricultural land, offering the best conditions for sustainable and profitable farming operations. Its prime location and soil quality make it a valuable asset for farmers and a key resource for food production in South Africa.
Class II – High Potential	Class II agricultural land capability classification is highly productive, though it has minor limitations compared to Class I land. These limitations may include slightly steeper slopes, moderate erosion risks, or minor drainage issues. However, Class II soils are still very fertile and well-suited for a wide range of agricultural activities, including the cultivation of row crops, vegetables, and fruits. They may also support pasture and livestock farming, offering good forage quality. Class II land requires careful management to address its limitations and prevent any potential degradation. Practices such as contour ploughing, crop rotation, and the use of cover crops can help maintain soil health and productivity. Overall, Class II land remains a valuable resource for sustainable agricultural production, providing favourable conditions for high yields and supporting the agricultural sector's growth and stability.
Class III – Moderate Potential	Class III agricultural land capability classification is moderately productive, with more significant limitations than Class I and II lands. These limitations can include steeper slopes, higher erosion risks, drainage issues, and less fertile soils. Despite these challenges, Class III land remains suitable for a wide range of agricultural activities, albeit with more intensive management practices to maintain productivity and prevent degradation. Common uses of Class III land include the cultivation of less demanding crops, such as grains and certain vegetables, as well as pasture and livestock farming. Effective management strategies, such as terracing, contour ploughing, and soil conservation techniques, are essential to optimize the agricultural potential of Class III land. While not as versatile as Class I and II lands, Class III land still contributes significantly to agricultural production and can support sustainable farming practices with proper management.
Class IV – Marginal Potential Arable Land	Class IV agricultural land capability classification presents more significant limitations compared to Classes I, II, and III. These limitations can include steeper slopes, higher erosion risks, poorer soil fertility, and drainage issues. As a result, Class IV land is less versatile for agricultural purposes and requires more intensive management practices to maintain productivity. This land is generally suitable for less demanding crops, such as certain types of grains and forage crops, and may also be used for pasture and livestock farming. Effective management strategies for Class IV land include erosion control measures, such as terracing and contour ploughing, as well as soil conservation techniques to enhance soil fertility and prevent degradation. While Class IV land is not as productive as higher classes, it still holds potential for sustainable agricultural use with careful planning and management.

CLASSIFICATION	DESCRIPTION
Class V – Non-Arable; Grazing, Woodland or Wildlife	Class V agricultural land capability classification is characterized by significant limitations that restrict its use for crop production. These limitations may include steep slopes, severe erosion risks, shallow soil depths, poor drainage, and low fertility. Consequently, Class V land is generally unsuitable for regular cultivation of crops. However, it can still be utilized for other agricultural purposes, such as grazing and pasture for livestock. To ensure sustainable use, Class V land requires careful management practices, such as implementing erosion control measures, maintaining vegetation cover, and managing grazing intensity to prevent further degradation. While not ideal for intensive agricultural activities, Class V land still holds value for supporting certain types of extensive agricultural practices and can contribute to the overall agricultural productivity of a region when managed properly.
Class VI – Non-Arable; Grazing, Woodland or Wildlife	Class VI agricultural land capability classification is marked by more severe limitations that make it unsuitable for most types of agricultural activities. These limitations can include extremely steep slopes, severe erosion risks, shallow or rocky soils, poor drainage, and low fertility. As a result, Class VI land is generally not suitable for cultivation and is best used for grazing, forestry, or wildlife habitat. Effective management practices are essential for preventing further land degradation and maintaining the land's ecological balance. This may involve implementing erosion control measures, maintaining vegetation cover to protect the soil, and managing grazing intensity to ensure sustainable use. While Class VI land has limited agricultural potential, it plays an important role in supporting biodiversity and providing ecosystem services, such as soil stabilization and water regulation. Proper management of Class VI land can help maintain its ecological value and contribute to the overall sustainability of the landscape.
Class VII - Non-Arable; Grazing, Woodland or Wildlife	Class VII agricultural land capability classification is characterized by very severe limitations that make it unsuitable for most agricultural activities. These limitations may include extremely steep slopes, severe erosion risks, shallow and rocky soils, poor drainage, and low fertility. Consequently, Class VII land is generally unfit for cultivation or intensive farming. Instead, it is best suited for non-agricultural uses such as forestry, wildlife habitat, and conservation areas. The primary focus for managing Class VII land is to prevent further land degradation and to maintain its ecological balance. This can be achieved through erosion control measures, maintaining natural vegetation cover, and restricting activities that could exacerbate land degradation. Although Class VII land has limited agricultural potential, it is valuable for supporting biodiversity, providing ecosystem services such as soil stabilization and water regulation, and offering recreational and conservation opportunities. Proper management of Class VII land can help preserve its ecological value and contribute to the overall sustainability of the landscape.
Class VIII - Wilderness	Class VIII agricultural land capability classification is identified by its extreme limitations, rendering it unsuitable for most agricultural activities. These limitations can include exceptionally steep slopes, severe erosion risks, shallow and rocky soils, poor drainage, and very low fertility. As a result, Class VIII land is generally not fit for cultivation, grazing, or forestry. Instead, it is best designated for non-agricultural uses such as wildlife habitat, recreation, and conservation areas. The primary focus for managing Class VIII land is to prevent further land degradation and to protect its ecological and environmental value. This involves implementing strict conservation measures, maintaining natural vegetation cover, and restricting activities that could cause additional damage. Although Class VIII land has very limited agricultural potential, it plays a critical role in supporting biodiversity, providing ecosystem services like soil stabilization and water regulation, and offering recreational and conservation opportunities. Proper management of Class VIII land helps to preserve its environmental value and contributes to the overall sustainability and health of the landscape.



MAP 38: AGRICULTURAL LAND CLASSIFICATIONS



MAP 39: AGRICULTURAL LAND CAPABILITY

WINNIE MADIKIZELA MANDELA SPATIAL DEVELOPMENT FRAMEWORK

Agricultural Land Capability

Legend

- NFEPA River
- Railway
- National Road
- Provincial Road
- Access Road
- Cadastral
- Protected Area
- Settlement
- High Potential
- Very High Potential
- Marginal Potential
- Moderate Potential
- Non-Arable
- Wilderness
- Water
- Ocean

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6.8.2. GRAZING CAPACITY

The grazing capability of agricultural land is a crucial aspect of livestock farming, and it is often evaluated using the measure of hectares per Livestock Unit (ha LSU). This metric helps determine the carrying capacity of land for supporting livestock, ensuring sustainable grazing practices that prevent overgrazing and land degradation. A Livestock Unit (LSU) is a standardized measure that represents the grazing equivalent of one adult cow, typically weighing around 450 kg. By assessing the number of hectares required to support one LSU, farmers and land managers can make informed decisions about stocking rates, grazing management, and land use planning.

In South Africa, the grazing capability of agricultural land varies significantly depending on factors such as soil type, vegetation, climate, and topography. High-quality grazing land with fertile soils, abundant forage, and favourable climatic conditions may require fewer hectares per LSU, indicating a higher carrying capacity. For example, well-managed pastures in regions with adequate rainfall and rich soil may support one LSU on as little as 1 to 2 hectares. These areas are ideal for intensive livestock farming and can sustain higher stocking rates without compromising the land's health.

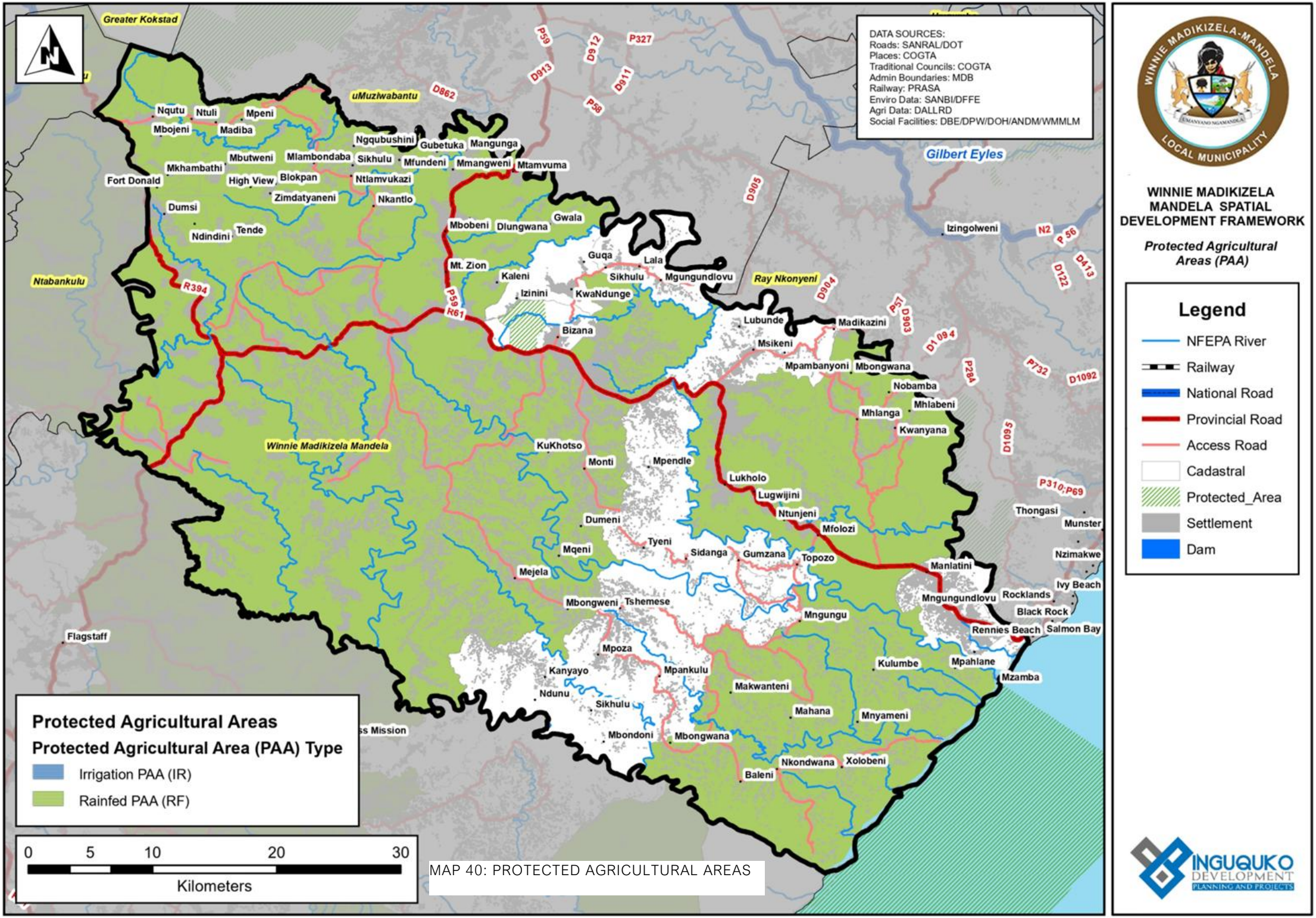
Conversely, grazing land in arid or semi-arid regions, with poor soil quality and limited vegetation, may require significantly more hectares per LSU. In such areas, the carrying capacity can be as low as one LSU per 10 to 20 hectares or even more. These lands are more susceptible to overgrazing, erosion, and desertification, necessitating careful management practices to ensure sustainability. Strategies such as rotational grazing, supplementary feeding, and reseeding of pastures can help maintain the land's productivity and support livestock health in these challenging environments.

Slope and topography also play a critical role in determining the grazing capability of agricultural land. Steeper slopes and rugged terrain can limit the accessibility of forage for livestock and increase the risk of erosion. In these areas, the carrying capacity may be lower, requiring more hectares per LSU. Implementing erosion control measures, such as terracing and maintaining vegetation cover, can help mitigate these challenges and enhance the land's grazing potential.

Another important factor influencing grazing capability is the type of vegetation present on the land. Grasslands, savannas, and shrublands each offer different types of forage with varying nutritional values. The quality and quantity of forage available directly impact the number of hectares required to support one LSU. High-quality forage, rich in nutrients, can sustain livestock on fewer hectares, whereas poor-quality forage may necessitate larger areas to meet the nutritional needs of the animals. Water availability is another critical consideration in assessing grazing capability. Access to reliable water sources is essential for livestock health and productivity. In areas with limited water resources, the carrying capacity may be lower, as animals require additional space to meet their hydration needs. Ensuring adequate water supply through the development of wells, dams, or water troughs can enhance the grazing potential of agricultural land.

6.8.3. PROTECTED AGRICULTURAL AREAS

Protected Agricultural Areas (PAA) in South Africa are designated zones aimed at preserving and promoting sustainable agricultural practices. These areas are classified into two main categories: Irrigation (IR) PAA and Rainfed (RF) PAA. Irrigation (IR) PAA refers to agricultural lands that rely on irrigation systems to maintain crop growth and productivity. These areas are equipped with infrastructure such as canals, pipelines, and sprinkler systems to provide a consistent water supply, especially in regions with limited rainfall. The primary goal of IR PAA is to optimize water use efficiency, enhance crop yields, and support sustainable farming practices in water-scarce environments. Rainfed (RF) PAA, on the other hand, consists of agricultural lands that depend solely on natural rainfall for crop production. These areas do not have irrigation infrastructure and rely on the seasonal precipitation patterns to sustain crops. RF PAA is typically found in regions with adequate rainfall and aims to promote conservation practices, soil health, and biodiversity to ensure the long-term sustainability of rainfed agriculture.



MAP 40: PROTECTED AGRICULTURAL AREAS

6.9. CLIMATE CHANGE

The phenomenon of climate change, often referred to as global warming, is primarily driven by the release of greenhouse gases—such as carbon dioxide, water vapor, nitrous oxide, methane, and fluorinated gases—into the atmosphere. These emissions result mainly from human activities, including the burning of fossil fuels for energy, deforestation, fertilization, farming, oil drilling, and waste generation. To a lesser extent, volcanic eruptions also contribute. These greenhouse gases act as a blanket, trapping heat within the Earth's atmosphere that would otherwise escape into space, ensuring an energy balance. This trapping effect leads to increased global temperatures and alterations in rainfall patterns, both in amount and spatial distribution. Over time, climate change is expected to intensify in terms of severity and frequency.

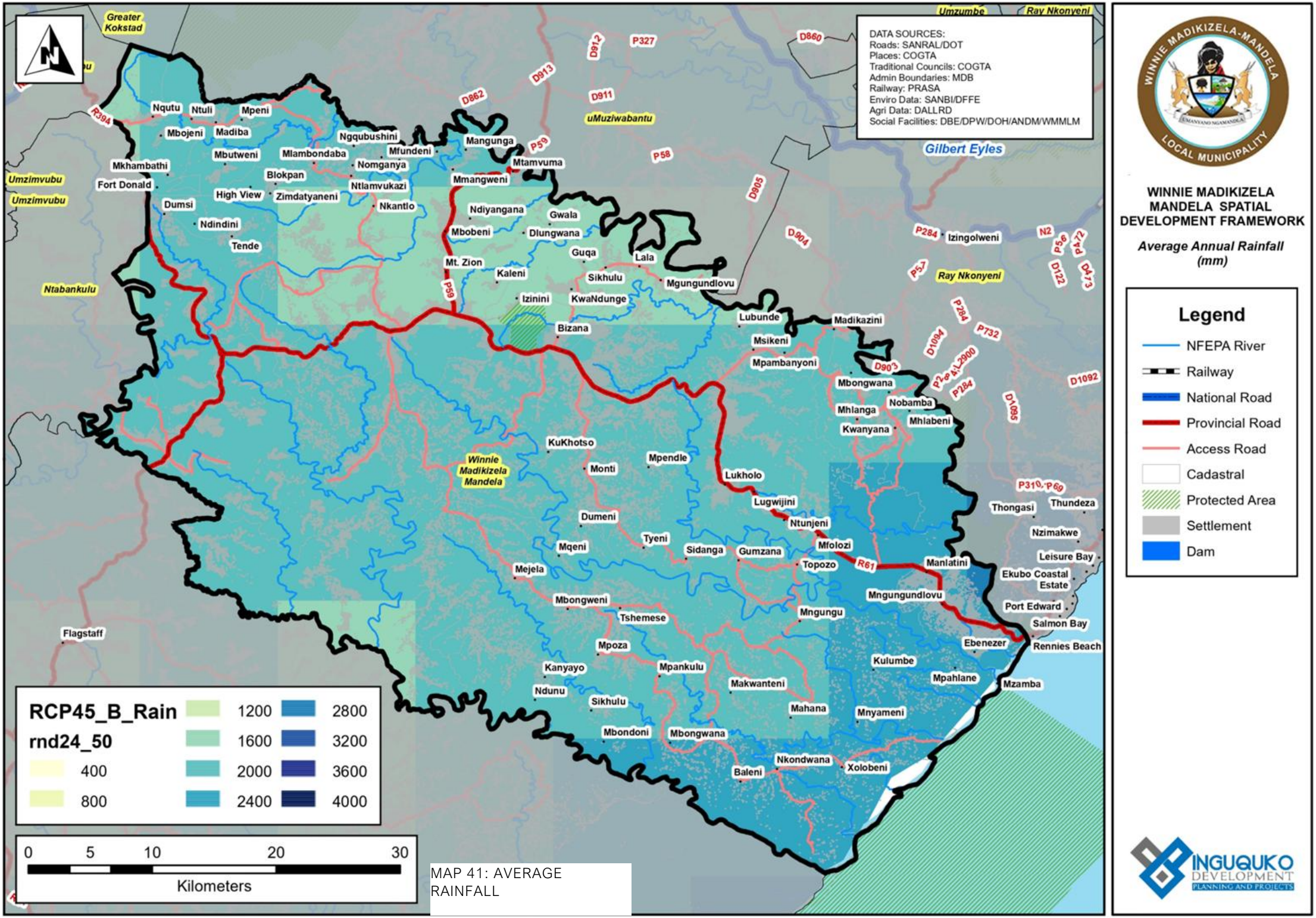
Efforts to mitigate climate change focus on reducing the severity and frequency of extreme events. However, fundamental changes in the Earth's systems, known as climate feedback, are also occurring. Climate change triggers certain alterations on Earth that, in turn, lead to further climate change, creating a vicious cycle. This feedback become more likely and severe as temperatures rise. A temperature increases of 1.5°C is considered critical to stabilizing the climate and limiting this feedback.

It is important to note that we have already experienced approximately 1.1°C of global warming, with noticeable impacts. At a 1.5°C increase, further climate change is expected. For example, deforestation can lead to additional global warming as the bare land absorbs more heat. Stabilizing the climate is crucial to preventing such outcomes. If temperatures exceed 1.5°C, our ability to stabilize the climate will be compromised.

One method of managing carbon is carbon capture, which involves industries capturing carbon at the point of emission and either storing it underground or utilizing it in products. Additionally, removing CO2 from the atmosphere is essential. Reforestation is the most straightforward approach, as plants absorb carbon dioxide. Increasing forested areas can significantly reduce atmospheric CO2 levels and help mitigate climate change.

Implications for the municipality:

- Climate change poses significant challenges for water resources as water availability, quality, and stream flow are highly sensitive to changes in temperature and precipitation.
- In addition to climatic factors, non-climatic influences such as land use practices and degradation can further impact water resources, prompting additional changes.
- The potential loss of cold to moderate climatic zones due to rising temperatures under climate change conditions may negatively impact the escarpment and interior of the province. This could affect both agricultural production (e.g., wheat, lupins, potatoes, and sheep) and biodiversity, altering growing conditions and crop choices.
- Warmer conditions may also facilitate the growth of pests and diseases with better adaptation mechanisms, posing additional threats to agriculture and biodiversity.



MAP 41: AVERAGE RAINFALL

WINNIE MADIKIZELA MANDELA SPATIAL DEVELOPMENT FRAMEWORK

Average Annual Rainfall (mm)

Legend

- NFEPA River
- Railway
- National Road
- Provincial Road
- Access Road
- Cadastral
- Protected Area
- Settlement
- Dam

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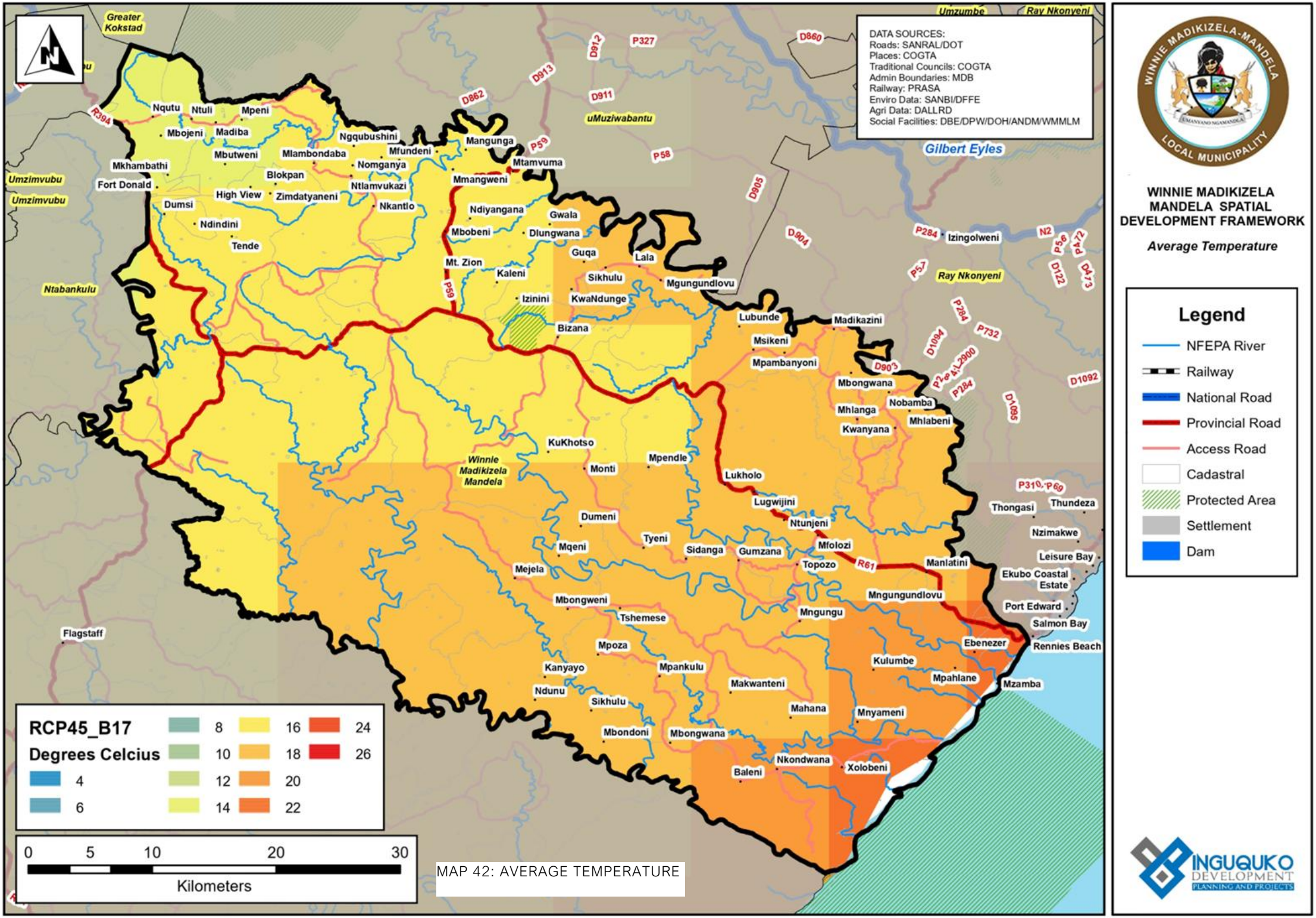

MAP 42: AVERAGE TEMPERATURE

6.10. ENVIRONMENTAL SWOT ANALYSIS

TABLE 13: ENVIRONMENTAL SWOT ANALYSIS

STRENGTH	WEAKNESSES
➢ High agricultural potential: ➢ Vegetable production and processing. ➢ Agriculture is a major driver of the local economy. ➢ All environmentally sensitive areas are highly valued and mapped accordingly. ➢ Climate conditions are favourable for an agricultural hub. ➢ Several NFEPA rivers traverse the municipality. ➢ Wetlands in the municipality provide clean water (ecosystem goods) to downstream communities and irrigation for agriculture.	➢ Inadequate protection of rivers, particularly near settlement areas. ➢ Insufficient management of the natural environment. ➢ Poor preservation of agricultural land. ➢ Limited agricultural potential in certain areas, especially those under communal ownership.
OPPORTUNITIES	**THREATS**
➢ Relocate settlements from high-risk areas such as floodplains and highly erodible soils. ➢ Scenic and environmentally significant areas hold potential for eco-tourism, benefiting tourism. ➢ Prioritize environmental education initiatives around sensitive areas. ➢ Coordinate activities of water users and water management institutions within the water management area. ➢ Increase investment in land care and agricultural education focused on subsistence farming. ➢ Develop guidelines for the protection of all wetland areas. ➢ Enhance value addition through the introduction of processing industries. ➢ Explore extensive value chain opportunities in vegetable farming, maize, and citrus. ➢ Create an inventory of wetlands within the district.	➢ Climate change poses a threat to ecosystems: ➢ Encroachment of settlements into sensitive areas ➢ Insufficient protection of environmental and municipal resources ➢ Inadequate land use management in rural areas ➢ Decreased vegetation cover, resulting in lower primary productivity and land carrying capacity ➢ Diminished water resources due to river management practices

DISASTER RISK MANAGEMENT

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7. DISASTER RISK MANAGEMENT

The Disaster Management Sector Plan is a fundamental part of the Integrated Development Plan (IDP). According to Section 26(g) of the Municipal Systems Act No. 32 of 2000, the municipal IDP must include a relevant Disaster Management Sector Plan (DMSP). Additionally, Section 53(2)(a) of the Disaster Management Act No. 57 of 2002 mandates that a disaster management sector plan for a municipal area must be an integral part of the municipality's IDP.

The Winnie Madikizela-Mandela local municipality is prone to various types of disaster hazards, both natural and human-induced. While natural disaster hazards cannot be prevented, it is essential to implement initiatives and measures to mitigate their effects. Human-induced disaster hazards, on the other hand, are largely preventable. As a result, the municipality remains vigilant and has established stringent measures and programs to effectively prevent and respond to such hazards.

7.1. DISASTER MANAGEMENT POLICY FRAMEWORK

Section 42 of the Disaster Management Act (Act 57 of 2002) mandates that each metropolitan and district municipality must establish and implement a framework for disaster management within the municipality to ensure an integrated and uniform approach to disaster management in its area. The Winnie Madikizela-Mandela Local Municipality (WMMLM) has developed a Disaster Management Plan for its jurisdiction, which is reviewed annually.

While the Alfred Nzo District Municipality (ANDM) performs this function according to its powers and functions, the WMMLM has prepared its own Disaster Management Plan to align with the ANDM Plan. Given the physical and social characteristics of the WMMLM area, several types of disasters are likely to occur.

7.2. RISK PROFILE AND NATURAL HAZARDS

The Winnie Madikizela-Mandela Local Municipality encounters a variety of risks, which include both human-induced and natural hazards. Conducting a disaster risk assessment is the initial step in planning effective disaster risk reduction programs (NDMF, 2005). This assessment involves investigating related hazards, conditions of vulnerability that increase the likelihood of loss, and the capacity or resources available to address such hazards and vulnerabilities. The following priority hazards have been identified across all five wards: drought, veld/forest fires, structural fires, floods, heavy rainfall, hailstorms, strong winds, lightning, and snow. The table below illustrates the results of the priority hazard analysis.

7.3. NATURAL HAZARDS

7.3.1. GEOLOGICAL HAZARDS

Natural processes or phenomena occurring within the biosphere can lead to damaging events known as natural hazards. These hazards are typically categorized into geological hazards, which encompass natural earth processes or phenomena within the biosphere. This category includes geological, neo-tectonic, geo-physical, geo-morphological, geotechnical, and hydro-geological occurrences. Examples of geological hazards include landslides, mudslides, rockslides, liquefaction, and subsidence.

7.3.2. BIOLOLGICAL HAZARDS

Biological hazards refer to processes of organic origin or those transmitted by biological vectors, encompassing exposure to pathogenic microorganisms, toxins, and bioactive substances. Examples of such hazards include epidemic diseases impacting humans or livestock, veld fires, and plant infestations. Specific examples include anthrax, cholera, food poisoning, measles, polio, rabies, Shigella dysentery, and tuberculosis.

7.3.3. HYDRO-METEOROLOGOCAL HAZARDS

Hydro-meteorological hazards are natural processes or phenomena related to the atmosphere or hydrology. These hazards include floods, debris flows, tropical cyclones, storm surges, severe storms, drought, and desertification.

7.3.4. TECHNOLOGICAL HAZARDS

Industrial pollution, nuclear activities, toxic waste, dam failures, transport accidents, hazardous installations, and the transportation of hazardous materials by road and rail, along with aircraft and vehicle accidents, constitute significant risks.

7.3.5. ENVIRONMENTAL DEGRADATION

Environmental degradation is a root cause of various human-induced disasters. Activities such as air and water pollution, overgrazing, and irresponsible developments contribute to these issues. The resulting disasters include land degradation, desertification, disease outbreaks such as cholera, and groundwater pollution.

7.4. DISASTER RISK REDUCTION

Disaster Risk Reduction is defined as the "conceptual framework of elements considered with the possibilities to minimize vulnerabilities and disaster risks throughout a society, to avoid (prevention) or to limit (mitigation and preparedness) the adverse impacts of hazards, within the broad context of sustainable development."

Disaster risk reduction focuses on disaster risk management planning and implementation to guide development. This encompasses plans, programs, and projects aimed at reducing disaster risks. It also addresses the requirements for disaster management frameworks and planning across all levels of government, with particular emphasis on integrating core risk reduction principles of prevention and mitigation into ongoing programs and initiatives.

Disaster response and recovery include all necessary measures to provide immediate emergency assistance to the affected people of the Winnie Madikizela-Mandela Local Municipality (WMMLM), such as search, rescue, and evacuation operations. Understanding the actions required during a disaster is crucial to effectively assist those affected in recovering from the incident. After a disaster occurs, the WMMLM, in consultation with the Alfred Nzo District Municipality (ANDM), activates a joint operations center to ensure a coordinated response effort by all relevant stakeholders. Ensuring the presence of relevant response teams is essential to prevent any secondary disaster incidents at the scene.

The WMMLM has prepared a Disaster Management Plan for its jurisdiction, with the review process now completed. According to the Disaster Management Amendment Act of 2015 (Act No. 16 of 2015), local municipalities are required to perform disaster management functions. Consequently, the WMMLM prepared its own Disaster Management Plan to

align with the ANDM Plan. Given the physical and social characteristics of the WMMLM area, several types of disasters are likely to occur.

7.4.1. EARLY WARNING STRATEGY

- Maintain communication with forecasting agencies and gather all available information about the alert.
- Ensure that everyone in areas likely to be affected by the imminent disaster receives warning signals and responds accordingly.
- Inform members of the Municipal Disaster Advisory Forum.
- Stay in contact with the District and Province Disaster Management Centre.
- Instruct all relevant parties to be prepared for emergency response.
- Advise concerned officials to carry out evacuations where necessary, and ensure transport, relief, and medical teams are ready to move to the affected areas on short notice.

7.5. ADVERSELY LOCATED HOUSEHOLDS

Identifying households adversely affected by hydrological areas and steep slopes is crucial for disaster risk management. Hydrological areas, such as floodplains and areas prone to waterlogging, pose significant risks to households due to the potential for flooding and water-related damage. Steep slopes, on the other hand, are susceptible to landslides and erosion, which can lead to structural damage and endanger the lives of residents. The assessment involves mapping these high-risk areas using geographic information systems (GIS) and satellite imagery, combined with field surveys to identify vulnerable households.

Factors such as elevation, proximity to water bodies, soil type, vegetation cover, and historical data on past incidents are considered in the analysis. This information helps in prioritizing areas for mitigation measures, such as the construction of retaining walls, drainage systems, and relocation of at-risk households to safer locations. By identifying and addressing these vulnerabilities, communities can be better prepared and resilient against hydrological and slope-related hazards.

7.5.1. HOUSEHOLDS IN HYDROLOGICAL AREAS

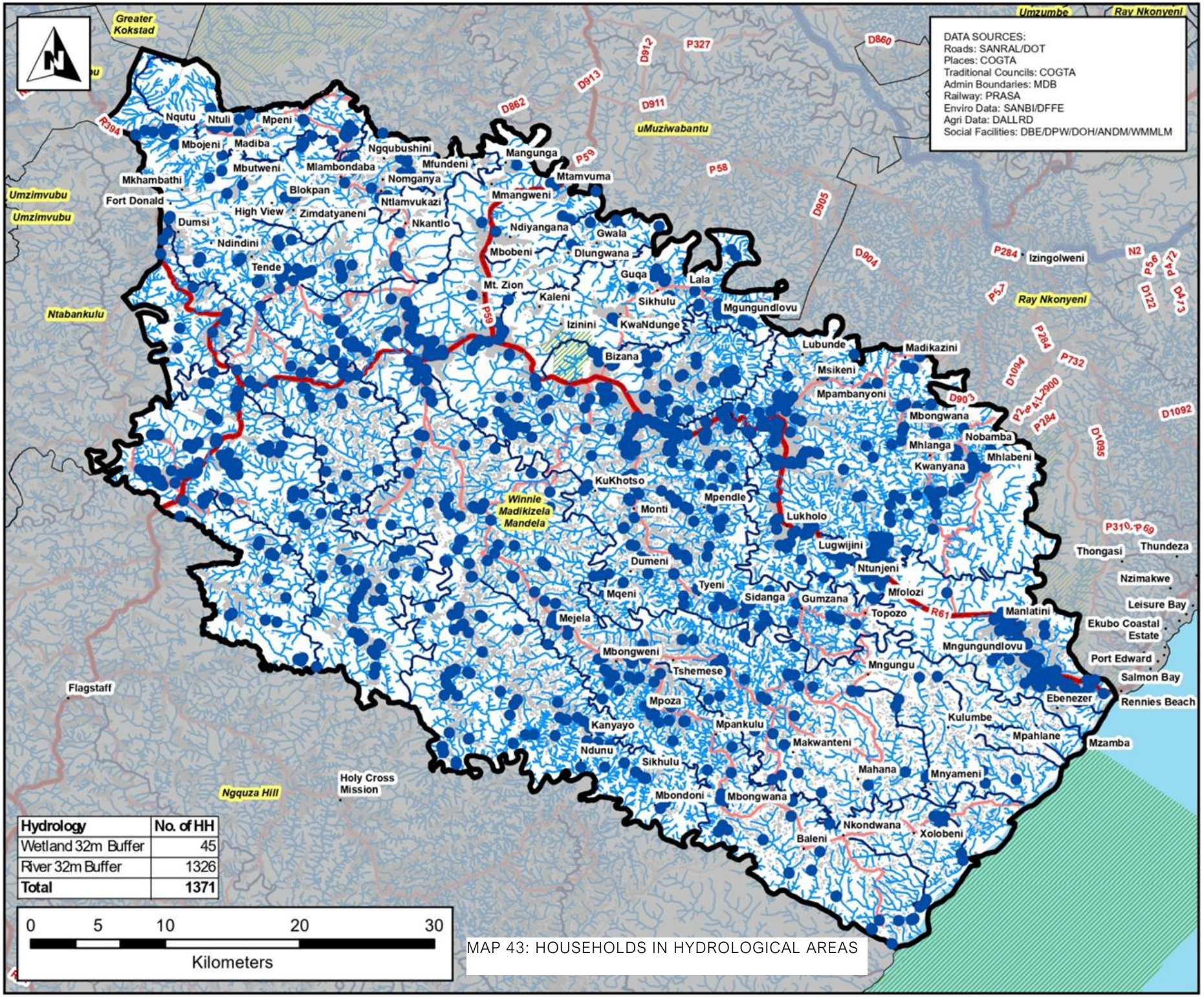
The municipality currently has approximately 1 371 households located in hydrological areas. A detailed analysis is tabulated below:

TABLE 14: HOUSEHOLDS IN HYDROLOGICAL AREAS

HYDROLOGY	NO. OF HH
Wetland 32m Buffer	45
River 32m Buffer	1326
TOTAL	**1371**

7.5.2. HOUSEHOLDS IN STEEP SLOPES

A slope is considered “steep” when it has a gradient of 1:3 or steeper. These areas pose a challenge in provision of infrastructure, public facilities, as well as disaster management hazards such as landslides during periods of heavy rain.



Hydrology	No. of HH
Wetland 32m Buffer	45
River 32m Buffer	1326
Total	**1371**

0 5 10 20 30

Kilometers

MAP 43: HOUSEHOLDS IN HYDROLOGICAL AREAS

WINNIE MADIKIZELA-MANDELA LOCAL MUNICIPALITY

WINNIE MADIKIZELA MANDELA SPATIAL DEVELOPMENT FRAMEWORK

Adversely Located Households in Hydrological Areas

Legend

- Household
- NFEPA River
- River
- Railway
- National Road
- Provincial Road
- Access Road
- Cadastral
- Protected Area
- Wetland
- Wetland 32m Buffer
- River 32m Buffer
- Settlement

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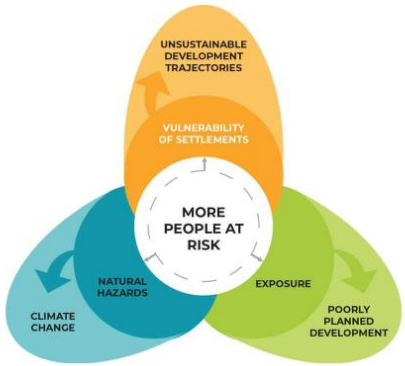
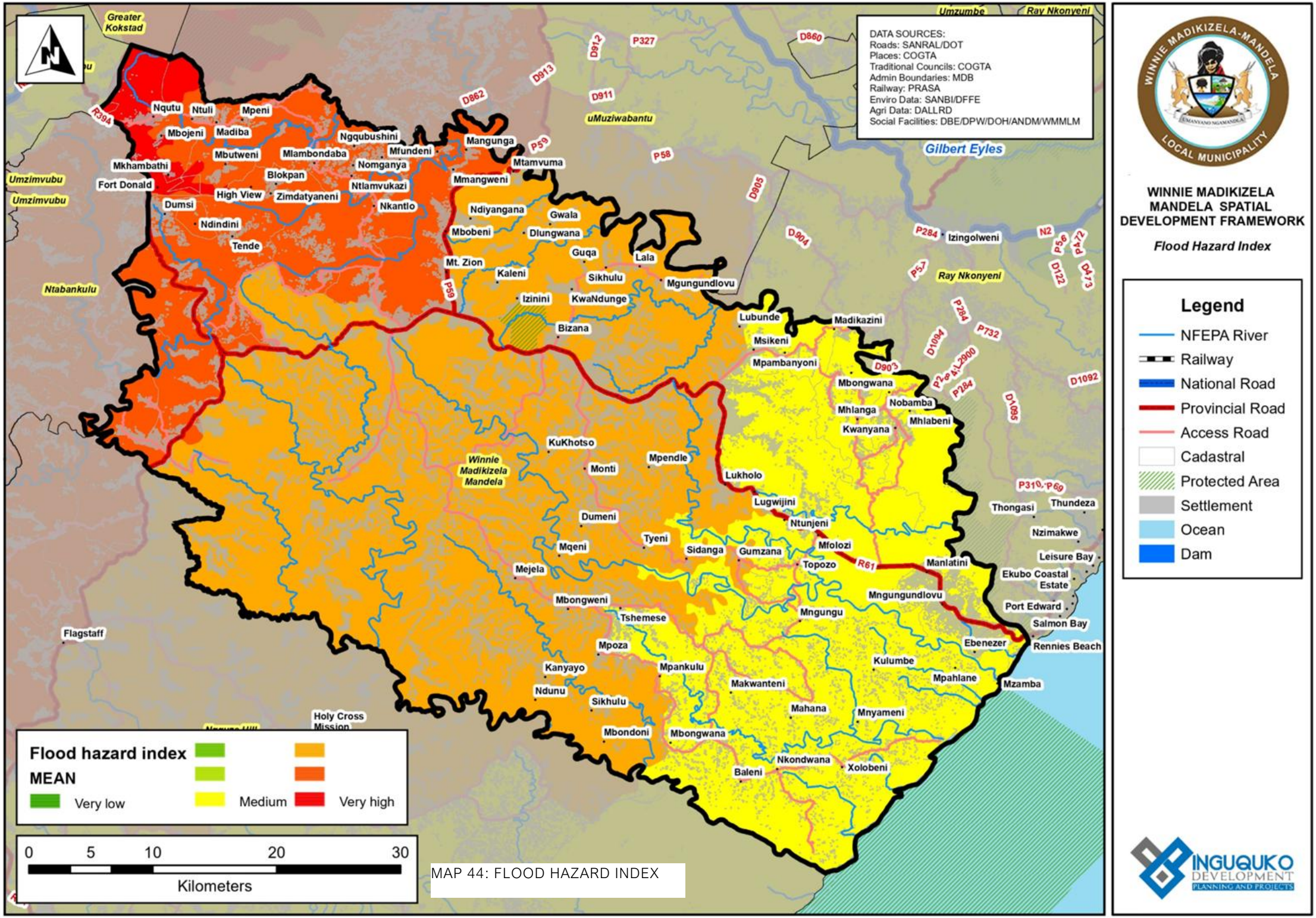
7.6. FLOOD HAZARD INDEX



The GreenBook on disaster management in South Africa is a comprehensive resource aimed at enhancing resilience and preparedness against various hazards. This tool, developed by the Council for Scientific and Industrial Research (CSIR), provides scientific evidence and practical guidelines for municipalities to integrate climate adaptation and disaster risk reduction into local planning and development processes. The GreenBook covers a wide range of topics, including flood risk assessments, drought management, and urban planning, offering strategies to mitigate the impacts of climate change and natural disasters. It emphasizes the importance of proactive measures, community engagement, and sustainable practices to ensure long-term resilience. By utilizing the GreenBook, municipalities can make informed decisions to protect lives, infrastructure, and ecosystems from the adverse effects of disasters. According to South Africa's GreenBook on disaster management, flood risk hazards are a significant concern due to the country's diverse climate and topography.

The GreenBook highlights that urbanization, land-use practices, and climate change contribute to the increasing frequency and intensity of flood events. Floods can cause extensive damage to infrastructure, disrupt communities, and pose serious risks to human life. The GreenBook emphasizes the importance of integrating flood risk assessments into municipal planning and development processes to mitigate these impacts. It provides scientific evidence and tools to help local governments identify vulnerable areas, implement effective flood management strategies, and enhance resilience against future flood events.

IMAGE 8: INFRASTRUCTURE DAMAGE CAUSED BY FLOODING



MAP 44: FLOOD HAZARD INDEX

WINNIE MADIKIZELA MANDELA SPATIAL DEVELOPMENT FRAMEWORK

Flood Hazard Index

7.7. FIRE LIKELIHOOD

Fire likelihood refers to the probability of wildfires occurring in specific areas, especially in the context of a changing climate. This index is determined by various environmental factors, including vegetation type, historical fire data, topography, and projected climate conditions such as temperature and wind patterns.

The Green Book identifies high-risk areas, particularly those within the wildland-urban interface—where natural vegetation meets human settlements—and categorizes them into different risk levels. These classifications help municipalities anticipate wildfire occurrences and assess their potential impacts. By mapping fire likelihood, the Green Book enables proactive planning, including buffer zone creation, improved land-use management, and targeted fire prevention measures, all aimed at safeguarding lives, infrastructure, and biodiversity in a warming climate.

The fire likelihood index classifies areas based on the statistical probability of wildfire occurrence, assisting municipalities in assessing and managing fire risks effectively:

- Likely: Fires are expected approximately once every 5 years in areas with environmental conditions that support frequent fire activity, such as certain vegetation types and climate patterns.
- Possible: Fires may occur about once every 10 years, influenced by seasonal weather variations and land-use patterns.
- Unlikely: Fires are anticipated roughly once every 20 years in regions with lower fire risks due to less flammable vegetation, cooler or wetter climates, or effective fire management practices.
- Rare: Fires happen approximately once every 100 years, typically in low-risk zones where environmental conditions or minimal fuel availability limit fire outbreaks.

This structured approach helps municipalities enhance wildfire preparedness and integrate fire risk considerations into broader climate resilience strategies.

7.8. VELD FIRE RISK

The Let's Respond Toolkit highlights veld fires as a major environmental and disaster risk in South Africa, particularly in regions with dry climates and dense vegetation. It includes a Veldfire Risk Map that classifies areas into extreme, high, medium, and low risk levels, aligning with the National Veld and Forest Fire Act. This classification helps municipalities prioritize fire management efforts, incorporate veldfire risk into climate change strategies, and integrate it into spatial planning. The toolkit underscores the importance of proactive measures such as firebreak maintenance, fuel load management, and community awareness to mitigate veld fire risks.

The veld fire risk classifications in the toolkit—Low, Medium, High, and Extreme—reflect the potential severity and frequency of fires:

- Low risk areas have minimal fire threat due to limited vegetation, cooler temperatures, or effective land management.
- Medium risk zones may experience occasional fires influenced by seasonal changes or moderate fuel loads.
- High risk regions are more susceptible to frequent and intense veld fires due to dense vegetation, dry conditions, and wind exposure.
- Extreme risk zones face the most significant danger, where fires are not only likely but can spread rapidly, causing severe damage to ecosystems, infrastructure, and communities.

It is evident that the majority of the municipality us under “extreme risk” when it comes to veld fires.

7.9. LIGHTNING STORM RISK

According to the Let's Respond Toolkit, lightning storm risk in South Africa is assessed using a metric called ground-flash density, which measures the number of lightning flashes per square kilometre per year. This classification helps identify areas most at risk of lightning-related hazards, which is particularly important given South Africa's high incidence of lightning-related fatalities. The classifications are as follows:

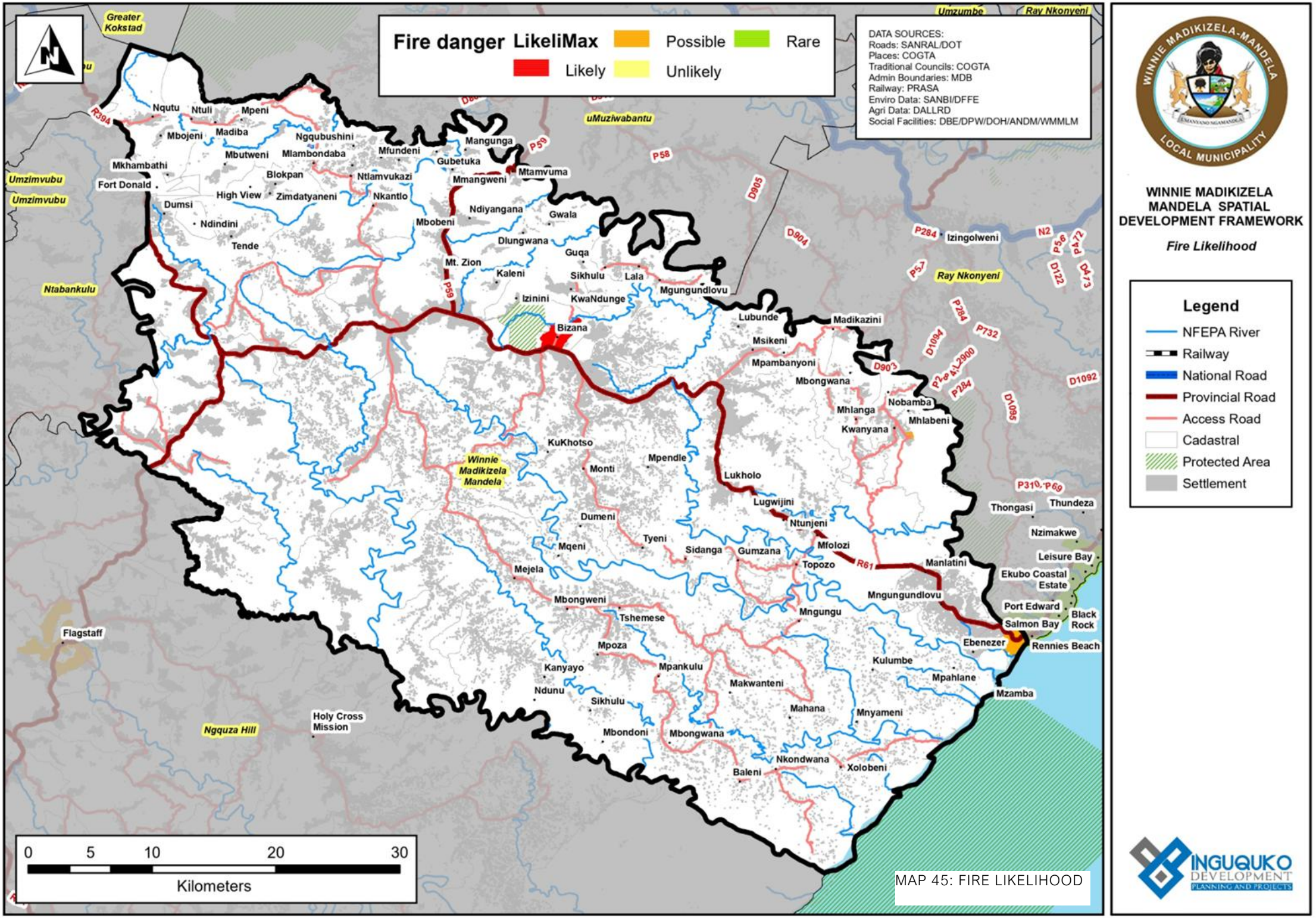
TABLE 15: LIGHTNING ACTIVITY RISK LEVELS

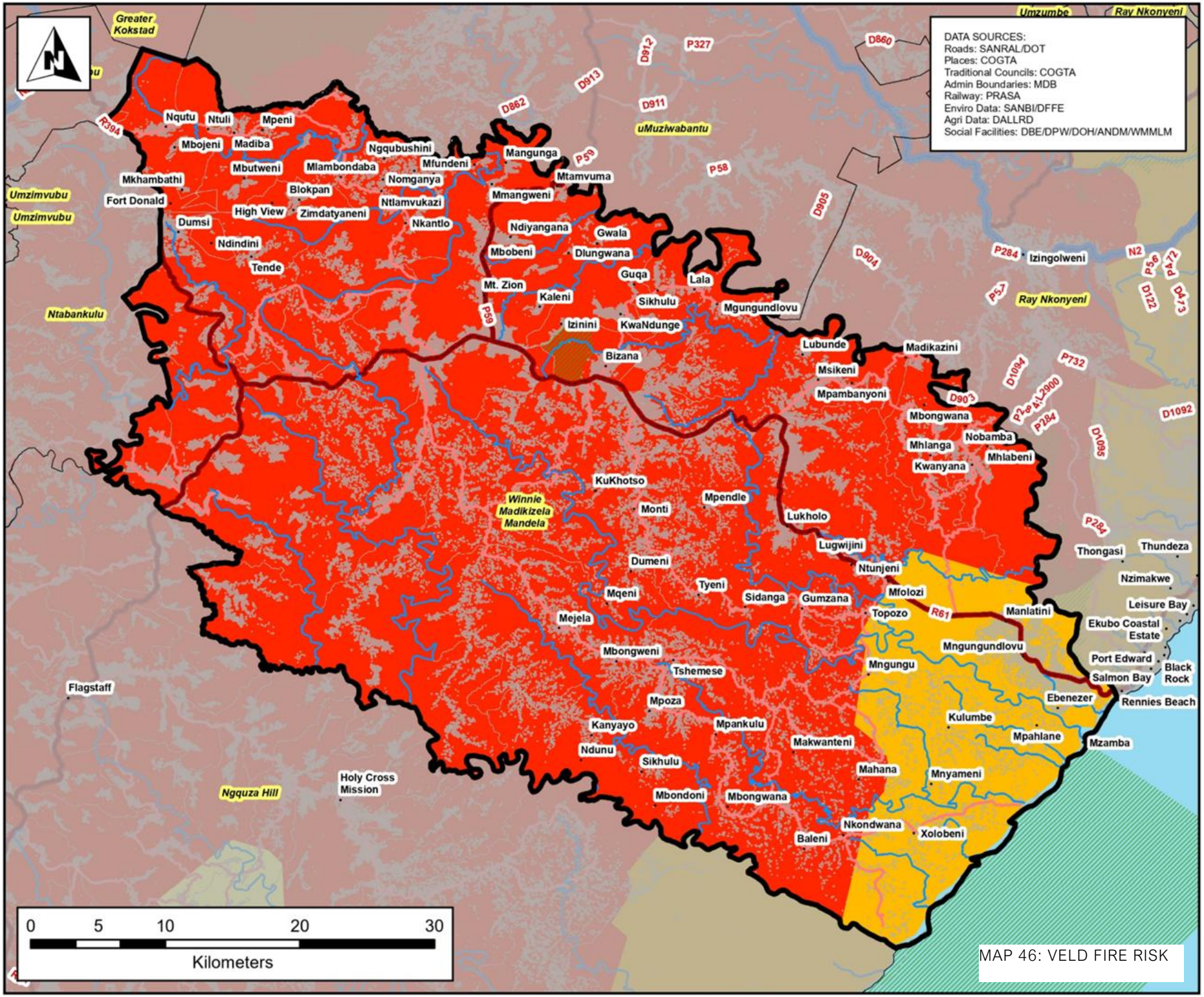
LIGHTNING ACTIVITY (FLASHES/KM²/YEAR)	RISK LEVEL	DESCRIPTION
1–2	Low	Minimal lightning activity, indicating low risk.
2–4	Slightly Elevated	Some risk, but still relatively low.
4–6	Moderate	Requires preparedness due to moderate lightning activity.
6–8	High	Frequent lightning events, posing a significant risk.
8–10+	Very High to Extreme	Lightning is common and can be a serious hazard.

The WMMLM risk assessment indicates significant variability in lightning activity across the municipality, influenced by geographic and climatic factors. In the northern region, the municipality experiences 1–6 flashes/km² per year, which suggests low to moderate lightning activity. This level of lightning risk is generally associated with inland areas where atmospheric instability and storm formation are less frequent due to terrain, vegetation, and prevailing climate conditions. While lightning does occur, it poses a relatively lower hazard compared to coastal zones, allowing for less intensive mitigation measures.

As one moves toward the coastal region, lightning activity intensifies, reaching 8–10 flashes/km² per year. This very high to extreme risk level is likely driven by increased atmospheric moisture, coastal weather patterns, and frequent storm systems. The presence of warmer temperatures, higher humidity, and wind currents off the ocean can contribute to strong convective thunderstorms, resulting in a higher frequency of lightning strikes. Coastal areas often experience more severe weather events, which can heighten the potential for infrastructure damage, power disruptions, and safety concerns for communities.

This escalation in lightning frequency highlights the need for targeted risk mitigation strategies, especially in high-risk coastal zones. Measures such as enhanced lightning detection systems, improved infrastructure grounding, public safety awareness programs, and emergency response planning can help municipalities manage the risks associated with intense lightning activity. Understanding this spatial variation in lightning occurrence allows for better resource allocation and disaster preparedness, ensuring communities are equipped to handle these natural hazards effectively.


Fire danger LikeliMax
Likely
Possible
Unlikely
Rare
DATA SOURCES:
Roads: SANRAL/DOT
Places: COGTA
Traditional Councils: COGTA
Admin Boundaries: MDB
Railway: PRASA
Enviro Data: SANBI/DFFE
Agri Data: DALLRD
Social Facilities: DBE/DPW/DOH/ANDM/WMMLM
WINNIE MADIKIZELA MANDELA SPATIAL DEVELOPMENT FRAMEWORK
Fire Likelihood
Legend
NFEPA River
Railway
National Road
Provincial Road
Access Road
Cadastral
Protected Area
Settlement
0 5 10 20 30
Kilometers
Greater Kokstad
Umzumbe
Ray Nkonyeni
uMuziwabantu
Umzimvubu
Ntabankulu
Winnie Madikizela Mandela
Flagstaff
Ngquza Hill
Holy Cross Mission
Nqutu
Ntuli
Mpeni
Mbojeni
Madiba
Ngqubushini
Mbutweni
Mlambondaba
Mfundeni
Mangunga
Gubetuka
Mtamvuma
Mkhambathi
Fort Donald
Blokpan
Ntlamvukazi
Mmangweni
High View
Zimdatyaneni
Nkantlo
Dumsi
Ndindini
Tende
Ndiyangana
Gwala
Mbobeni
Dlungwana
Guqa
Mt. Zion
Kaleni
Sikhulu
Lala
Mgungundlovu
Izinini
KwaNdunge
Bizana
Lubunde
Madikazini
Msikeni
Mpambanyoni
Mbongwana
Nobamba
Mhlanga
Mhlabeni
Kwanyana
KuKhotso
Monti
Mpendle
Lukholo
Lugwijini
Ntunjeni
Dumeni
Tyeni
Mqeni
Sidanga
Gumzana
Mfolozi
Topozo
Manlatini
Mejela
Mbongweni
Tshemese
Mngungundlovu
Mngungu
Mpoza
Kanyayo
Mpankulu
Ndunu
Sikhulu
Makwanteni
Kulumbe
Mpahlane
Mahana
Mnyameni
Mbondoni
Mbongwana
Nkondwana
Xolobeni
Baleni
Izingolweni
Thongasi
Thundeza
Nzimakwe
Leisure Bay
Ekubo Coastal Estate
Port Edward
Black Rock
Salmon Bay
Rennies Beach
Ebenezer
Mzamba
R394
R61
P59
P58
P284
P732
P310
P69
D905
D904
D1094
D1092
D1095
D122
D473
N2
P56
P54
P57
MAP 45: FIRE LIKELIHOOD



WINNIE MADIKIZELA MANDELA LOCAL MUNICIPALITY

WINNIE MADIKIZELA MANDELA SPATIAL DEVELOPMENT FRAMEWORK

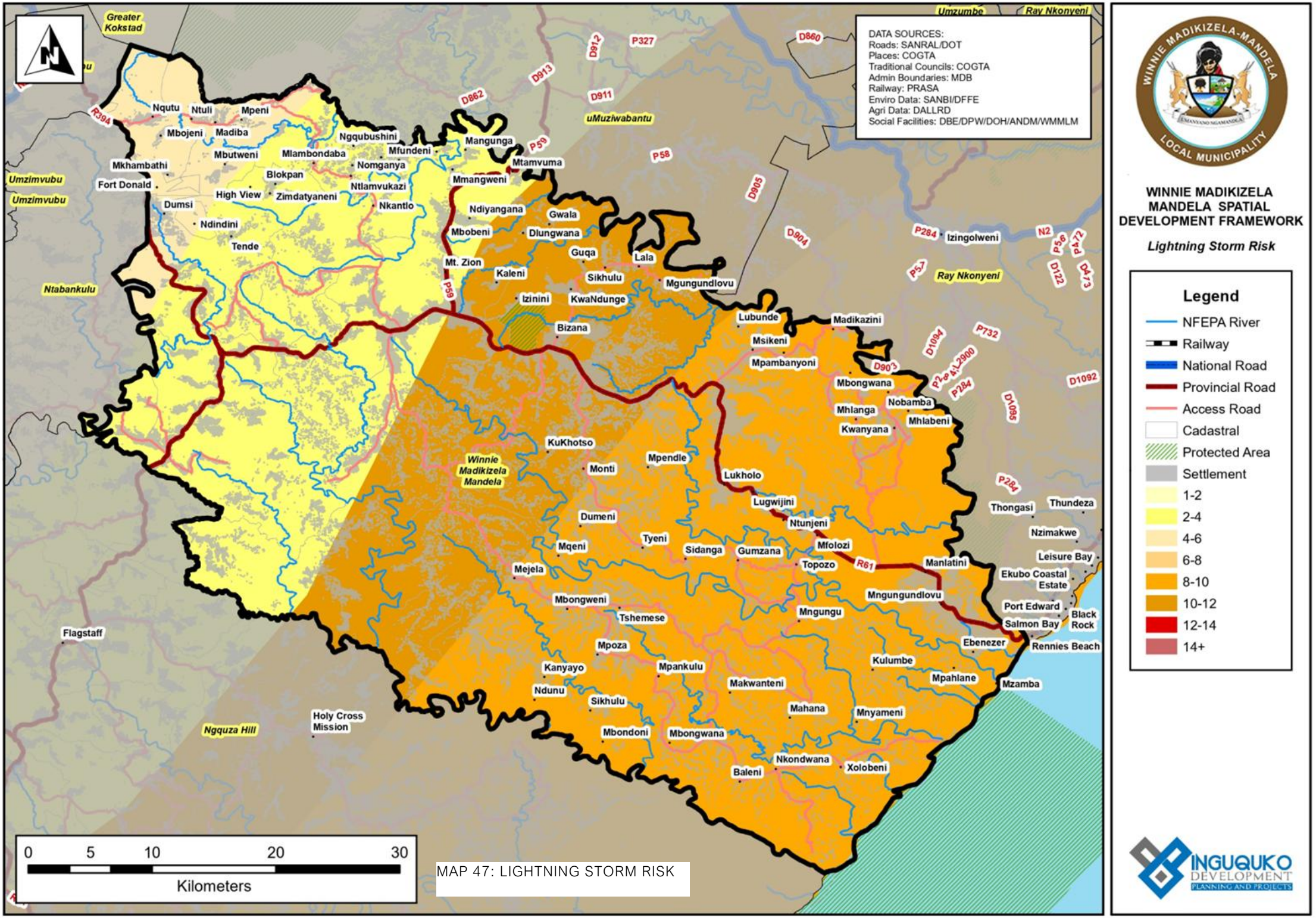
Veld Fire Risk

Legend

- NFEPA River
- Railway
- National Road
- Provincial Road
- Access Road
- Cadastral
- Protected Area
- Settlement
- Low
- Medium
- High
- Extreme

MAP 46: VELD FIRE RISK

INGUQUKO DEVELOPMENT PLANNING AND PROJECTS



MAP 47: LIGHTNING STORM RISK

7.10. SWOT ANALYSIS

TABLE 17: SWOT ANALYSIS

STRENGTHS	WEAKNESSES
➢ The area has strong agricultural potential, especially for vegetable production and processing. ➢ Agriculture is a key driver of the local economy. Environmentally sensitive areas are carefully mapped and valued. ➢ Favourable climate conditions support the region as an agricultural hub. ➢ NFEPA Rivers flow through the municipality, and its wetlands provide clean water and irrigation for agriculture. ➢ The scenic public open spaces are significant social and biophysical assets.	➢ Insufficient protection of rivers, particularly near settlement areas. ➢ Inadequate management of the natural environment. ➢ Lack of preservation efforts for agricultural land. ➢ Limited agricultural potential in certain regions, especially within communally owned areas.
OPPORTUNITIES	**THREATS**
➢ Relocate settlements from high-risk areas such as floodplains and regions with highly erodible soil. ➢ Promote eco-tourism by capitalizing on scenic and environmentally significant areas. ➢ Initially focus environmental education initiatives around sensitive areas. ➢ Coordinate activities of water users and water management institutions within the water management area. ➢ Increase investment in land care and agricultural education for subsistence farming. ➢ Develop guidelines for the protection of all wetland areas. ➢ Enhance value through the introduction of processing industries. ➢ Explore significant value chain opportunities in vegetable farming, maize, and citrus. ➢ Create an inventory of wetlands within the district.	➢ Climate change poses a threat to ecosystems. ➢ Settlements encroach into sensitive areas. ➢ There is limited protection for environmental and municipal resources. ➢ Land use management in rural areas is lacking. ➢ Reduced vegetation cover diminishes primary productivity and land carrying capacity. ➢ Water resources are decreased due to inadequate river management.

SPATIAL PLANNING ISSUES AND CHALLENGES

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8. SPATIAL PLANNING ISSUES AND CHALLENGES

8.1. URBAN DEVELOPMENT OPPORTUNITIES

8.1.1. DENSIFICATION

The Winnie Madikizela-Mandela Local Municipality offers several urban development opportunities that can significantly enhance the area's infrastructure and quality of life. One key opportunity is the implementation of infill development in Bizana, coupled with the encouragement of densification. This approach aims to utilize underused urban spaces within Bizana to create additional housing opportunities, thereby accommodating the growing population without the need for extensive expansion into undeveloped areas. By focusing on densification, the municipality can efficiently use existing infrastructure, reduce the costs associated with urban sprawl, and promote a more sustainable and walkable urban environment.

Additionally, this strategy can lead to the revitalization of older neighbourhoods, improved access to public services, and a greater sense of community. It also supports the preservation of surrounding natural landscapes and agricultural lands by curbing the outward spread of settlements. Furthermore, densification can stimulate local economic growth by attracting businesses and investments to the urban core, creating job opportunities, and enhancing the overall vibrancy of the municipality.

Overall, infill development and densification in Bizana represent forward-thinking urban planning initiatives that align with sustainable development goals and the long-term well-being of the community.

8.1.2. URBAN RENEWAL

The Winnie Madikizela-Mandela Local Municipality (WMMLM) presents significant opportunities for urban renewal. By inviting developers to invest in the urban center, the municipality can foster the creation of employment opportunities and housing within the urban core and surrounding settlements. This revitalization effort can attract businesses and residents, stimulate economic growth, and improve the overall quality of life. Additionally, urban renewal can enhance infrastructure, increase property values, and create a more vibrant and sustainable community. Through strategic planning and collaboration with developers, WMMLM can transform its urban areas into thriving, dynamic environments that benefit all residents.

8.2. URBANISATION AND FUTURE NEED FOR DENSIFICATION

Winnie Madikizela-Mandela Local Municipality has experienced significant urbanization over a 10-year period (2001 – 2011). Migration is believed to be one of the main driving forces behind this growth. Without proper management, one of the most visible crises that may arise is the development of informal settlements, which can become poverty traps. These settlements are often poorly located and can become breeding grounds for social problems, such as routine aggression and violence, substance abuse, and broken family relations. They also suffer from high levels of violent crime compared to commercial and middle-class areas.

A study by the South African Cities Network, titled "Towards an Integrated Urban Framework," recommended that a growing town or city can thrive through sustainable and mixed-use development. Central to this

recommendation is the need to plan for liveable, economically viable, and sustainable towns with infrastructure resilient enough to support inclusive growth. When properly managed, urbanization offers significant opportunities for economic growth and poverty reduction. Winnie Madikizela-Mandela Local Municipality will continue to grow and should be prioritized in urban policy, increased investments, service delivery, and the provision of mixed-use affordable integrated housing to support a stronger emerging economy.

8.3. RURAL POVERTY

The analysis of the socio-economic status indicates that Winnie Madikizela-Mandela Local Municipality faces several challenges that contribute to rural poverty within the area. These challenges are not limited to issues of service delivery and economic opportunities. Poverty levels are relatively high in rural areas, which are the primary targets for poverty alleviation efforts. These areas are mostly located on the outskirts of the municipal town and require intervention. According to the poverty assessment and socio-economic analysis, the rural areas are identified as the most poverty-stricken wards.

8.4. TRANSPORT ROUTES AND INFLUENCE ON DEVELOPMENT DIRECTION

The development within Winnie Madikizela-Mandela Local Municipality is significantly influenced by accessibility and proximity to key transport routes. The transportation network, particularly the main routes, continues to play a crucial role in shaping the structure of the area while simultaneously creating investment opportunities. This is due to the fundamental fact that the transportation network provides linkages between different areas, and the level of access to social and economic opportunities directly impacts the quality of life for individuals.

8.5. ENVIRONMENTAL ANXIETY

The study area faces significant environmental risks, including freshwater catchment management, wetlands protection, the conservation of critically endangered and vulnerable vegetation, and soil erosion control. There is an urgent need to implement measures to conserve the environment. Additional environmental issues that require attention include:

- The undulating terrains within the municipal area restrict development.
- Riverbank areas should be protected.
- Solid waste management and waste treatment should be addressed.
- High-density rural settlements should be upgraded from VIP to waterborne sewerage systems.

8.6. UNDER-SERVICED AREAS

The uneven access to basic services and development remains one of the most prominent legacies of the apartheid era. Areas that were previously part of Winnie Madikizela-Mandela Town are generally well-served with basic services, while the quality of services in rural areas remains subpar. This issue is exacerbated in peri-urban and rural settlements, where there is a significant backlog in services. Consequently, these areas are characterized by severe deficits and are prioritized for infrastructure investment.

8.7. ECONOMICALLY CHALLENGES AREAS

Economically disadvantaged areas are predominantly found throughout the municipal region, particularly among households situated on agricultural farms. Several factors contribute to this situation, with the primary reason being the settlements' distance from main economic activities and service centres. Additionally, these areas suffer from severe limitations in natural resources, further exacerbating the challenges faced by the residents.

SUMMARY OF KEY ISSUES

9. SUMMARY OF KEY CHALLENGES & OPPORTUNITIES

TABLE 18: SUMMARY OF KEY CHALLENGES AND OPPORTUNITIES

TYPE OF CHALLENGE	CHALLENGE	CAUSE	EFFECT	RESPONSE TYPE	RESPONSIBLE AGENTS	OPPORTUNITIES
BIOPHYSICAL CHALLENGES						
Current	Inadequate environmental management and resulting degradation	Inadequate land use management systems and an insufficient environmental management framework	Depletion of natural assets	Address & mitigate	WMMLM	Initiating an environmental rehabilitation program and utilizing management tools.
Current	Households located in environmentally sensitive areas	Lack of technical knowledge in tribal land allocation practices	Disaster risks (flooding and landslides)	Address	WMMLM & COGTA	Development of traditional settlement master plans for each of the traditional authorities. Technical advisory forum for traditional leaders.
SOCIOECONOMIC						
Current	Disinvestment	Lack of investment attraction and inadequate infrastructure development. Decaying urban fabric	Depleting jobs market	Address & mitigate	WMMLM	Development of Bozana Urban Renewal Plan/Strategy Developing a business strategy and implementing Local Economic Development (LED) strategies.
Future	Food Security	Depletion of agricultural land due to settlement sprawl.	Lack of sufficient land and limitation of future development potential	Address & mitigate	WMMLM, DALLRD	Conservation of agricultural land. Enforcement of urban edge, encouragement

TYPE OF CHALLENGE	CHALLENGE	CAUSE	EFFECT	RESPONSE TYPE	RESPONSIBLE AGENTS	OPPORTUNITIES
						of infill housing in Bizana
Current	Low literacy levels and lack of skills	Lack of skills development programmes and higher education facilities	Inadequate labour pool. Loss of business/investor confidence	Address	WMMLM, SEDA, DEDEAT	Implementation of skills development programmes
Current	Low levels of income	Lack of employment opportunities	High poverty levels especially in the rural component of the municipality	Address	WMMLM, DEDEAT, SEDA	Generating employment opportunities in close proximity to settlements.
Current	Rural Poverty	Dearth of economic opportunities	Underdevelopment	Address & mitigate	WMMLM, DALRRD, DEDEAT	Implementation of social and economic development opportunities
Future	Spatial inefficiency	Scattered settlements and a disconnect between residential areas and economic opportunities.	Lack of access to economic opportunities	Address	WMMLM	Creation of self-sustaining settlements
SPATIAL & BUILT ENVIRONMENT						
Current	Lack of effective land use management	Lack of enforcement	Sprawling settlements and loss of environmental and agricultural land.	Address	WMMLM, COGTA	Development and management of urban edge.
Current	Lack of access to services and infrastructure	Infrastructure demand in disperse settlements	Basic needs not met.	Address	WMMLM, ANDM, COGTA, Eskom. DPW	Infrastructure development
Current	Land Invasions in Bizana urban periphery	Lack of economic opportunities in rural areas. Lack of housing options	Informal settlements, unplanned and unstructured development. Loss of business confidence	Address	WMMLM, ECDHS	Provision of a range of housing options. Provision of economic and job opportunities in rural nodes.

10. SPATIAL DEVELOPMENT STRATEGY

10.1. SPATIAL CONCEPT AND LONG-TERM SPATIAL DEVELOPMENT VISION

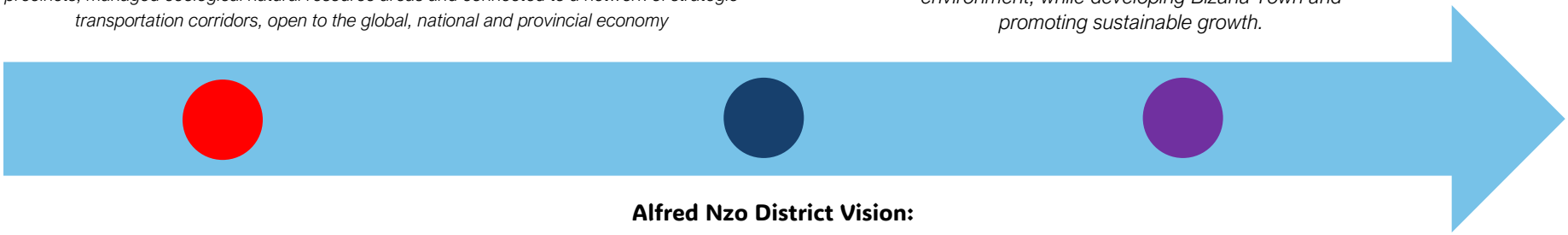
The spatial development strategy is a guiding tool in adopting spatial transformation that is suitable for the municipality. Enabling one coherent spatial plan to guide and direct decision-making on a municipal level. The vision for Winnie Madikizela Mandela Local Municipality will follow the rules and principles of Alfred Nzo District Municipality, ensuring that all proposed development and growth is in tune with the holistic plans of the province. Winnie Madikizela Mandela LM vision, in essence, is to create a municipality that offers its residents with quality life. This to be achieved by offering economic development, service delivery, and infrastructure delivery which will improve the quality of life in communities. The spatial vision is an important factor in fulfilling the municipalities long term vision.

EC Provincial SDF Vision:

The future spatial perspective of the province over the next 20 to 50 years could be conceptualised in the context of the Provincial Growth and Development Plan vision of a "poverty free Eastern Cape". Understanding that such a vision would be founded upon a concept of a" modern, ecologically sustainable economy based in agriculture, tourism and industry", it is believed the future spatial perspective would comprise a spatial development framework of managed urban and rural human settlements clustered in urban (settlement) regions and corridors, alongside productive agricultural precincts, managed ecological natural resource areas and connected to a network of strategic transportation corridors, open to the global, national and provincial economy

Proposed Winnie Madikizela Mandela SDF Vision:

By 2030, the Winnie Madikizela Mandela Municipality will be vibrant, inclusive, and sustainable, with thriving communities. We aim to ensure equitable access to services, socio-economic opportunities, and a healthy environment, while developing Bizana Town and promoting sustainable growth.



Alfred Nzo District Vision:

"By 2030, Alfred Nzo will be a place where communities enjoy much improved public infrastructure in an environmentally sustainable manner, better quality of public services and socio-economic opportunities"

10.2. SPATIAL DEVELOPMENT FRAMEWORK STRATEGIC GOALS

TABLE 19: STRATEGIC GOALS

STRATEGIC GOAL 1 – BALANCING URBAN GROWTH WITH ENVIRONMENTAL SUSTAINABILITY	STRATEGIC GOAL 2 – CREATING ECONOMIC OPPORTUNITIES AND JOBS	STRATEGIC GOAL 3 – A TOWN THAT IS INCLUSIVE, EQUITABLE, COHESIVE, AND VIBRANT
This strategic goal is guided by the principles of spatial sustainability and resilience. It advocates for a managed growth path that benefits humanity without compromising the environment. Urbanization challenges and climate change make it crucial to pursue this goal. It also aims to help property developers make informed investment decisions and develop in appropriate locations.	This strategic goal is guided by the principles of spatial justice and efficiency. It recognizes that promoting mixed-use developments, new projects, and economic incentives can foster shared and inclusive economic growth. Economic development and higher-density residential projects will be encouraged in areas well-served by public transport.	This strategic goal is guided by the principles of spatial resilience and good governance. It recognizes the need to build an inclusive, integrated, and vibrant town that addresses the legacies of apartheid by rectifying imbalances in the distribution of socio-economic development and avoiding the creation of new disparities. Transforming townships and informal settlements into economically and socially integrated neighbourhoods, along with encouraging public/private partnerships to diversify housing delivery, are integral to this process.

10.3. DEVELOPMENT PRINCIPLES OF THE SPATIAL PLANNING AND LAND USE MANAGEMENT ACT

TABLE 20: SPLUMA DEVELOPMENT PRINCIPLES

SPATIAL RESILIENCE	SPATIAL JUSTICE	SPATIAL EFFICIENCY	SPATIAL SUSTAINABILITY	GOOD ADMINISTRATION
Integrating flexibility into spatial strategies to develop mechanisms that support vulnerable groups during external disruptions (such as economic or environmental shocks).	Address the spatial inequalities from the apartheid era by ensuring equal access to land and its use. This involves incorporating the needs of previously disadvantaged groups and the entire municipal region into Spatial Development Frameworks and Land Use Schemes.	Ensure optimal use of existing and future resources, such as infrastructure and services, by considering all potential positive and negative outcomes of a development application and consistently following the required administrative processes.	To consistently use resources (environmental, fiscal, infrastructure, etc.) responsibly through proper planning, administration, and implementation processes.	To create an integrated planning system, all government spheres and sectors must consistently participate and provide input during the compilation of the Spatial Development Framework and associated administrative processes as required by law.

The WMMLM SDF is guided by development principles derived from the Spatial Planning and Land Use Management Act (SPLUMA) (Act No. 16 of 2013). These principles are essential for preparing, reviewing, and implementing the Winnie Madikizela Mandela Local Municipality SDF. They aim to influence planning decisions, whether related to spatial development frameworks or land use changes.

Key principles include promoting sustainable land use, directing resources to areas with the greatest need and potential, addressing historical inequities in marginalized areas, protecting land rights, restructuring inefficient settlements, stimulating economic opportunities in both rural and urban areas, and considering the capacities of stakeholders, community needs, and environmental factors.

10.4. DEVELOPMENT OBJECTIVES ALIGNED TO SPLUMA PRINCPLES

TABLE 21: SPLUMA PRINCIPLES ALIGNED TO OBJECTIVES

SPATIAL RESILIENCE	SPATIAL JUSTICE	SPATIAL EFFICIENCY	SPATIAL SUSTAINABILITY	GOOD ADMINISTRATION
➢ Develop a network of open spaces for conservation and recreation. ➢ Designate opportunities for SMMEs and traders alongside mainstream economic activities.	➢ Develop interfaces in previously segregated areas (both between and within nodes). ➢ Provide infrastructure and amenities to previously neglected areas. ➢ Promote social cohesion through built environments and enhance social mobility. ➢ Support private sector initiatives and incentives in rural and township economies. ➢ Encourage integrated residential development and related economic initiatives.	➢ Densification and in-fill development only in suitable locations. ➢ New developments on urban edges to prevent urban sprawl. ➢ Clustering of various activities (work, live, play, and pray) at appropriate locations. ➢ Densification linked to bulk services, public transport, environmental capacity, and strategic urban restructuring. ➢ Efficient and effective public transport network.	➢ Implement conservation initiatives and programs for heritage buildings and sensitive sites. ➢ Prevent development from encroaching on rural tourism areas. ➢ Protect and enhance biodiversity networks. ➢ Safeguard valuable agricultural land. ➢ Implement nature-based conservation strategies.	➢ Engage in collaborative planning and implementation with all stakeholders.

11. SPATIAL PROPOSALS

11.1. ENVIRONMENTAL FRAMEWORK

11.1.1. STRATEGY 1 – BIODIVERISITY MANAGEMENT

Winnie Madikizela Mandela Local Municipality comprises predominantly endangered and vulnerable vegetation types and contains exceptionally rich flora and fauna species diversity. The areas with high biodiversity value that are still in pristine condition are environmentally sensitive. The recommended environmental practices for these areas should be as follows:

- High Biodiversity Areas – Areas of high biodiversity are important for their intrinsic value in the ecosystem. These areas have very high development constraints, and care should be taken to ensure that large-scale transformation does not occur and that the ecological functioning of these sites is not lost. These areas are afforded legal protection in terms of environmental management legislation. Any development within protected areas is subject to an Environmental Impact Assessment (EIA) with a vegetation assessment study and will require extensive consultation with all interested and affected parties.
- Medium to Average Biodiversity Areas – Any development proposed within this zone must be subject to a pre-feasibility assessment, which must include all necessary specialist biodiversity investigations and the consideration of alternatives and mitigation. If the site is confirmed to be highly sensitive and the proposed activity is expected to result in the potential net loss of critical biodiversity elements, then the development should be considered fatally flawed from a biodiversity perspective and should not proceed. Activities that are compatible with biodiversity management objectives and that would result in a net increase in biodiversity should be supported. In cases where biodiversity impacts cannot altogether be avoided or acceptably mitigated on-site, consideration must be given to establishing suitable off-site biodiversity offsets that would result in positive impacts for biodiversity in the region.

11.1.2. STRATEGY 2 – EFFECTIVE RESPONSE TO CLIMATE CHANGE

Carbon emissions refer to the release of greenhouse gases, primarily carbon dioxide, into the atmosphere over a specific area and period. Reducing carbon dioxide emissions is crucial to mitigating the effects of climate change on the environment.

The short-term proposals are intended to effectively manage inevitable climate change impacts through interventions that build and sustain Winnie Madikizela Mandela. To achieve this, the Spatial Development Framework (SDF) proposes the following interventions:

- Develop and implement a climate change response strategy.
- Recommend robust adaptation and mitigation measures needed to minimize risks associated with climate change while maximizing opportunities.
- Strengthen the human resource capital base in charge of disaster risk reduction and implementation of climate change measures.
- Prioritize the terrestrial ecosystem. The only way to reverse climate change is through reforestation; therefore, conservation areas should be protected, maintained, and expanded with more vegetation where possible. Protected areas can be strictly reserved as natural areas and connected through natural corridors, allowing species to move freely within the municipality.

- Spatial imagery of the municipality shows little vegetation around residential areas. These areas are usually where most pollution is emitted, leading to poor air quality and increased heat levels. Therefore, it is important to introduce more vegetation in communal areas. Local government should encourage residents to live sustainably.

11.1.3. STRATEGY 3 – BUILDING SUSTAINABLE COMMUNITIES

The long-term proposals aim to sustain the environment, ensure universal access to basic services, and optimize waste management. To achieve this, the Spatial Development Framework (SDF) proposes the following interventions:

- Conduct environmental vulnerability assessments to identify at-risk communities and develop strategies to minimize risks and promote human well-being.
- Update the Disaster Management Plan.
- Educate and raise awareness about environmentally sensitive areas.
- Accelerate equitable and universal access to acceptable standards of basic services.
- Integrate service provision requirements, including bulk infrastructure, into the development planning process.
- Assess municipal infrastructure capacity and status and implement upgrades and maintenance to ensure sustainable service provision.
- Implement a source separation program for recyclables at the household, public sector buildings, and business levels.
- Support small collectors of recyclables at community and landfill sites to become formal collection enterprises.
- Develop a large-scale composting facility to treat agricultural waste.

11.1.4. STRATEGY 4 – TAPPING INTO THE GREEN ECONOMY

The short-to-long-term proposals aim to eradicate poverty, reduce the wealth gap, and implement a Green Economic strategy. To achieve this, the Spatial Development Framework (SDF) proposes the following short-term interventions:

Winnie Madikizela Mandela Municipality can link with the ANDM Environmental Forum and existing forums such as the ECPDP stakeholders, the Provincial Renewable Energy Workgroup, and the National SIP 8. Part of the green economy strategy should identify the skills gaps in the district and incorporate these into the strategy's outputs.

For the long-term period, the SDF proposes the following interventions:

- Establish investment incentives to support and promote green industries and developments in Winnie Madikizela Mandela.
- Develop incentives to produce environmentally friendly products.
- Implement programs to ensure the rehabilitation and sustainable management of natural assets and ecosystem services.
- Create opportunities for training and job creation in green economy programs.

11.1.5. STRATEGY 5 – SUSTINENCE OF ECOSYSTEMS & EFFICIENT USE OF NATURAL RESOURCES

The short- to long-term proposals under this priority aim to protect municipal services, promote sustainable agricultural development, and preserve natural resources. To achieve this, the Spatial Development Framework (SDF) proposes the following short-term interventions:

- Mapping and maintaining ecological corridors (LUMS provision).

For the long-term period, the SDF proposes the following interventions:

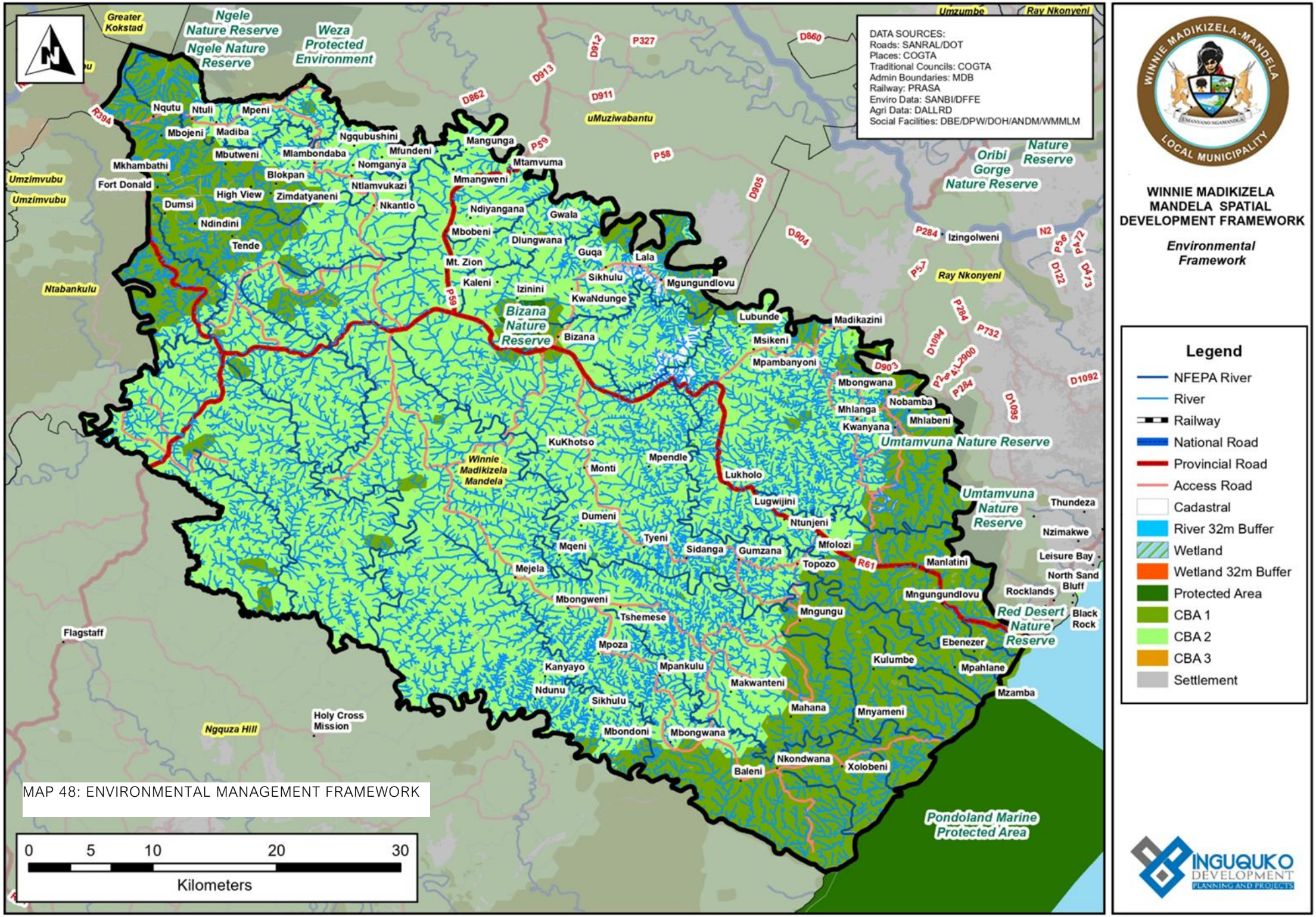
- Limit development on high-quality agricultural land through the Land Use Scheme and minimize incompatible uses adjacent to agricultural land.
- Rehabilitate low-potential agricultural land.
- Coordinate and integrate strategies and programs for sustained alien plant control and rehabilitation.
- Develop a protection area strategy plan for ecosystems and biodiversity.
- Initiate biodiversity stewardship programs.
- Manage development impacts on natural resources and critical biodiversity networks.

11.1.6. STRATEGY 6 – SYSTEMS ENHANCEMENT FOR INTEGRATED PLANNING AND IMPLEMENTATION

The short-term proposals under this priority aim to protect the wetlands system within the municipality and enhance environmental governance throughout the Winnie Madikizela Mandela area of jurisdiction. To achieve this, the Spatial Development Framework (SDF) proposes the following interventions:

- Preparation of a wetland inventory for the municipality.
- Delineation of priority wetlands and conducting functionality assessments.
- Adoption of environmental management guidelines and bylaws.
- Implementation of an Integrated Environmental Management Plan and Policy.
- Incorporation of Alfred Nzo District Municipality (ANDM) SEA and SEMP.
- Implementation of sensitive environmental buffers:
    - 100m (Freshwater systematic conservation assessment wetlands).
    - 500m (FEPA and priority wetlands).

Regarding the preparation of a wetlands inventory for the municipality, it is understood that developing such an inventory would be too demanding for the municipality alone. Therefore, it is proposed that Eastern Cape Department of Economic Development, Environmental Affairs & Tourism play an active and supportive role. Winnie Madikizela Mandela should ideally have its own SEA and SEMP, but given the limited resources in a local municipality, the proposal suggests using the ANDM SEA and SEMP at the local level. In conclusion, wetlands not deemed part of sensitive environmental buffers shall be allocated a 32m confidence buffer, as on-site delineation of those wetlands has not been undertaken.



MAP 48: ENVIRONMENTAL MANAGEMENT FRAMEWORK

WINNIE MADIKIZELA MANDELA SPATIAL DEVELOPMENT FRAMEWORK

Environmental Framework

Legend

- NFEPA River
- River
- Railway
- National Road
- Provincial Road
- Access Road
- Cadastral
- River 32m Buffer
- Wetland
- Wetland 32m Buffer
- Protected Area
- CBA 1
- CBA 2
- CBA 3
- Settlement

INGUQUKO DEVELOPMENT PLANNING AND PROJECTS

11.2. DISASTER MANAGEMENT FRAMEWORK

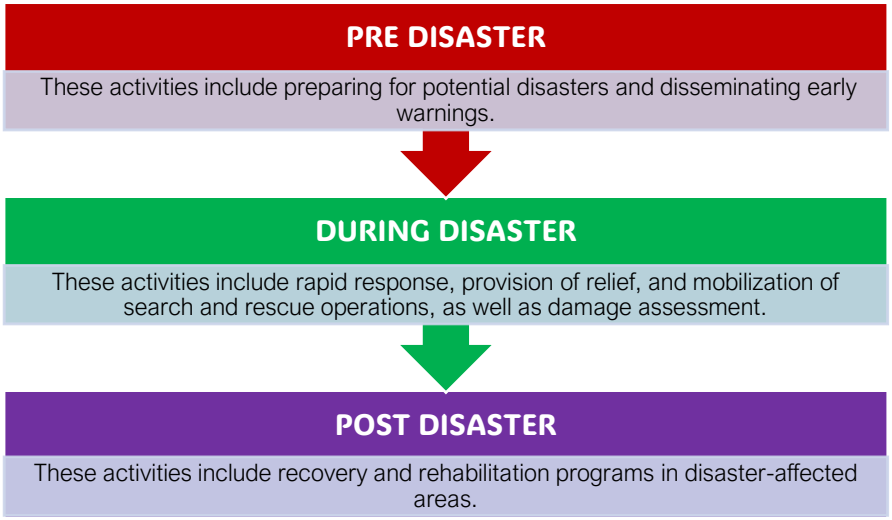


FIGURE 7: DISASTER MANAGEMENT ACTION PLAN

Winnie Madikizela Mandela Local Municipality currently does disaster response and recovery measures in place, which are followed during and after the occurrence of a disaster. However, the Municipality is encouraged to further identify key activities for disaster management and improve its Disaster Management Plan.

The SDF has identified areas that are not suitable for human habitation, forming the basis for disaster preventative measures. Identifying facilities such as community halls will also be necessary to assist and accommodate communities during disasters.

11.2.1. STRATEGY 1 – FOR LIGHTNING

While it is impossible to prevent lightning from occurring, measures can be taken to protect residents. The proposed solutions are as follows:

- Identify all areas prone to lightning strikes.
- Install lightning conductors in these high-risk areas.

11.2.2. STRATEGY 2 – AWARENESS OF CHOLERA

Cholera is a growing issue in the country, and some parts of Winnie Madikizela Mandela are prone to cholera cases. The proposed solutions are as follows:

- Conduct education and awareness campaigns to inform communities about cholera.
- Ensure that residents have access to clean drinking water.

11.2.3. STRATEGY 3 – HAIL & HEAVY RAINFALL

Heavy rain and hailstorms can cause significant damage to infrastructure and occur frequently within the municipality. The proposed solutions are as follows:

- Implementation of v-drains in strategic nodes and areas that re flood prone.
- Ensure that drainage systems are properly installed and regularly unclogged.
- Educate the community on protective measures to take during these natural events.

11.2.4. STRATEGY 4 – HYDROLOGICAL DROUGHT

Although the municipality has a low risk of hydrological drought given its coastal location, it is imperative that measures be put in place to ensure water is properly collected during seasons of abundance. The proposed solutions are as follows:

- Households can collect rainwater in JoJo tanks.
- Use collected rainwater for gardens, house cleaning, car washing, and flushing toilets.

11.2.5. STRATEGY 5 – STRONG WINDS

Although strong winds cannot be prevented, they can be planned for. The proposed solutions are as follows:

- Inspect trees and shrubs and remove any loose branches that could cause damage to properties.
- Advise residents to maintain their roofs, windows, doors, and garages, as these are the weakest parts of a house.
- Educate residents on safety procedures during strong winds, such as staying away from doors and windows.

11.2.6. STRATEGY 6 – STRUCTURAL FIRES

Although strong winds cannot be prevented, they can be planned for. The proposed solutions are as follows:

- Inspect trees and shrubs and remove any loose branches that could cause damage to properties.
- Advise residents to maintain their roofs, windows, doors, and garages, as these are the weakest parts of a house.
- Educate residents on safety procedures during strong winds, such as staying away from doors and windows.

11.2.7. STRATEGY 7 – PROPOSAL FOR FLOODS

Due to the abundance of water sources, a large part of the municipality is prone to flooding. The proposed solutions are as follows:

- Install proper drainage systems in flood-prone areas to control water levels.
- Maintain rivers and dams by removing overgrown vegetation or blockages that can hinder water flow.
- Relocate people living on flood plains or in flood-prone areas.
- Place retainers along the sides of rivers to prevent erosion.

11.2.8. STRATEGY 8 – PROPOSALS FOR VELD & FOREST FIRES

Research shows that Bizana town is highly prone urban fires due to the informal settlements located along the urban periphery of the town. The proposed solutions are as follows:

- Allocate proper housing to residents living in these informal settlements.
- Relocate residents from hazardous areas to settlements more suitable for human habitation.

11.3. AGRICULTURAL FRAMEWORK

11.3.1. STRAREGY 1 – PROTECTION OF PRIMARY AGRICULTURAL LAND

The protection of good agricultural land within Winnie Madikizela Mandela 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, with significant weight given to strategies that minimize impacts on high-quality agricultural land.
- The Land Use Scheme should aim to minimize cases where incompatible uses are located adjacent to agricultural operations in a manner that inhibits normal farming practices. Where such instances arise, measures to mitigate potential conflicts should be devised.
- The Land Use Scheme should provide for a hierarchy of agricultural zones based on agricultural development potential and the impact of non-agricultural activities on agricultural land. Non-agricultural activities such as agri-tourism, game farms with themed estates or lodges, and resort developments 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, providing a continuum of agricultural zones from predominantly agriculture-only zones to zones that allow 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 mainly for agricultural activities. However, limited non-agricultural uses may be permitted, especially along corridors and within designated development nodes. Conservation should be part of a drive to protect and enhance the quality of agricultural land. Irrigated land along river corridors should be equally protected.
    - Low potential agricultural land should be subjected to tourism and low-intensity agricultural uses. Most of it is degraded and prone to soil erosion.

11.3.2. STRATEGY 2 – LAND & AGRICULTURAL REFORM

The intention of the land reform has been centred on rural development aimed at creating lively, fair, and sustainable rural communities. However, rural communities located on settled land claims are situated on low and very low agricultural potential land. This is also the case for land that is still yet to be transferred. The Municipality needs to undertake suitable feasibility studies to analyse agricultural potential on land before claiming these land parcels for agrarian reform.

The effectiveness of land reform depends on access to inputs, equipment, draught power, infrastructure for transport and communications, and support services such as extension, training, and marketing advice and channels. The municipality needs to play a significant role in planning and implementing programs that work closely with other relevant government departments, agencies such as NGOs and the private sector, and the surrounding communities.

The promotion of sustainable agriculture and awareness creation by the Local Municipality will help address concerns about the environmental sustainability of small-scale agriculture and natural resource harvesting in communal areas. Thus, an extensive redistribution of land and resources should be accompanied by securing tenure rights both in practice and in law to ensure long-term sustainability. The EC Provincial Development Plan provides

potential interventions to address sustainable agriculture from land reform, including:

- Establishing a mechanism to shorten the land claim processes to secure land tenure for aspiring commercial farms, as well as accelerating and optimizing post-settlement agricultural support on land reform farms (i.e., technical, financial, and capacity development support).
- Recognizing the importance of stimulating commercial farming as a means of expanding agricultural production and enhancing the contribution of small-scale farmers within the sector in EC, and providing support to new commercial farmers, particularly access to new trade markets and opportunities, improved production methods and mechanization, access to funding, and skills training and mentorship.
- Strengthening strategic partnerships between government and the private sector, streamlining support packages, and consolidating funding.
- Establishing and supporting commercial farmers through the full range of agricultural sub-sectors, with reference to the municipality, the dairy and timber industries have been identified as presenting several opportunities.
- Land reform processes are slow and may result in agricultural land losing its value, especially if transformed into rural settlements. Therefore, the following needs to be taken into consideration:
- Establishing broad awareness-raising and training programs regarding sustainable land use, agricultural production, and land-care techniques is vital.
- Generating opportunities that will grow agricultural production through innovative and sustainable agricultural practices within the commercial, subsistence, and/or small-scale farming sectors is required.
- Implementing tougher measures to ensure that if the land has reached full capacity, people should not be allowed to continue building. This will also require the involvement of the Department of Rural Development and Land Reform.
- Promoting off-farm settlement as a land delivery approach where the main need for land is settlement. This land should be situated in accessible areas that can be provided with social facilities and basic services in a resourceful manner, facilitating housing delivery and the development of such settlements as sustainable human settlements.

11.3.3. STRATEGY 3 – DEVELOPMENT & DIVERSIFICATION OF THE AGRICULTURAL SECTOR

Agriculture is a key economic activity in Winnie Madikizela Mandela, providing food security to the local municipality as well as neighbouring towns and cities. The average arable land needed to feed an individual varies from place to place. Developed countries may require less land to cater to their population due to advanced technology. However, research shows that 4 hectares are needed to feed one person per year.

11.3.3.1. AGRI-PROCESSING

The South African government has identified the agro-processing sector as a strategic industry with significant potential to promote inclusive growth and job creation. Agri-processing has strong backward linkages with the primary, secondary, and tertiary sectors, creating substantial opportunities for economic growth and value addition.

The agro-processing industries in South Africa encompass a diverse range of activities, from simple food processing to more sophisticated manufacturing, such as converting cotton, leather, timber, and rubber into finished products and manufacturing furniture. As a division of the manufacturing sector, agro-

processing focuses on transforming primary agricultural products into intermediate and final goods. The sector has the following opportunities:

- Manufacture of food products (Low Tech)
- Manufacture of leather and related products (Low Tech)
- Manufacture of wood and wood products (Low Tech)
- Manufacture of paper and paper products (Low Tech)
- Manufacture of furniture (Low Tech)

11.3.3.2. PROMOTION OF FOOD SECURITY

A fraction of rural settlements in Winnie Madikizela Mandela are based on commercial farms and are part of the commercial farming community. However, a key concern within the municipality is the visible, densely populated rural settlements without subsistence farming activities. Many parts of these lands have been encroached by settlements, posing a major challenge to food security and agricultural development.

Despite this, there is still an opportunity to utilize the few patches of available agricultural land within the settlements to address food security initiatives. Intensive production on arable land, particularly areas located along water sources, should be utilized for food production. Additionally, the community and households should be encouraged to participate in growing food gardens. Subsistence farmers need to be provided with inputs and support to enhance food security and nutrition at the household level until they become self-sufficient.

Furthermore, programmes focused on developing emerging and communal farmers should aim to expand vegetable production, staple crops, and livestock improvement, which can be linked with agro-processing. This requires that unused land in communal areas and land-reform farms be reserved strictly for commercial production, along with identifying land that can be readily accessible for new farmers who are not land reform beneficiaries. The development of a formal fresh farmers market will also encourage the growth of emerging and small-scale farmers, creating opportunities for commercialization.

The overall agricultural development for Winnie Madikizela Mandela is crucial for the municipality's success and requires collaborative effort and partnership from the municipality, District Municipality (ANDM), relevant sector departments (DEDEAT, DALLRD, DAFF, and DTI), associated agencies (such as the District Development Agency), and all local farmers and farmers' associations.

11.3.3.3. AGRICULTURAL LAND CARE

Subsistence farming remains a major source of food for many rural households within the municipality. Therefore, proper land care management should be part of promoting food security and sustainable agriculture, considering community-based and indigenous approaches to sustainable food production. Rural communities rely on natural resources to sustain their livelihoods, making sustainable land care management essential for these communities to continue and prolong their way of life. Development, past planning, and land use management have plagued these areas, threatening their livelihoods and survival. Sustainable land care management should be the foundation of successful agricultural development. The following is proposed for land care:

11.3.3.4. AGRI-BUSINESS SUPPORT CENTRE

The Agri-Business Centre will offer comprehensive support to emerging farmers and entrepreneurs in the following areas:

- Business registration, administration, and management
- Market intelligence and marketing strategies
- In-field extension and technical support
- Social facilitation and local logistics
- Bulk buying facilities
- Advice and support in accessing credit
- Assistance with appropriate technologies

11.3.3.5. ABBATOIR

An abattoir, formally known as a slaughterhouse, represents the pinnacle of modern and conventional services. This development is particularly advantageous for the municipality, which already hosts numerous animal farms. The abattoir aims to process 50-100 animals daily, considering establishment costs, meat demand, and supply from three main sources: (1) Dairy Cull Cows, (2) Black Beef farmers (out growers), and (3) Auction sales. As a red meat facility, it will be capable of slaughtering sheep, pigs, and goats.

Additionally, the abattoir must adapt to fluctuating demands, especially during holiday seasons and peak consumption periods. Maintaining a livestock reservoir is essential for this flexibility. For the FPSU, satellite abattoirs are planned on the farms where animals are raised. However, a feedlot at the abattoir site will be necessary to ensure animals are available on demand.

11.3.3.6. FEED LOTS

The necessity of a feedlot as a supply source for an abattoir is vital for its sustainability. There are two main reasons for this:

- Extensive beef ranching farmers wean calves at around 200 kg and then prepare for the new calving season.
- Feedlots serve as growing pens, taking these weaned calves from 200 kg to the ideal slaughter weight of 450 kg, thereby allowing the grasslands to support the breeding herds.

11.3.3.7. HYDROPONIC FARMING

It is proposed that tunnel farming be dedicated to vegetable cultivation, particularly for farmers with limited land potential. Tunnel farming offers numerous advantages, as plants are grown in plastic tunnels using a growth medium other than natural soil. These plants receive a constant flow of nutrients dissolved in the irrigated water system, resulting in large and high-quality crops.

Hydroponic systems are cost-effective, producing high-quality crops with larger yields and reducing the cost of managing soil-borne diseases. Another increasingly popular method is aquaponics, which is distinctively designed as a self-sustainable system with minimal waste released into the environment.

Tunnel farming and aquaponics are highly beneficial in areas with restricted land potential and size. They enable small-scale farmers to adapt to environmental threats associated with climate change, as these methods are resilient to impacts such as heat stress, flooding, lightning, wind, and hail from severe storms. Currently, subsistence farmers lack access to the information and resources needed to adapt to climate change, leaving them vulnerable to its effects.

11.3.3.8. FOOD GARDENS

Although much of the land has been encroached by settlements, there is still an opportunity to utilize the remaining patches of agricultural land within these areas to address food security initiatives. Intensive production on arable land, especially along river systems, should be prioritized for food production.

Additionally, the community and households should be encouraged to participate in growing food gardens, while taking care not to plant too close to the water's edge.

These initiatives will require significant support and collaboration between communities, government, and the private sector to succeed. The government's plan to build an Agri-park within the district and establish Farmer Production Support Unit (FPSU) Centres in each local municipality will greatly benefit the Winnie Madikizela Mandela municipality, particularly small-scale farmers and communities.

The FPSU Centre within the municipality will provide local subsistence farmers with:

- Agricultural input supply control, ensuring quality, quantity, and timely deployment of inputs
- Extension support and training, involving universities, agricultural graduates, and NARYSEC in a collaborative effort to support farmers over the next 10 years
- Mechanization support (tractor driving, ploughing, spraying, harvesting, etc.)
- Machinery servicing workshop facilities
- Local logistics support, including the delivery of farming inputs, post-harvest transportation, and transportation to local markets
- Primary produce collection

This initiative will offer local small-scale farmers and communities' opportunities for economic development and job creation. It will also enable these farmers to invest in climate-resilient agricultural practices and infrastructure, helping to mitigate the impacts of climate variability while connecting farming cooperatives to existing and new markets.

11.3.3.9. INTENSIVE FARMING

Agricultural intensification refers to increasing agricultural production per unit of input, which can include labour, land, time, fertilizer, seed, feed, or cash. Practically, intensification occurs when there is an increase in the total volume of agricultural production due to higher input productivity, or when production is maintained with reduced inputs through more efficient methods, such as better fertilizer application, targeted plant or animal protection, and mixed or relay cropping on smaller fields.

Intensification that boosts production is crucial when expanding the food supply is necessary, such as during rapid population growth. Conversely, intensification that optimizes input use is vital when addressing environmental or social issues. These changes contrast with extensive adjustments, which involve altering the number of inputs used. Historically, the most common extensive adjustment in agriculture has been to change the area of land under cultivation.

11.3.3.10. WOOD PROCESSING

The locality holds significant potential for a woodworking industry, with the furniture manufacturing sector identified as a key area for growth and job creation by the Industrial Policy Action Plan (IPAP), New Growth Path, and National Development Plan. South Africa is a major exporter and the largest producer of furniture in the Southern African region, with most manufacturers being small-scale producers.

This, combined with the need to intensify manufacturing within the municipality, presents an opportunity for small-scale producers to thrive. Promoting labour-intensive employment in this sector will benefit those in need and contribute to the growth of the municipality's manufacturing sector.

11.3.3.11. TUNNEL FARMING

It is proposed that tunnel farming be dedicated to vegetable cultivation, particularly for farmers with limited land potential. Tunnel farming offers numerous advantages, as plants are grown in plastic tunnels using a growth medium other than natural soil. These plants receive a constant flow of nutrients dissolved in the irrigated water system, resulting in large and high-quality crops.

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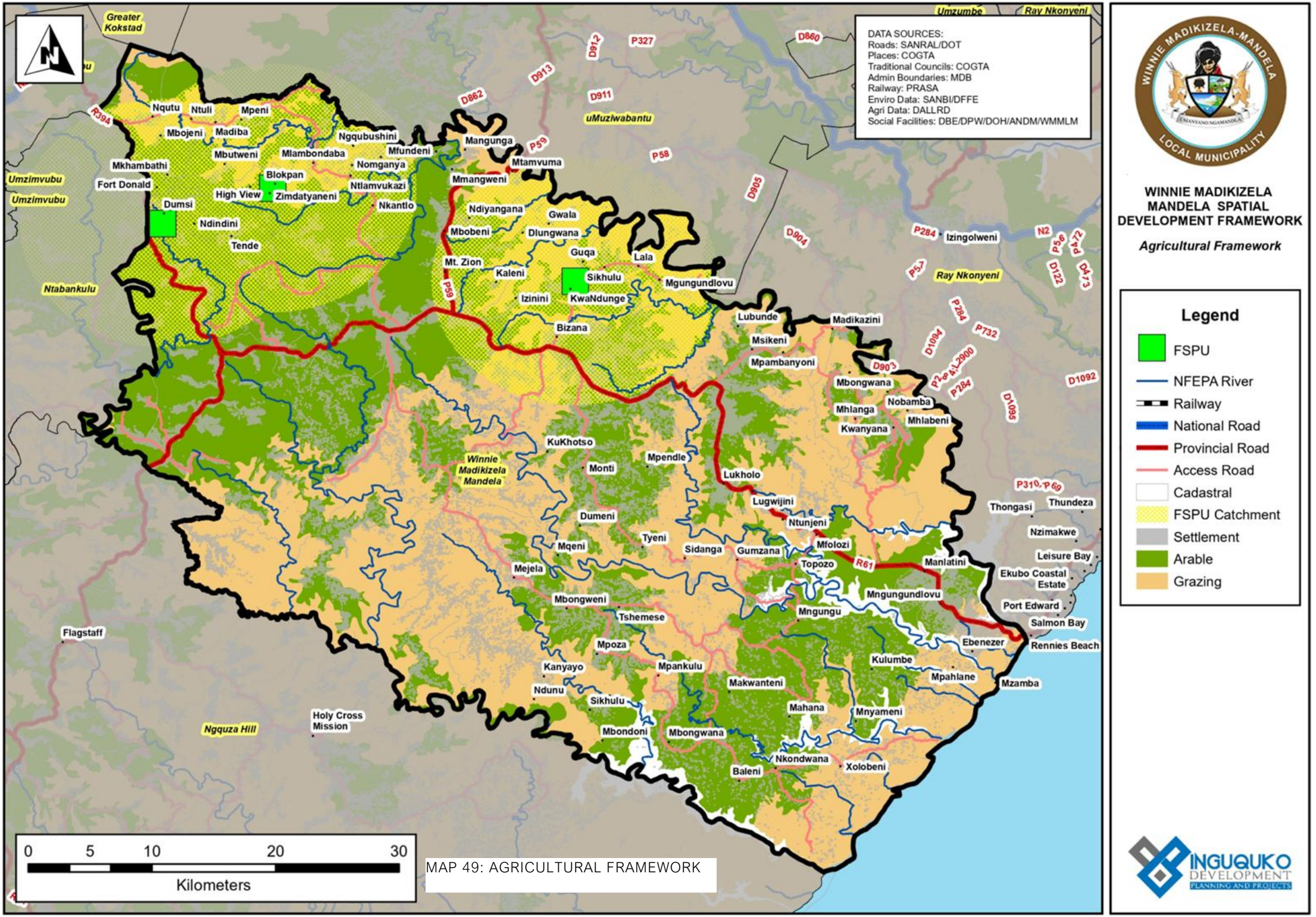


MAP 49: AGRICULTURAL FRAMEWORK

11.4. HUMAN SETTLEMENTS FRAMEWORK

11.4.1. STRATEGY 1 – NEW AREAS FOR FUTURE HOUSING DELIVERY

The strategies and projects must guide the municipality to achieve its vision within the framework of its legal obligations, the context of other role-players, the principles of development rationality, and the current reality in which the municipality finds itself. The housing strategies will direct this Spatial Development Framework (SDF) in determining the location of housing development within Winnie Madikizela Mandela Municipality. It is proposed that the following areas be excluded as potential suitable greenfield housing development sites:

- Areas that are more than 30 minutes travel time, by public and other transport, from main roads.
- Areas that are more than 30 minutes travel time, by public and other transport, from development nodes.
- Areas that are more than 20 minutes travel time, by public and other transport, from facilities and other areas.
- Areas where the population density is less than 80 people per km².
- Environmentally sensitive areas, including all wetlands, reserves, private reserves, and conservation areas, as well as all areas with an Irreplaceability Index greater than 0.8.
- Areas with slope characteristics where the gradient exceeds 25%.

It is therefore essential that the land identified for housing development aligns with the areas with the greatest population, the areas deemed suitable for development, and the settlements identified for housing development. This means that housing projects must be located where priority intervention has been noted. These are the designated areas where inclusionary housing policy may be applicable, as stipulated per Section 21 (i) of SPLUMA. Below is a list of new areas for housing delivery:

- Bizana (areas east of the town).
- Kubha
- Ntlenzi
- Redoubt

11.4.2. STRATEGY 2 – INFILL AND DENSIFICATION

To leverage housing provision as a catalyst for the socio-economic development of the WMMLM area, the spatial positioning of housing projects must be meticulously planned. Developing housing in the optimal locations will enhance the area and optimize scarce resources such as developable land, costly service infrastructure, and the natural environment. The following actions are recommended within the context of this land identification and evaluation process:

- Conduct a detailed land audit focusing on land identified as suitable for development in the Land Use Management System (LUMS), the Spatial Development Framework (SDF), and the municipality's Strategic Environmental Plan (SEA). This ensures that vacant land and potential infill areas are identified.
- Evaluate potential developable land against development principles to determine the most advantageous locations. Assess all geological, geotechnical, environmental, and physical constraints on the identified land with development potential.
- Determine legal constraints, land restitution issues, tribal or mining rights, and any land use right considerations.
- Identify land ownership of land that has been screened through the first three categories, prioritize government-owned land as much as possible, and then embark on a land acquisition process where required. This acquisition process needs to be budgeted for regularly (annually) to ensure that financial allocations align with the identified targeted timelines.

Below is a list of suitable areas where the approach of infill and densification can be applied:

- Bizana town
- Kubha
- Redoubt
- Mzamba

11.4.3. STRATEGY 3 – DEVELOPMENT OF A RENTAL HOUSING POLICY

The Winnie Madikizela-Mandela Local Municipality (WMMLM) faces a significant rental housing demand, primarily driven by professionals such as nurses, police officers, and teachers working in local clinics, police stations, and public schools. This demand is evident from the numerous rental cottage establishments along the R61 and R394 roads. However, a major challenge with these rental establishments is that many do not meet the national building regulation standards and requirements, posing safety and quality concerns for tenants.

To address this issue, a comprehensive rental housing policy is essential. Such a policy would establish clear guidelines and standards for rental properties, ensuring they comply with national building regulations. This would involve regular inspections and enforcement measures to ensure that all rental units meet the required safety, health, and structural standards. By doing so, the municipality can improve the living conditions for tenants and ensure their safety.

Additionally, the rental housing policy should include provisions for the development of new rental housing units that meet modern standards. This could involve incentivizing private developers to invest in the construction of high-quality rental properties. Offering tax breaks, subsidies, or low-interest loans could encourage the development of affordable and compliant rental housing. Furthermore, the policy could promote the renovation and upgrading of existing rental units to bring them up to standard.

Another critical aspect of the rental housing policy would be to address the affordability of rental housing. The policy could include measures to control rent increases and provide financial assistance to low-income tenants. This would ensure that rental housing remains accessible to all segments of the population, including those with lower incomes.

Community engagement and participation should also be a key component of the rental housing policy. Involving residents in the planning and implementation process can help ensure that the policy addresses their needs and concerns. Establishing a platform for regular communication between the municipality and residents can facilitate this engagement and ensure transparency and accountability.

The rental housing policy should align with the rental housing norms and standards as mandated by the Department of Human Settlements. These norms and standards provide a comprehensive framework to ensure that rental housing is safe, secure, and meets the necessary quality benchmarks. By adhering to these guidelines, the policy can ensure that all rental properties comply with national regulations, thereby improving living conditions for tenants and ensuring their safety.

Incorporating these norms and standards into the rental housing policy will involve regular inspections and enforcement measures to ensure compliance. This will help address the current issues with substandard rental establishments and ensure that all rental units meet the required safety, health, and structural standards. Additionally, the policy should promote the development of new rental housing units that adhere to these standards, ensuring that future housing developments are of high quality and meet the needs of the community.

By aligning with the Department of Human Settlements' norms and standards, the rental housing policy can effectively address the high demand for rental housing in the municipality, improve the quality of existing rental properties, and ensure the safety and well-being of all tenants.

11.5. URBAN DEVELOPMENT FRAMEWORK

Urban management in the central business district (CBD) is crucial for fostering economic growth, meeting housing demands, and promoting sustainable development. Effective urban management ensures that the CBD remains a vibrant and attractive area for businesses, residents, and visitors. By maintaining infrastructure, enhancing public spaces, and ensuring efficient transportation systems, urban management can significantly boost investor confidence. Investors are more likely to commit resources to areas that demonstrate stability, growth potential, and a well-maintained environment. This influx of investment can lead to job creation, increased economic activity, and overall urban prosperity.

Meeting housing demands in the CBD is another critical aspect of urban management. As cities grow, the need for diverse housing options becomes more pressing. Urban management strategies can include the development of mixed-use buildings, affordable housing projects, and the revitalization of underutilized spaces. By addressing housing needs, cities can attract a diverse population, including young professionals, families, and retirees, contributing to a dynamic and inclusive urban environment. Additionally, providing adequate housing in the CBD reduces commuting times, decreases traffic congestion, and enhances the quality of life for residents.

Sustainable development is a key goal of modern urban management. Implementing green building practices, promoting energy efficiency, and enhancing public transportation are essential strategies for creating sustainable urban environments. Urban management can also focus on preserving green spaces, improving waste management systems, and encouraging the use of renewable energy sources. These initiatives not only reduce the environmental impact of urban areas but also create healthier and more liveable cities. By integrating sustainability into urban planning, cities can ensure long-term resilience and adaptability to changing environmental conditions.

The Bizana CBD is in urgent need of urban management interventions to address its current challenges and unlock its full potential. Implementing an urban development strategy or a CBD revitalisation strategy within the 2025/2026 financial year is essential for the following reasons:

- A well-structured urban development strategy can attract significant investment to the Bizana CBD. By improving infrastructure, enhancing public spaces, and ensuring efficient transportation systems, the area can become more appealing to investors. This can lead to the establishment of new businesses, the creation of job opportunities, and overall economic growth. Investors are more likely to commit resources to areas that demonstrate stability, growth potential, and a well-maintained environment.
- Addressing housing demands is a critical aspect of urban management in the Bizana CBD. As the population grows, the need for diverse housing options becomes more pressing. An effective strategy can include the development of mixed-use buildings, affordable housing projects, and the revitalization of underutilized spaces. By providing adequate housing, the CBD can attract a diverse population, including young professionals, families, and retirees, contributing to a dynamic and inclusive urban environment. Additionally, reducing commuting times and traffic congestion enhances the quality of life for residents.
- Sustainable development is a key goal of modern urban management. Implementing green building practices, promoting energy efficiency, and enhancing public transportation are essential strategies for creating sustainable urban environments. Urban management can

also focus on preserving green spaces, improving waste management systems, and encouraging the use of renewable energy sources. These initiatives not only reduce the environmental impact of urban areas but also create healthier and more liveable cities. By integrating sustainability into urban planning, Bizana can ensure long-term resilience and adaptability to changing environmental conditions.

11.5.1. STRATEGY 1 – DEVELOPMENT OF AN EFFICIENT CIRCULATION AND MOVEMENT SYSTEM

With urban renewal come new opportunities for development and increased economic activity, which inevitably leads to an increase in traffic. The impact of this increase must be carefully assessed to ensure it does not cause inefficiencies in the movement of people and goods. Traffic congestion is particularly important in commercial and business hubs, and heavy vehicle access must be evaluated for CBD areas.

Additionally, an increase in commercial or industrial space will, through job creation, generate a rise in the number of community members who need to travel, potentially from distant areas. The intelligent and thoughtful placement of new infrastructure can enhance community satisfaction by providing ease of access and cost savings through shorter travel times and distances, among other benefits.

The influence of circulation and the movement system extends far beyond the primary project area. People travel to Bizana CBD from various areas within and outside the municipality for work, shopping, job opportunities, and as a transit zone to and from other areas. Therefore, it is critically important that the town's flow in the movement of goods and people enhances economic, social, and recreational activities. The major issues in Bizana regarding circulation and movement must be addressed to ensure the town's development is both efficient and beneficial for all stakeholders.

- Traffic congestion on Upper Main Street and its intersections, particularly during peak hours.
- Lack of clearly defined pedestrian walkways.
- Overconcentration of economic activity on Upper Main Street, Thompson Avenue, and Hope Street.
- Insufficient parking spaces near the CBD and beach during peak periods.
- Inadequate public transport infrastructure.
- Poor management of informal activities, which have encroached on spaces intended for circulation and movement.

The following strategies need to be implemented:

- Establishment of improved regional access
  - Improve the capacity and efficiency of public transport facilities in the CBD.
  - Enhance the capacity and efficiency of municipal parking facilities in the CBD, particularly along Upper Main Street, the main road in the town.
  - Upgrade and redesign the major gateway intersection to the CBD.
  - Upgrade Thompson Avenue providing access into the municipality with clearly defined pedestrian paths.
  - Upgrade the gravel roads that feed into CBD to an acceptable standard.
- Improvement of internal connectivity:
  - Improve internal circulation and ease of movement within all areas of the CBD for both pedestrians and vehicles.
  - Establish internal connections within the CBD for both pedestrians and vehicles, particularly between the busiest core areas.
  - Formalize pedestrian access to key public infrastructure facilities such as the taxi rank, social development offices,

municipal offices, the community center, and the police station.
    - Enhance the quality of pedestrian infrastructure along Upper Main Street, Thompson Avenue and Hope Street, as well as the smaller roads that feed into the CBD.
- Improvement of traffic management systems:
    - Create a management and operational system to address seasonal traffic surges and parking requirements.

11.5.2. STRATEGY 2- CBD DENSIFICATION THROUGH THE LAND USE SCHEME

Urban sprawl has created long travel distances with fragmented and dispersed urban activity patterns in Bizana, making it difficult to develop a viable public transport system. This negatively impacts the mobility of poorer people who rely on public transport. The cost of providing infrastructure for low-density urban development is significantly higher than for medium to high-density development. This inefficiency has serious economic implications, limiting access to opportunities and causing operational inefficiencies and wastage of resources.

Densification can contribute to creating high-quality, efficient, and sustainable urban environments in several ways:

- Encouraging upward rather than outward development helps reduce the consumption of valuable resources such as agricultural land, mineral areas, aquifer recharge zones, and biodiversity areas. It also reduces car dependence and non-renewable fuel consumption.
- Higher densities, with increased population thresholds and mixed-use development, support the efficient functioning and viable provision of public transport services, especially on major transit routes.
- Higher densities in appropriate locations, particularly near urban opportunities (services, facilities, jobs) and public transport, help rationalize housing patterns and improve access to city amenities and facilities. This reduces travel distances, times, and associated costs.
- Higher densities create sufficient consumer bases to generate economic opportunities, social facilities, and services, enabling cost-effective provision and optimal use of infrastructure, especially where there is excess capacity or where increased thresholds are needed.
- A mix of residential densities ensures diversification and choice of housing types and tenure options.
- Appropriately designed and located higher densities (in terms of form, scale, height, orientation) can enhance place-making and create attractive and safe urban environments, particularly near public spaces.

However, higher densities alone do not guarantee quality urban environments. Appropriate regulations, local development policies, and urban design policies are necessary to prevent negative built environments. In Bizana CBD, most buildings are single-storey, and there is a significant amount of underutilized land and derelict buildings that could be repurposed for development. For densification to be effective in Bizana CBD, the Town Planning Scheme needs to accommodate these changes incrementally. The following principles are proposed for inclusion in the Land Use Scheme as amendments become necessary. The following strategies are proposed:

- Promote attached/detached second dwellings, including converting non-residential buildings or parts of buildings to residential use and other purposes, especially within the core of the CBD and its immediate surroundings.
- Increase existing bulk rights by extending buildings or adding floors to accommodate more units.

- Consolidate blocks of erven for redevelopment at higher densities.
- Subdivide land and redevelop at higher densities.
- Consolidate and redevelop at higher densities, including demolishing and integrating existing structures.
- Implement higher-density infill on vacant and underutilized land throughout the built area of Bizana CBD.
- Consolidate sites within a street block to create a single, larger parcel for redevelopment into multi-storey units.

11.5.3. STRATEGY 3 – DEVELOPMENT OF AN ATTRACTIVE PUBLIC ENVIRONMENT

Transforming Bizana CBD into an attractive public environment requires an approach that promotes certain 'urban truths.' These timeless qualities create opportunities, facilitate choice, promote safety, encourage investment, and ultimately develop places that work for everyone. Key urban design elements such as permeability, diversity and complexity, people-centred environments, and robust urban spaces are essential for creating sustainable, liveable developments.

These elements foster a flourishing economic life, prudent use of resources, and social progress. Good design can help create lively places with distinct character, streets, and public spaces that are safe, accessible, pleasant to use, and human in scale. Such places inspire through imaginative and sensitive design.

- **Diversity and Complexity**: Ensure a high degree of integration between activities to promote access to a wide range of opportunities and experiences. A diverse environment increases the levels of choice available to its users.
- **People-Centered Environments**: Focus on accommodating the needs of people and maintaining a human scale in the environment created.
- **Legibility**: Ensure the environment is easily understood by all users, enabling choice and clear understanding of different elements and functions.
- **Permeability**: Enhance a movement system that offers a variety of choices for all users, including both vehicular and pedestrian movement.
- **Continuity and Enclosure**: Ensure all public spaces and streets are adequately defined, allowing for surveillance and safety.
- **High-Quality Public Realm**: Promote the development of a high-quality public environment with attractive and safe public spaces and streets.

11.5.4. STRATEGY 4 - DEVELOPMENT OF GATEWAYS AND ENTRY POINTS

Focal points can be used to distinguish gateways (entry/exit points) into an area by emphasizing arrival points. Providing a unique gateway landmark will improve the legibility and identity of Bizana upon entering the town via the Thompson Avenue and Upper Main Street.

Gateway landmarks can give the area character, and the design could have a theme linked to the culture and heritage of Bizana. In some instances, advertising billboards can serve as gateways and market products within the precinct. In Bizana CBD, there is a sense of arrival upon entering the area, mainly due to the modern design of the Municipal Offices. However, this should be enhanced with welcome boards, attractive street furniture, and infrastructure upgrades. Thompson Avenue and Upper Main Street run through the town and should be upgraded to leave a lasting impression. The following is proposed:

- Enhance infrastructure at the entrance and along the Upper Main Street and Thompson Avenue.
- Introduce unique and prominent signage at the town's entrance.

- Regularly maintain verges, including grass cutting, and introduce distinctive landscaping at the town's entrance.
- Provide unique street furniture that resonates with the town's history and tells a story the Municipality wishes to communicate.
- Encourage the upgrading of private developments at the town's entrance through regular and structured engagements with property owners.
- Create opportunities for small businesses to sell artwork, crafts, and other items at the town's entrance.

11.5.5. STRATEGY 5 – CBD EXPANSION AND REDEVELOPMENT

The future expansion of the CBD can be approached in several ways:

- **Anticipating and Planning for Growth**: The logical outward expansion of the CBD would be along the east and west axis of R395. This direction of growth can be anticipated and planned for accordingly.
- **Redevelopment and Renewal**: The CBD could first undergo redevelopment or renewal by identifying specific areas or precincts where interventions can be implemented. This might include incentives such as Improvement Districts.

Other methods for expanding the CBD include:

- **Proactive Rezoning for Mixed-Use Development**: Properties adjacent to the CBD (commercial and business sites) can acquire limited business rights through Consent Use applications or rezoning.
- **Rezoning Residential Sites**: Rezoning residential sites in selected areas will assist in expanding the existing CBD area.

11.5.6. STRATEGY 6 - PROPER URBAN MANAGEMENT

Effective urban management of rural towns is essential for fostering sustainable development, improving quality of life, and ensuring economic vitality. Several strategies can be implemented to achieve these goals.

- Comprehensive planning is crucial. Developing a detailed urban management plan that includes land use, infrastructure development, and environmental conservation is essential. This plan should be based on thorough research and community input to ensure it meets the specific needs of the town. Regular updates and revisions to the plan can help adapt to changing circumstances and emerging challenges.
- Infrastructure development is another key strategy. Investing in essential infrastructure such as roads, water supply, sewage systems, and electricity can significantly improve living conditions and attract investment. Prioritizing the maintenance and upgrading of existing infrastructure is equally important to ensure long-term sustainability. Additionally, incorporating modern technologies and sustainable practices, such as renewable energy sources and smart grids, can enhance efficiency and reduce environmental impact.
- Economic development initiatives are vital for the prosperity of rural towns. Encouraging local entrepreneurship and supporting small businesses can create job opportunities and stimulate economic growth. Providing training and resources for local entrepreneurs, as well as facilitating access to markets, can help build a robust local economy. Attracting external investment through incentives and creating a business-friendly environment can also contribute to economic development.
- Housing and community development are essential components of urban management. Ensuring the availability of affordable and diverse housing options can accommodate the needs of different population

groups. Implementing policies that promote mixed-use development, and the revitalization of underutilized spaces can create vibrant and inclusive communities. Additionally, investing in community facilities such as schools, healthcare centres, and recreational areas can enhance the quality of life for residents.

- Environmental sustainability should be a core focus of urban management strategies. Implementing green building practices, promoting energy efficiency, and enhancing waste management systems are crucial for reducing the environmental impact of urban areas. Preserving green spaces and promoting biodiversity can also contribute to a healthier and more liveable environment. Encouraging the use of public transportation and non-motorized modes of transport, such as cycling and walking, can reduce traffic congestion and lower carbon emissions.
- Community engagement and participation are fundamental to successful urban management. Involving residents in decision-making processes and encouraging active participation in community initiatives can foster a sense of ownership and responsibility. Establishing platforms for regular communication between local authorities and residents can ensure that community needs and concerns are addressed promptly. Additionally, promoting civic education and awareness can empower residents to contribute to the development and management of their town.
- Governance and institutional capacity are critical for effective urban management. Strengthening local governance structures and enhancing the capacity of municipal authorities can improve the efficiency and effectiveness of urban management efforts. Providing training and resources for local officials and staff can enhance their skills and knowledge. Additionally, fostering partnerships with other government agencies, non-governmental organizations, and the private sector can leverage additional resources and expertise.

11.6. COASTAL DEVELOPMENT FRAMEWORK

Coastal development in the Winnie Madikizela Mandela Local Municipality is crucial for several reasons.

- Firstly, it leverages the natural beauty and resources of the coastline to boost tourism, which can significantly enhance the local economy. By attracting visitors, coastal development creates job opportunities and stimulates local businesses, from hospitality to retail.
- Secondly, it provides a platform for sustainable development practices. By carefully planning and managing coastal areas, the municipality can protect sensitive ecosystems while promoting economic growth. This balance is essential for maintaining biodiversity and ensuring long-term environmental health.
- Additionally, coastal development can improve infrastructure and public amenities, making the area more attractive for both residents and investors. Enhanced infrastructure, such as roads, public transport, and utilities, can lead to better living standards and increased property values.
- Furthermore, coastal development can foster community engagement and social cohesion by creating public spaces and recreational facilities that encourage social interaction and a sense of community pride. Overall, coastal development in the Winnie Madikizela Mandela Local Municipality is a strategic initiative that supports economic growth, environmental sustainability, and social well-being, making it a vital component of the region's development strategy.

11.6.1. WILD COAST PRECINCT PLAN

The Winnie Madikizela Mandela Local Municipal Spatial Development Framework (SDF) highlights the Wild Coast of the Eastern Cape as a region with significant potential for the development of both the Eastern Cape and South Africa as a whole. This area, due to its unique position, serves as a model

for integrated rural development initiatives that combine land and agrarian livelihoods with modern approaches to community-driven tourism development.

The Winnie Madikizela Mandela Local Municipality encompasses approximately a 40km stretch of the Wild Coast, including the Wild Coast Sun Hotel. It proudly claims the legacy of Oliver Reginald Tambo and is recognized as an internationally acclaimed biodiversity hotspot, known as the "Pondoland Centre of Endemism."

The municipality boasts pristine beaches, petrified forests, ancient archaeological sites, rugged coastlines, and scenic estuaries. Due to its rugged nature and rich historical and cultural heritage, the coastline within the Winnie Madikizela Mandela Local Municipality remains one of the least developed portions of the Eastern Cape coastline, free from coastal ribbon development. Many areas are still in pristine or near-pristine condition, preserving the essence of the Wild Coast, which is a major attraction for tourism.

To maintain the integrity of the coastline, including its functional ecosystems, biodiversity, and landscape processes, it is crucial to regulate the drivers of environmental degradation. Accessibility and infrastructure development have influenced settlement patterns in the Winnie Madikizela Mandela Local Municipality. Certain settlements are experiencing development pressures and are rapidly urbanizing. The SDF has identified these areas, such as Bizana town, Kubha Redoubt, Ebenezer, and Sea View, as future growth areas due to their current densities and infrastructure development. Future development in these areas needs to be carefully guided to ensure sustainable growth.

11.6.1.1. THE NEED FOR A PRECINCT PLAN

The development of the Wild Coast Precinct Plan for the Winnie Madikizela Mandela Local Municipality is essential to harness the region's potential while preserving its unique environmental and cultural heritage. This plan is crucial for guiding sustainable development, ensuring that growth is balanced with the protection of the area's pristine landscapes and biodiversity. By establishing a clear framework for development, the precinct plan can help manage the pressures of urbanization and infrastructure expansion, particularly in areas like Bizana town, Kubha Redoubt, Ebenezer, and Sea View, which are experiencing rapid growth.

The plan will also facilitate the integration of land and agrarian livelihoods with modern tourism initiatives, promoting economic development that benefits local communities. By identifying suitable areas for development and regulating activities that could lead to environmental degradation, the precinct plan will help maintain the integrity of the Wild Coast's ecosystems and cultural sites. Additionally, improved infrastructure and accessibility, guided by the precinct plan, will enhance the region's appeal to tourists, boosting the local economy and creating job opportunities.

11.6.2. LAND USE PROPOSALS FOR THE PRECINCT PLAN

The precinct boundary has been divided into three sub-precincts: A, B, and C. This division enables more targeted and efficient planning and development strategies, tailored to the unique characteristics and needs of each sub-precinct.

11.6.2.1. SUB-PRECINCT A – MIXED USE PRECINCT

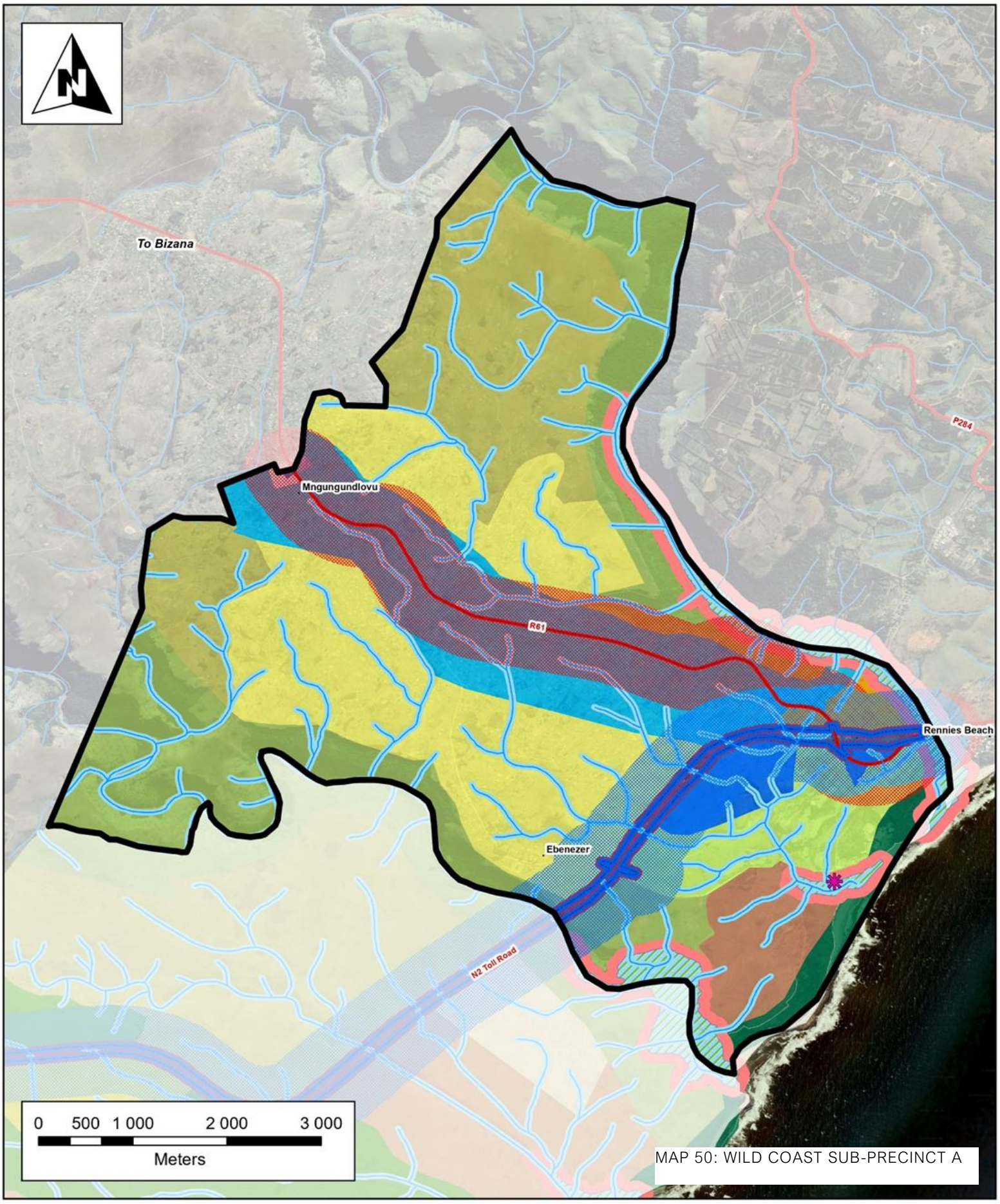
Sub-Precinct A is designated as a mixed-use tourism precinct to enhance its role as a key tourism destination. Strategically located along the R61 road, it is easily accessible to both local and international tourists. The goal is to promote mixed-use development that integrates tourism-related activities, adventure and eco-tourism, and civic land use.

The development will include hospitality establishments such as hotels, lodges, and guesthouses, along with retail outlets, restaurants, and entertainment venues. This diverse range of facilities will cater to tourists, providing a comprehensive experience. Residential areas will also be incorporated, creating a vibrant community that supports the tourism industry.

Adventure and eco-tourism will leverage the natural beauty of the Wild Coast, with activities like hiking, mountain biking, bird watching, and guided nature tours. Eco-tourism initiatives will focus on sustainable practices to preserve the environment for future generations.

Additionally, Sub-Precinct A will feature a civic precinct with essential public services and facilities such as community centres, libraries, and government offices. This area will foster community engagement and provide necessary services to both locals and tourists.

Developing Sub-Precinct A as a mixed-use tourism precinct aims to create a dynamic and sustainable tourism destination, boosting the local economy, creating jobs, and improving the quality of life for residents.



MAP 50: WILD COAST SUB-PRECINCT A

DEVELOPMENT OF WILD COAST PRECINCT PLANS

Sub-Precinct A Development Concept Land Use Proposals

Legend

- Small Harbour
- River
- Proposed N2 Toll Road
- Provincial Road
- N2 Toll Corridor
- Mixed Use Corridor
- Eco-Tourism Corridor
- River 32m Buffer
- Sports Complex
- Industry
- Camp Site
- Agri-Park
- Education Facility
- Agriculture
- Aqua-Culture Industries
- Cultural Village
- Adventure Tourism
- Chalets
- Existing Residential
- Informal Market
- SMME Support Centre
- Agri-Tourism
- Mixed Use
- Civic Precinct
- Eco-Tourism
- Hotel Precinct
- Commercial
- N2 60m Building Line
- Recreational Precinct
- Estuaries
- Estuary 100m Buffer
- Admiralty Reserve

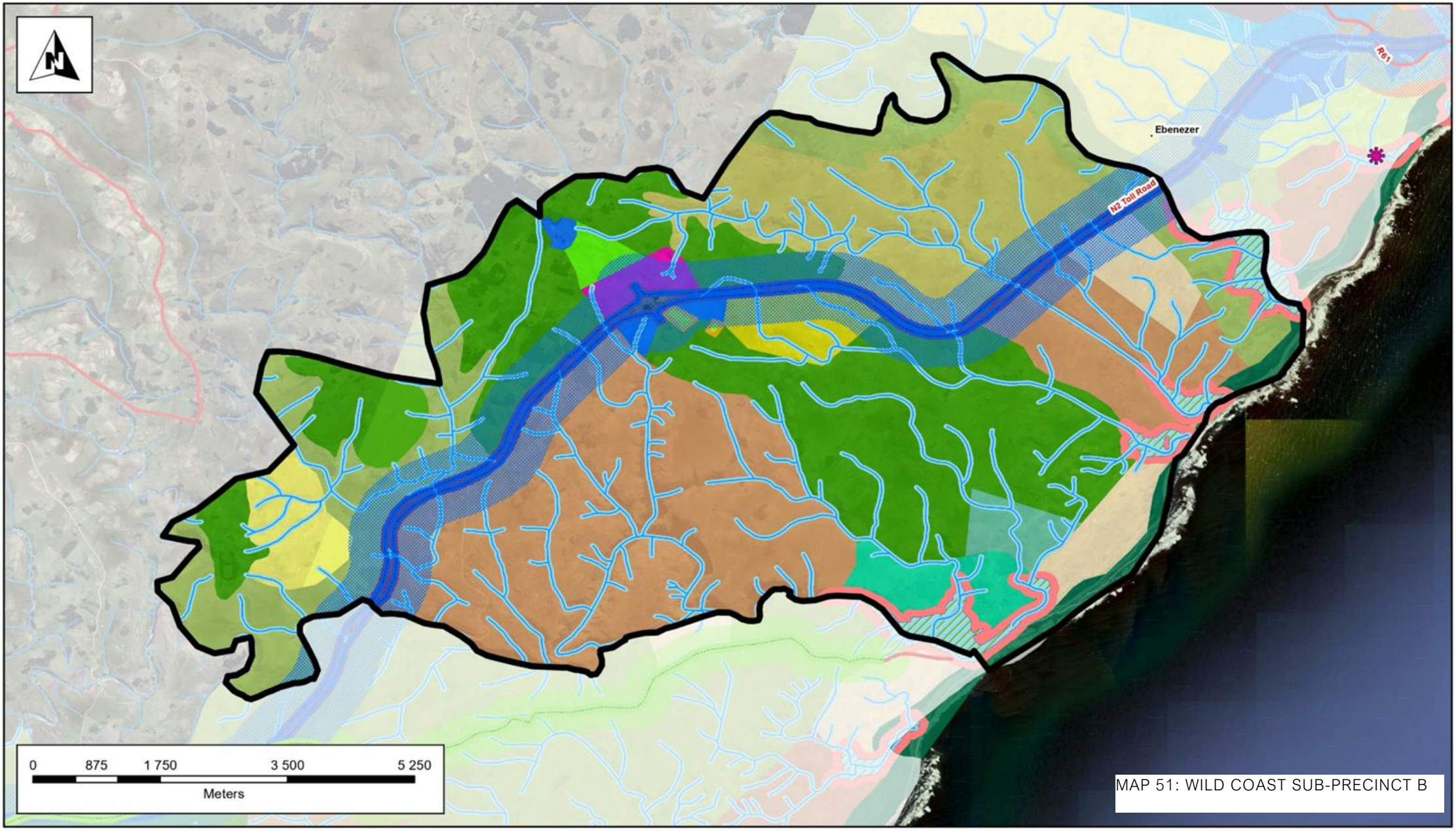
11.6.2.2. SUB-PRECINCT B – ECONOMIC DIVERSIFICATION PRECINCT

Sub-Precinct B is designated as an Economic Diversification Precinct to reduce reliance on seasonal tourism and create a resilient economy. Key proposals include:

- **Agri-park**: A hub for agricultural activities, supporting local farmers with modern techniques, equipment, and markets, and promoting value-added activities like packaging and branding.
- **Agri-processing areas**: Facilities for transforming raw agricultural products into finished goods, enhancing the agricultural value chain, reducing post-harvest losses, and ensuring food security.
- **Commercial zones**: Infrastructure and amenities to attract businesses and investors, stimulating economic growth and generating employment.
- **Adventure and eco-tourism**: Promoting activities like hiking, mountain biking, and water sports, while focusing on sustainable practices and environmental conservation.
- **Aquaculture industries**: Utilizing coastal resources for farming fish, shellfish, and other aquatic organisms, providing a sustainable seafood source and creating employment.

These proposals capitalize on the proposed N2 toll road, improving connectivity and accessibility, facilitating the movement of goods and people, and attracting investors and entrepreneurs to boost the local economy.

IMAGE 9: STELLENBOSCH AGRI-PARK



MAP 51: WILD COAST SUB-PRECINCT B

DEVELOPMENT OF WILD COAST PRECINCT PLANS

Sub-Precinct B Development Concept Land Use Proposals

Legend

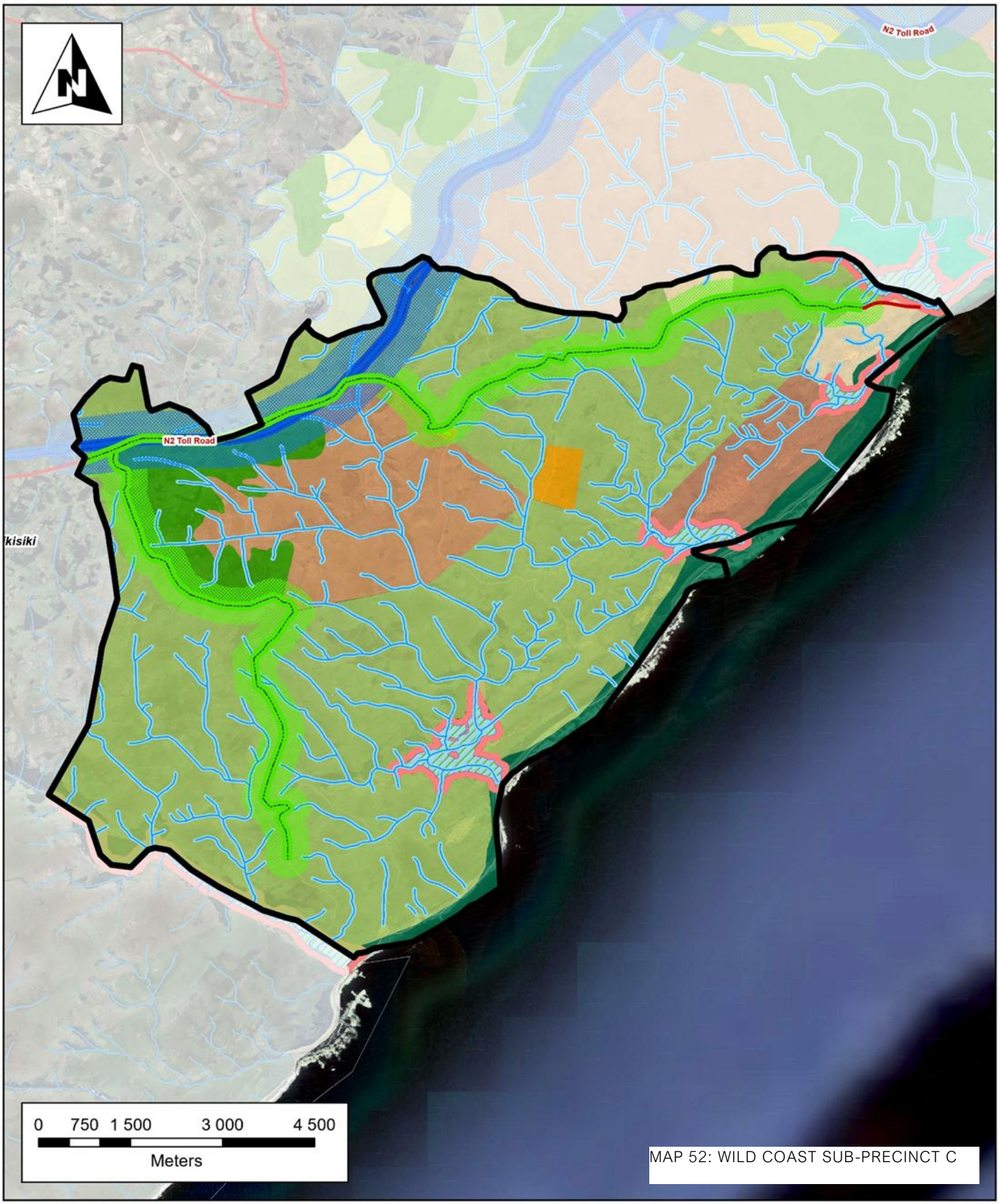
- Small Harbour
- River
- Proposed N2 Toll Road
- Provincial Road
- N2 Toll Corridor
- Mixed Use Corridor
- Eco-Tourism Corridor
- River 32m Buffer
- Sports Complex
- Industry
- Camp Site
- Agri-Park
- Education Facility
- Agriculture
- Aqua-Culture Industries
- Cultural Village
- Adventure Tourism
- Chalets
- Existing Residential
- Informal Market
- SMME Support Centre
- Agri-Tourism
- Mixed Use
- Civic Precinct
- Eco-Tourism
- Hotel Precinct
- Commercial
- N2 60m Building Line
- Erven
- Recreational Precinct
- Estuaries
- Estuary 100m Buffer
- Admiralty Reserve

11.6.2.3. SUB-PRECINCT C – ADVENTURE TOURISM PRECINCT

Sub-Precinct C is designated for adventure tourism with a focus on eco-friendly and sustainable development. Key proposals include eco-tourism, adventure tourism, a hotel precinct, and cultural villages.

- **Eco-tourism**: Activities like guided nature walks, bird watching, and educational tours to appreciate the natural environment.
- **Adventure tourism**: Thrill-seeking activities such as zip-lining, rock climbing, mountain biking, kayaking, and snorkeling.
- **Hotel precinct**: A range of lodging options from luxury resorts to budget-friendly accommodations, ensuring comfort for all visitors.
- **Cultural villages**: Immersive experiences featuring traditional crafts, performances, and cuisine to showcase local culture and heritage.

The rationale is to balance tourism growth with environmental conservation, protecting the natural habitat while boosting the local economy. This approach ensures the preservation of the area's beauty and cultural richness for future generations, creating a vibrant and attractive destination for tourists.



MAP 52: WILD COAST SUB-PRECINCT C

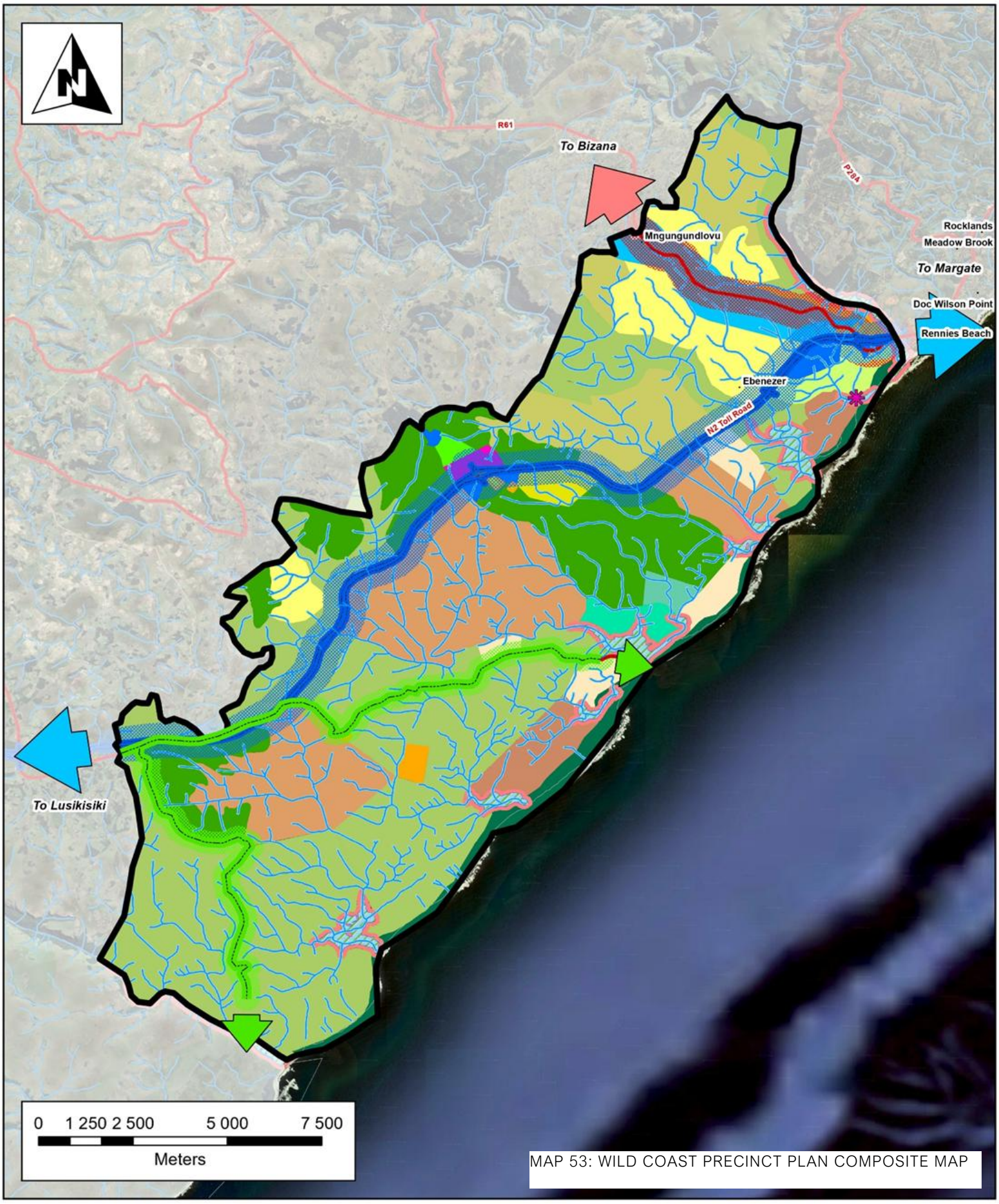
DEVELOPMENT OF WILD COAST PRECINCT PLANS

Sub-Precinct C
Development Concept
Land Use Proposals

Legend

- Small Harbour
- River
- Proposed N2 Toll Road
- Provincial Road
- N2 Toll Corridor
- Mixed Use Corridor
- Eco-Tourism Corridor
- River 32m Buffer
- Sports Complex
- Industry
- Camp Site
- Agri-Park
- Education Facility
- Agriculture
- Aqua-Culture Industries
- Cultural Village
- Adventure Tourism
- Chalets
- Existing Residential
- Informal Market
- SMME Support Centre
- Agri-Tourism
- Mixed Use
- Civic Precinct
- Eco-Tourism
- Hotel Precinct
- Commercial
- N2 60m Building Line
- Recreational Precinct
- Estuaries
- Estuary 100m Buffer
- Admiralty Reserve

WINNIE MADIKIZELA-MANDELA LOCAL MUNICIPALITY



MAP 53: WILD COAST PRECINCT PLAN COMPOSITE MAP

DEVELOPMENT OF WILD COAST PRECINCT PLANS

Precinct Plan Development Concept Land Use Proposals

Legend

- Small Harbour
- River
- Proposed N2 Toll Road
- Provincial Road
- N2 Toll Corridor
- Mixed Use Corridor
- Eco-Tourism Corridor
- River 32m Buffer
- Sports Complex
- Industry
- Camp Site
- Agri-Park
- Education Facility
- Agriculture
- Aqua-Culture Industries
- Cultural Village
- Adventure Tourism
- Chalets
- Existing Residential
- Informal Market
- SMME Support Centre
- Agri-Tourism
- Mixed Use
- Civic Precinct
- Eco-Tourism
- Hotel Precinct
- Commercial
- N2 60m Building Line
- Recreational Precinct
- Estuaries
- Estuary_100m_Buffer
- Admiralty Reserve

WINNIE MADIKIZELA-MANDELA LOCAL MUNICIPALITY

11.7. NODAL DEVELOPMENT FRAMEWORK

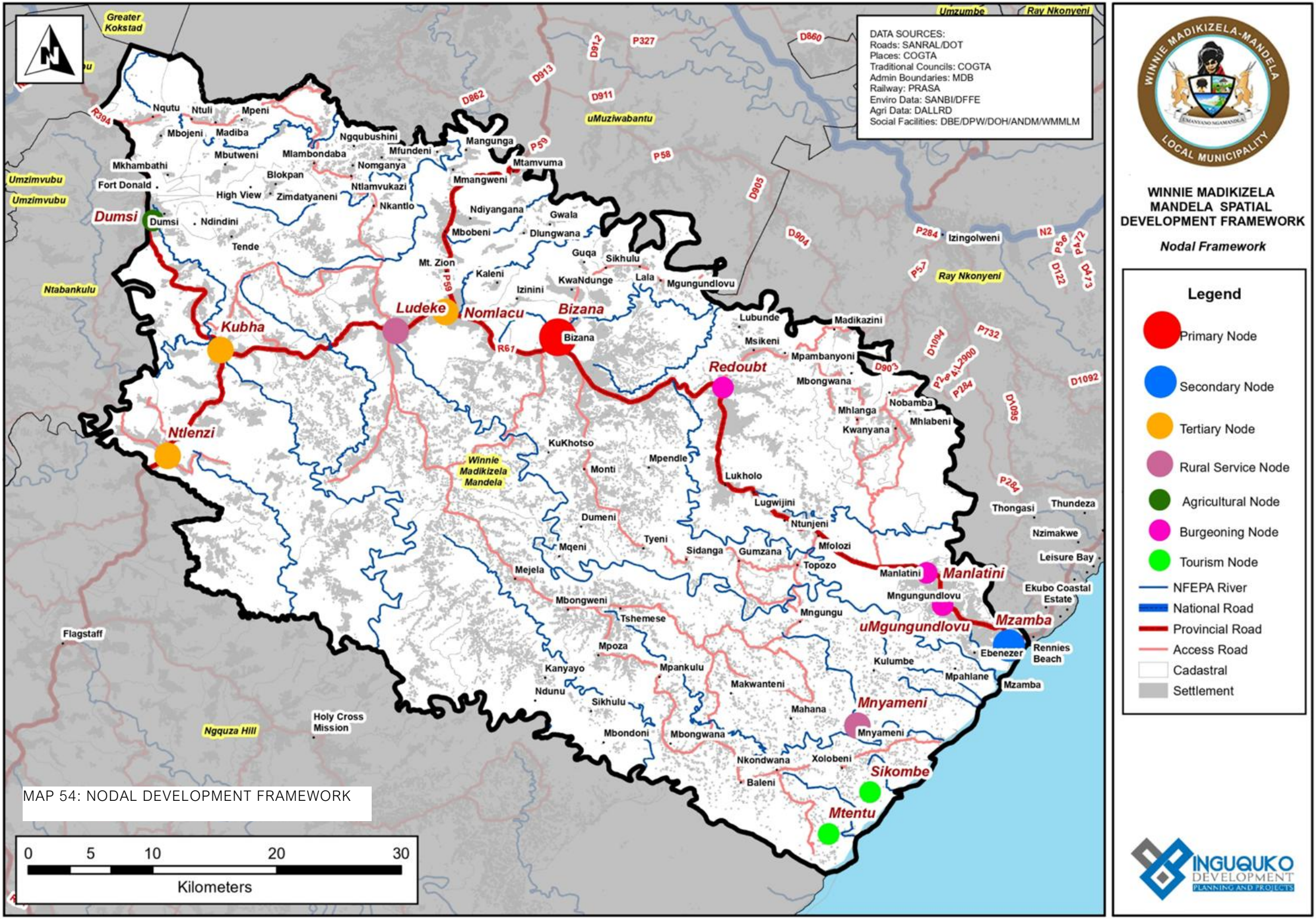
The identification and development of nodes in spatial development frameworks are crucial for fostering balanced and sustainable urban and rural growth. Nodes serve as focal points for economic activities, social services, and infrastructure development, helping to distribute resources and opportunities more evenly across a region. By strategically developing these nodes, planners can enhance connectivity, reduce congestion in central areas, and promote the efficient use of land and resources. This approach also supports the creation of vibrant, self-sufficient communities, reducing the need for long commutes and encouraging local economic development. Ultimately, well-planned nodes contribute to a more equitable and resilient spatial structure, accommodating growth while preserving the quality of life for residents.

11.7.1. NODAL HIERARCHY

TABLE 22: NODAL HIERARCHY

NODE TYPE	DESCRIPTION	NODE
Primary Development Node	The Primary Development Node serves as the primary economic hub, encompassing a diverse range of economic sectors with significant potential for further expansion. This nodal area is strategically connected to highly accessible regions with existing bulk infrastructure and relatively high population densities. These factors not only contribute to economic growth but also stand to benefit from targeted interventions in these areas.	Bizana
Secondary Development Node	Secondary Development Nodes are small towns that act as exchange points for household and common consumer products, as well as farm inputs. These nodes serve as transportation and distribution hubs connected to regional centres. They offer higher-level administrative services not available in smaller community nodes, and provide vocational and secondary education, health and childcare services, and rural commercial services.	Mzamba
Tertiary Development Node	A Tertiary Development Node encompasses a settlement or a cluster of settlements. Similar to a neighbourhood, its service area is limited to the surrounding settlements. It includes basic public facilities, shopping options, and small business enterprises.	Kubha, Magusheni
Rural Service Node	A Rural Service Node serves as a focal point for providing essential services and infrastructure to surrounding communities. These nodes are strategically located to enhance accessibility and connectivity, offering a range of services such as healthcare, education, administrative functions, and commercial activities. The aim is to support rural development by concentrating resources and services in specific locations, thereby improving the quality of life for rural residents and promoting economic growth	Ludeke, Ntlenzi, Mnyameni, Sikombe, Mtentu
Agricultural Node	An Agricultural Node serves as a central point for agricultural activities and services. These nodes are strategically located to support and enhance agricultural production, processing, and distribution. They typically include facilities	Dumsi

NODE TYPE	DESCRIPTION	NODE
	for storage, processing, and marketing of agricultural products, as well as access to agricultural support services such as extension services, training, and financial assistance. The aim is to boost agricultural productivity, promote rural development, and ensure food security by concentrating resources and services in specific locations that are easily accessible to farmers and agribusinesses.	
Tourism Node	A Tourism Node serves as a focal point for tourism-related activities and infrastructure. These nodes are strategically located to maximize the potential of natural, cultural, and historical attractions, thereby enhancing the visitor experience and promoting economic development. Tourism nodes typically include accommodations, restaurants, recreational facilities, and transportation links, making them accessible and attractive to tourists. The development of these nodes aims to boost local economies, create jobs, and ensure sustainable tourism practices by concentrating resources and services in specific locations	Mzamba, Sikombe, Mtentu, and Mnyameni
Burgeoning Node	A Burgeoning Node refers to an area experiencing rapid growth and development, often characterized by increasing economic activities, population density, and infrastructure expansion. These nodes are typically identified as emerging hubs of commerce, industry, or residential development, and are strategically supported to harness their growth potential. The aim is to manage and direct this growth in a sustainable manner, ensuring that the necessary services, amenities, and infrastructure are in place to support the expanding population and economic activities. This approach helps to balance development across regions and prevent over-concentration in already established urban centres	Ebenezer, Alfred Nzo, Redoubt



MAP 54: NODAL DEVELOPMENT FRAMEWORK

11.7.2. BIZANA TOWN

The spatial proposals for Bizana are designed to create a sustainable, economically vibrant town with high-density, mixed-use development. This strategy aims to enhance Bizana's role as the administrative center of the Winnie Madikizela-Mandela Local Municipality (WMMLM) and promote overall regional growth.

- **Agri-processing along the R61 road**: This initiative focuses on establishing agri-processing facilities to add value to agricultural products from the surrounding commercial farms and the broader region. By processing local produce, these facilities can enhance the agricultural sector's profitability, create jobs, and stimulate economic activity. The R61 road provides a strategic location for these facilities, ensuring easy access to transportation networks and markets.

- **Mixed-use development**: The town plans to integrate shops, offices, and residential units within the same areas, fostering a vibrant, multifunctional urban environment. This type of development encourages economic activity by providing convenient access to various services and amenities, making the town more attractive for businesses and residents alike. Mixed-use areas are designed to reduce the need for long commutes, promote walkability, and create a lively community atmosphere.

- **Light industry and residential expansion**: Along the R61, light industrial zones will be developed to support small-scale manufacturing and other industrial activities. These zones will provide opportunities for local entrepreneurs and businesses to thrive, contributing to job creation and economic diversification. Additionally, residential areas will be expanded with medium to high-density housing to meet the growing demand for affordable and middle-income housing. This expansion aims to accommodate future population growth while ensuring efficient land use and reducing urban sprawl.

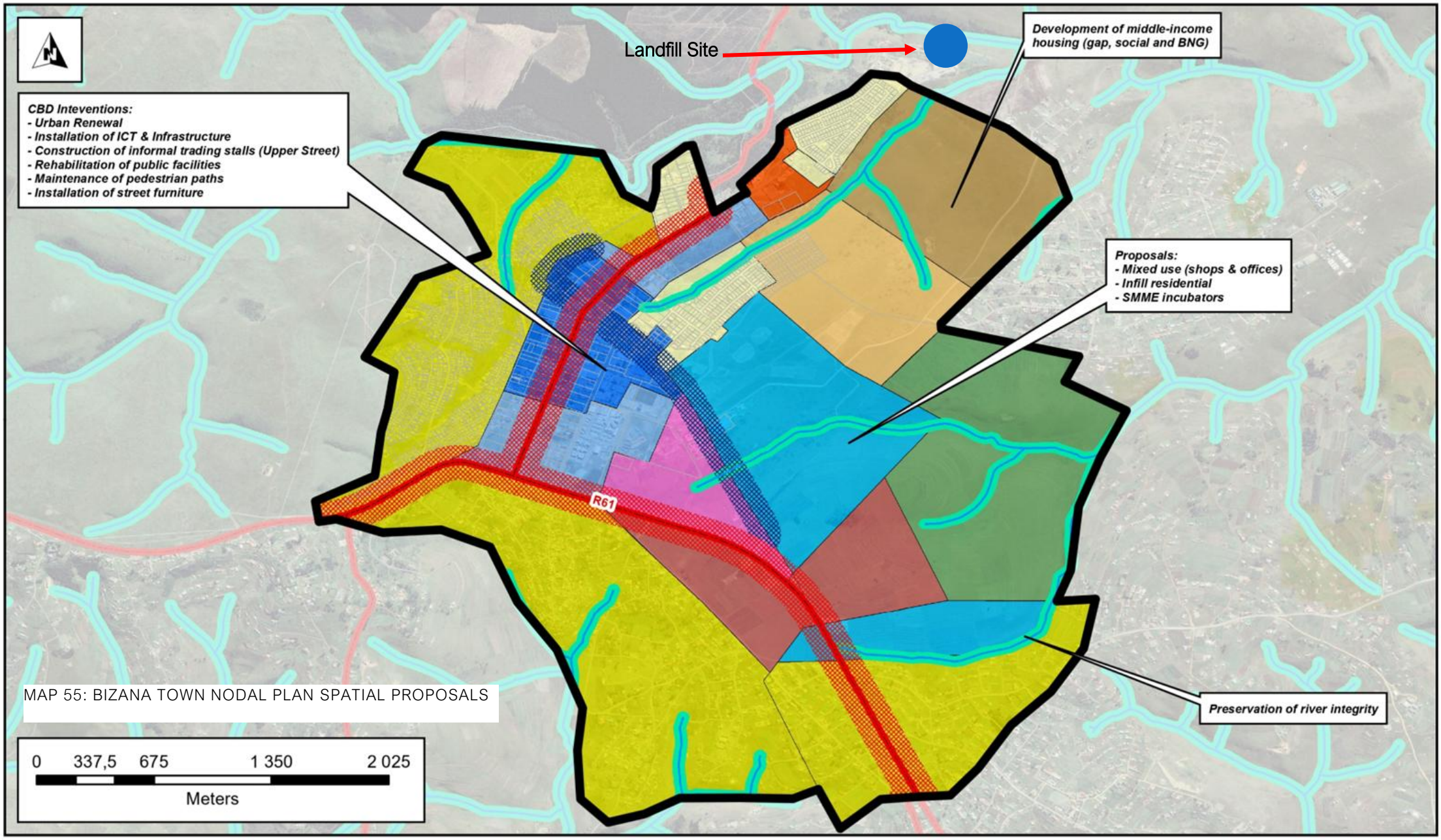
- **Sustainable urban planning**: The proposals emphasize sustainable urban planning principles, including the efficient use of land, the promotion of public transportation, and the integration of green spaces. These measures aim to create a balanced, environmentally friendly urban environment that supports the well-being of residents and the long-term sustainability of the town

- **Infrastructure development**: To support these initiatives, significant investments will be made in infrastructure development, including roads, utilities, and public services. Improved infrastructure will enhance connectivity within the town and the surrounding region, facilitating economic growth and improving the quality of life for residents

The following interventions have been proposed for the CBD with the aim to enhance the town's functionality, aesthetics, and economic vitality. Here's a detailed look at each intervention:

- **Urban Renewal**: This involves revitalizing the central business district (CBD) to improve its economic and social environment. Urban renewal projects typically include upgrading infrastructure, enhancing public spaces, and promoting mixed-use developments. The goal is to attract businesses, residents, and visitors, thereby boosting local commerce and community engagement.
- **Installation of ICT & Infrastructure**: Implementing advanced information and communication technology (ICT) infrastructure is crucial for modernizing the CBD. This includes high-speed internet, smart city technologies, and improved telecommunications. Enhanced ICT infrastructure supports business operations, improves public services, and facilitates digital inclusion.

- **Construction of Informal Trading Stalls (Upper Street)**: Providing designated areas for informal traders helps integrate them into the formal economy. These stalls offer a structured environment for small vendors, promoting entrepreneurship and economic diversity. The construction of these stalls on Upper Street aims to create a vibrant marketplace, supporting local livelihoods and reducing street congestion.
- **Rehabilitation of Public Facilities**: Upgrading public facilities such as parks, public toilets, and community centres is essential for improving the quality of life in the CBD. Rehabilitation projects ensure these facilities are safe, clean, and accessible, encouraging their use by residents and visitors. This also includes maintaining historical buildings and landmarks, preserving the town's cultural heritage.
- **Maintenance of Pedestrian Paths**: Ensuring well-maintained pedestrian paths is vital for promoting walkability and safety in the CBD. This includes regular upkeep of sidewalks, crosswalks, and pedestrian signage. Proper maintenance encourages walking as a mode of transportation, reduces traffic congestion, and enhances the overall urban experience.
- **Installation of Street Furniture**: Adding Street furniture such as benches, trash bins, and planters enhances the functionality and aesthetics of public spaces. Street furniture provides comfort and convenience for pedestrians, encourages social interaction, and contributes to a pleasant urban environment. These installations are strategically placed to create inviting and accessible public areas.



MAP 55: BIZANA TOWN NODAL PLAN SPATIAL PROPOSALS

WINNIE MADIKIZELA MANDELA SPATIAL DEVELOPMENT FRAMEWORK

Bizana Nodal Plan Spatial Proposals

Legend

- River
- Main Road
- Development Corridor
- Mixed Use Activity Spine
- Erven
- River 32m Buffer
- Agriculture
- Civic Precinct
- Existing Residential
- Existing Mixed Use
- Existing Commercial Core
- Proposed Agri-Processing
- Proposed Residential Formalisation
- Proposed Medium Density Residential
- Proposed High Density Residential
- Proposed Light Industry
- Proposed Use Mixed Use
- Settlement Boundary

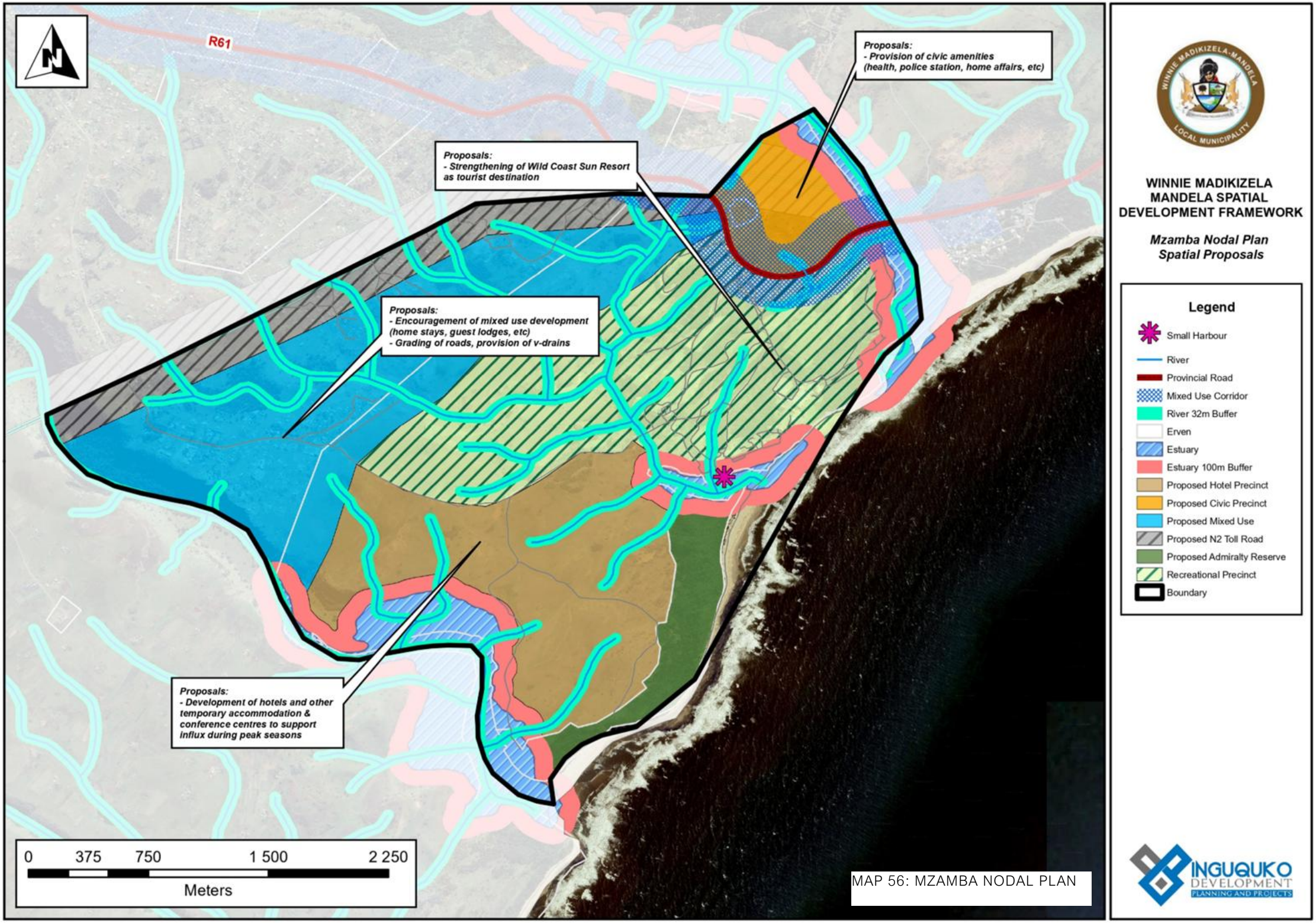
11.7.3. MZAMBA

The intention to strengthen the tourist aspect of Mzamba while adding other mixed-use land use activities is a multifaceted approach aimed at boosting the local economy and enhancing the overall visitor experience. One of the key proposals is the encouragement of mixed-use development, which includes the establishment of home stays and guest lodges. This initiative not only provides tourists with a variety of accommodation options but also integrates them into the local community, fostering a more immersive and authentic experience. Additionally, the grading of roads and provision of v-drains are essential infrastructural improvements that will enhance accessibility and safety for both residents and visitors.

A significant focus is also placed on strengthening the Wild Coast Sun Resort as a premier tourist destination. By enhancing its facilities and services, the resort can attract a larger number of tourists, thereby boosting local businesses and creating job opportunities. The provision of a civic precinct with essential amenities such as health services, a police station, and home affairs offices is another critical component. This development ensures that both residents and tourists have access to necessary services, contributing to the overall appeal and functionality of the area.

Furthermore, the development of hotels and other temporary accommodations, along with conference centres, is aimed at supporting the influx of visitors during peak seasons. These facilities will cater to the needs of tourists and business travellers alike, promoting Mzamba as a versatile destination for both leisure and business. By implementing these proposals, Mzamba can transform into a vibrant hub that offers a blend of cultural, recreational, and professional experiences, ultimately driving sustainable growth and development in the region. In addition:

- Strengthening Mzamba as a tourism node involves several strategic proposals aimed at leveraging its natural and cultural assets to boost local economic development. The Wild Coast Sun Resort, a major attraction in the region, plays a pivotal role in this strategy. Situated on an unspoiled beach between the Umtamvuna and Mzamba rivers, the resort offers a range of activities, from water sports to golf, attracting both domestic and international tourists.
- Enhancing the resort's connectivity and facilities can further increase its appeal, making Bizana a prime destination on the Wild Coast.
- Protecting the estuaries with an admiralty reserve is another crucial component of this strategy. Estuaries are vital ecosystems that support diverse wildlife and act as natural buffers against extreme weather events.
- Establishing an admiralty reserve ensures these areas are preserved, maintaining their ecological integrity and enhancing their attractiveness for eco-tourism. This protection not only safeguards biodiversity but also promotes sustainable tourism practices, drawing visitors interested in nature and conservation
- Encouraging the development of hotels, bed & breakfasts, and other holiday accommodations is essential to cater to the growing number of tourists. Diverse lodging options, from luxury hotels to charming bed & breakfasts, provide visitors with a range of choices to suit different preferences and budgets
- This development can stimulate local businesses, create jobs, and foster a vibrant tourism economy. Additionally, promoting eco-friendly and sustainable accommodations aligns with global tourism trends, attracting environmentally conscious travellers.

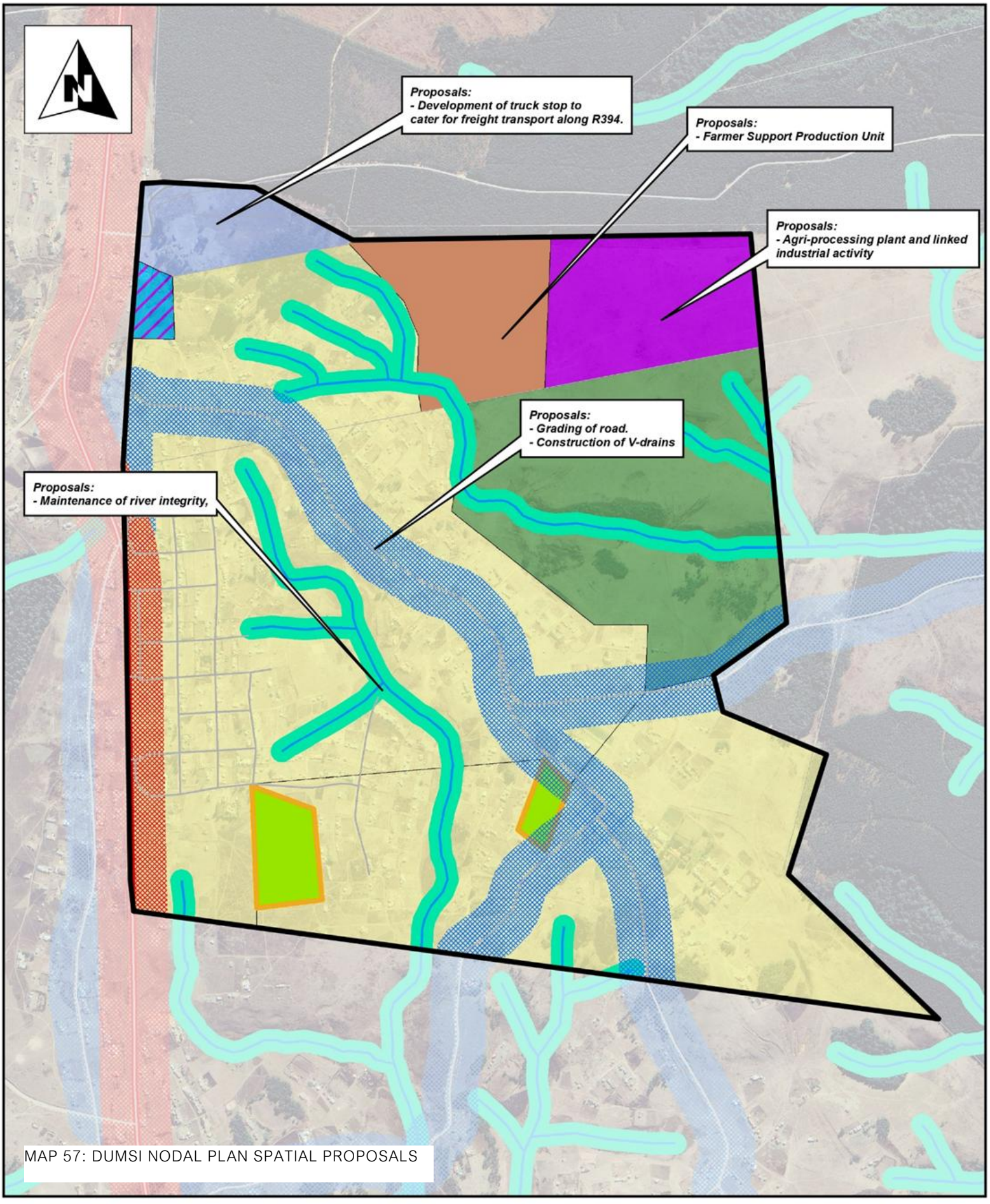


MAP 56: MZAMBA NODAL PLAN

11.7.4. DUMSI

The proposal is for Dumsi to be developed into an Agricultural Node. The following is thus proposed:

- The development of a truckstop along the R394 is a strategic initiative aimed at supporting freight transportation in the region. This truckstop will provide essential services such as refuelling, rest areas, dining options, and maintenance facilities for long-haul truckers. By offering these amenities, the truckstop will enhance the efficiency and safety of freight operations, reduce driver fatigue, and support the local economy through job creation and increased business activity.
- The establishment of a Farmer Support Production Unit (FPSU) is another critical proposal. FPSUs are designed to provide farmers with the necessary resources, training, and infrastructure to improve their productivity and sustainability. These units offer services such as access to mechanization, production inputs, and skills development programs. By supporting farmers in this way, the FPSU will help boost agricultural output, enhance food security, and promote rural development.
- Developing an agri-processing plant to support forestry agriculture is a key strategy for adding value to raw agricultural products. This plant will process timber and other forest products into marketable goods, such as furniture, paper, and construction materials. Agri-processing not only increases the economic value of agricultural produce but also creates employment opportunities and stimulates local industries. By integrating forestry agriculture with processing facilities, the region can maximize its natural resources and drive economic growth.
- Grading of roads and the provision of V-drains for proper stormwater management are essential for maintaining infrastructure and preventing erosion. Properly graded roads ensure safe and efficient transportation, while V-drains help manage stormwater runoff, reducing the risk of flooding and soil erosion. These measures are crucial for sustaining the integrity of transportation networks and protecting the environment.
- Maintaining the integrity of rivers and tributaries is vital for preserving the region's natural ecosystems. This involves implementing measures to prevent pollution, manage water flow, and restore natural habitats. By protecting these waterways, the region can ensure a sustainable water supply, support biodiversity, and enhance the quality of life for local communities. These combined efforts will create a resilient and thriving environment, promoting long-term sustainability and economic prosperity.



MAP 57: DUMSI NODAL PLAN SPATIAL PROPOSALS

WINNIE MADKIZELA MANDELA SPATIAL DEVELOPMENT FRAMEWORK

Dumsi Nodal Plan Spatial Proposals (Agricultural Node)

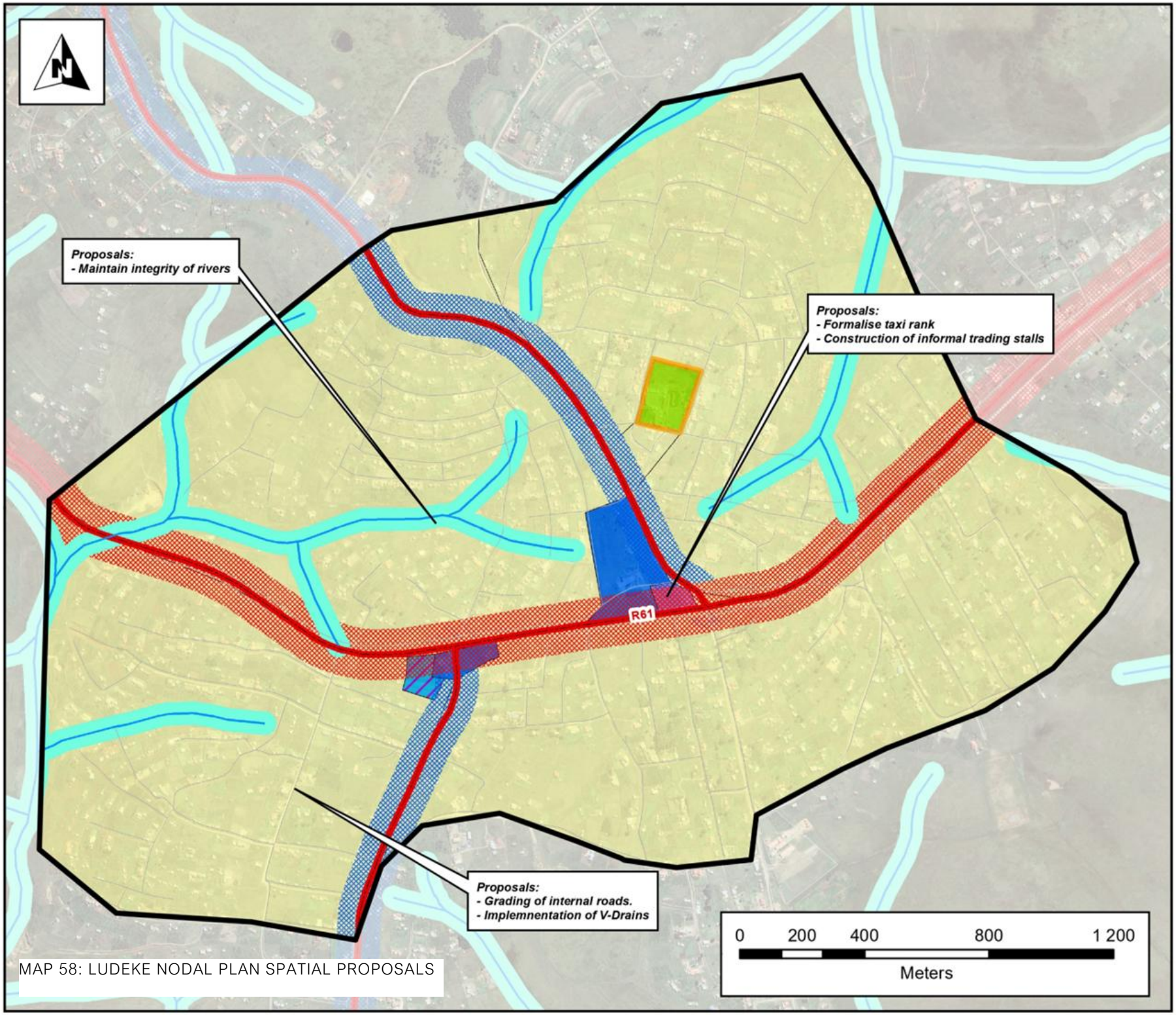
Legend

- River
- Provincial Road
- Development Corridor
- Activity Spine
- River 32m Buffer
- Erven
- Existing School
- Exisitng Residential
- Proposed Agriculture
- Proposed Petrol Station
- Proposed FSPU
- Proposed Truck Stop
- Proposed Industry
- Boundary

11.7.5. LUDKEKE

The rationale behind transforming Ludeke into a rural service node involves several strategic proposals aimed at enhancing its functionality and economic potential.

- **Construction of a Formal Taxi Rank with Accompanying Informal Trading Stalls**: Establishing a formal taxi rank will provide a structured and efficient transportation hub for the community. This facility will include designated areas for taxis to load and unload passengers, improving traffic flow and safety. Accompanying informal trading stalls will offer local vendors a secure and organized space to conduct their businesses, promoting entrepreneurship and economic activity. These stalls will cater to the daily needs of commuters, providing convenient access to goods and services.
- **Petrol Station**: Developing a petrol station in Ludeke will address the fuel needs of residents and travellers, reducing the distance they need to travel for refuelling. This facility will support local transportation and logistics, making it easier for businesses and individuals to operate efficiently. Additionally, the petrol station can create job opportunities and stimulate economic growth in the area
- **Commercial Land Uses for Medium to Large Scale Retailers**: Allocating land for commercial use will attract medium to large-scale retailers to Ludeke. This development will provide residents with access to a wider range of goods and services, reducing the need to travel to distant towns for shopping. The presence of larger retailers can also draw customers from surrounding areas, boosting local commerce and creating a vibrant economic environment.
- **Upgrading of Roads**: Improving the road infrastructure in Ludeke is essential for enhancing connectivity and accessibility. Upgraded roads will facilitate smoother and safer transportation for residents, businesses, and visitors. This includes paving, widening, and maintaining roads to accommodate increased traffic and ensure efficient movement of goods and people. Proper road infrastructure is crucial for supporting economic activities and attracting investment to the area.



MAP 58: LUDEKE NODAL PLAN SPATIAL PROPOSALS

WINNIE MADIKIZELA MANDELA SPATIAL DEVELOPMENT FRAMEWORK

Ludeke Nodal Plan
Spatial Proposals

Legend

- River
- Provincial Road
- River 32m Buffer
- Development Corridor
- Activity Spine
- Existing School
- Proposed Petrol Station
- Erven
- Existing Residential
- Proposed Formal Taxi Rank
- Proposed Commercial
- Settlement Boundary

INGUQUKO DEVELOPMENT PLANNING AND PROJECTS

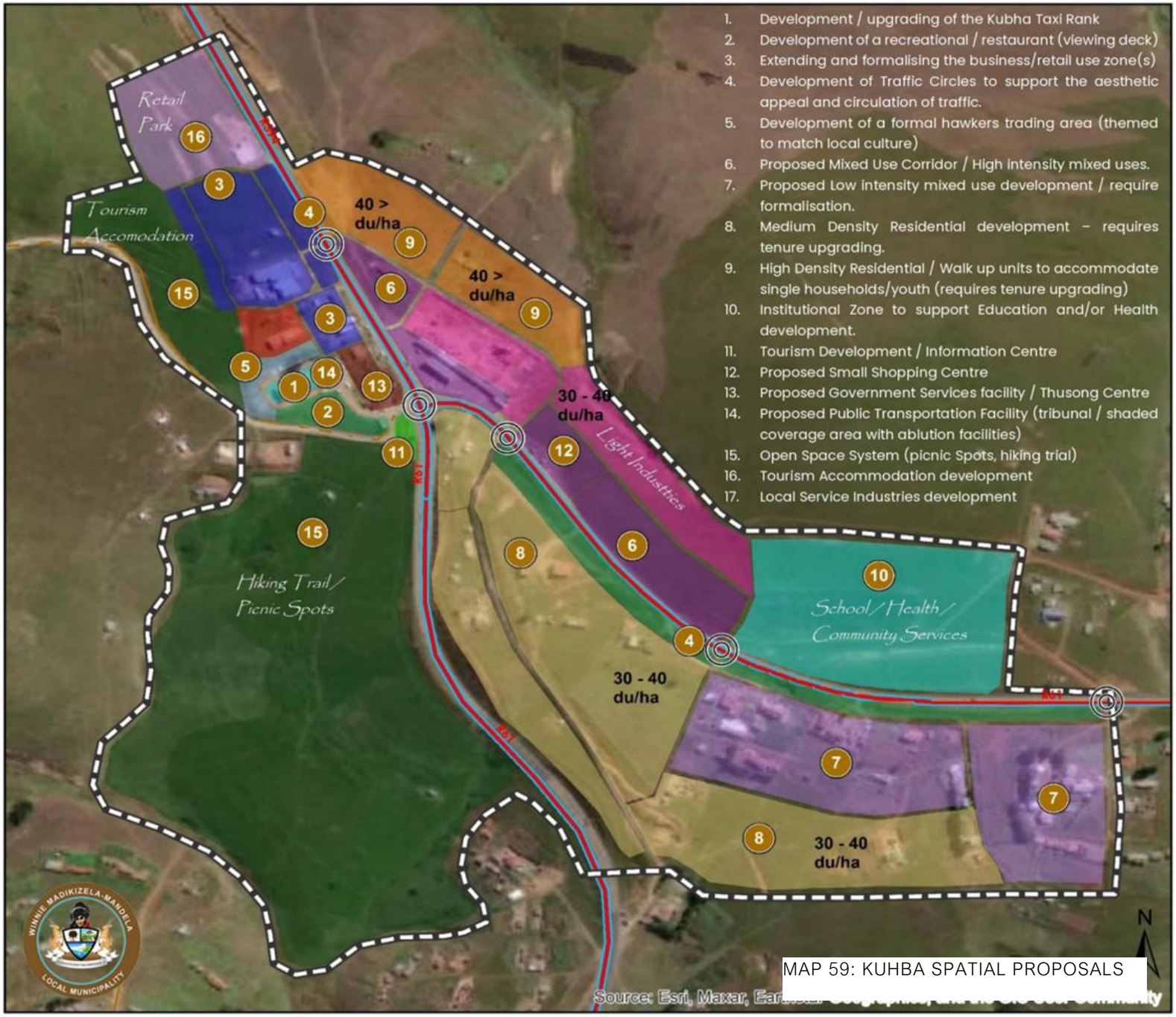
11.7.6. KUBHA

A Local Spatial Development Framework was developed and adopted for the Kuhba Magusheni area. The following is proposed:

- **Development/Upgrading of the Kubha Taxi Rank**: Ensuring easy access for vehicles and safe pedestrian movement.
- **Public Transportation Facility**: Proposed at the taxi rank to provide covered waiting areas for passengers and public ablution facilities.
- **Restaurant or Recreational Development**: Featuring a large viewing deck overlooking the landscape near the taxi rank, offering a clear view of the surrounding area.
- **Formalizing and Extending Business/Retail Uses**: Across from the filling station to encourage private investment and secure tenure for business owners.
- **Development of Traffic Circles**: At key junctions to control traffic flow and enhance aesthetic appeal with unique designs.
- **Formal Hawker Trading Area**: Designed to reflect local culture, allowing local craft producers to sell their products to tourists in a safe and inviting location.
- **Mixed-Use Corridor**: Allowing a variety of high-intensity mixed uses to support the existing filling station development and surrounding business/retail uses.
- **Low-Intensity Mixed-Use Developments**: Along the R61, requiring the formalization of existing erven to provide secure tenure for private investors.
- **Light Industries Zone**: To formalize brickmaking activities and other supporting industries.
- **Residential Developments**: Proposing high-density residential walk-up units for young adults or small households near the industrial and high-intensity mixed-use area, and medium-density residential south of the filling station. These developments require upgrading tenure and formalizing erven.
- **Institutional Zone**: For educational, health, or community facilities, providing easy access to residents of the proposed residential developments and the taxi rank.
- **Tourist Information Centre**: To inform tourists of local attractions and encourage them to spend time in the area.
- **Small Shopping Centre**: In the high-intensity mixed-use corridor to provide products to residents and tourists.
- **Government Services Centre/Thusong Centre**: Near the junction of the R61 and R394, offering various government services and spaces for recreational or informational purposes.
- **Open Space System**: Near the R61, featuring hiking trails, picnic sites, and conservation efforts.
- **Tourist Accommodation Facility**: Near the open space system adjacent to the R61, providing easy access to the informal hawkers trading area, hiking trails, picnic spots, and other attractions.

KUBHA MAGUSHENI LOCAL SPATIAL DEVELOPMENT FRAMEWORK - KUBHA PRECINCT

Map 31: Kubha Precinct Proposals



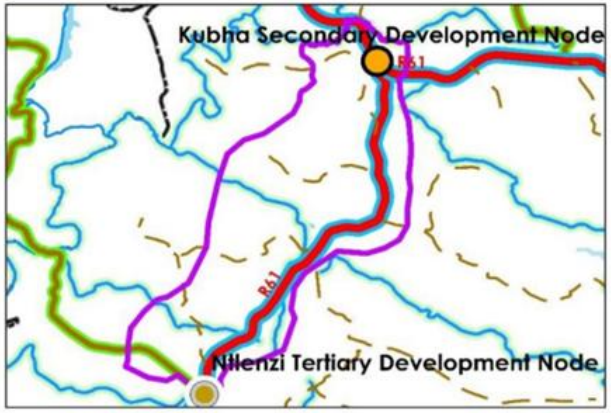
1. Development / upgrading of the Kubha Taxi Rank
2. Development of a recreational / restaurant (viewing deck)
3. Extending and formalising the business/retail use zone(s)
4. Development of Traffic Circles to support the aesthetic appeal and circulation of traffic.
5. Development of a formal hawkers trading area (themed to match local culture)
6. Proposed Mixed Use Corridor / High intensity mixed uses.
7. Proposed Low intensity mixed use development / require formalisation.
8. Medium Density Residential development – requires tenure upgrading.
9. High Density Residential / Walk up units to accommodate single households/youth (requires tenure upgrading)
10. Institutional Zone to support Education and/or Health development.
11. Tourism Development / Information Centre
12. Proposed Small Shopping Centre
13. Proposed Government Services facility / Thusong Centre
14. Proposed Public Transportation Facility (tribunal / shaded coverage area with ablution facilities)
15. Open Space System (picnic Spots, hiking trial)
16. Tourism Accommodation development
17. Local Service Industries development

Legend

- Traffic Calming
- Winnie Madikizela-Mandela Local Municipality
- Node Boundary
- Key Regional Linkage Road
- Local Linkage Road
- Loacl Roads
- River corridor
- National Wetlands

Land Uses

- Tourism Use
- Industrial Use
- Service Industry Use
- High Density Residential Use
- Municipal Use
- Commercial Use
- Religious Use
- Business / Commercial Use
- High Intensity Mixed Use
- Low Density Mixed USe
- Open Space / Recreational Use
- No Development - No Go Zone
- Residential use



MAP 59: KUHBA SPATIAL PROPOSALS

0 75 150 300 450 600 Meters

CITEPLAN

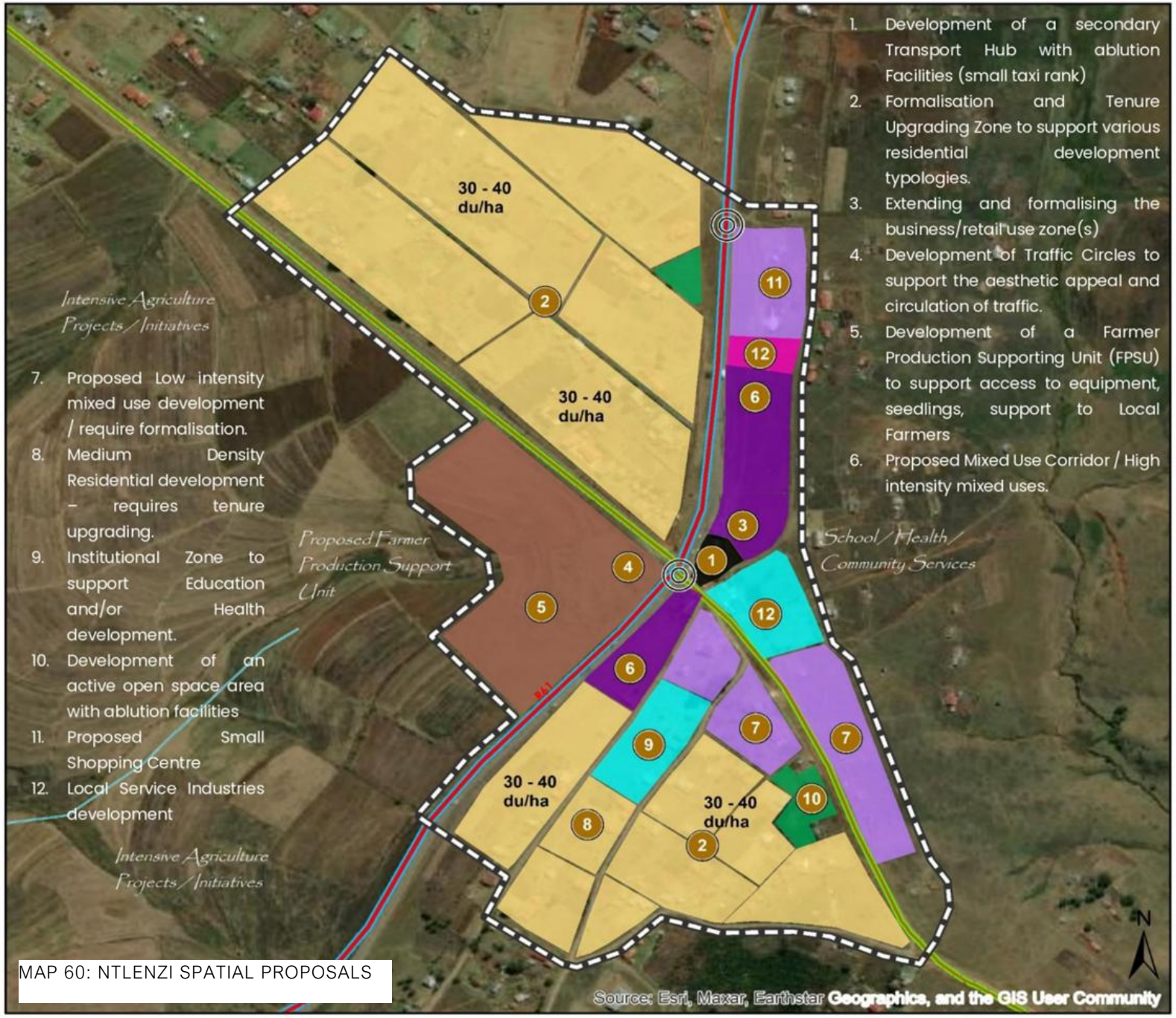
11.7.7. NTLENZI

Also forming part of the aforementioned LSDF is Ntlenzi. The following development proposals have been identified:

- **Development of a Secondary Transport Hub**: Proposing a small taxi rank with covered waiting areas and ablution facilities for passengers.
- **Residential Developments**: A large area is designated for residential projects of varying densities, requiring tenure upgrades and formalization to support higher density housing.
- **Business/Retail Zone Expansion**: Formalizing and extending the current business/retail zone near the junction of the R61 and the road to the Thandimpilo node to attract more private investment.
- **Traffic Circles**: Developing traffic circles at key junctions to manage traffic flow and enhance aesthetic appeal with unique designs.
- **Farmer Production Support Unit (FSPU)**: Proposed to assist local farmers by providing access to equipment, seedlings, and expertise.
- **High-Intensity Mixed-Use Corridor**: Proposed along the R61, south of the major junction, requiring area formalization and tenure upgrades to attract private investment.
- **Low-Intensity Mixed-Use Developments**: Proposed along the gravel road at the major junction, requiring formalization of existing erven and secure tenure for private investors.
- **Institutional Zones**: Proposed to provide educational and health facilities for residents.
- **Active Open Spaces**: Proposed to ensure residents have access to safe outdoor recreational areas, supported by ablution facilities.
- **Small Shopping Centre**: Proposed to provide residents with access to fresh produce and household items.
- **Light Industries Zone**: Proposed to formalize brickmaking activities and other supporting industries.

KUBHA MAGUSHENI LOCAL SPATIAL DEVELOPMENT FRAMEWORK - NTLENZI PRECINCT

Map 32: Ntlenzi Precinct Proposals



MAP 60: NTLENZI SPATIAL PROPOSALS

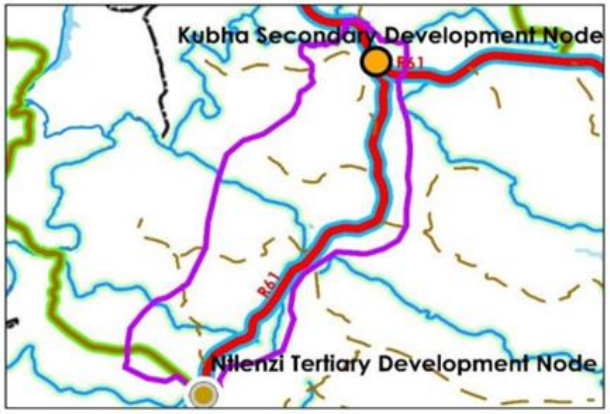
0 80 160 320 480 640 Meters

Legend

- Winnie Madikizela-Mandela Local Municipality
- Node Boundary
- Key Regional Linkage Road
- Local Linkage Road
- Loacl Roads
- River corridor
- National Wetlands

Land Uses

- Development of a Farmers Production Supporting Unit
- Development aof a Secondary Transport Hub
- Service Industry Use
- Open Space
- Industrial Area
- Low Density Mixed Use
- High Intensity Mixed Use
- Residential Use



CITEPLAN

WINNIE MADIKIZELA-MANDELA LOCAL MUNICIPALITY
UMANYANO NGAMANDLA

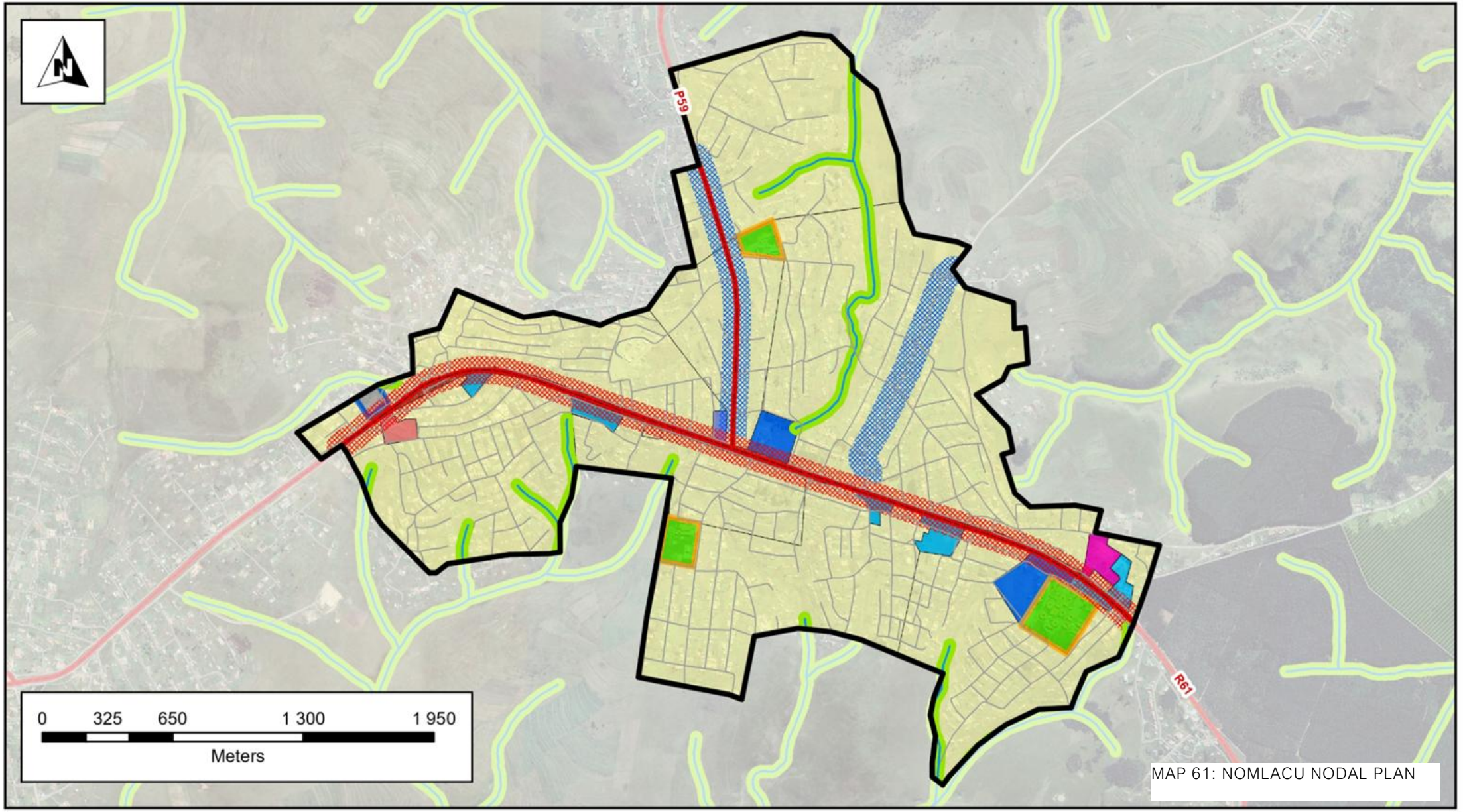
11.7.8. NOMLACU

Nomlacu has been identified as a tertiary node in the Winnie Madikizela Mandela Local Municipality Spatial Development Framework. Located along the R61 just outside of Bizana town, Nomlacu holds significant potential to evolve into a secondary node in the near future. This strategic positioning is set to catalyse various developmental initiatives aimed at boosting the local economy and enhancing the quality of life for residents. One of the key proposals for Nomlacu is the establishment of a light industrial hub. This hub is envisioned to stimulate the local economy by facilitating light industrial activities, particularly those linked to agriculture. By providing a dedicated space for such activities, the hub will not only create jobs but also support the agricultural sector, which is a vital part of the local economy.

In addition to the industrial hub, the development framework includes the creation of a Small, Medium, and Micro Enterprises (SMME) support centre. This centre is crucial for fostering entrepreneurship and job creation within the municipality. It will serve as a one-stop-shop for SMMEs, offering services such as registration on the municipal portal, access to funding information, and acting as a liaison between local SMMEs and government entities. This initiative is expected to empower local entrepreneurs, thereby driving economic growth and innovation.

Public transport infrastructure is also a priority, with plans for a formal taxi rank. This facility will address the need for organized public transport, providing a safe and efficient hub for commuters. The taxi rank will be complemented by ancillary informal trading infrastructure, supporting small-scale traders and enhancing the vibrancy of the area.

Commercial activities are another focus, with proposals to expand existing commercial enterprises and introduce new ones. This will not only create jobs but also diversify the local economy. Furthermore, mixed-use developments are proposed to include small businesses, guest houses, bed & breakfast establishments, and other income-generating activities. These mixed-use areas will provide a variety of services and amenities, making Nomlacu a more attractive and dynamic place to live and work.



MAP 61: NOMLACU NODAL PLAN

WINNIE MADIKIZELA MANDELA SPATIAL DEVELOPMENT FRA

Nomlacu Nodal Plan Spatial Proposals

Legend

- Provincial Road
- Access Road
- River
- River 32m Buffer
- Mixed Use Corridor
- Development Corridor
- Existing Substation
- Existing School
- Existing Residential
- Light Industrial Hub
- SMME Support Centre
- Formal Taxi Rank
- Mixed Use
- Commercial
- Cadastral
- Protected Area

11.8. CORRIDOR DEVELOPMENT FRAMEWORK

11.8.1. HIERARCHY OF DEVELOPMENT CORRIDORS

Improved accessibility and connectivity are based on recognizing the role of various movement routes within the study area and the need to provide and maintain an accessible movement system and network. Development corridors are a potential tool to restructure the WMMLM area into an efficient and well-connected spatial system, contributing to region-wide economic growth and job creation. This is achieved by unlocking inherent and under-utilized economic and social development potential with existing nodal development and road infrastructure.

TABLE 23: HIERARCHY OF DEVELOPMENT CORRIDORS

CORRIDOR	FUNCTION	LAND USE INTENSITY	BUILDING LINES
Primary Corridors	Major Arterial, Mobility Highway, Limited Access	Large Industrial Hubs and Large Commercial Hubs	15m
Secondary Corridors	Minor Arterial, Main Road, Limited Access	Medium Industrial Hubs, Medium Commercial Hubs, Recreational Community Services, Mixed Use Development and Administration centres	15m
Tertiary Corridors	Collector Road, Access Permitted Off Road Edge or Lay byes	Urban Settlements/ rural settlements, Convenient shops/ neighbourhood centres, Open Space Networks and Light industrial activities	7m
Tourism Corridors	Aims at promoting and facilitating tourism development	Scenic routes, tourism and cultural activities, Agriculture, and recreational activities	15m

11.8.2. PRIMARY CORRIDORS: R61

The R61 has been identified as a primary corridor. The R61 road plays a crucial role in the Winnie Madikizela Mandela Local Municipality, serving as a vital link between the KwaZulu-Natal South Coastal Boundary and the N2 highway. This road not only facilitates regional connectivity but also supports economic activities by providing access to various towns and villages within the municipality. The R61 enhances mobility for residents, enabling easier access to essential services and opportunities for economic growth. Its strategic importance is underscored by its role in connecting rural areas to urban centres, thereby fostering social and economic integration within the Winnie Madikizela-Mandela Local Municipality.

The proposal to intensify land uses along the R61 near Mzamba, Redoubt, and Bizana aims to stimulate economic growth and development in these areas. By incorporating industrial, mixed-use, and commercial developments, the plan seeks to create a vibrant economic corridor that can attract businesses, create jobs, and enhance the overall quality of life for residents. Industrial developments will provide manufacturing and production opportunities, while mixed-use areas will combine residential, commercial, and recreational spaces, fostering a dynamic and integrated community. Commercial developments will offer retail and service options, meeting the needs of both locals and visitors. This strategic approach not only maximizes the use of available land but also ensures sustainable growth by balancing economic, social, and environmental considerations. The intensified land use along the R61 is expected to transform the region into a thriving hub of activity, driving long-term prosperity and development.

11.8.3. SECONDARY CORRIDORS: R394

The R394 is identified as a secondary corridor. The R394 road is a significant route within the WMMLM, connecting the N2 highway from Phakade with the R61 in Magusheni. This road is essential for facilitating local and regional connectivity, providing residents with access to various services and economic opportunities. The R394 supports the movement of goods and people, enhancing the overall mobility within the municipality. However, it has also been a focal point for community protests related to municipal demarcation disputes, which have occasionally disrupted traffic and highlighted the need for improved infrastructure and conflict resolution mechanisms.

The proposal to encourage agriculture-related development along this route, particularly near Dumsi, aims to boost the local economy by leveraging the region's agricultural potential. By promoting agri-business and agri-processing, the plan seeks to create a robust agricultural value chain that can enhance productivity and profitability for local farmers. Agri-business initiatives will support the cultivation, harvesting, and distribution of crops, while agri-processing facilities will add value by transforming raw agricultural products into finished goods. This approach not only increases the marketability of local produce but also creates job opportunities and stimulates investment in the area. Additionally, the development of agri-business and agri-processing hubs can foster innovation and the adoption of modern farming techniques, leading to more sustainable and efficient agricultural practices. Overall, this strategic focus on agriculture-related development is expected to drive economic growth, improve food security, and elevate the standard of living for the community around Dumsi.

11.8.4. TERTIARY CORRIDOR

The P59 and P57 roads are integral to the infrastructure of the WMMLM, enhancing connectivity and accessibility within the region. The P59 road links various rural communities to the main urban centres, facilitating the movement of people and goods, and supporting local economic activities. Similarly, the P57 road serves as a crucial route, connecting smaller villages to larger towns and providing access to essential services and markets. Both roads play a vital

role in promoting regional development, reducing travel times, and improving the overall quality of life for residents in the Winnie Madikizela-Mandela Local Municipality. Furthermore, the road branching off from the R61 in Ludeke and connecting to the Ingquza Hill Local Municipality has also been identified as a secondary road, providing an alternative linkage to the IHLLM.

The proposals for these corridors aim to enhance their role as public transport routes while integrating small-scale commercial development. By improving public transport infrastructure, the plan seeks to provide efficient and reliable transit options for residents, reducing traffic congestion and promoting sustainable mobility. The inclusion of small-scale commercial development along these routes will create convenient access to essential services and amenities, such as shops, cafes, and local businesses, fostering vibrant and active communities. This strategic approach not only supports the daily needs of commuters but also stimulates local economies by encouraging entrepreneurship and job creation. Additionally, the development of these corridors as mixed-use areas can enhance the overall urban experience, making them more attractive and liveable. By balancing transportation improvements with commercial opportunities, the proposals aim to create dynamic and interconnected spaces that benefit both residents and businesses, contributing to the long-term growth and vitality of the region.

11.8.5. PROPOSED PUBLIC TRANSPORT CORRIDOR

A Public Transport (PT) corridor is proposed from Mpetsheni, linking the settlements of Mjelea, Mbongweni, KwaMpisi, Mpankulu, and Pumzipika, and feeding into the proposed N2 Toll Road in Baleni. This corridor has been identified due to its strategic potential as an alternative linkage to the N2 Toll Road, enhancing regional connectivity and accessibility. By providing an additional route to the N2 Toll Road, this corridor aims to alleviate traffic congestion on the R61 in Mzamba, offering a more efficient and reliable public transport option for residents. The development of this PT corridor is expected to stimulate economic growth and job creation in the connected settlements by improving access to markets, services, and employment opportunities. Furthermore, it will enhance the overall mobility within the WMMLM, contributing to the region's socio-economic development and integration.

11.8.6. PROPOSED TOURISM ROUTE

A proposed tourism corridor will branch from the secondary corridor in Lukhanyisweni, passing through the settlements of Ntabezulu Bhodweni Clinic, Kanyayo, Sikhulu, and ending at Mbondoni. This corridor has been identified for its potential to showcase the scenic beauty of the Ndunu and Mbondeni valleys, offering breathtaking views that are expected to attract tourists. The route will highlight the natural landscapes and cultural heritage of the region, promoting eco-tourism and providing economic opportunities for local communities.

11.8.7. PROPOSED N2 TOLL ROAD

The proposed Wild Coast Toll Road holds significant potential for boosting tourism in the Winnie Madikizela-Mandela Local Municipality. By improving access to the region, the toll road will make it easier for tourists to visit some of the area's most breathtaking natural attractions. Notable examples include Waterfall Bluff, where waterfalls plunge directly into the ocean, and Mfihlelo Falls, known for its scenic beauty. The Mtentu and Msikaba River Gorges offer dramatic landscapes and opportunities for adventure tourism, such as hiking and kayaking.

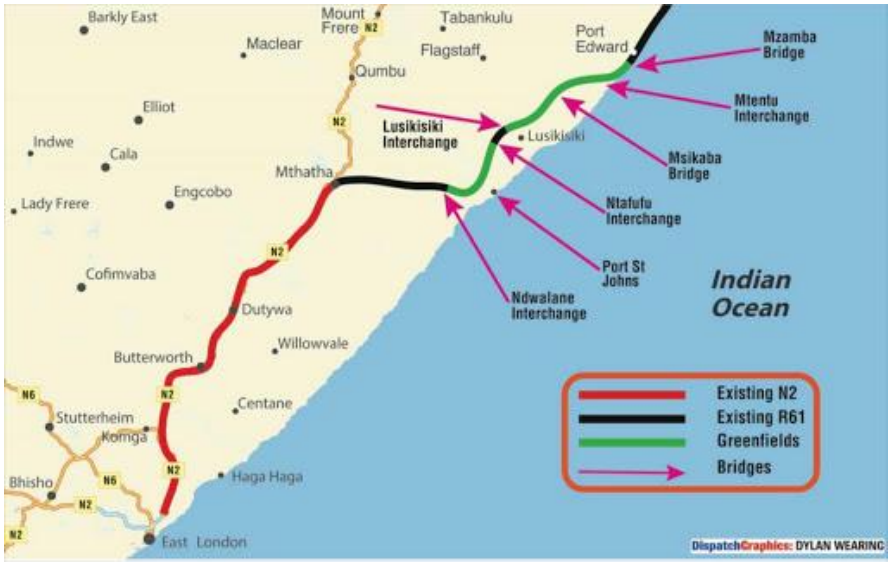
Additionally, the Mkambati Nature Reserve, with its diverse flora and fauna, will become more accessible, attracting nature enthusiasts and eco-tourists. Lupatana and Port Grosvenor, with their historical significance and stunning coastal views, will also benefit from increased visitor numbers. The improved infrastructure will not only enhance the overall tourist experience but also

stimulate local economies by creating jobs and supporting businesses in hospitality, retail, and services.

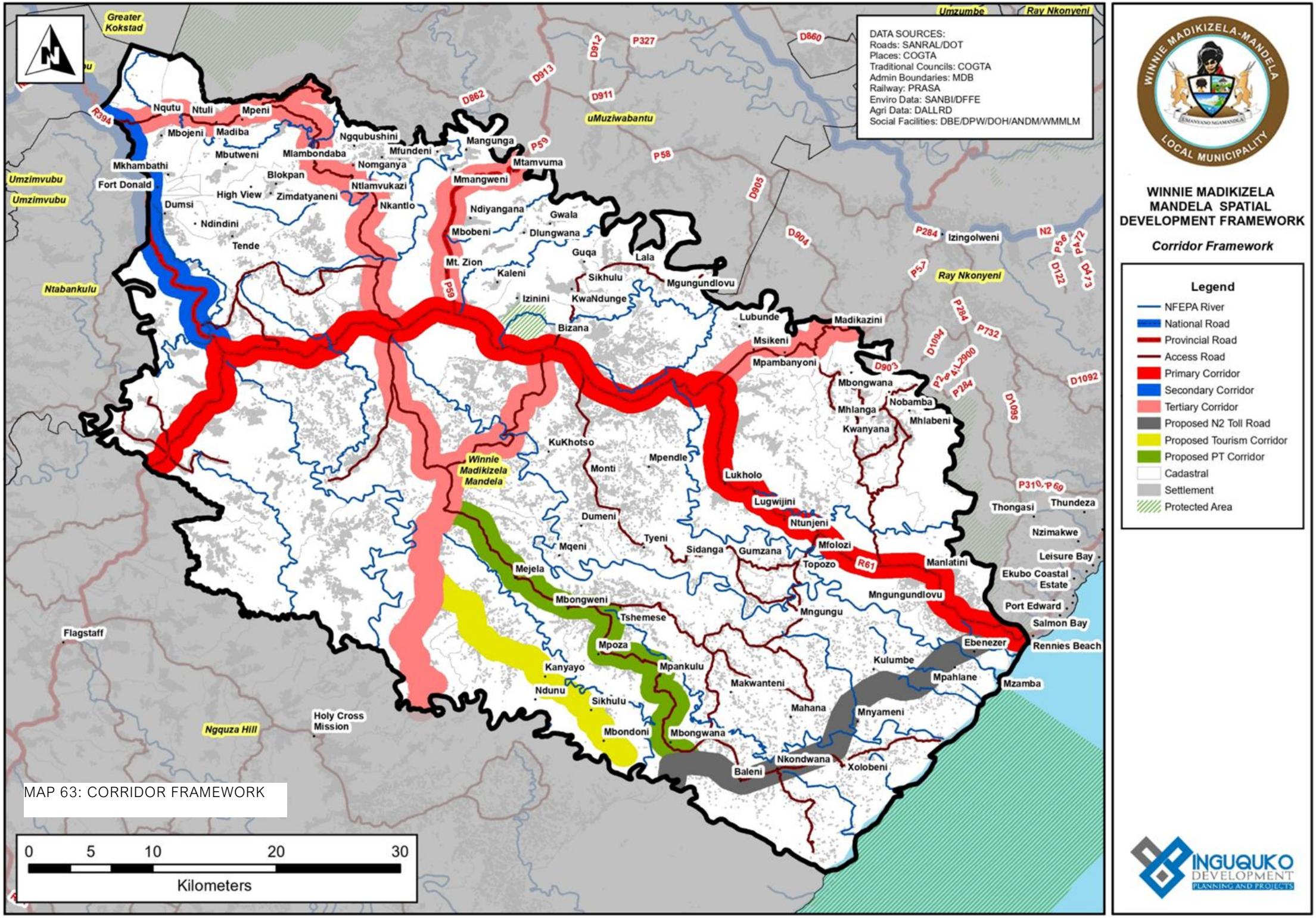
Furthermore, the toll road can facilitate the development of new tourism-related facilities, such as lodges, restaurants, and guided tour services, providing additional amenities for visitors. This development can lead to a more vibrant and sustainable tourism sector, contributing to the long-term economic growth of the municipality.

However, it is essential to balance development with environmental conservation. Measures should be taken to protect the natural landscapes and ecosystems that make these locations unique. Sustainable tourism practices, such as eco-friendly accommodations and responsible waste management, should be promoted to ensure that the natural beauty of the Wild Coast is preserved for future generations.

The proposed N2 Toll Road has the potential to transform the tourism landscape of the Winnie Madikizela-Mandela Local Municipality by making its stunning coastal attractions more accessible, thereby driving economic growth and enhancing the visitor experience.



MAP 62: PROPOSED N2 NATIONAL ROAD



MAP 63: CORRIDOR FRAMEWORK

0 5 10 20 30
Kilometers

WINNIE MADIKIZELA-MANDELA LOCAL MUNICIPALITY

WINNIE MADIKIZELA MANDELA SPATIAL DEVELOPMENT FRAMEWORK

Corridor Framework

Legend

- NFEPA River
- National Road
- Provincial Road
- Access Road
- Primary Corridor
- Secondary Corridor
- Tertiary Corridor
- Proposed N2 Toll Road
- Proposed Tourism Corridor
- Proposed PT Corridor
- Cadastral
- Settlement
- Protected Area

INGUQUKO DEVELOPMENT PLANNING AND PROJECTS

11.9. CONCEPT PLAN

A Spatial Development Framework (SDF) concept plan is essential in guiding spatial planning and development. It provides a strategic direction and vision, ensuring that land use and development align with broader goals and policies. By coordinating various sectoral plans and policies, the SDF integrates economic, social, and environmental objectives into a cohesive framework.

This process involves collaborative engagement with stakeholders, fostering alignment between government entities and external parties. Additionally, the SDF promotes sustainable land use and management, balancing development needs with environmental conservation. It also ensures compliance with relevant legislation, such as the Spatial Planning and Land Use Management Act (SPLUMA) in South Africa. Overall, the SDF concept plan is a vital tool for achieving sustainable and coordinated spatial development.

11.10. LAND USE PROPOSALS

11.10.1. ADVENTURE & ECO TOURISM

Adventure and Eco-Tourism has been proposed along the south-western border of the municipality. The land use proposal for adventure and eco-tourism in the Winnie Madikizela-Mandela Local Municipality aims to leverage the region's natural beauty and cultural heritage to create sustainable economic opportunities. By developing eco-tourism projects such as wildlife sanctuaries, hiking trails, and cultural tours, the municipality can attract tourists seeking unique and environmentally responsible travel experiences.

This initiative not only promotes conservation of natural habitats but also generates significant economic benefits for the local community. Economic incentives include job creation in tourism-related sectors, such as hospitality, guiding services, and local crafts. Additionally, increased tourist activity can stimulate local businesses, leading to improved infrastructure and services. The outcomes of this proposal are multifaceted: it fosters environmental stewardship, enhances the quality of life for residents through economic upliftment, and preserves cultural heritage by involving local communities in tourism activities. By promoting sustainable tourism practices, the municipality can ensure long-term economic growth while protecting its natural and cultural assets.

11.10.2. COMMERCIAL CORE

Bizana is identified as the municipality's commercial core. The objective is to strengthen the role of Bizana in providing this function. Strengthening Bizana as the commercial core of the Winnie Madikizela-Mandela Local Municipality is crucial for driving economic growth and development in the region. Urban renewal proposals, such as upgrading infrastructure, improving public spaces, and enhancing service delivery, are essential to revitalize Bizana and make it more attractive to businesses and investors.

These initiatives can transform Bizana into a vibrant economic hub, providing a conducive environment for commerce and industry. Investment attraction is another critical component, as it brings in much-needed capital, creates jobs, and stimulates local businesses. By offering incentives and creating a business-friendly environment, the municipality can attract both domestic and foreign investors, fostering economic diversification and resilience. Strengthening Bizana's commercial core also involves leveraging its strategic location and existing assets, such as transportation links and natural resources, to

boost trade and tourism. In essence, a focused effort on urban renewal and investment attraction can lead to sustainable economic development, improved quality of life for residents, and a more prosperous future for the Winnie Madikizela-Mandela Local Municipality.

11.10.3. MIXED UE EXPANSION

Mixed Use Expansion has been proposed west of the Bizana town. A mixed-use area can incorporate a variety of land uses, including residential units, commercial spaces such as retail stores and offices, recreational facilities like parks and gyms, and cultural venues. This blend of uses creates vibrant, self-sustaining communities where people can live, work, and play within the same area.

The proposed mixed-use expansion area west of Bizana is particularly important for diversifying the local economy. By integrating different land uses, this development can attract a range of businesses and services, fostering economic growth and resilience. It also provides additional employment opportunities, from construction jobs during the development phase to permanent positions in retail, hospitality, and other sectors once the area is operational. Moreover, the mixed-use expansion can enhance the quality of life for residents by offering convenient access to amenities and reducing the need for long commutes. Overall, this initiative is a strategic move to boost Bizana's economic vitality and create a more dynamic and prosperous community.

11.10.4. MIXED USE TOURISM

The Mzamba area has been identified as a Mixed-Use Tourism area. A mixed-use tourism area is a development that combines various land uses, such as residential, commercial, recreational, and cultural facilities, within a single, integrated space. This approach creates vibrant, self-sustaining communities where tourists and residents can enjoy a range of amenities and activities in close proximity. Mixed-use tourism areas often include hotels, restaurants, shops, entertainment venues, and public spaces, all designed to enhance the visitor experience and promote economic vitality.

In the context of Mzamba, establishing it as a mixed-use tourism area can yield significant economic benefits. The presence of the Wild Coast Sun Resort already attracts numerous visitors, providing a strong foundation for further development. By integrating additional facilities such as the proposed small-harbour, Mzamba can become a hub for various tourism activities, including water sports, fishing, and cultural tours. This diversification can attract a broader range of tourists, boosting local businesses and creating employment opportunities.

The small harbour, in particular, can enhance connectivity and accessibility, encouraging more visitors to explore the area. Overall, developing Mzamba as a mixed-use tourism area can drive sustainable economic growth, improve infrastructure, and elevate the region's profile as a premier tourist destination.

11.10.5. AGRI-BUSINESS & AGRI-PROCESSING

Dumsi in the northern region of the municipality has been identified as a Agri-Business and Agri-Processing area. The economic benefits of agri-processing and agri-business in the Winnie Madikizela-Mandela Local Municipality (WMMLM) are substantial, particularly given that the National Spatial Development Framework (SDF) has earmarked this region as an agri-business and agri-processing hub. Agri-processing, which involves transforming raw agricultural products into value-added goods, can significantly enhance the agricultural sector's efficiency and economic output. This transformation leads to increased employment opportunities at various levels, from farming and production to distribution and marketing, thereby reducing unemployment rates and improving livelihoods in both rural and urban areas.

Moreover, agri-processing can generate foreign exchange earnings through the export of processed agricultural products, contributing to the overall economic health of the region. The diversification of products, such as converting fruits into juices, jams, and dried snacks, not only provides consumers with more choices but also enhances the marketability of agricultural produce. This diversification is crucial for stabilizing farmers' incomes and reducing their reliance on seasonal crops.

The establishment of agri-businesses in WMMLM can also lead to improved infrastructure, such as roads and electricity, which are necessary for the operation of agri-processing plants. This infrastructure development benefits the broader community by enhancing connectivity and access to services. Additionally, agri-businesses can stimulate local economies by creating demand for various support services, including logistics, packaging, and marketing.

Furthermore, the focus on agri-processing aligns with sustainable development goals by reducing post-harvest losses and ensuring a stable supply of goods throughout the year. This stability is vital for food security and can lead to improved nutrition by making fortified and processed foods more readily available. Overall, the emphasis on agri-processing and agri-business in the WMMLM region presents a promising pathway for economic growth, job creation, and sustainable development, positioning the municipality as a key player in the national and global agricultural markets.

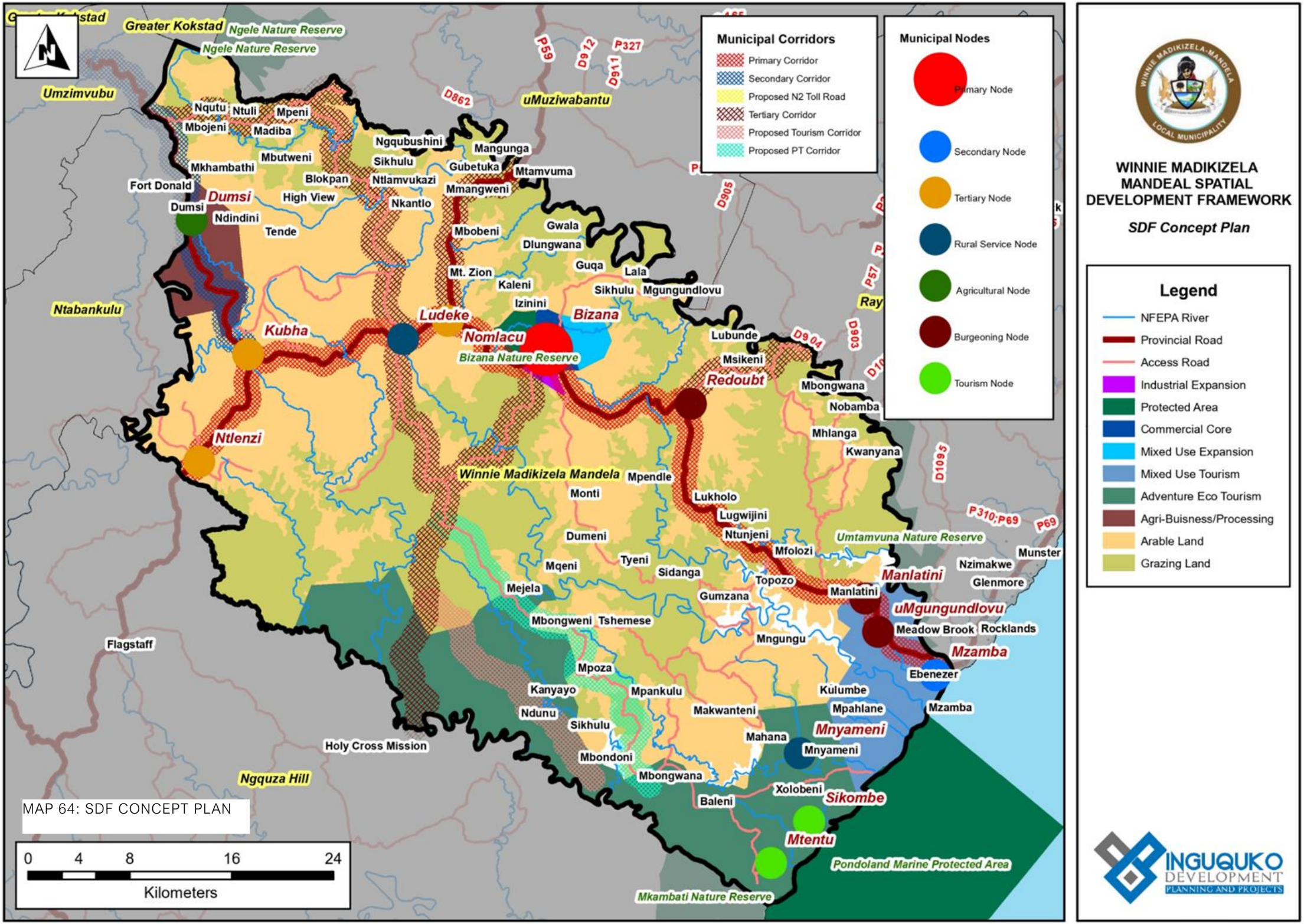
11.10.6. ARABLE & GRAZING LAND

The concept plan has earmarked areas in the municipality that have high value, arable agricultural land, as well as land that is suitable for grazing purposes. Protecting high-value agricultural land, identified as both arable and suitable for grazing, is crucial for several reasons. Firstly, arable land, which is fertile and capable of being ploughed to grow crops, is essential for food production. It supports the cultivation of a wide variety of crops, contributing to food security and the agricultural economy. Ensuring that this land remains available for farming helps maintain a stable supply of essential food products, reducing reliance on imports and enhancing local food sovereignty. Additionally, arable land often has rich, nutrient-dense soils that are vital for sustainable agricultural practices.

Equally important is land suitable for grazing, which supports livestock farming. Grazing land provides a natural habitat for cattle, sheep, and other ruminants, enabling the production of meat, dairy, and wool. This type of land is often less suitable for crop production but is ideal for raising livestock, making it a valuable component of the agricultural landscape. Protecting grazing land ensures that livestock farming can continue sustainably, contributing to the diversity and resilience of the agricultural sector.

Moreover, the preservation of high-value agricultural land helps mitigate the impacts of urban sprawl and industrial development. As urban areas expand, agricultural lands are often at risk of being converted to non-agricultural uses, which can lead to the loss of productive farmland and the fragmentation of rural landscapes. By protecting these lands, we can prevent the encroachment of urban development, maintain the integrity of rural areas, and support the long-term viability of agriculture.

In addition to economic benefits, protected agricultural land plays a role in environmental conservation. It helps sequester carbon, supports biodiversity, and maintains ecosystem services such as water filtration and soil health.


Municipal Corridors
Primary Corridor
Secondary Corridor
Proposed N2 Toll Road
Tertiary Corridor
Proposed Tourism Corridor
Proposed PT Corridor
Municipal Nodes
Primary Node
Secondary Node
Tertiary Node
Rural Service Node
Agricultural Node
Burgeoning Node
Tourism Node
WINNIE MADIKIZELA MANDEAL SPATIAL DEVELOPMENT FRAMEWORK
SDF Concept Plan
Legend
NFEPA River
Provincial Road
Access Road
Industrial Expansion
Protected Area
Commercial Core
Mixed Use Expansion
Mixed Use Tourism
Adventure Eco Tourism
Agri-Buisness/Processing
Arable Land
Grazing Land
Greater Kokstad
Ngele Nature Reserve
Umzimvubu
uMuziwabantu
Ntabankulu
Flagstaff
Holy Cross Mission
Ngquza Hill
Dumsi
Kubha
Ntlenzi
Ludeke
Nomlacu
Bizana
Bizana Nature Reserve
Winnie Madikizela Mandela
Redoubt
Mzamba
Manlatini
uMgungundlovu
Mnyameni
Sikombe
Mtentu
Umtamvuna Nature Reserve
Pondoland Marine Protected Area
Mkambati Nature Reserve
Fort Donald
Nqutu
Ntuli
Mpeni
Mbojeni
Madiba
Mbutweni
Mkhambathi
Ndindini
Tende
High View
Blokpan
Ntlamvukazi
Nkantlo
Ngqubushini
Sikhulu
Mangunga
Gubetuka
Mtamvuma
Mmangweni
Mbobeni
Gwala
Dlungwana
Guqa
Lala
Mt. Zion
Kaleni
Izinini
Sikhulu
Mgungundlovu
Lubunde
Msikeni
Mbongwana
Nobamba
Mhlanga
Kwanyana
Monti
Mpendle
Lukholo
Lugwijini
Ntunjeni
Mfolozi
Dumeni
Tyeni
Mqeni
Sidanga
Topozo
Gumzana
Mejela
Mbongweni
Tshemese
Mngungu
Mpoza
Kanyayo
Mpankulu
Ndunu
Sikhulu
Makwanteni
Mahana
Mbondoni
Mbongwana
Baleni
Xolobeni
Kulumbe
Mpahlane
Ebenezer
Mzamba
Meadow Brook
Rocklands
Nzimakwe
Glenmore
Munster
D862
P59
D912
P327
D911
D905
D903
D904
D1095
P310;P69
P69
P57
MAP 64: SDF CONCEPT PLAN
0
4
8
16
24
Kilometers
INGUQUKO DEVELOPMENT
PLANNING AND PROJECTS

12. COMPOSITE SPATIAL DEVELOPMENT FRAMEWORK

12.1. PROPOSED COMMERCIAL & MIXED USE

The proposal for commercial and mixed-use land uses in Bizana, Mzamba, Ludeke, Kubha, and Ntlenzi nodes aims to stimulate economic growth and enhance the liveability of these areas. By integrating future commercial land uses into mixed-use zones and planning for urban and rural expansion, the development strategy ensures a balanced and sustainable approach. The inclusion of shopping malls and business parks is particularly significant as these facilities will serve as economic hubs, attracting both local and external investments. These commercial centres will not only provide essential services and retail options to residents but also create job opportunities, thereby boosting the local economy.

Moreover, the strategic placement of commercial land uses will facilitate the expansion of existing nodes, allowing them to evolve into more dynamic and diverse urban centres. This diversification is crucial for the long-term sustainability of these nodes, as it reduces dependency on a single economic activity and promotes resilience against market fluctuations. The development of incipient nodes into fully functional urban areas will also support the overall regional growth, ensuring that both urban and rural areas benefit from the economic opportunities created. By implementing these proposals, the region can achieve a more integrated and prosperous future, enhancing the quality of life for its residents.

12.2. PROPOSED INDUSTRIAL

The proposal for industrial land uses in Bizana (particularly along the R61), Kubha, and Dumsi nodes is a strategic initiative aimed at bolstering the municipality's agri-processing capabilities. Recognized by the National Spatial Development Framework (SDF) as an agri-business and agri-processing region, the municipality has significant potential to become a hub for agricultural innovation and production. By designating specific areas for industrial development, the proposal seeks to attract the necessary investments to establish robust agri-processing facilities. These facilities will not only enhance the value chain of local agricultural products but also create numerous employment opportunities, thereby stimulating the local economy.

The focus on agri-processing is particularly important as it allows for the transformation of raw agricultural products into finished goods, adding value and increasing market competitiveness. This industrial development will support local farmers by providing them with access to processing facilities, reducing transportation costs, and improving product quality. Additionally, the establishment of these industrial zones will pave the way for the realization of an industrial Winnie Madikizela Mandela, symbolizing progress and empowerment in the region. By fostering a thriving agri-processing industry, the municipality can achieve sustainable economic growth, improve food security, and enhance the overall quality of life for its residents.

12.3. PROPOSED AGRICULTURE

The municipality, endowed with extensive pockets of arable land, holds significant potential for agricultural development. To harness this potential, it is crucial to protect and manage these fertile areas effectively. This involves identifying specific zones for various agricultural activities, such as tunnel farming, Farmer Support Production Units (FSPUs), and agri-processing facilities. Tunnel farming, a method that uses protective structures to create optimal growing conditions, can significantly enhance crop yields and extend growing seasons. By designating areas for tunnel farming, the municipality can boost local food production, reduce dependency on external food sources, and increase the resilience of the agricultural sector against climate variability.

Farmer Support Production Units (FSPUs) play a vital role in this strategy by providing essential resources and support to local farmers. These units can offer training, access to modern farming equipment, and supply chains for seeds and fertilizers. By establishing FSPUs, the municipality can empower small-scale farmers, improve agricultural practices, and promote sustainable farming methods. This support infrastructure is essential for fostering a thriving agricultural community and ensuring that farmers can maximize the productivity of their arable land.

Agri-processing facilities are another critical component of the municipality's agricultural development plan. These facilities enable the transformation of raw agricultural products into value-added goods, such as packaged foods, beverages, and bio-products. By identifying and developing areas for agri-processing, the municipality can create new economic opportunities, generate employment, and increase the marketability of local produce. This not only boosts the local economy but also enhances food security and reduces post-harvest losses.

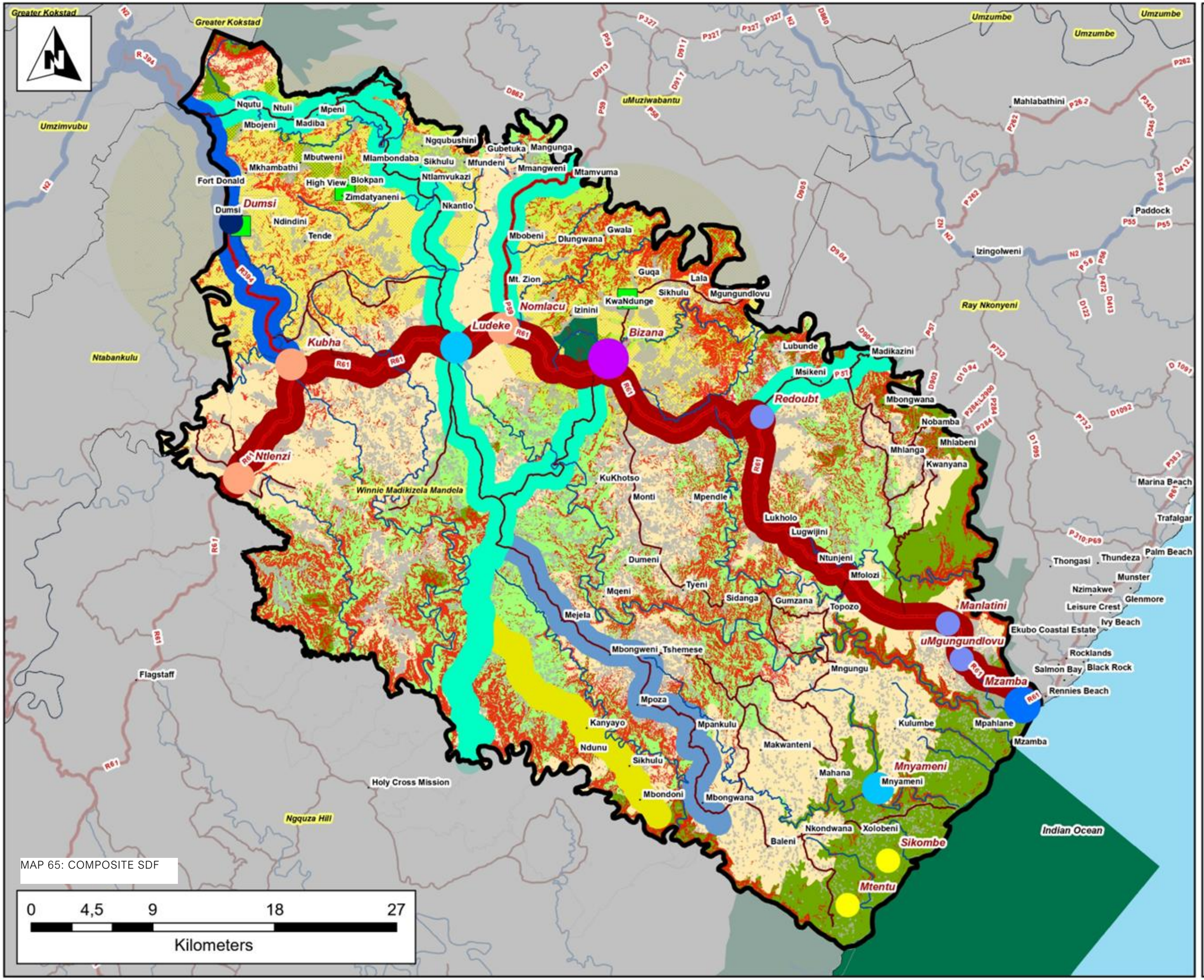
12.4. PROPOSED INTEGRATED RESIDENTIAL SETTLEMENTS

Integrated residential settlements are crucial for achieving efficient and sustainable development within the municipality. These settlements are designed to create cohesive communities that offer a blend of residential, commercial, and recreational spaces, thereby enhancing the quality of life for residents. In the areas surrounding Bizana town, medium to high-density residential developments have been proposed. These developments aim to accommodate a growing population while optimizing land use and minimizing urban sprawl. By concentrating housing in these areas, the municipality can ensure that infrastructure and services such as water, electricity, and transportation are provided more efficiently.

In addition to Bizana, integrated residential settlements have also been proposed for Kubha and Ntlenzi. These areas will benefit from a mix of housing types, including affordable housing options, which will cater to diverse socio-economic groups. The integration of commercial spaces within these settlements will provide residents with easy access to essential services and amenities, reducing the need for long commutes and fostering a sense of community. Moreover, the inclusion of green spaces and recreational facilities will promote a healthy and active lifestyle, contributing to the overall well-being of the residents.

For the more rural nodes, the focus is on formalization. This involves upgrading informal settlements and providing basic infrastructure and services to ensure that all residents have access to safe and adequate housing. Formalization efforts will also include the provision of legal land tenure, which will empower residents and encourage investment in their properties. By formalizing these rural nodes, the municipality can create more stable and resilient communities that are better equipped to face future challenges.

Overall, the development of integrated residential settlements in both urban and rural areas is a strategic approach to sustainable growth. It ensures that all residents, regardless of their location, have access to the resources and opportunities they need to thrive. This holistic development strategy will not only improve living conditions but also drive economic growth and social cohesion within the municipality.



MAP 65: COMPOSITE SDF

0 4,5 9 18 27

Kilometers

WINNIE MADIKIZELA MANDELA SPATIAL DEVELOPMENT FRAMEWORK

SDF Composite Map

Legend

- Primary Node
- Secondary Node
- Tertiary Node
- Rural Service Node
- Agricultural Node
- Burgeoning Node
- Tourism Node
- FSPU
- NFEPA River
- National Road
- Provincial Road
- Access Road
- Primary Corridor
- Secondary Corridor
- Proposed N2 Toll Road
- Tertiary Corridor
- Proposed Tourism Corridor
- Proposed PT Corridor
- Steep Slope
- Settlement
- Erven
- Protected Area
- FSPU Catchment
- Arable
- CBA 1
- CBA 2

12.5. DESIRED SPATIAL FORM

12.5.1. AREAS WHERE DEVELOPMENT INTENSITY SHOULD DECREASE

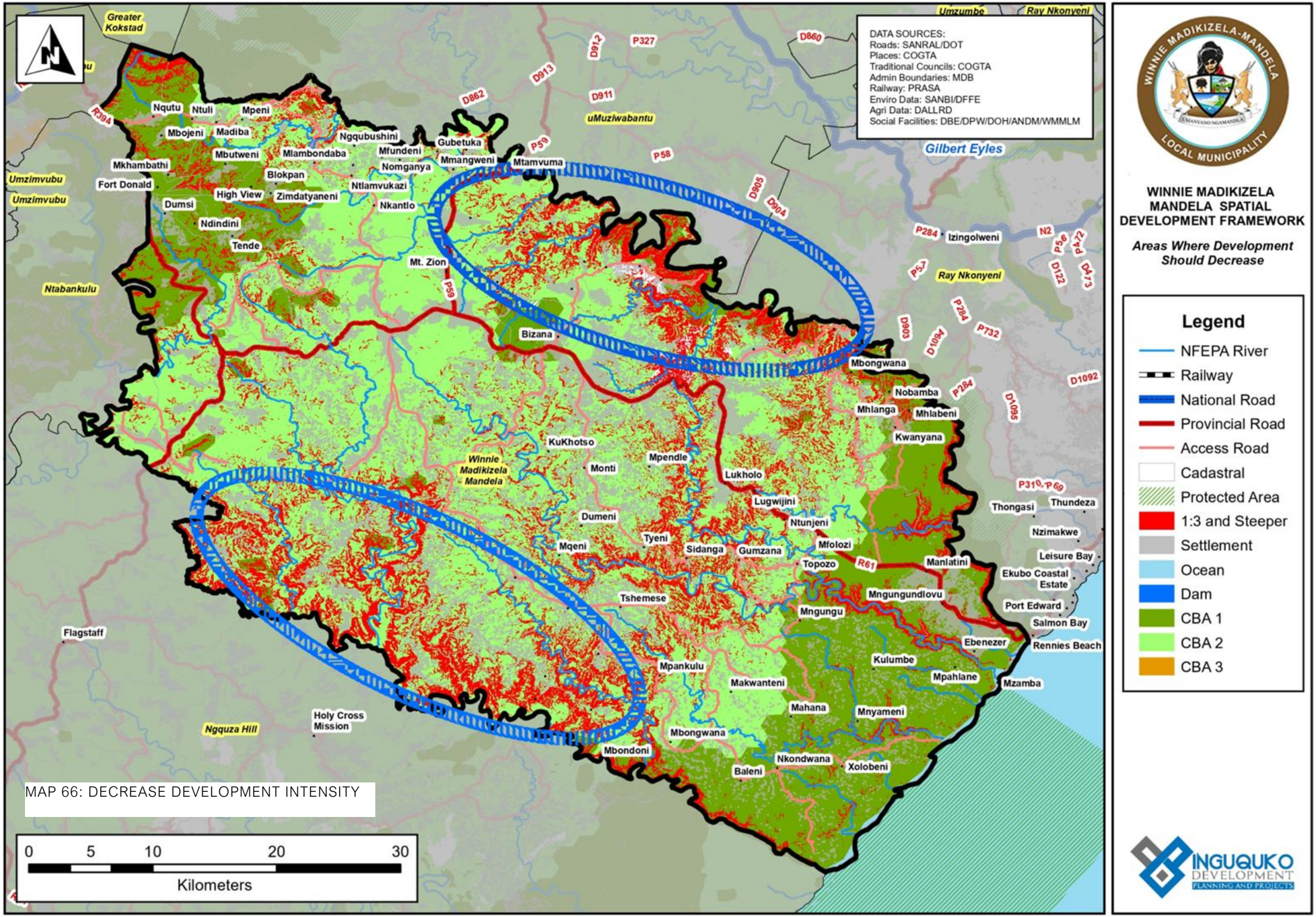
The maps below indicate an undesirable development direction that should be avoided, such will be illustrated in the blue annotation, due to that:

- Overall, the scheme highlights areas designated as protected, including the conservation corridor.
- Development should be discouraged near hydrological features and along flood lines that are prone to flooding. The expansion of settlements in these flood-prone areas must be avoided.
- Expansion of development towards Critical Biodiversity Areas (CBA), Ecological Support Areas (ESA), and Freshwater Ecosystem Priority Areas (FEPA) must be discouraged. These areas are crucial for meeting biodiversity targets and thresholds, ensuring the persistence of viable species populations and ecosystem functionality.
- These areas represent the only known locations where conservation targets for one or more biodiversity features can be achieved, meaning there are no alternative sites available. All these areas must be protected to ensure the persistence of species and habitats. CBA areas within the municipality are scattered throughout, with the northern part predominantly consisting of ecologically sensitive areas.
- Development on slopes with a gradient of 1:3 or steeper is unfavourable.

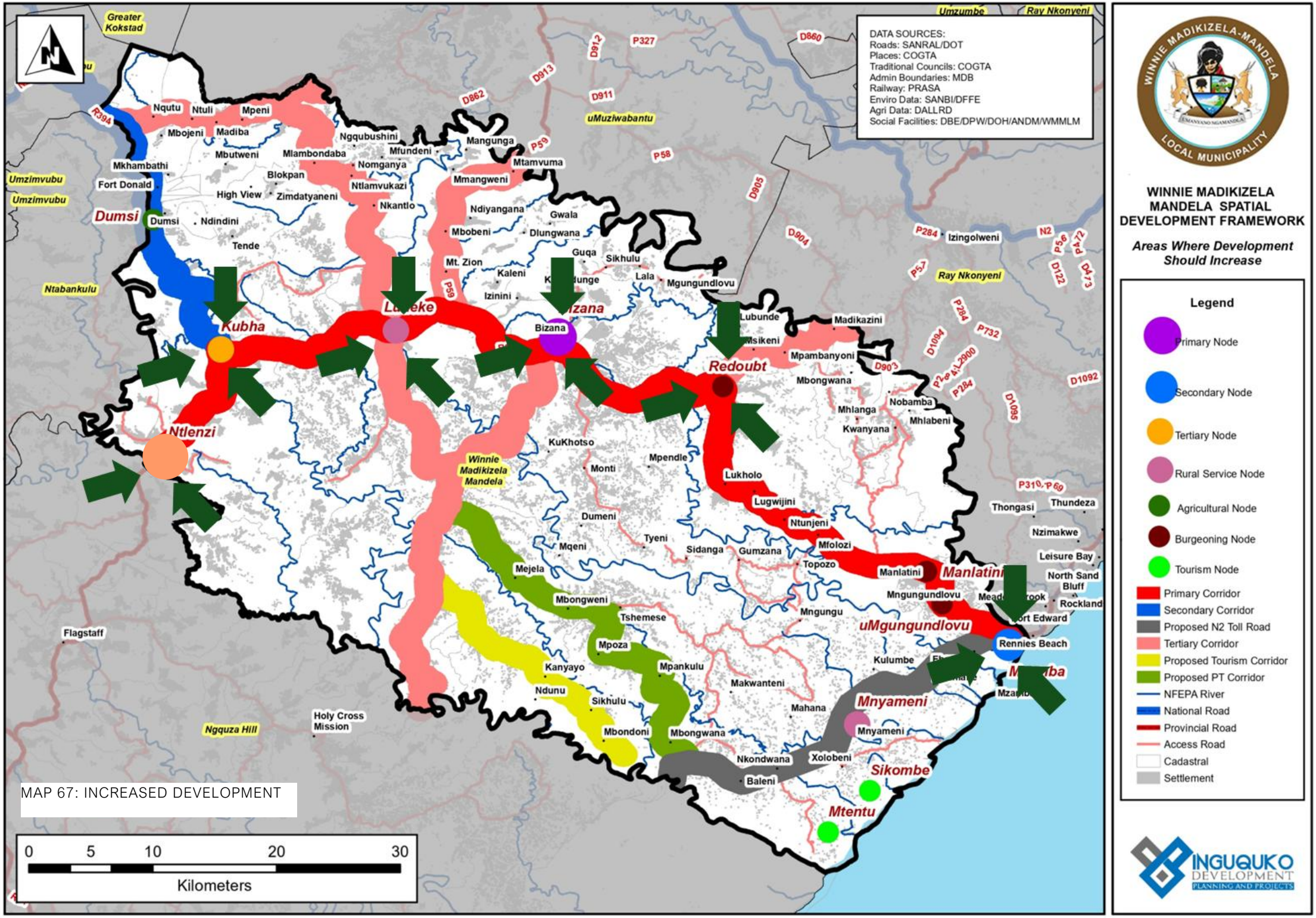
12.5.2. AREAS WHERE DEVELOPMENT INTENSITY SHOULD INCREASE

The following illustrations and indications outline the future direction for increased development intensity.

- Bizana Town Commercial and Mixed Land Use activities are encouraged to expand from the Primary Node along the Primary Corridors.
- Development intensity is encouraged to occur within the municipal nodes. The direction for future development within Bizana has been prioritized along the key activity spinal corridors that form a systematic order.
- The existing nodes can accommodate the objective of densification and infill. Inward densification should be encouraged within the rural service nodes. The proposal is to facilitate the development strategy of densification/infill development on open spaces for revitalization of existing local areas/nodes and encourage the formation of enterprises to unlock untapped assets for sustainable local economic development and provision of social services.
- Agriculture is one of the biggest economic activities within the municipality and contributes significantly to local employment; therefore, the development of agriculture is continually envisioned on the primary agricultural land.
- Outward expansion of the nodes is another proposal for future growth. This should involve linking the existing nodes through activity or mobility routes in a manner that promotes interface development.
- Development along R61 and R394 is envisioned to unlock untapped economic opportunities.



MAP 66: DECREASE DEVELOPMENT INTENSITY


DATA SOURCES:
Roads: SANRAL/DOT
Places: COGTA
Traditional Councils: COGTA
Admin Boundaries: MDB
Railway: PRASA
Enviro Data: SANBI/DFFE
Agri Data: DALLRD
Social Facilities: DBE/DPW/DOH/ANDM/WMMLM
WINNIE MADIKIZELA MANDELA SPATIAL DEVELOPMENT FRAMEWORK
Areas Where Development Should Increase
Legend
Primary Node
Secondary Node
Tertiary Node
Rural Service Node
Agricultural Node
Burgeoning Node
Tourism Node
Primary Corridor
Secondary Corridor
Proposed N2 Toll Road
Tertiary Corridor
Proposed Tourism Corridor
Proposed PT Corridor
NFEPA River
National Road
Provincial Road
Access Road
Cadastral
Settlement
Kubha
Ntlenzi
Redoubt
Manlatini
uMgungundlovu
Mnyameni
Sikombe
Mtentu
Dumsi
Bizana
Winnie Madikizela Mandela
Greater Kokstad
Umzimvubu
Ntabankulu
uMuziwabantu
Ray Nkonyeni
Flagstaff
Ngquza Hill
Holy Cross Mission
0 5 10 20 30
Kilometers
MAP 67: INCREASED DEVELOPMENT

13. IMPLEMENTATION FRAMEWORK

13.1. INCLUSIVE HOUSING POLICY

It is crucial for the municipality to address the housing situation within the study area, as the development of human settlements significantly impacts spatial planning quality both within South Africa and beyond. Currently, Winnie Madikizela Mandela primarily caters to low-income residents through RDP housing projects. However, the Spatial Development Framework (SDF) has proposed housing programmes in Bizana town which are ideal for promoting diverse, inclusionary housing.

To deliver an inclusive housing policy, WMMLM must address the growing demand for middle-income housing, including Community Residential Units (CRU), social housing, and open market housing. The following are some of the programs initiated by the Department that can be applied within the study area:

- Integrated Residential Development Programme
- Informal Settlements Upgrading Programme
- Emergency Housing Assistance Programme
- Social Housing Programme and Community Residential Units Programme
- Institutional Housing Subsidy Programme
- Individual Subsidy Programme
- Rural Housing Programme
- Enhanced People's Housing Process
- Farm Resident's Housing Assistance Programme

13.2. DENSIFICATION

Densification refers to the process of thoughtfully and purposefully increasing population densities in developed areas to ensure the most effective and efficient use of scarce resources. It is important to note that the By-laws should allow for urban mixed-use developments to include buildings up to 4 storeys high, meaning that densification can occur in this manner within the urban areas of WMMLM.

13.3. REGENERATION POLICY

In the planning context, the term 'regeneration' refers to the ongoing process of remodelling cities or towns through rehabilitation, conservation, and redevelopment. In South Africa, this program is known as 'urban renewal' and typically involves actions such as infrastructural development and improving the quality of life in areas undergoing change. Within WMMLM (Winnie Madikizela-Mandela Local Municipality), regeneration will take place in the town, guided by the municipality's adopted precinct plan and the initiatives outlined in the conceptual plan. At the local government level, the program includes the following key actions:

- Preventing urban decay.
- Addressing the 'rotten-apple syndrome' by renewing non-functional parts of the municipal area.
- Adjusting the urban environment to meet the demands of economic and social changes.

13.4. INTEGRATED TRANSPORT & LAND POLICY

Integrated transport planning has faced limited success and implementation challenges, primarily because it is often secondary to prioritized public transport and associated planning, with land use and transport integration missing from current practices. To address this, an integrated transport planning framework should be established. This framework should integrate infrastructure and operations planning across modes for both freight and passenger transport, connect the transport system with other sectors, and promote integrated transport planning between the Department of Transport (DoT) and other departments, across and within the three spheres of government, using shared data and information.

Land use planning processes should encourage mixed-use developments to provide workplaces close to homes and designate high-density development areas along transport corridors to make public transport feasible and accessible. This should be done while considering potential adverse environmental and health impacts from poor air quality associated with the close proximity of residential development to transport activity.

One of the objectives of land use planning is to stimulate economic development and ensure that the spatial locations of activities, people, and amenities positively impact the local, regional, and national economy. These land use planning objectives can only be achieved with the support of transport services. The relationship between land use and transport is such that transportation infrastructure attracts land use development. Land use development is often initiated by the provision of high-quality, integrated transport infrastructure and services.

Integrated transport planning results in several key benefits:

- Enhanced mobility and connectivity, leading to improved access to services and opportunities.
- Increased productivity, higher education levels, and better employment prospects by reducing the time and cost associated with travel, whether for work or job searching.
- Creation of denser and more efficient urban areas.
- Reduced emissions and more efficient use of resources, as people opt for public transport over private cars.

The National Land Transport Transition Act 22 of 2000 mandates that municipalities compile an Integrated Transport Plan (ITP) to achieve these benefits. However, the Act also acknowledges that each plan will be unique, tailored to the specific circumstances of the area, whether rural or urban.

13.5. PUBLIC FACILITIES PROVISION

Facility provision standards, which include access distance and population-serving thresholds, are fundamental to developing well-served, sustainable, and integrated communities. The quality and capacity of these facilities, offering the appropriate range of services tailored to the specific needs of the community and operated by competent staff, along with proper maintenance, are crucial for the effective delivery of services.

13.5.1. ROLE AND FUNCTION OF PUBLIC FACILITIES

The CSIR Guidelines for the provision of social facilities define these facilities as essential services that cannot be delivered directly to individual dwelling units and are therefore utilized within the public environment. Social facilities meet specific individual or community needs, including safety and security, communication, recreation, sports, education, health, public administration, religious, cultural, and social services. These facilities are generally considered the responsibility of government—whether central, regional, or local—and are provided by government institutions. However, when government-provided services are deemed inadequate, social facilities are also offered privately.

13.5.2. PLANNING STANDARDS ON PUBLIC FACILITIES

Public facilities are essential services that cannot be delivered directly to individual dwelling units and are therefore utilized within the public environment. These facilities meet specific individual or community needs, such as safety and security, communication, recreation, sports, education, health, public administration, religious, cultural, and social services.

Facility location planning standards, access guidelines, and threshold norms are crucial elements of strategic forward planning. They are used to allocate and reserve land for specific uses and facilities, as well as to develop capital budget plans within a planning area. This is particularly important for community-type facilities, which are provided by both the public sector and private developers.

Section 5.6. of this document provides a needs assessment based on the aforementioned CSIR guidelines, and the household population in the municipality which reveals a significant surplus in most facility types, such as clinics, primary schools, secondary schools, and ECD centres, indicating that the current infrastructure exceeds the assessed requirements. For instance, there are 18 surplus clinics and 129 surplus primary schools. This surplus suggests that the municipality has invested heavily in these areas, potentially leading to better access to essential services for residents. However, the presence of surplus facilities also implies that resources could be reallocated or optimized to address other areas of need. For example, the surplus in community halls (30) could be repurposed for other community services or activities.

13.6. LAND USE MANAGEMENT FRAMEWORK

A land use framework is a key component of a municipality's land use management scheme. The primary purpose of the Land Use Management Framework (LUMF) is to bridge the gap between the Integrated Development Plan (IDP) and the detailed land use management requirements at the municipal level. While not legally mandated, it plays a crucial role in spatial planning.

The LUMF refines the Spatial Development Framework (SDF), identifies areas needing varying levels of detail in land use schemes, and formulates broad principles to guide land use scheme development. It facilitates development control at different levels of complexity, extending over rural areas, and provides property owners, developers, and authorities with a clear reference point for managing land conservation and development. The municipality currently has an updated Land Use Management Scheme (LUMS) and Framework, adopted in the 2021 financial year.

13.6.1. PURPOSE & OBJECTIVES OF THE LAND USE SCHEME

The Spatial Planning and Land Use Management Act, Act No 16 of 2013 (SPLUMA), mandates that all municipalities in the province develop and implement a Single Land Use Scheme across their jurisdiction. According to the 2017 DALLRD Scheme guidelines, a Land Use Scheme is a planning tool that designates or restricts specific land uses to certain geographic areas.

Typically, this includes a spatial depiction of these areas (often called zones or zoning) and a document (often called scheme regulations) that outlines all procedures and conditions associated with land use in these zones. A land use scheme should not prevent planners from engaging with applications, relevant considerations, the Spatial Development Framework (SDF), SPLUMA principles, etc. Importantly, as indicated above, WMMLM (Winnie Madikizela-

Mandela Local Municipality) has an updated Land Use Management Scheme (LUMS).

13.6.2. LINKAGE BETWEEN THE SPATIAL DEVELOPMENT FRAMEWORK, LAND USE FRAMEWORK AND THE SCHEME

The connection between broader Strategic Planning (Spatial Development Frameworks) and the preparation of Schemes is crucial for ensuring consistent and comprehensive decision-making in land use management and change. This relationship ensures that land use decisions align with larger policy goals. Consequently, the Scheme is utilized to implement the broader policies outlined in the Municipality's Integrated Development Plan (IDP) and Spatial Development Framework (SDF) at the property level.

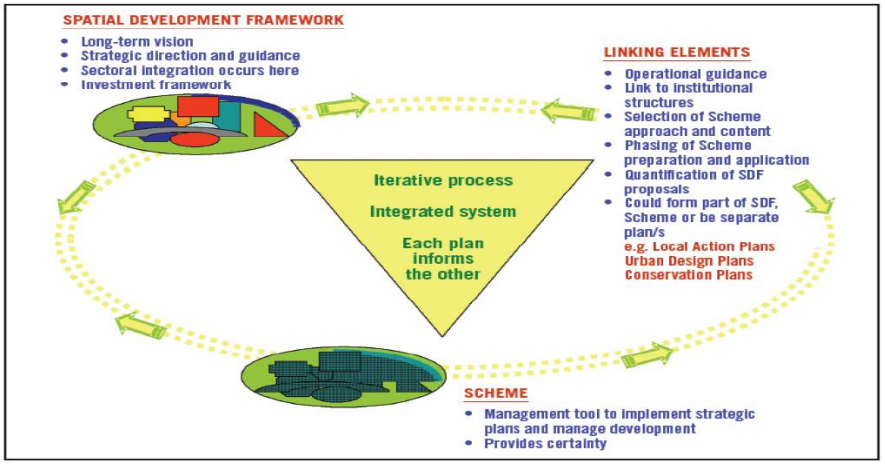


FIGURE 8: LINKAGE BETWEEN SDF, LUF, & SCHEME

The connection between the scheme and the SDF through the LUMF ensures that planners receive operational guidance for implementing the SDF and the scheme. It also provides institutional guidance, taking into account existing governance structures in certain areas of land use decision-making. The figure above illustrates the relationship between broader strategic planning and schemes, which are more specific in terms of intentions and controls for any prescribed land uses. It is essential to maintain a clear link between broader strategic planning tools and land use schemes.

13.7. STRATEGIC SPATIAL PLANNING PROJECTS

TABLE 24: STRATEGIC SPATIAL PLANNING PROJECTS

PROJECT NAME	DESCRIPTION	TOTAL BUDGET	MEDIUM TERM EXPENDITURE FRAMEWORK		
			2024/2025	2025/2026	2026/2027
Feasibility studies & township establishment for mixed use, layout plan, concept design in Bizana Town.	The plan will be to develop a range of housing typology options (BNG, social housing, gap housing), as well as economic stimulant land uses (industrial, mixed use, etc).	R5,000,000.00	-	R5,000,000.00	-
Development of Local Spatial Development Frameworks/Precinct Plans for newly identified nodes (Dumsi, Ludeke, etc.)	The plan outlines a strategy for the proper planning and sustainable development of a specific area. The Local Area Plan (LAP) will help define the community's vision for the future, provide guidelines and policies to minimize land use conflicts, ensure that future development and growth occur in an orderly manner, and give local residents the opportunity to influence land use decisions.	R500,000.00 per LSDF/precinct plan	TBC	TBC	TBC
Development of a Disaster Management Sector Plan	Section 26(g) of the Municipal Systems Act No. 32 of 2000 mandates that the municipal Integrated Development Plan (IDP) must include an applicable Disaster Management Sector Plan (DMP).	R400,000.00	-	R400,000.00	-
Comprehensive Tourism Strategy	A tourism development strategy will aims to boost visitor numbers and economic growth by improving infrastructure, promoting local culture, and ensuring sustainability in WMMLM. Key elements include enhancing transportation and accommodation, hosting cultural events, and preserving natural resources. Collaboration between government, communities, and businesses is essential, along with targeted marketing campaigns to attract diverse tourists. The focus is on creating memorable experiences and fostering local economic and social benefits.	R500,000.00		R500,000.00	-
Land Invasion Policy	This policy aims to prevent the proliferation of informal settlements on municipally owned land. It should identify strategies and provide guidance to the municipality on how to avoid such occurrences.	R300,000.00		R300,000.00	-
Review of the Integrated Coastal Management Plan	A coastal management plan aims to protect, sustainably develop, and manage coastal areas, balancing environmental conservation with economic activities.	R500,000.00		R500,000.00	-

PROJECT NAME	DESCRIPTION	TOTAL BUDGET	MEDIUM TERM EXPENDITURE FRAMEWORK		
			2024/2025	2025/2026	2026/2027
Comprehensive Estuary Management Plan	An estuary management plan is designed to protect and sustainably manage the municipality's estuarine environments. Estuaries, where freshwater meets the sea, are vital ecosystems that support diverse wildlife and provide numerous ecological, economic, and social benefits.	R600,000.00		R600,000.00	-
Development of a Comprehensive Agricultural Sector Plan	An agricultural plan directs the development of agriculture in the region, offering guidance on suitable agricultural activities for specific areas and making recommendations on activities that should be supported by and for the municipality.	R450,000.00			R450,000.00
Comprehensive Integrated Transport Plan	The formulation of an Integrated Transport Plan (ITP) is mandated by Section 27(2) of the NLTTA. This means that the ITP must reflect the planning authority's official vision, policy, and objectives, aligning with national and provincial policies while considering relevant integrated development planning or land development goals, specifically surrounding the proposed N2 Toll Road.				R800,000.00
Bizana CBD Revitalisation Strategy	A CBD revitalisation strategy focuses on improving infrastructure, enhancing public spaces, and attracting investment to create a vibrant urban center.	R600,000.00		R600,000.00	
TOTAL		R9,350,000.00		R7,900,000.00	R1,250,000.00

13.8. CAPITAL INVESTMENT FRAMEWORK

TABLE 25: IMPLEMENTATION PROJECTS

PROJECT NAME	RESPONIBLE DEPT.	FUNDER	TOTAL BUDGET*	MEDIUM TERM EXPENDITURE FRAMEWORK				
				2024/2025	2025/2026	2026/2027	2027/2028	2028/2029
Upgrading of P59 (16km)	EC Dept. of Transport	MIG	R128,000,000.00	-	-	R43,000,000.00	R43,000,000.00	R43,000,000.00
Upgrading of secondary corridor from Redoubt (13.6km)	EC Dept. of Transport	MIG	R81,600,000.00	-	-	R27,200,000.00	R27,200,000.00	R27,200,000.00
Upgrading of tertiary corridor from Ludeke (36km)	WMMLM	MIG	R288,000,000.00	-	-	R96,000,000.00	R96,000,000.00	R96,000,000.00
Upgrading of Proposed Tourism Corridor (21km)	WMMLM	MIG	R14,700,000.00	-	-	R4,900,000.00	R4,900,000.00	R4,900,000.00
Upgrading of Proposed Public Transport Corridor (44km)	WMMLM	MIG	R352,000,000.00	-	-	R117,333,333.00	R117,333,333.00	R117,333,333.00
Feasibility study for waterborne sanitation reticulation in Mzamba	WMMLM	WMMLM	R600,000.00	-	R600,000.00	-	-	-
Bizana extension Housing Project	WMMLM & ECDHS	DHS	TBD	TBD	TBD	TBD	TBD	TBD
Assessment & construction of v-drains in Ludeke	ANDM	ANDM	R10,000,000.00	-	-	-	R10,000,000.00	-
Assessment & construction of v-drains in Dumsi	ANDM	ANDM	R10,000,000.00	-	-	-	R10,000,000.00	-
Construction of taxi rank in Ludeke	ECCOGTA	MIG	R20,000,000.00			R10,000,000.00	R10,000,000.00	-
Provision of water infrastructure	WMMLM & ANDM	ANDM	R5,500,000.00 (R2.5m already spent)	R3,000,000.00	-	-	-	-
Mtentu & Sikombe Tourism Development	DEDEAT	DEDEAT	TBD	TBD	TBD	TBD	TBD	TBD
Formalisation of Mzamba Node	WMMLM	WMMLM & MIG	R2,500,000.00	R2,500,000.00	-	-	-	-
Feasibility study for adventure and eco-tourism in Ndunu/Mbondeni	WMMLM	WMMLM	R500,000.00	-	R500,000.00	-	-	-
Establishment of an SMME and Informal Sector Economy Hub/Incubator in Mzamba	WMMLM	DEDEAT & WMMLM	R5,000,000.00			R1,700,000.00	R1,700,000.00	R1,600,000.00
Establishment of an SMME and Informal Sector Economy Hub/Incubator in Bizana	WMMLM	DEDEAT & WMMLM	R5,000,000.00			R1,700,000.00	R1,700,000.00	R1,600,000.00

PROJECT NAME	RESPONIBLE DEPT.	FUNDER	TOTAL BUDGET*	MEDIUM TERM EXPENDITURE FRAMEWORK				
				2024/2025	2025/2026	2026/2027	2027/2028	2028/2029
Feasibility study and business plan for agri-processing plant in Dumsi	WMMLM	DALRRD & DEDEAT	R600,000.00		R600,000.00			

**Costs based on Public Infrastructure Unit Coast Guideline*

13.8.1. ACCESS ROADS BY EXTERNAL PLANT

TABLE 26: ACCESS ROADS BY EXTERNAL PLANT

ROAD / VILLAGE	WARD NO.	AMOUNT	STATUS
Qotyana access road	32	n/a	internal plant tipping underway
Mbiba access road	3	n/a	Internal plant blading done
Qobo to Gubhethuka Access Road	27	R1 400 294,00	Construction
Cwaka to Phathekile access road	29	R1 865 520,00	Construction
Andile to Mbongweni access road (Road to Hub)	6	R2 693 088,00	Construction
Zindleleni via groundini access road	31	R4 891 656,00	Construction
Mpetshwa to Nqabeni access road	9	R2 494 524,00	Construction
Mzamba mouth to reformed village access road	24	R3 650 136,00	Construction
CBD roads upgrading & resurfacing using alternative technologies	1	R3 500 000,00	Procurement
Maintenance of Mbuthweni access road	2	R2 500 000,00	Construction
Maintenance of Gwabeni access road	9	R1 258 000,00	Construction
Maintenance of Mfundambini access road	12	R4 000 000,00	Construction
Construction of 400m Slab Gcinisizwe Access Road	25	R400 000,00	Procurement
Maintenance of Ncenjane access road	29	R1 500 000,00	Procurement

Source: WMMLM, 2025/2026 Integrated Development Plan (IDP)

13.8.2. ACCESS ROADS BY MUNICIPAL PLANT

TABLE 27: ACCESS ROADS BY MUNICIPAL PLANT

NAME OF THE PROJECT	LENGTH	WARD	PROGRESS / STATUS
Nompumalanga access road	7km	7	Planned tipping
Mbiba	3,6km	3	Planned tipping
Nyanisweni via Mzambana to kwaMbuzi	5km	30	planned tipping
Ntsimbini	1.5km	30	Spot tipping and processing underway
R61 to Malola	13km	26	Planned tipping
Pelepele	5,4km	11	Planned tipping
Giniswayo	3km	11	Planned tipping
Mantshangase to Qhabangeni komkhulu to Ntshangase Access Road (Nomathebe, Sithukuthezi)	9.8km	3	Tipping and processing Complete
Nonja access Road	4,3km	22, 19	Tipping and processing Complete
Tribal authority Access Road	1.7km	21	Tipping and processing Complete
Ntshamathe to Guqa	6,3 km	6	Processing underway
Qotyana, Fonoza access road	9km	32	Tipping, underway
Ngcingo to Didi via Soweto to Gagashe, Fonoza	6,3km	13	Tipping and processing underway

Source: WMMLM, 2025/2026 Integrated Development Plan (IDP)

13.8.3. BASIC SERVICE DELIVERY PROJECTS

TABLE 28: BASIC SERVICE DELIVERY PROJECTS

PROJECT NAME	PROJECT NATURE	WARD	VILLAGE	BUDGET ALLOCATED
Mtamvuna to Mabheleni via Ndayingana Access Road	Construction of 12.6km access road	5	Mthamvuna, Mabheleni	R 4 510 917,24
Mkhwasweni Access Road	Construction of 4.2km A/R	16	Mkhwasweni	R 7 999 986,81
116 to Somgungqu to Khwanyana Access Road	Construction of 3km A/R	19	Khwanyana	R 3 999 992,10
Lukhanyo Access Road	Construction of 1,9km A/R and 0.50km concrete slab	3	Lukhanyo	R 7 035 695,87
Mbuthweni to Nokhatshile Access Road	Construction of 4.1km A/R	2	Mbuthweni, Nokhatshile	R 5 217 826,78

PROJECT NAME	PROJECT NATURE	WARD	VILLAGE	BUDGET ALLOCATED
Pelepele Bridge & Access Road	Rehabilitation of 5.6km A/R	11	Pelepele	R 7 867 756,40
Ntinga Bridge & Access Road	Rehabilitation of 8km gravel and 0.50km Concrete Slab	N/A	Ntinga	R 5 919 592,46
Moscow Access Road	Rehabilitation of 6.7km	25	Moscow	R 4 200 000,53
Monti to Ntsimbini Access Road	Construction of 2km	19	Monti	R 2 909 779,00
Vuyisile to Ntsingizi Access Road with Bridge	Construction of 1.6km A/R	17	Ntsingizi	R1 051 920,04
Ward 08 Road to Hub	Construction of A/R with 0,8km concrete slab	8		R3 001 043,12
Ward 16 Road to Hub Access Road	Construction of 2.3km A/R	16		R 2 477 598,65
Upgrading and maintenance of surfaced roads in the CBD using alternative surfacing	Upgrading 3,4km and maintenance of 1km of surfaced roads, sidewalks and stormwater in the CBD	1	Town	R10 000 000,00
Ntlenzi to Mcetheni	Rehabilitation and upgrading of access roads using alternative surfacing	10		R12 400 000,00
Maqokweni to Nokhatshile	Rehabilitation and upgrading of access roads using alternative surfacing	2		R 9 300 000,00
Mphuthumi Mafumbatha Sportsfield	Phase 3 Construction	1	Town	R19 421 219,90
Ntlozelo to Shukuma SSS, Ngedle to Mbuthuma A/R, Plangeni to Mahwaqa A/R	90km of gravel access roads Maintained		Various	R26 800 000,00

Source: WMMLM, 2025/2026 Integrated Development Plan (IDP)

13.8.4. COMMUNITY SERVICES PROJECTS

TABLE 29: COMMUNITY SERVICES PROJECTS

PROJECT NAME	PROJECT NATURE	WARD	VILLAGE	BUDGET ALLOCATED
Library Services	Conduct 8 library awareness campaigns, Maintain and equip 4 libraries, Supply 2800 periodicals	1, 8, 24, 27	Town, Dudumeni, Nkantolo, Ebenezer	R1 096 218
Environmental Management	Implementing climate change strategy, Conduct 4 coastal committee meetings and 8 environmental awareness campaigns,	Coastal	Coastal villages	R837 507
Waste Management	routine maintenance of EXT 3 disposal site and financial projections report. Conduct quarterly audits and phase 1 rehabilitation for closure of Ext 3 disposal site	1	Extension 3	R12 115 649
Free Basic Services	Subsidized 100% of qualifying beneficiaries with grid electricity and FBAE	All wards	Various	R6 000 000
Provision of free refuse removal	Provide 442 qualifying beneficiaries with free refuse removal	1	All villages in ward 01 (indigent)	Nil
Disaster management	Record & assess 100% reported disaster incidences & respond within 72 hours and conduct 8 disaster awareness campaigns Conduct 8 Disaster Risk awareness campaigns; Coordinate and Facilitate the sitting of 4 Disaster Advisory Forum Meetings	All wards	Various	R1 612 336
	Conduct 8 Disaster Risk awareness campaigns; Coordinate and Facilitate the sitting of 4 Disaster Advisory Forum Meetings			R189 900

Source: WMMLM, 2025/2026 Integrated Development Plan (IDP)

13.8.5. WATER INFRASTRUCTURE PROJECTS

TABLE 30: WATER INFRASTRUCTURE PROJECTS

PROJECT NAME	APPROVED ALLOCATION	2024/2025 ALLOCATION	2025/2026 ALLOCATION	2026/2027 ALLOCATION
Servicing Mbizana Town Area with Sewerage	R159 700 201	R0,00	R1 992 929,99	R0,00

PROJECT NAME	APPROVED ALLOCATION	2024/2025 ALLOCATION	2025/2026 ALLOCATION	2026/2027 ALLOCATION
Greater Mbizana Water Supply-Phase 1A Reticulation System (Supply Zones A, C, E & O) Project Adjustment	R353 073 471	R4 000 000,00	R0,00	R0,00
Mbizana ward 10, 12,13 & 15 Water Supply Scheme: Implementation Phase	R484 567 610,17	R155 965 460,85	R35 000 000,00	R0,00
Mbizana ward 10, 12,13 & 15 Water Supply Scheme: Phase 2	R438 878 093,36	R0,00	R26 292 697,79	R76 292 697,79
Greater Mbizana Water Supply-Phase 1B	R495 073 208,00	R18 318 938,42	R34 434 836,10	R74 434 836,10
Mbizana Stabilisation Ponds 10% MIG Refurbishment	R19 539 938,07	R800 991,30	R0,00	R0,00
Mbizana Ward 21, 23 & 24 Water Supply Scheme - Implementation Phase	R563 935 992,54	R31 697 378,99	R45 062 229,38	R46 062 229,38
Mbizana Ward 29 & 30 Water Supply Scheme Feasibility Studies	R215 103 947,65	R12 000 000,00	R56 681 294,53	R69 021 644,20

Source: WMMLM, 2025/2026 Integrated Development Plan (IDP)

13.8.6. HUMAN SETTLEMENTS PROJECTS

TABLE 31: HUMAN SETTLEMENTS PROJECTS

PROJECT NAME	PROJECT NATURE	WARD	VILLAGE	STATUS	BUDGET ALLOCATED
Alfred Nzo 1119 (200) Mbizana Destitute	Housing	Various Wards	Around Mbizana	Contractor is currently on site working in Ward 8, 5, 10 and 32. No completions done yet; the units are in different stages.	R 280,000
Highland and Downtown Upgrading of Informal Settlement Programme	Services	Ward 1	Highland and Downtown	No activities currently on site due to contractual issues between TCT, HDA, and DoHS. 72% work done, 100% time	R 100,000

PROJECT NAME	PROJECT NATURE	WARD	VILLAGE	STATUS	BUDGET ALLOCATED
				lapse, 28% work outstanding.	
Nkantolo MPCC	Multi-Purpose Centre	Ward 27	Nkantolo	Contractor is currently on site. Planned.	R20,000,000.00
Mbizana 700 Permanent structures for destitute	Permanent structures for destitute households	Various	Various	Contractor currently on site	TBC

Source: WMMLM, 2025/2026 Integrated Development Plan (IDP)

13.8.7. PUBLIC WORKS INFRASTRUCTURE PROJECTS

TABLE 32: PUBLIC WORKS INFRASTRUCTURE PROJECTS

PROJECT NAME	PROJECT NATURE / SCOPE OF WORK	WARD	VILLAGE	BUDGET ALLOCATED	IMPLEMENTING AGENT
CURRENT RUNNING PROJECTS					
Nokhatshile Clinic	Repairs to the main clinic	2	Nokhatshile	R9 Million	DPW&I
Amantshangase Clinic	Repairs to the main clinic	12		R792 673, 13	DPW&I
Hlamandana Clinic	Repairs to the main clinic	Ward		R720 897, 00	DPW&I
Ndela Clinic	Repairs to the main clinic	31	Ndela	R817 889, 15	DPW&I
PLANNED PROJECTS					
Greenville Hospital	Hospital Upgrade	21	Greenville	R25 Million	DPW&I

Source: WMMLM, 2025/2026 Integrated Development Plan (IDP)

13.8.8. DEPARTMENT OF TRANSPORT PROJECTS

TABLE 33: DEPARTMENT OF TRANSPORT PROJECTS

PROJECT NAME	PROJECT NATURE / SCOPE OF WORK	WARD	VILLAGE	BUDGET ALLOCATED	IMPLEMENTING AGENT
DR08112	Regravelling of 13km	04, 27, 02, 03	Various	TBC	DoT
DR08115	Regravelling 5km	01, 06	Various	TBC	DoT
DR08116	Regravelling 8km	13, 19	Various	TBC	DoT
DR08120	Regravelling 10km	13, 30, 12, 15	Various	TBC	DoT

Source: WMMLM, 2025/2026 Integrated Development Plan (IDP)

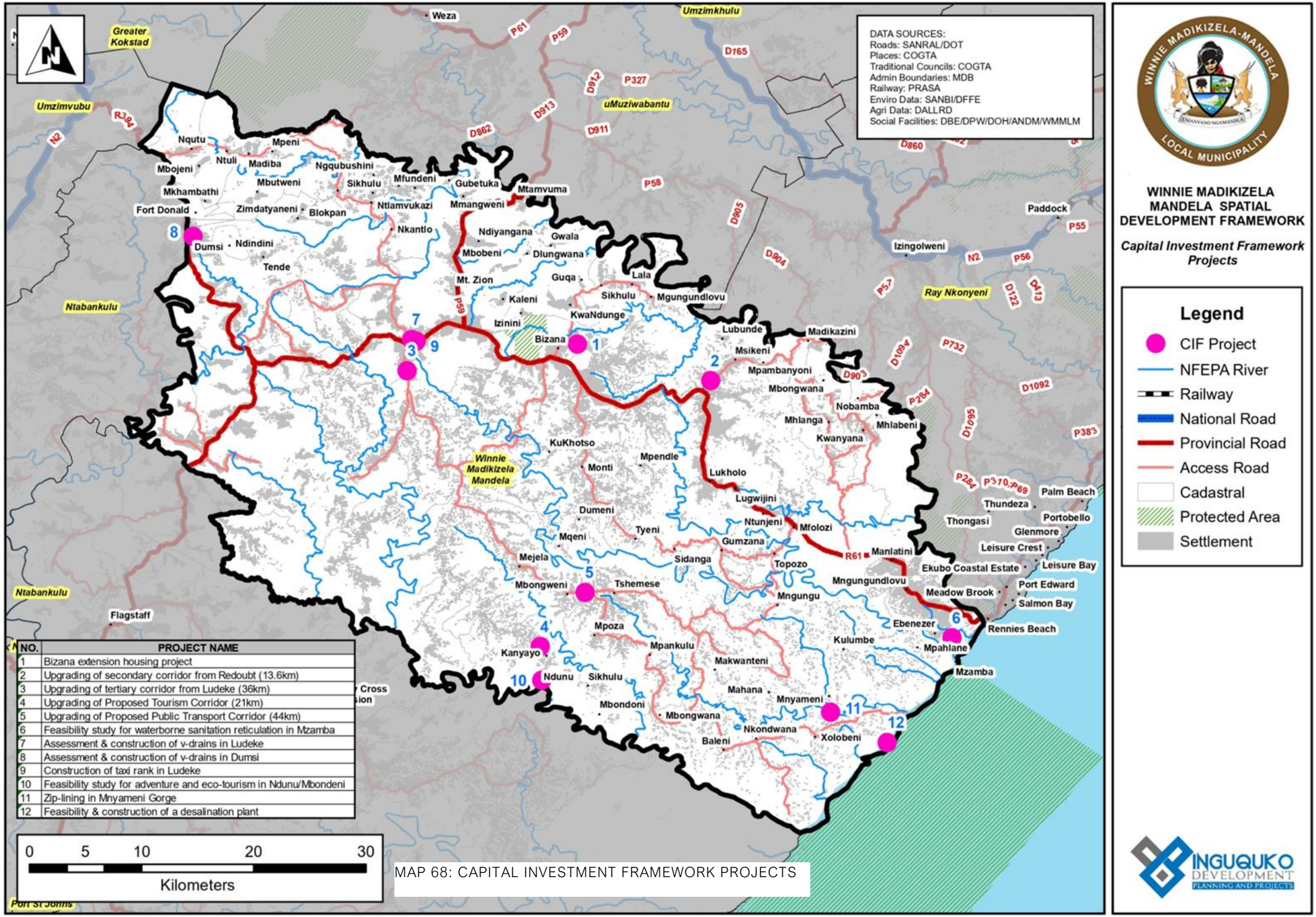
13.8.9. THREE YEAR CAPITAL PROJECTS

TABLE 34: THREE YEAR CAPITAL PROJECTS

PROJECT NAME	2025/26 ALLOCATION	2026/27 ALLOCATION	2027/28 ALLOCATION	WARD NO.
Construction of Mtamvuna to Mabheleni via Ndayingana Access Road	R4 510 917,24	R0.00	R0.00	5
Construction of Mkhwasweni Access Road	R7 999 986,81	R0.00	R0.00	16
Construction of 116 to Somgungqu to Khwanyana Access Road	R3 999 992,10	R0.00	R0.00	19
Construction of Mbuthweni to Nokhatshile Access Road	R5 217 826,78	R0.00	R0.00	2
Construction of gravel and Concrete Slab Lukhanyo Access Road	R7 035 695,87	R0.00	R0.00	3
Rehabilitation of Pelepele Bridge & Access Road	R7 867 756,40	R0.00	R0.00	21
Rehabilitation of gravel and Concrete Slab Ntinga Bridge & Access Road	R5 919 592,46	R8 500 000,00	R0.00	29
Construction of Moscow Bridge & Access Road	R4,200 000.00	R0.00	R0.00	25
Construction of Monti to Ntsimbini Access Road	R2 909 779,00	R6 200 000,00	R0.00	19 & 30
Construction of Vuyisile to Ntsingizi Access Road with Bridge	R1 000 000.04	R0.00	R0.00	17 & 9
Construction of Ward 08 Road to Hub Concrete Slab	R3 001 043,12	R0.00	R0.00	8
Construction of Ward 16 Road to Hub Access Road	R2 477 598,65	R0.00	R0.00	16
Construction of Maqojwana to Greenville Access Road & Bridge	R5 000 000.00	R0.00	R0.00	18
Construction of Sidanga Bridge	R5 000 000,00	R0.00	R0.00	28
Upgrading of surfaced roads in the CBD using alternative surfacing	R10 000 000.00	R0.00	R0.00	1
Phase 3 Construction of Mphuthumi Mafumbatha Sports field	R19 421 219,90	R0.00	R0.00	1
Construction of Ngcingo to Matwebu Access Road	R0	R5 989 060,76	R0.00	13
Construction of Ntsingizi to Mbenya Access Road	0	R4 176 000,00	R0.00	17 & 32

Rehabilitation of Garhane Bridge & Access Road	0	R4 353 675,24	R0.00	24
Construction of Mbhatshe Bridge & Access Road	0	R5 110 020,91	R0.00	20
Rehabilitation of Maqokweni to Nokhatshile	R9 300 000.00	R0.00	R0.00	2
Resurfacing of Ntlenzi to Mcetheni	R12 400 000,00	R0.00	R0.00	10

Source: WMMLM, 2025/2026 Integrated Development Plan (IDP)



NO.	PROJECT NAME
1	Bizana extension housing project
2	Upgrading of secondary corridor from Redoubt (13.6km)
3	Upgrading of tertiary corridor from Ludeke (36km)
4	Upgrading of Proposed Tourism Corridor (21km)
5	Upgrading of Proposed Public Transport Corridor (44km)
6	Feasibility study for waterborne sanitation reticulation in Mzamba
7	Assessment & construction of v-drains in Ludeke
8	Assessment & construction of v-drains in Dumsi
9	Construction of taxi rank in Ludeke
10	Feasibility study for adventure and eco-tourism in Ndunu/Mbondeni
11	Zip-lining in Mnyameni Gorge
12	Feasibility & construction of a desalination plant

MAP 68: CAPITAL INVESTMENT FRAMEWORK PROJECTS

13.9. PROPOSED CATALYTIC PROJECTS

TABLE 35: PROPOSED CATALYTIC PROJECTS

PROJECT NAME	RESPONIBLE DEPT.	FUNDER	TOTAL BUDGET*	MEDIUM TERM EXPENDITURE FRAMEWORK				
				2024/2025	2025/2026	2026/2027	2027/2028	2028/2029
Zip-lining in Mnyameni Gorge	WMMLM DEDEAT	DEDEAT	R3,000,000.00	-	R3,000,000.00	-	-	-
Feasibility & construction of a desalination plant	WMMLM & DWS	DWS, MIG, IDC	TBD	TBD	TBD	TBD	TBD	TBD
Feasibility & business plan for aqua-culture fish farm	WMMLM	DEDEAT	R300,000.00	-	R300,000.00	-	-	-