KANNALAND
MUNISIPALITEIT | MUNICIPALITY

KANNALAND SPATIAL DEVELOPMENT FRAMEWORK 2025-2030

Draft : Municipal Spatial Development Framework

September 2025

Project Information Sheet

Project Name:	**MUNICIPAL SPATIAL DEVELOPMENT FRAMEWORK (SDF) FOR KANNALAND LOCAL MUNICIPALITY**	
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Document History

Version No	Date of Submission	Description
1	September	Draft Municipal Spatial Development Framework

Project Phases

List of Abbreviations

Abbreviation	Description
CBA	Critical Biodiversity Areas
CBD	Central Business District
CEF	Capital Expenditure Framework
CSIR	Council for Scientific and Industrial Research
DALRRD	Department of Agriculture, Land Reform, and Rural Development
ESAs	Ecological Support Areas
FLISP	Finance Linked Individual Subsidy Programme
GDP	Gross Domestic Product
IDP	Integrated Development Plan
IRDP	Integrated Residential Development Programme
Kl/d	kilolitres per day
ℓ/p/d	Litres per person per day
m	metres
mm	millimetres
NSDF	National Spatial Development Framework
SDF	Spatial Development Framework
SPCs	Spatial Planning Categories
UBPL	Upper-Bound Poverty Line
UISP	Upgrading of Informal Settlements Programme
WC	Western Cape Province
WCBA	Western Cape Biodiversity Act
WTW	Wastewater Treatment Works

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1: INTRODUCTION AND BACKGROUND

The Municipal Systems Act (Act 32 of 2000), the Spatial Planning and Land Use Management Act (Act 16 of 2013), and the Western Cape Land Use Planning Act (Act 3 of 2014) requires all municipalities to have a municipal spatial development framework (SDF). This framework serves to guide the spatial allocation of current and desired land uses within the municipality, aligning with the vision, goals, and objectives of the municipal integrated development plan (IDP). The existing 2013 SDF for the Kannaland Local Municipality is outdated, necessitating the development of a new SDF. The purpose of the updated SDF is to direct the spatial arrangement of present and future land uses, infrastructure investments, development activities, and environmental conservation, all while taking financial constraints into account.

The Department of Agriculture, Land Reform, and Rural Development (DALRRD) has appointed Asika Consulting Pty Ltd to prepare the new SDF for Kannaland Local Municipality within a period of twelve (12) months.

1.1: Purpose of the Kannaland Municipal Spatial Development Framework

The purpose of a Municipal Spatial Development Framework (SDF) is to provide a strategic, long-term plan that guides spatial planning and land use management within a municipality. It serves as a critical tool to achieve sustainable development, balance competing land-use demands, and ensure the effective use of resources.

The purpose of the Kannaland Municipal Spatial Development Framework is to:

- Articulate and reflect the municipality's spatial development vision, guided by a long-term vision statement and plan.
- Inform planning and development decisions across all levels of government, particularly municipal and provincial authorities, in spatial planning and land use management.
- Promote a unified and coordinated approach to spatial development among different spheres of government.
- Provide clear, accessible guidance to the public and private sectors, offering direction for investment and development.
- Incorporate and integrate previously disadvantaged areas, rural communities, informal settlements, slums, and state-owned or government agency landholdings into the municipality's spatial, economic, social, and environmental objectives.
- Address and rectify historical spatial inequities in development patterns.

1.2: Process and Timeframes

The figure below gives an overview of the process that has been followed to formulate the Kannaland SDF. The project phases are numbered 1 – 6 in figure 1 and this report is being submitted as part of Phase 4.

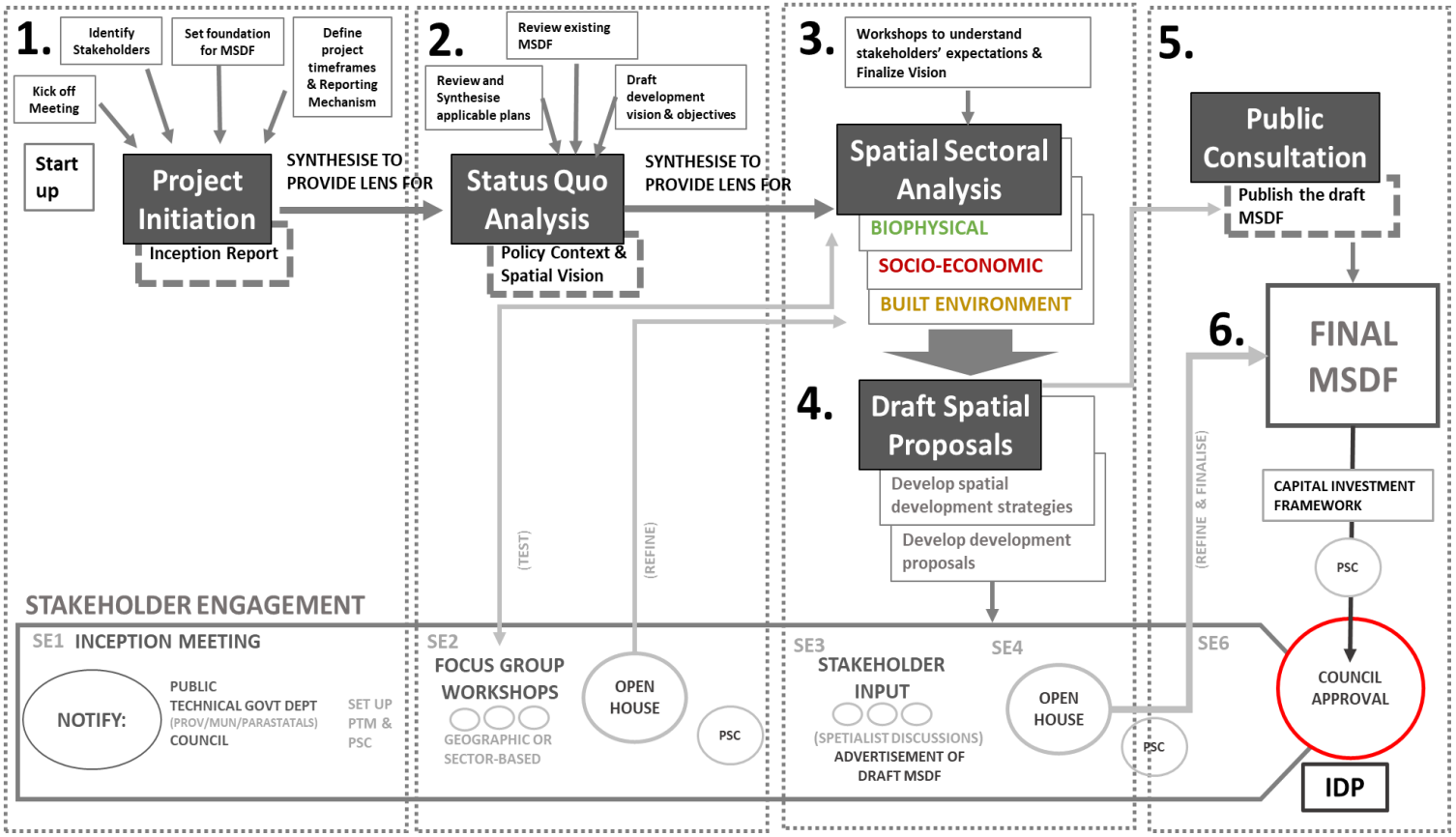


Figure 1: Process of developing the Kannaland SDF

2: LEGISLATIVE AND POLICY CONTEXT

This chapter examines and analyses the key legislation, plans, and policies influencing the municipality's spatial structure. It also highlights the significant implications of each policy or legislative framework on the Kannaland Municipal Spatial Development Framework.

2.1: Horizontal Alignment

2.1.1: National Level

Constitution of the Republic of South Africa: mandates local government to manage and organise planning processes to prioritise community needs.

Municipal Systems Act (Act 32 of 2000): outlines the functions and responsibilities of municipalities. Furthermore, it states that municipality's development plans and strategies should adhere to principles of cooperative governance outlined in the constitution.

Spatial Planning and Land Use Management Act (Act 16 of 2013): provides a comprehensive framework that guides spatial planning and land use management by outlining development planning processes that should be guided by spatial principles.

Local Government: Municipal Planning and Performance Management Regulations 2001: provides guidelines for municipalities on planning, performance management, and service delivery. These regulations ensure that local governments operate efficiently, transparently, and in line with national development goals.

National Environmental Management Act (Act 107 of 1998): provides an overarching framework for environmental legislation by establishing principles for decision-making on matters affecting the natural environment.

National Development Plan 2030: this is an official document setting out the government's long-term vision and strategic approach towards various identified objectives, with the overall aim to eliminate poverty and reduce inequality by the year 2030.

National Spatial Development Framework 2022: this is a framework that seeks to decisively transform the South African spatial development landscape in a viable and sustainable way from the inherited colonial and Apartheid forms to a truly transformed post-Apartheid form by 2050.

Integrated Urban Development Framework 2016: this national policy was designed to guide sustainable urban development. It aims to create well-managed, inclusive, and resilient cities and towns by addressing challenges like urbanisation, inequality, and service delivery.

National Transport Master Plan 2016: this is a national policy that outlines the 2050 vision with transport being an integral part of the economy.

2.1.2: Provincial Level

Western Cape Provincial Spatial Development Framework 2014: is a strategic plan guiding spatial planning and land use in the Western Cape province.

Western Cape Human Settlements Framework 2019: is a framework that emphasises various objectives that will enable the implementation of human settlements delivery in the Western Cape.

Western Cape Land Use Planning Act, 2014: is a provincial law that governs spatial planning, land use management, and development in the Western Cape.

2.1.3: District Level

Garden Route Human Settlements Sector Plan 2022: is a strategic plan for housing and the development of human settlements which addresses the current and projected housing needs in the district.

Garden Route Spatial Development Framework 2017: is a strategic plan developed by the Garden Route District Municipality to guide spatial planning and land use management within the district.

Garden Route and Development Strategy 2021: is a comprehensive framework designed to guide the economic and social advancement of the Garden Route District.

Garden Route Integrated Development Plan 2022-2027: is a strategic framework which is intended to guide the district's development over a five-year period. This plan aims to promote sustainable growth, enhance service delivery, and improve the quality of life for all residents within the district.

2.1.4: Municipal Level

Kannaland Spatial Development Framework 2013: is the strategic plan developed by the municipality to guide spatial planning and land use management.

Kannaland 5th Generation Integrated Development Plan 2022-2027: is a strategic framework that is intended to guide the municipality's development over a five-year period. This plan aims to promote sustainable growth, enhance service delivery, and improve the quality of life for all residents in the municipality.

Kannaland Local Economic Development Strategy 2022-2027: is a comprehensive plan designed to stimulate economic growth, create employment opportunities, and enhance the quality of life within the Kannaland Municipality.

2.2: Vertical Alignment

Vertical alignment is essential for **coordinated regional development, efficient resource use, and sustainable growth**. Since municipal boundaries do not limit economic activities, environmental systems, or infrastructure networks, alignment with neighbouring municipal spatial development frameworks ensures seamless and well-planned development. Some of the benefits of considering an inter-municipal, coordinated approach are as follows:

1. **Promotes Regional Integration and Economic Growth**
- Encourages coordinated economic strategies across municipal borders.
- Helps develop shared economic hubs, industrial zones, and transport corridors.
2. **Improves Infrastructure and Service Delivery**
- Ensures consistent planning for roads, water, electricity, and public transport networks.
- Prevents duplication of services and infrastructure, leading to cost savings.
3. **Enhances Environmental Sustainability**
- Supports coordinated conservation efforts for shared natural resources (e.g., rivers, forests, wetlands).
- Helps manage urban expansion to prevent environmental degradation.
4. **Facilitates Efficient Land Use Planning**
- Reduces urban sprawl by ensuring compact and well-planned settlements.
- Encourages the development of interconnected towns rather than isolated, fragmented areas.

5. **Strengthens Disaster Management and Climate Resilience**
- Improves coordination for flood control, fire management, and climate change adaptation.
- Supports shared emergency response plans for natural disasters.
6. **Reduces Spatial Inequality and Enhances Social Inclusion**
- Promotes balanced development between urban and rural areas.
- Ensures equitable access to housing, jobs, and public services across municipal borders.
7. **Supports Cooperative Governance**
- Encourages collaboration between municipalities by reducing conflicts over land use and development priorities.
- Aligns local planning with national and provincial policies for harmonised growth.

3: STATUS QUO ANALYSIS

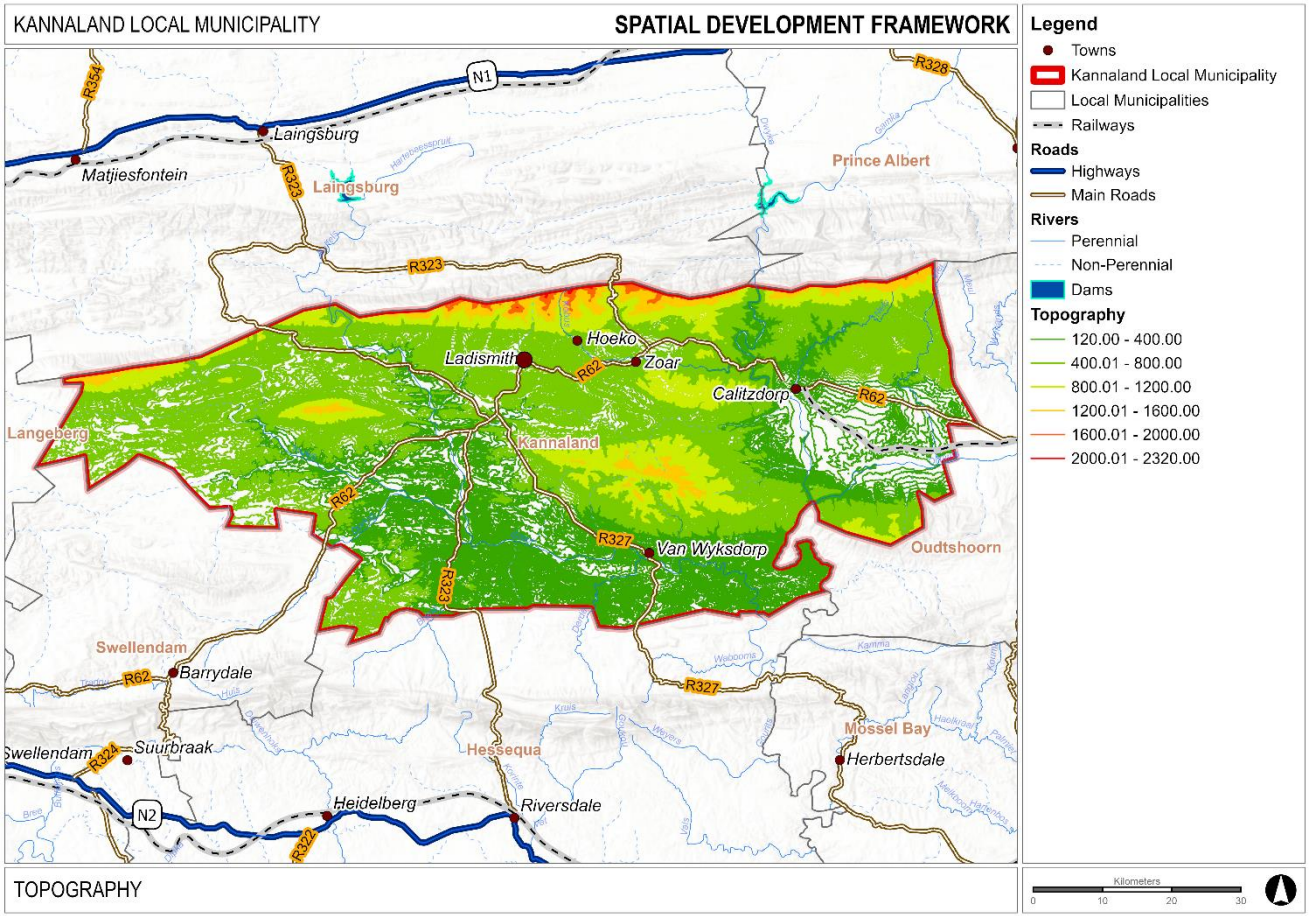
This chapter examines and analyses the key legislation, plans, and policies influencing the municipality's spatial structure. It also highlights the significant implications of each policy or legislative framework on the Kannaland Spatial Development Framework.

3.1: Biophysical Environment

3.1.1: Topography

The topography of the municipality is defined by the Kleinswart, Anys, and Grootswart Mountains, which form its northern boundary. These mountains have an average elevation ranging between 1200m to 2000m above sea level.

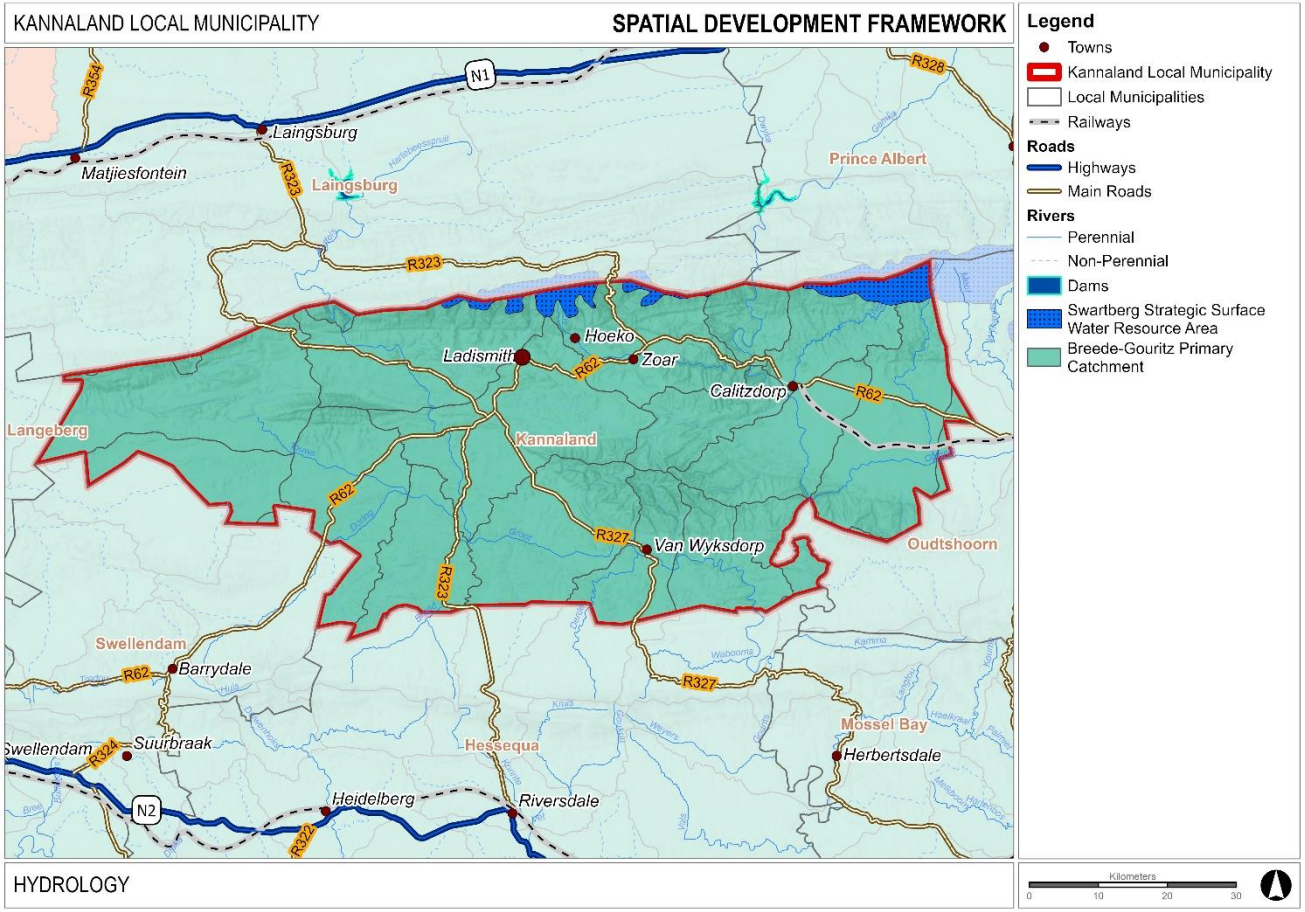
Additionally, three other elevated areas are present within the municipality: Touwsberg in the west, Rooiberg in the central region, and Bakenkop, located south of Zoar.



Map 1: Topography

3.1.2: Hydrology

The municipality falls within the Breede-Gourits River catchment area. Swartberg Strategic Surface Water Resource Area forms part of the municipality and is situated on the northern part of Kannaland Municipality, as shown in Map 2. This area supplies a disproportionate amount of water runoff in relation to its size and is vital for water security. The major rivers in the municipality include the Swartberg River, Brakrivier, Gamkarivier, Gouritsrivier, Grootrivier, Nelsrivier, Olifantsrivier, Elandsberg Fountain and Touws Rivers.



Map 2: Hydrology

According to the 2019 Green Book Municipal Risk Profiles, Kannaland has a water demand of 177.4 litre per capita (ℓ/p/d) and supply of 273.55 ℓ/p/d. Ladismith is the administrative capital of Kannaland LM and is mainly dependent on the Swartberg River (1 100 m3/day) and the Elandsberg Fountain (300 m3/day spring) for bulk water supply. Approximately 82.9% of the Municipality's water is surface water and the remaining 17.1% is sourced from groundwater which means that the majority of the municipality sources their water from surface water.

3.1.3: Vegetation and Biomes

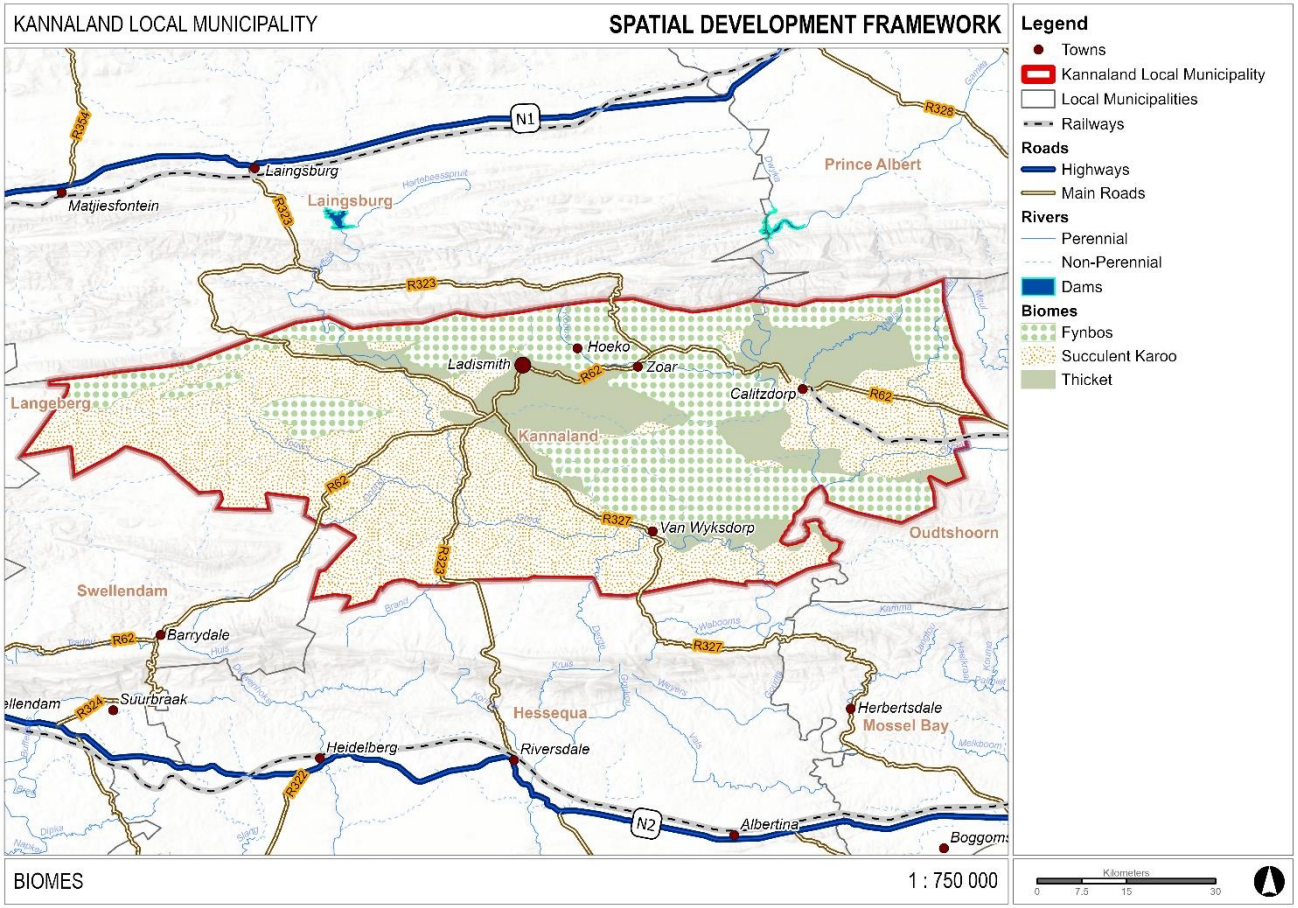
A biome is a large, distinct geographical region with a specific climate, vegetation, soil and wildlife. Map 3 shows the different biomes that are present in the municipality. These biomes include:

- Succulent Karoo Biome;
- Fynbos Biome; and
- Thicket Biome

The Succulent Karoo Biome is mainly found in the central, western and southern parts of the Municipality.

The Fynbos Biome is located along the northern boundary and in some central parts of the Municipality.

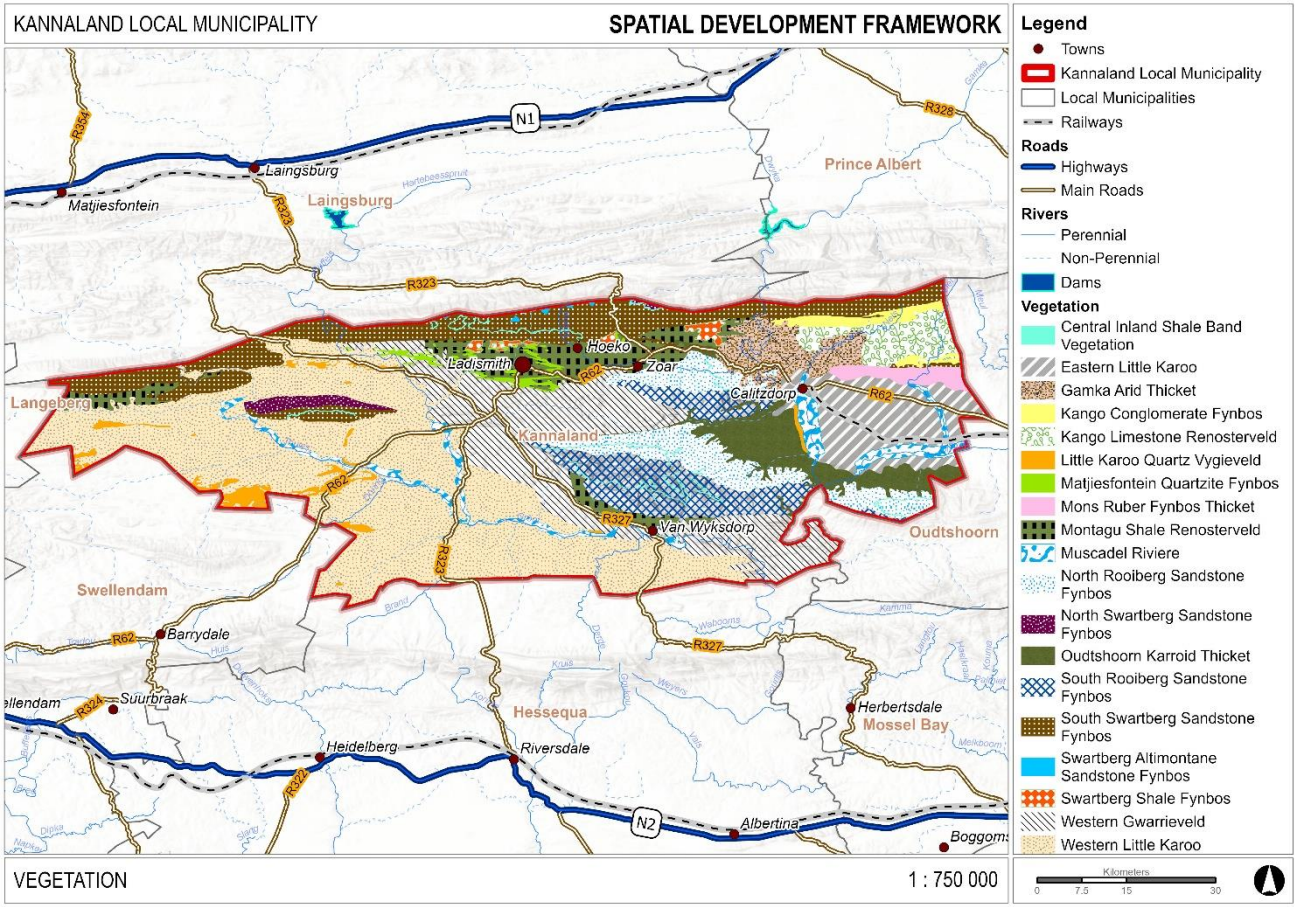
The Thicket Biome can be found in the central and eastern parts of the Municipality.



Map 3: Biomes

Map 4 shows the dominant vegetation types in the municipality:

- Western Little Karoo;
- Western Gwarrieveld;
- North Rooiberg Sandstone Fynbos;
- South Rooiberg Sanstone Fynbos;
- Eastern Little Karoo;
- Montagu Shale Renosterveld; and
- Gamka Arid Thicket



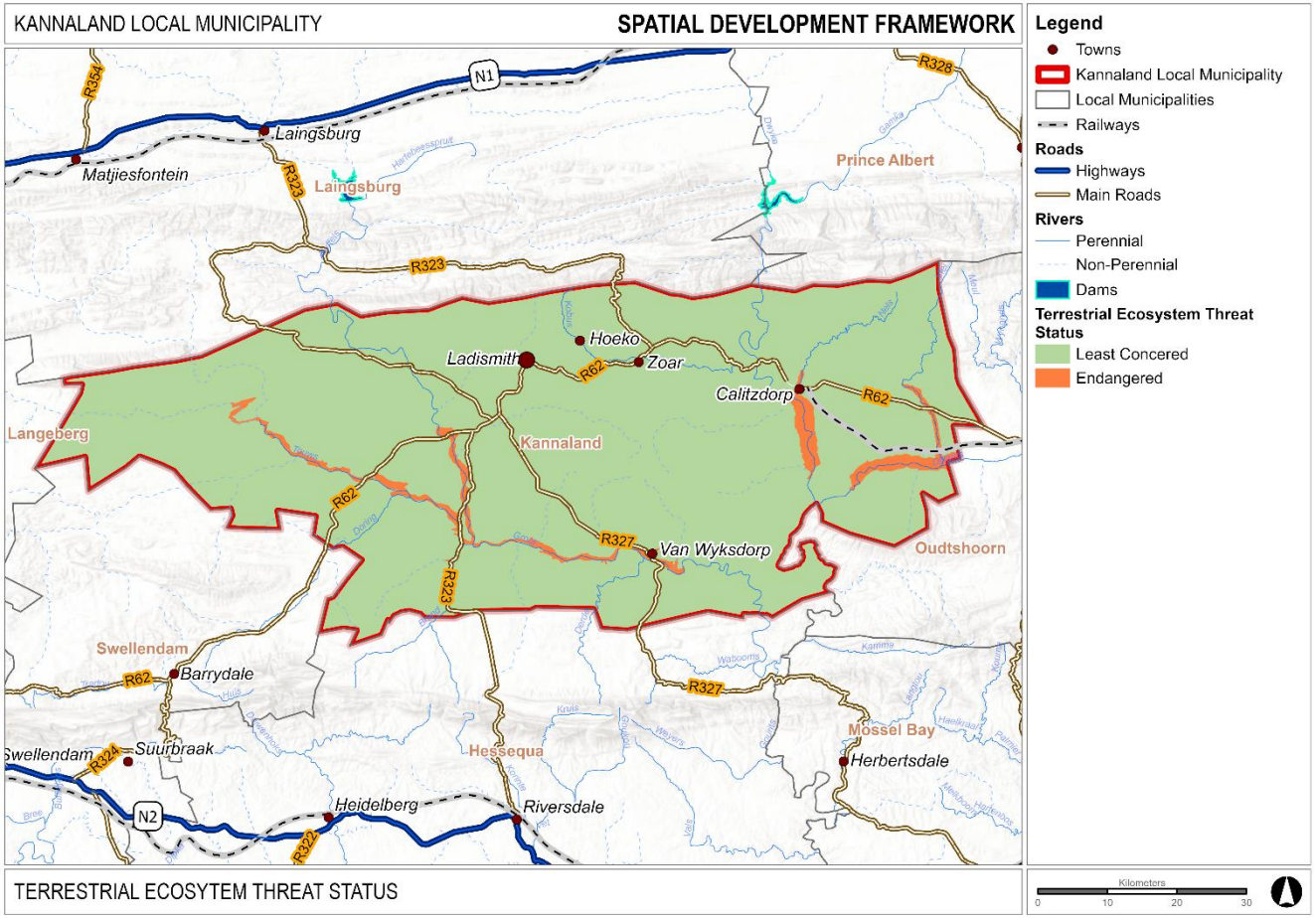
Map 4: Vegetation

3.1.4: Biodiversity Threat Assessment

The primary means of overseeing and reporting on the status of biodiversity in South Africa is the National Biodiversity Assessment (NBA). It serves to guide policies, strategies, and activities across various sectors to enhance the effective management and conservation of biodiversity. The NBA provides a condensed overview of South Africa's biodiversity status and is formulated in accordance with the SANBI mandate under the Biodiversity Act (NEMBA, Act 10 of 2004).

The NBA classifies geographic regions on the status of threat to their biodiversity. They are classified as follows:

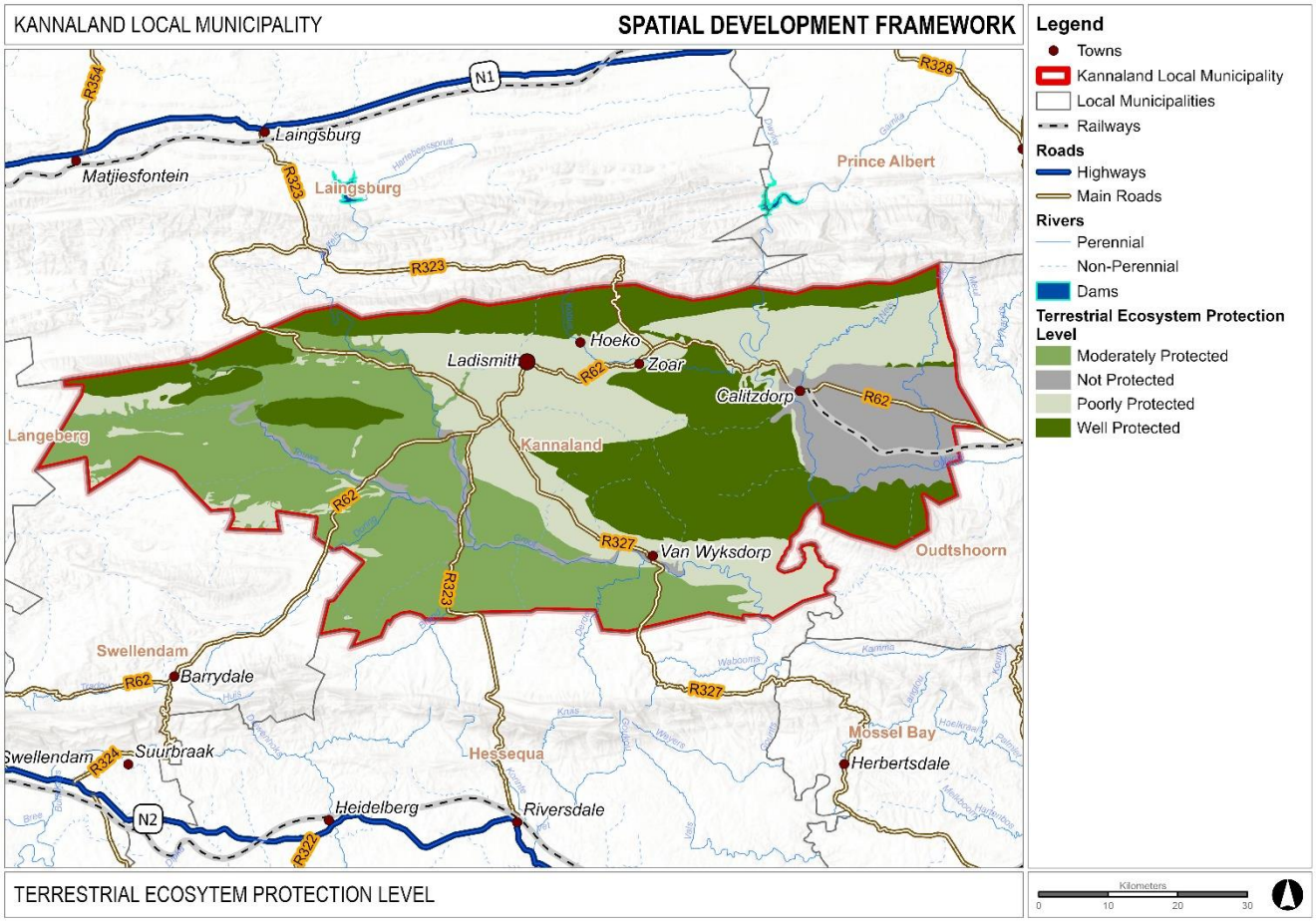
- Critically Endangered – facing an extremely high risk of extinction in the wild;
- Endangered – facing a very high risk of extinction in the wild;
- Vulnerable – facing a high risk of extinction in the wild;
- Near Threatened – close to qualifying for one of the above categories in the near future;
- Least Concern – stable enough that risk of facing extinction in the wild in the near future is unlikely;
- Data Deficient – not enough information to estimate the risk of extinction; and
- Not Assessed – has not yet been evaluated.



Map 5: Terrestrial Ecosystem Threat Status

As illustrated in Map 5, the majority of areas in the municipality fall under the ecosystem threat category of least concern. The endangered areas are shown to exist alongside the Touws, Buffels and Groot Rivers and more so the Olifants and Nels rivers.

Map 6 provides an indication of the levels of ecosystem protection that currently exist throughout the municipality[1]. South Swartberg Sandstone Fynbos, North Swartberg Sandstone Fynbos, South Rooiberg Sandstone Fynbos, North Rooiberg Sandstone Fynbos and Oudtshoorn Karroid Thicket are well protected. Western Gwarrieveld, Montagu Shale Renosterveld, Kango Conglomerate Fynbos, Kango Limestone Renosterveld, Little Karoo Quartz Vygieveld and Gamka Arid Thicket are poorly protected.



Map 6: Terrestrial Ecosystem Protection Level

It is vital that spatial planning promote the restoration and conservation of ecosystems by restricting further habitat loss and creating biodiversity corridors. This would require the limitation of hard development within defined urban development boundaries, encouraging the establishment of reserves and

[1] South African National Biodiversity Institute, 2019

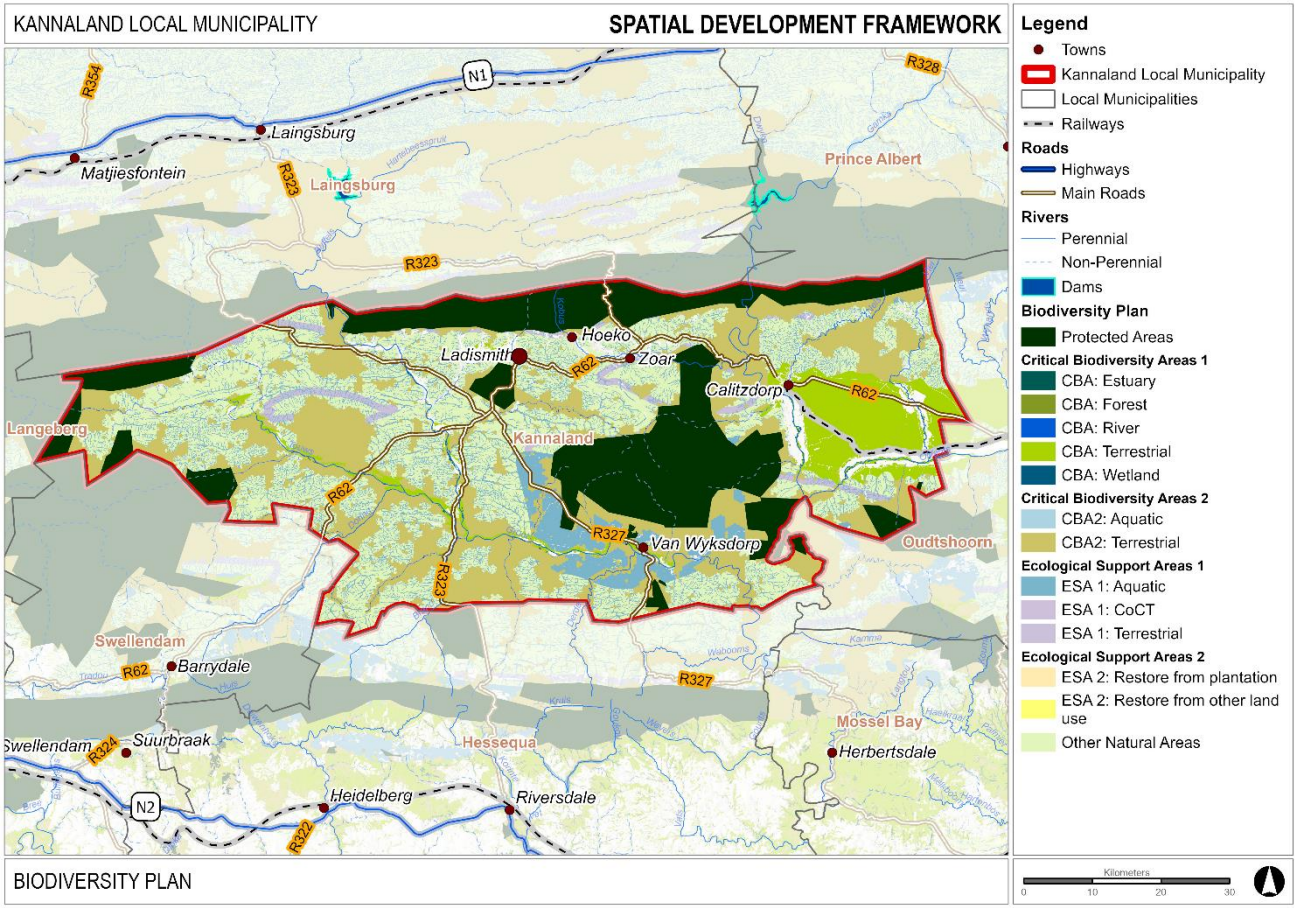
conservation areas and protecting rivers, ridges, wetlands, and other vital resources from urban development and the impact of population growth.

3.1.5: Critical Biodiversity Areas

The critical biodiversity areas in Kannaland Municipality are reflected in Map 7. Critical Biodiversity Areas (CBAs) refer to those terrestrial and aquatic areas that need to be preserved in their natural state to preserve the biodiversity pattern and keep ecosystems functioning (Berliner et al., 2007; Maree and Vromans, 2010).

There are two kinds of CBAs within the LM: irreplaceable (CBA1) and optimal (CBA2). Both CBAs are found close to one another in clusters/pockets but are distributed across the municipality.

The Ecological Support Areas are areas that are critical for supporting ecological processes and providing ecosystem services. These areas include wetlands, and other natural habitats that provide important ecosystem functions such as water purification, carbon sequestration, and soil stabilisation.



Map 7: Critical Biodiversity Areas

Protected areas are defined as regions with a distinct geographic boundary that are designated and administered in accordance with the National Environmental Management: Protected Areas Act 53 of 2000 (NEMPAA).

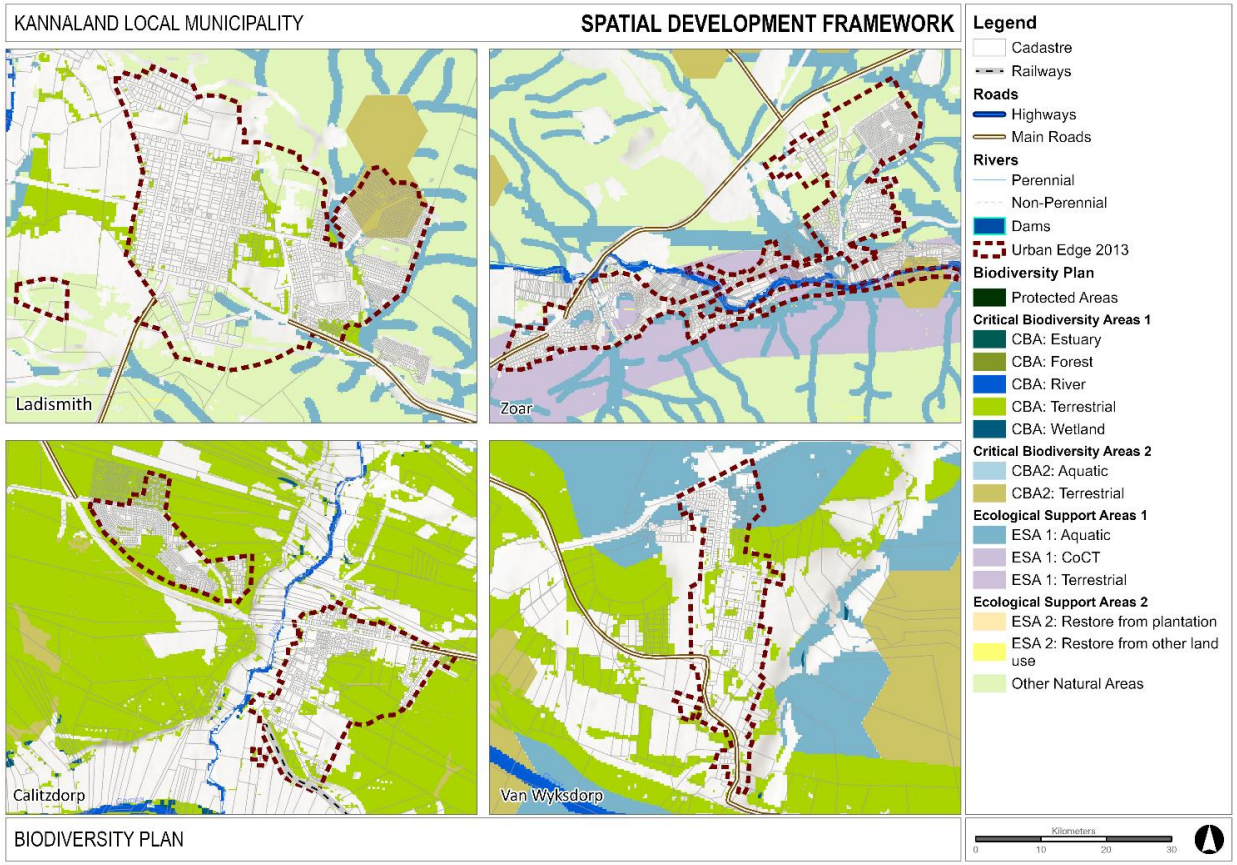
Table 1 gives a statistical overview of the proportion of critical biodiversity areas, ecological areas, protected areas and natural areas across the municipality.

Table 1: CBA, ESA, Protected Areas

Category	Biodiversity Plan Sub Categories	Area (km²)	Percentage (%)
Protected Areas	Protected Areas	1015.51	22.22
Critical Biodiversity Areas	CBA: Wetland	6.17	0.13
	CBA: Terrestrial	326.70	7.15
	CBA: River	32.84	0.72
	CBA2: Terrestrial	1214.74	26.57
	CBA2: Aquatic	0.04	0.00
Ecological Support Areas	ESA1: Terrestrial	78.83	1.72
	ESA 1: Aquatic	544.16	11.90
	ESA 2: Restore from other land use	3.88	0.08
Other Natural Areas	Other Natural Areas	1348.30	29.50
TOTAL		**4571.17**	**100.00**

Below is a list of the protected areas in the municipality:

- Anysberg Nature Reserve
- Anysberg Private Nature Reserve
- Die Poort Private Nature Reserve
- Doringkloof
- Gamkaberg Nature Reserve
- Groenfontein Nature Reserve (Gamkaberg)
- Groot Swartberg Nature Reserve
- Grootvadersbosch (Thornhill) - WWF land
- Klein Swartberg Mountain Catchment Area
- Kleinberg Private Nature Reserve
- Ladismith-Kleinkaroo
- Paardenberg Nature Reserve
- Part of Wolwekop
- Rooiberg Mountain Catchment Area
- Rooiberg Nature Reserve
- Rooiolifantskloof
- Taayskloof Private Nature Reserve
- The Eyerpoort Private Nature Reserve
- Towerkop Nature Reserve
- Vaalhoek Nature Reserve (Gamkaberg)



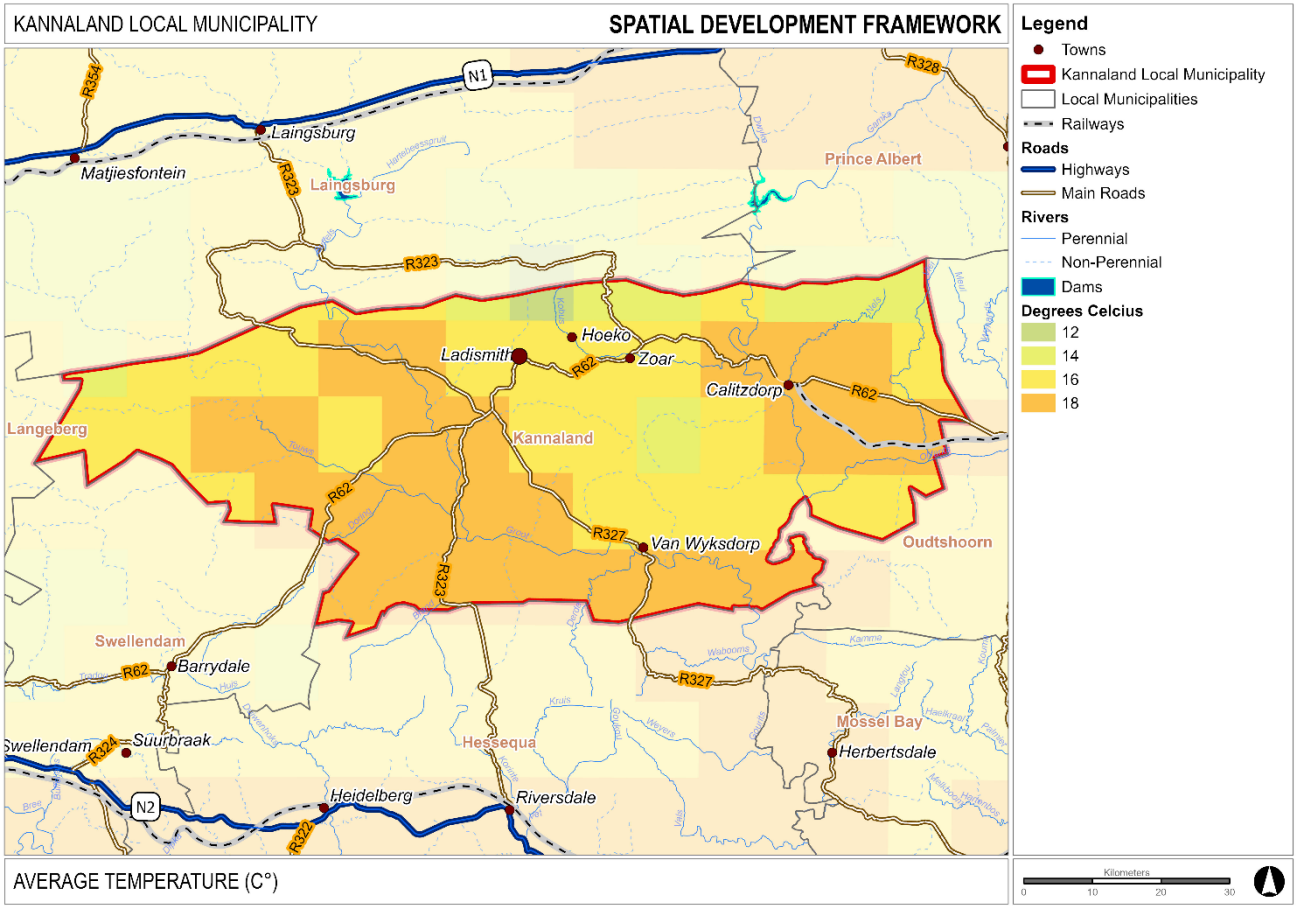
Map 8: Biodiversity Plan on town scale

3.1.6: Climate

Climate is generally defined as the weather conditions prevailing in an area in general or over a long period. It influences the nature of the natural landscape, availability of water resources, and the varieties of flora. The number of days that experience sunshine, rainfall and the frequency and strength of wind are important in terms of the availability of renewable energy.

3.1.6.1: Temperature

The average annual high temperature ranges between 12 Degrees Celsius (°C) and 18 °C[2]. Kannaland experiences the hottest temperature on average in March and the coldest temperature on average in July. The wettest months in Kannaland are March and June.[3]

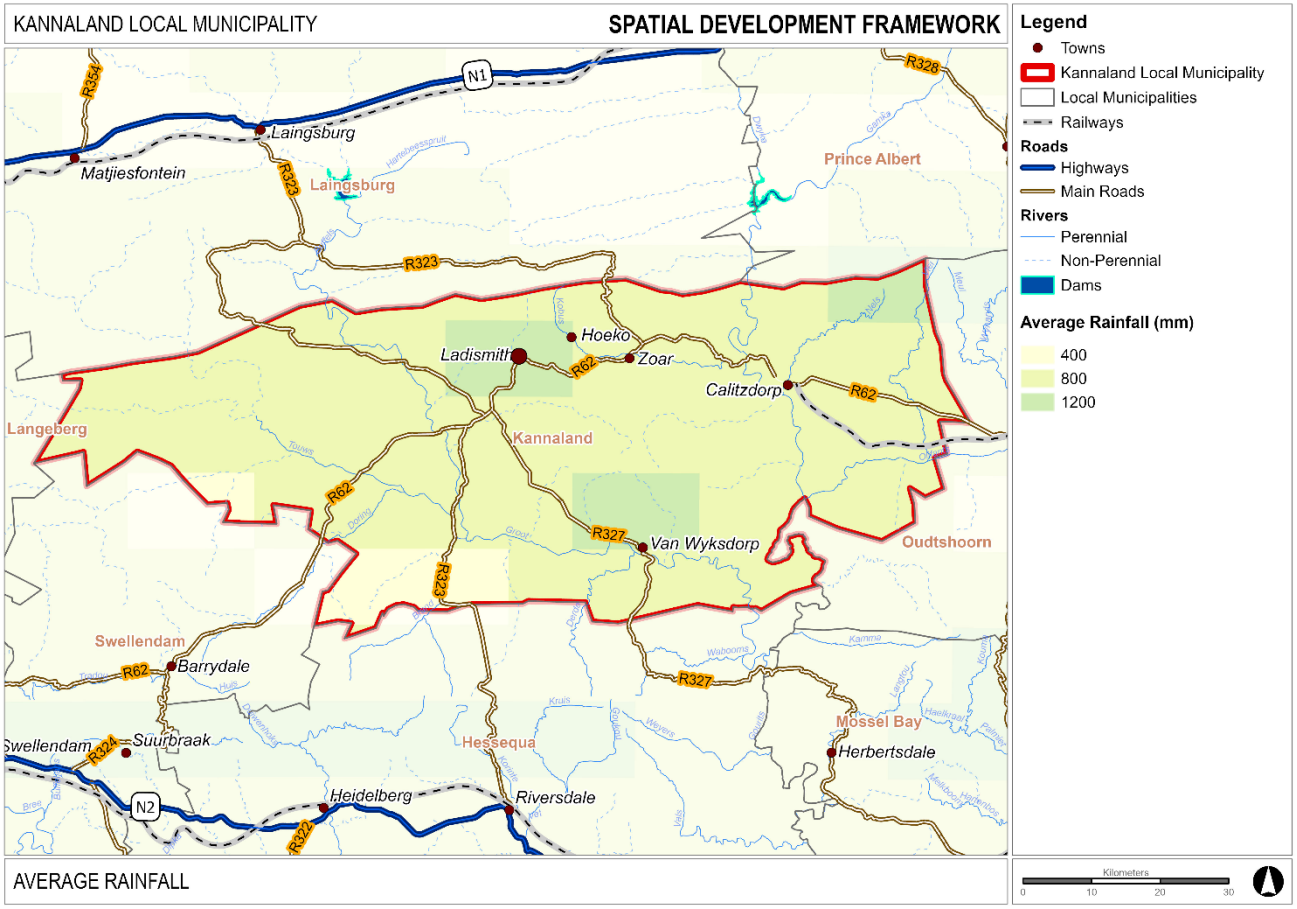


Map 9: Average Annual Temperature

[2] Green Book Municipal Risk Profile (CSIR), 2019
[3] https://weather.tomorrow.io/ZA/WC/

3.1.6.2: Rainfall

According to Map 10, the Municipality experiences an average annual rainfall of 400mm to 1200mm. Most of the municipality experiences a rainfall of 800mm[4] whereas the areas surrounding Ladismith, north of Van Wyksdorp and to the north-east of the Municipality experience higher measures of up to 1200mm.



Map 10: Average Annual Rainfall

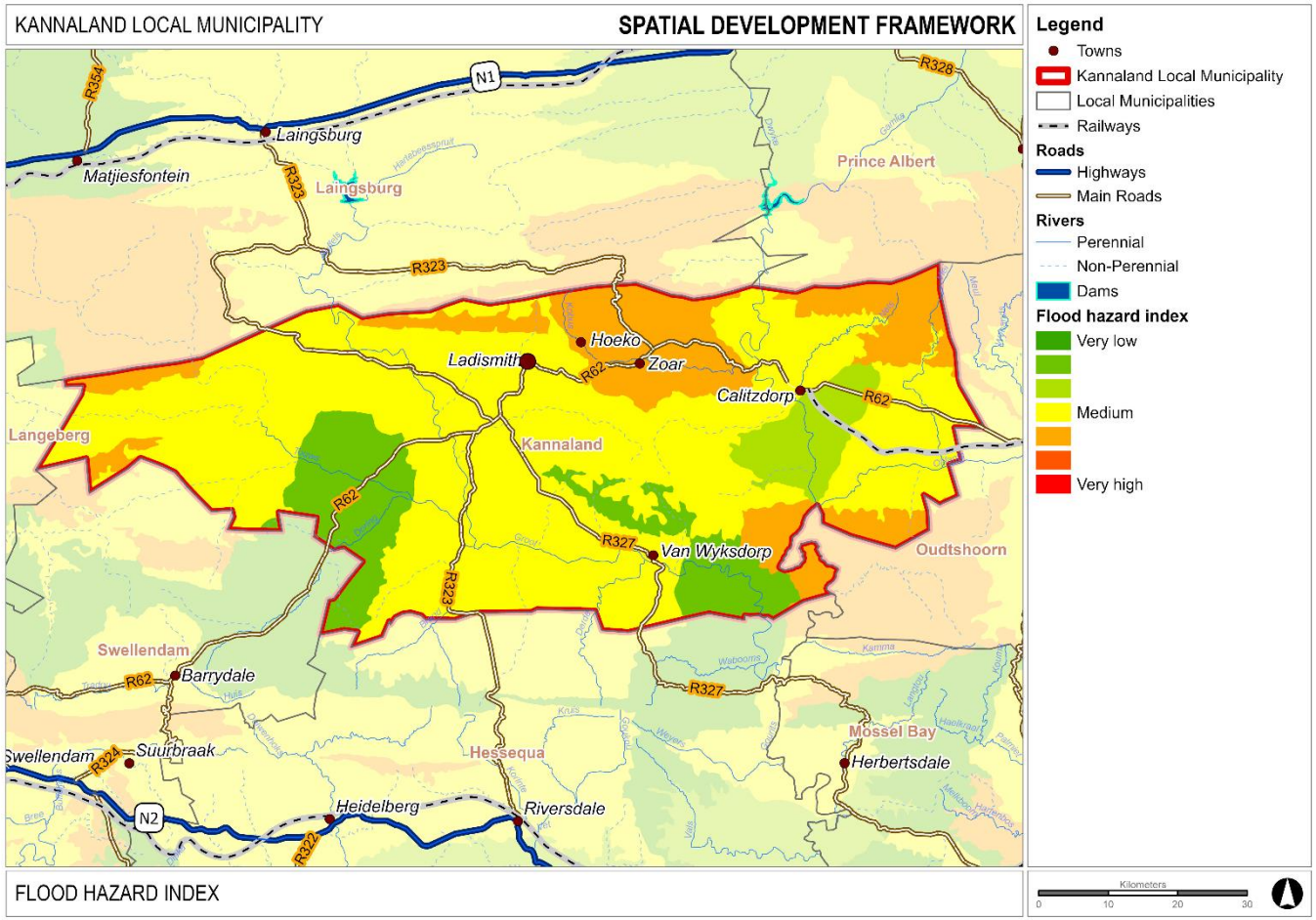
[4] Green Book Municipal Risk Profile (CSIR), 2019

3.1.7: Natural Disasters

3.1.7.1: Flooding

Floods are likely to occur in low-lying areas, near water, downstream from dams, and where stormwater management is poor. Flash floods typically commence within a few minutes to under 6 hours following heavy rainfall (Jalayer et al., 2018). Flash floods frequently bring about a dangerous surge of rushing water, carrying mud, rocks and assorted debris that can sweep away almost anything in its path.

On the flood hazard index shown in Map 11, a medium measure accounts for the vast majority of the municipality, followed by medium-to-high around Hoeko and Zoar and a few smaller areas to the east of the municipality[5].



Map 11: Flood Hazard Index

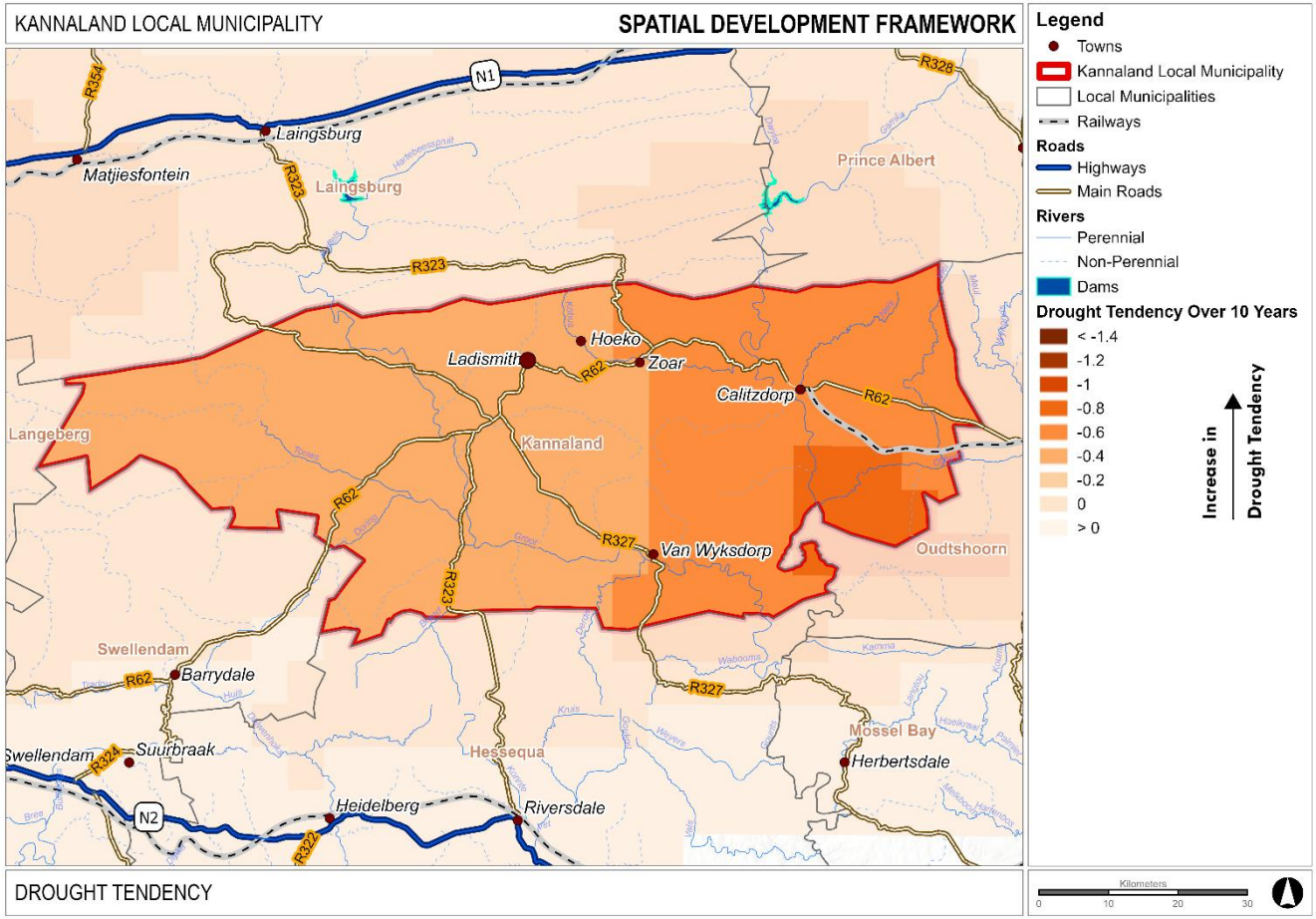
[5] Green Book Municipal Risk Profile (CSIR), 2019

3.1.7.2: Drought Tendency

Droughts are known to impact both natural resources and human development. Globally, it disrupts agricultural production, leading to notable food and health insecurities, as well as habitat loss due to land degradation and desertification. (Smakthin and Schipper, 2008).

The accompanying map measures the drought tendency in the municipality from zero as the lowest tendency and higher tendencies as the figure regresses into negative figures. The regression in negative figures indicates an increase in drought tendencies over a 10-year period. This is more frequent than the observed baseline which analysed the pattern of flooding over a period of 10 years.

The drought tendencies are generally medium to high across the municipality. Medium areas occur to the west with a score of -0.4 (including Ladismith), regressing to a score to -0.6 towards the east (including Van Wyksdorp and Calitzdorp). [6]



Map 12: Drought Tendency

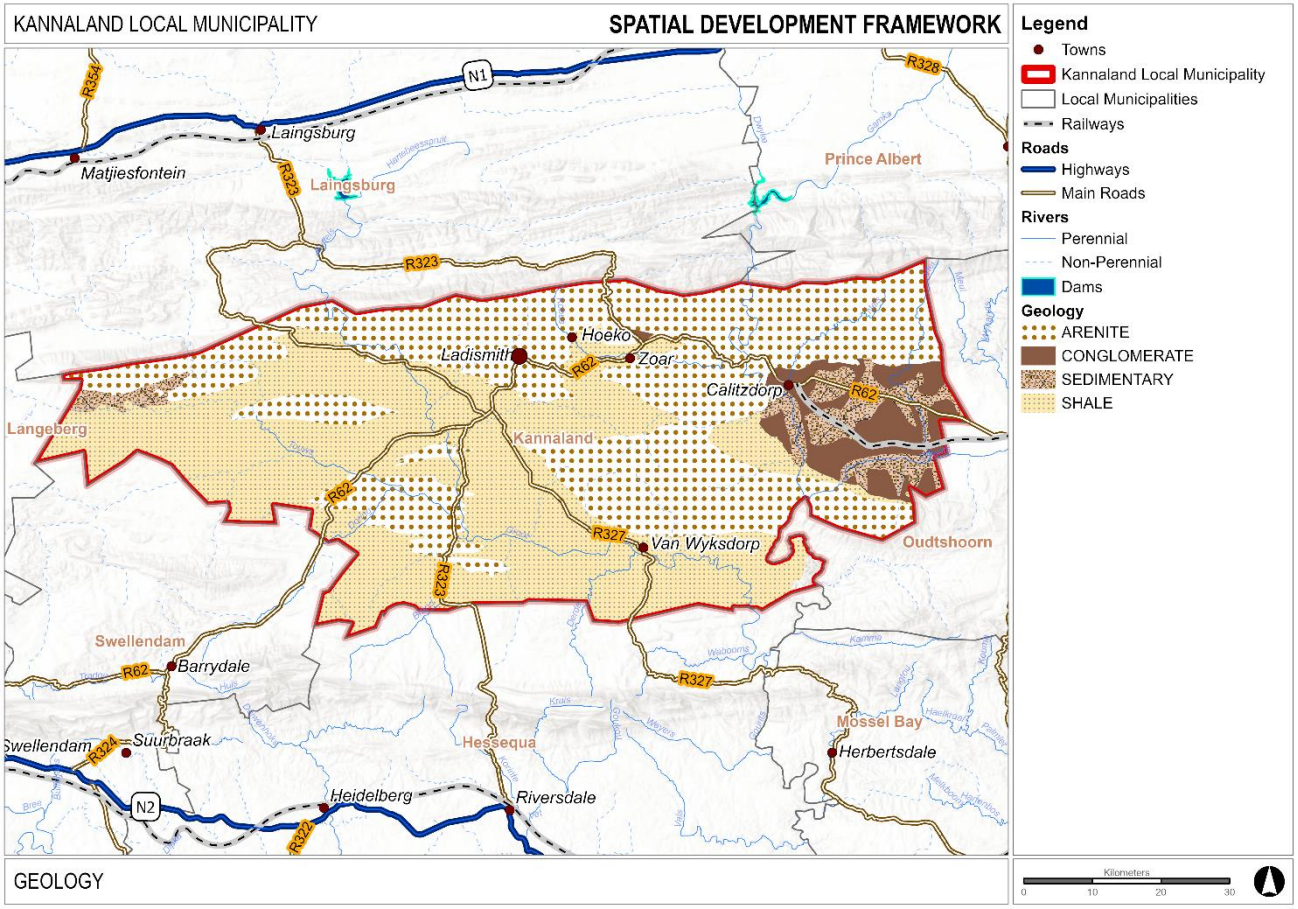
[6] Green Book Municipal Risk Profile (CSIR), 2019

3.1.8: Geology, Soils and Minerals

The municipality contains four distinct geological formations: Arenite, Conglomerate, Sedimentary, and Shale deposits. Arenite and Shale are the most prevalent, with Arenite being found mainly in the north and east, along with some scattered areas in the west, while Shale is concentrated in the south.

Arenite is a type of sedimentary rock composed of medium-grained sand, typically formed through the erosion of other rocks or the accumulation of sand deposits. Shale is primarily composed of clay minerals and quartz grains, is usually gray in color and forms in slow-moving waters such as lakes, lagoons, river deltas, and floodplains.

Conglomerate rock is present predominantly east of Calitzdorp. It is a sedimentary rock characterized by rounded fragments larger than sand, held together by a cementing material.



Map 13: Geology

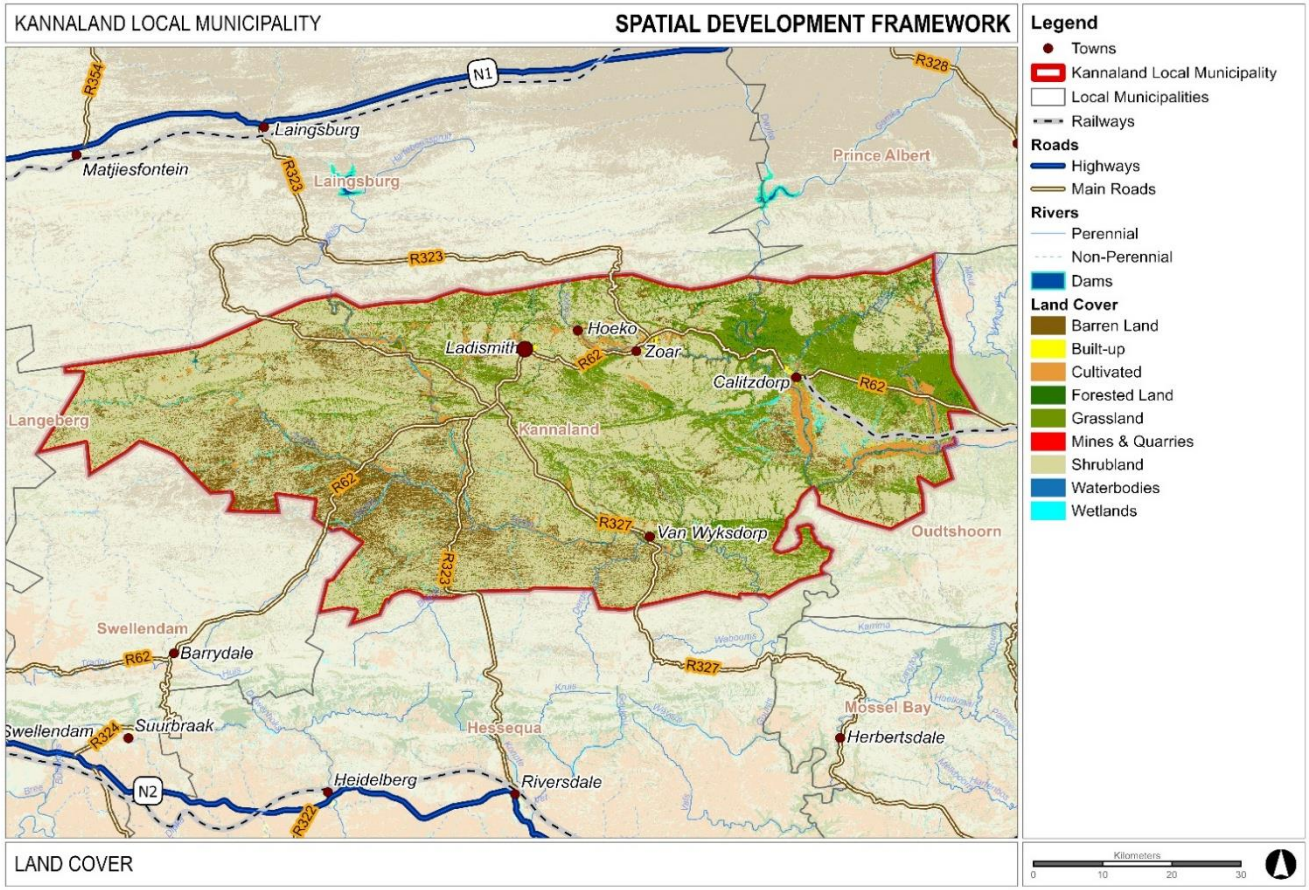
Small, scattered pockets of sedimentary rock can be found in the western and eastern parts of the municipality. Sediments are composed of mineral and organic deposits transported by wind, water, mass movement, or glaciers.

3.1.9: Land Cover

Land cover is generally defined as the physical material at the Earth's surface, which includes vegetation cover, bare land, waterbodies, built-up land, trees/forest, etc. The accompanying map depicts the land cover in Kannaland Municipality classified by the following uses:

- Built-up Area (0.43%),
- Cultivated Land (3.44%),
- Grassland (19.21%),
- Forested Land (2.33%),
- Barren Land (13.10%),
- Shrubland (60.29%)
- Wetlands (1.08%),
- Mines & Quaries (0.01%), and
- Waterbodies (0.11%).

Shrubland accounts for the vast majority of the area followed by grassland spreading to almost the entire region. The waterbodies and wetlands also account for a considerable part of the municipality, followed by built-up land, forested land, mines and quarries, and barren land constituting the lowest land cover.[7]



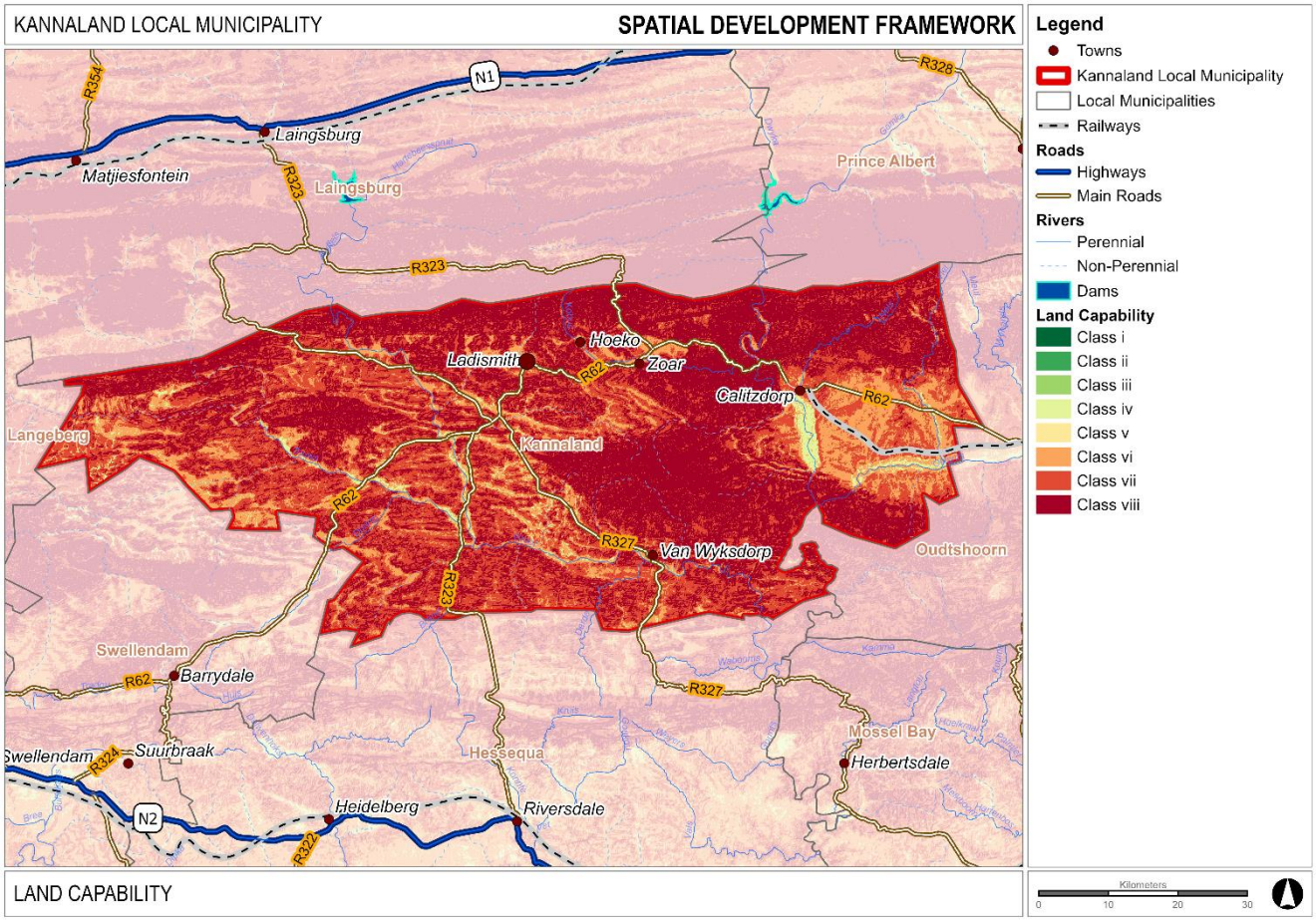
Map 14: Land Cover

[7] Department of Forestry, Fisheries and the Environment (National land cover dataset), 2020

3.1.10: Land Capabilities

Land capability is generally defined as the extent to which land can meet the needs of one or more uses, under defined conditions of management, without permanent damage. Land capability is ascertained through the combined influence of soil composition, topography, and climatic conditions, indicating the optimal and sustainable utilisation of land for rain-fed agricultural activities over an extended period. According to Klingebiel and Montgomery (1961) land capability is divided into eight classes (i to viii) (seeTable 2 below). The shaded area indicates the suitable land use for a particular class. The land capability is further defined in four orders (order A to D):

- **Order A:** Arable land – high potential land with few limitations (Classes i and ii);
- **Order B:** Arable land – moderate to severe limitations (Classes iii and iv);
- **Order C**: Grazing and forestry land (Classes v, vi, and vii); and
- **Order D:** Land not suitable for agriculture (Classes viii).



Map 15: Land Capabilities

Table 2: Land capability classes – intensity of land uses.

LAND CAPABILITY			Wildlife	Grazing and Forestry			Crop production			
Order		Class		Forestry	Veld	Pastures	Limited	Moderate	Intensive	Very
Arable	A	i								
		ii								
	B	iii								
		iv								
Non arable	C	v								
		vi								
		vii								
	D	viii								

Source (Klingebiel and Montgomery, 1961)

Map 15 shows the land capability for Kannaland Municipality.

The municipal land capability is divided into eight classes, where classes i, ii, iii, and iv represent arable land, where land is suitable for agriculture; and classes v, vi, vii, and viii are attributed to non-arable land where land is not suitable for agriculture.

Map 15 shows that most of the centre of the municipality and spreading to the northern parts are attributed to classes vii and viii land capability, where land is non arable and is suitable for grazing and forestry. [8]

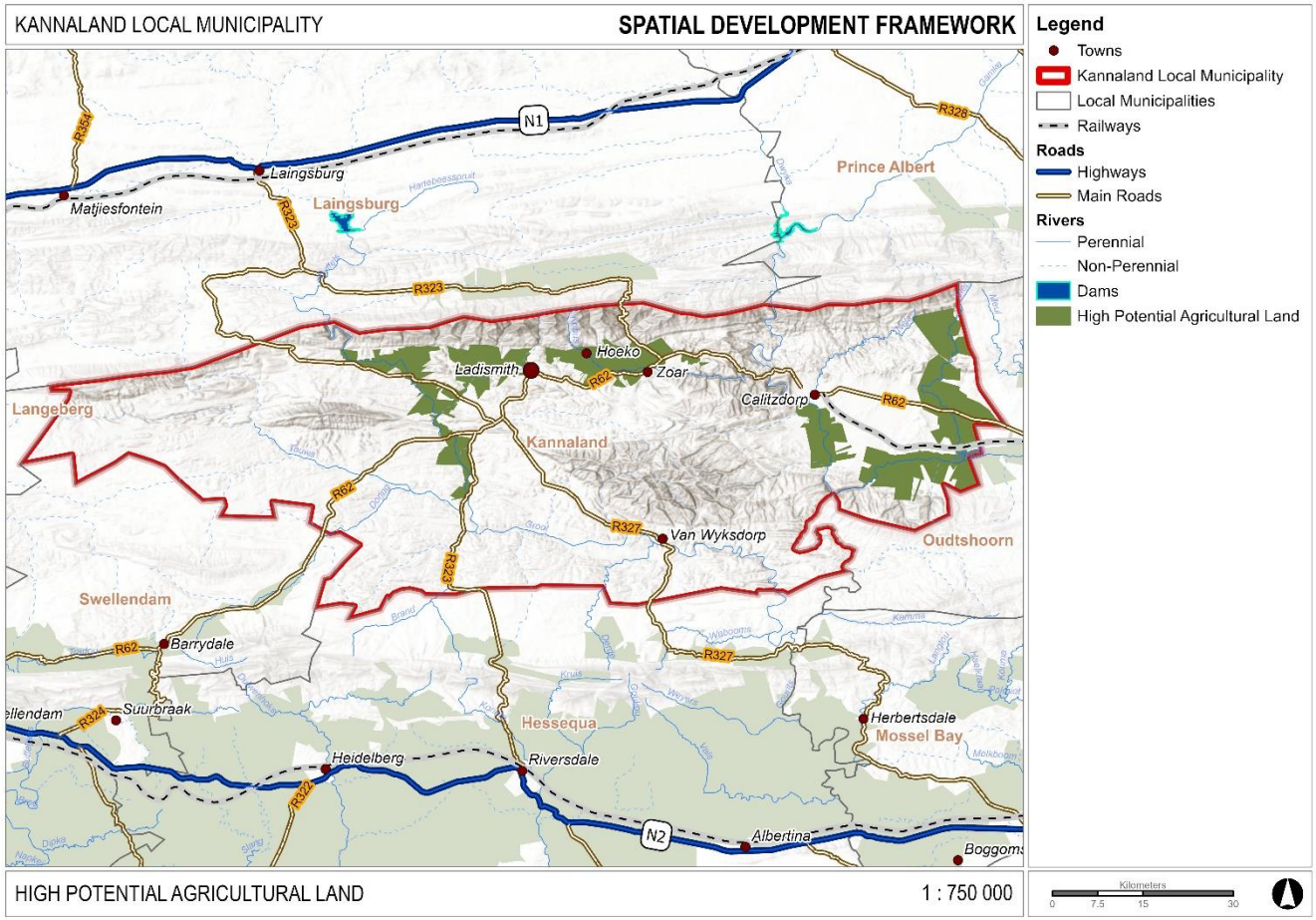
[8] Department of Agriculture, Land Reform and Rural Development, 2016

3.1.11: Agricultural Potential

Most of the municipality is covered with grass and shrubs. Agricultural activities in the Kannaland Municipality are largely shaped by the region's soil types and water availability, which together determine the area's natural resource potential. These factors create favorable conditions for various types of farming, including field crops, horticulture, and livestock production.

The municipality is also home to two cheese manufacturing plants located in Ladismith. Their presence suggests potential for further expansion of agro-industries in the region. Both existing plants are operating successfully and have expressed interest in expanding their operations.

According to Scotney et al. (1987), high-potential agricultural land is defined as having the necessary soil quality, terrain characteristics, growing season, and moisture supply to sustain high crop yields when managed using best farming practices. Map 16 highlights where the high-potential agricultural areas are located. It is evident that the most suitable agricultural land is concentrated in the eastern, central and northern regions of the municipality.



Map 16: High Potential Agriculture Land

3.2: Built Environment

3.2.1: Settlement Typology

The CSIR developed a spatial planning tool, as outlined in the 2015 publication "Updated CSIR/SACN South African Settlement Typology" by Van Huyssteen et al., which determined functional settlement typologies. This tool aids in identifying, calculating, and analysing a variety of developmental information and trends across different urban and rural settlements in South Africa. In developing this tool, the CSIR introduced several settlement types, as detailed in Table 3, to encapsulate the South African planning context. In its 2018 report, the CSIR stated that these typologies are designed to offer evidence and analysis for spatial planning, along with modelling outputs. This approach is intended to support government planning, emphasise strategic regional, inter-regional, and intergovernmental planning, as well as resource allocation, monitoring, and evaluation.

Table 3: CSIR Settlement Typology

Regional location and service role	Description of functional town-area types
Service towns	- Population: 15,000-100,000 people; - Economy: Economic and social service anchor role to hinterland
Small service towns	- Population: <20,000 people; - Morphology: Monochrome small town; - Local service role: Playing an anchor role as social service point, serving a large number of people within 30km from the town in denser areas and within 50km in sparser areas; - Economy: Government and community services
Rural service settlement	- Population: Varied in nodal settlement, large population in direct hinterland; - Morphology: Emerging nodes of consolidation in dense rural settlements; - Local service role: Strategically located to play an anchor role as social service point, serving a large number of people within 30km from the town in denser areas and within 50km in sparser areas
Small towns	- Population: <20,000 people; - Morphology: Monocentric small towns, often apartheid landscape with double centre towns; - Economy and service role: Primarily serve local population and/or 'niche' economic activity such as mining, tourism or fisheries.

National Network of Rural Service Centres

- Rural development must be supported through a network of prioritised service centres where people in rural areas and settlements can be optimally supplied with municipal and social services, and where rural logistics and support can be provided to support rural development.
- Specific support must be provided to (1) towns that act as border towns and trade posts, and (2) growing towns in border regions.
- In dense rural settlement regions, consolidation within nodal centres and rural design is required.

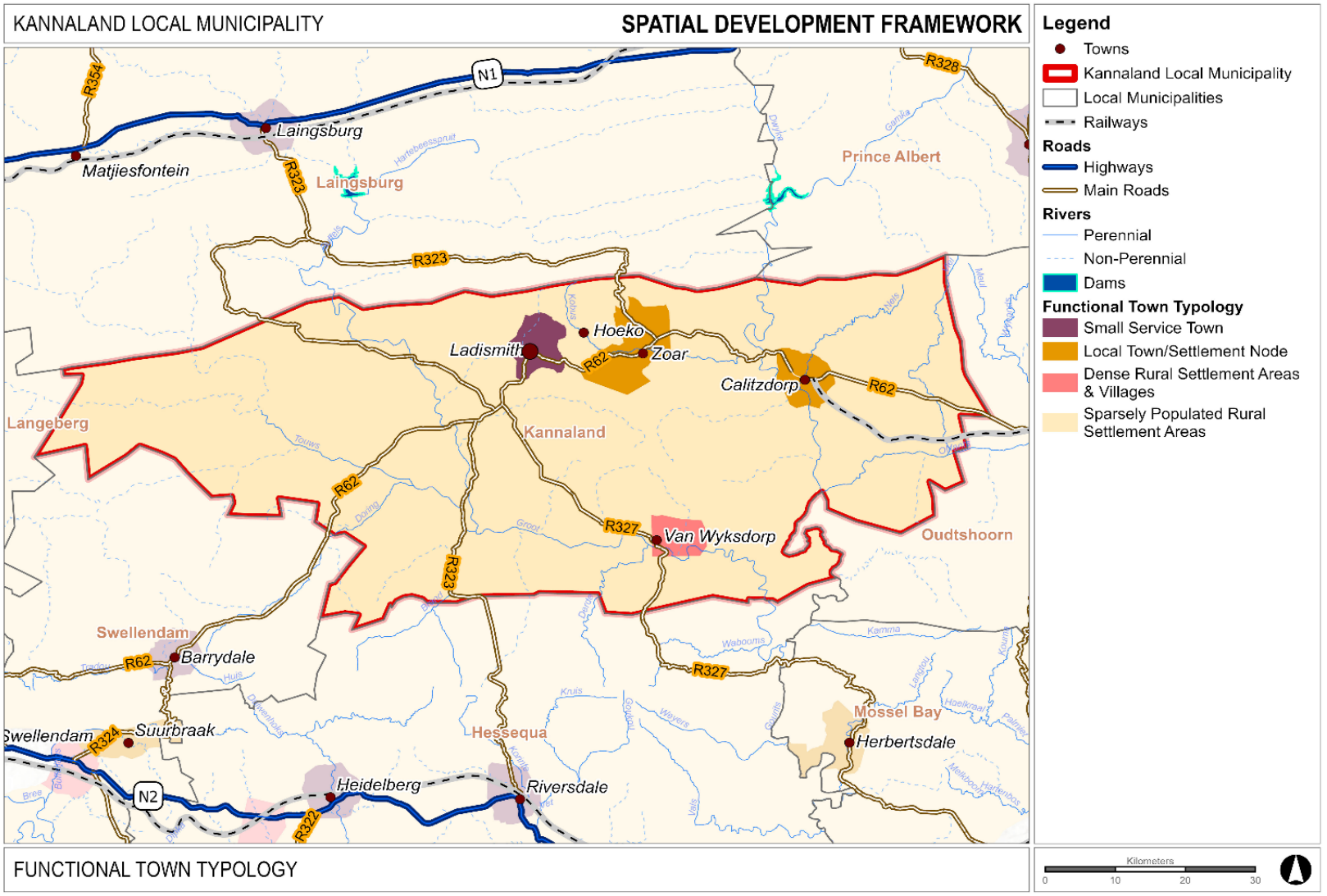
Other Smaller Towns and Settlements in South Africa

- Consolidate and provide basic services to the local population in a network of small towns and settlements.
- Urban consolidation and basic service delivery in growing regions must keep pace with population growth and economic development.
- In densely populated and growing rural regions, (1) settlements must be consolidated in nodes, and (2) spatial planning and rural design must be done to ensure managed and quality future settlement development.
- In areas that are ecologically sensitive, experience harsh climatic conditions, and are set to experience even harsher conditions in future, existing settlement expansion and new settlement formation/development must be discouraged.

The above settlement classifications propose a systemic view of rural areas, identifying polycentric functional rural regions with well-connected regional anchors, social, cultural, historical, economic, and cultural characteristics for development over time.

In consideration of the principles of the CSIR Settlement Typologies, the NDP settlement classifications and the Social Service Provisioning Model, the following hierarchy of towns can be identified within the municipality, as shown in Map 17.

- Ladismith is a small service town that has the largest population and number of economic activities, including manufacturing.
- Calitzdorp and Zoar are settlement nodes with less economic activity.
- Van Wyksdorp is a dense rural settlement.



Map 17: Functional Town Typology

3.2.2: Land Use Patterns

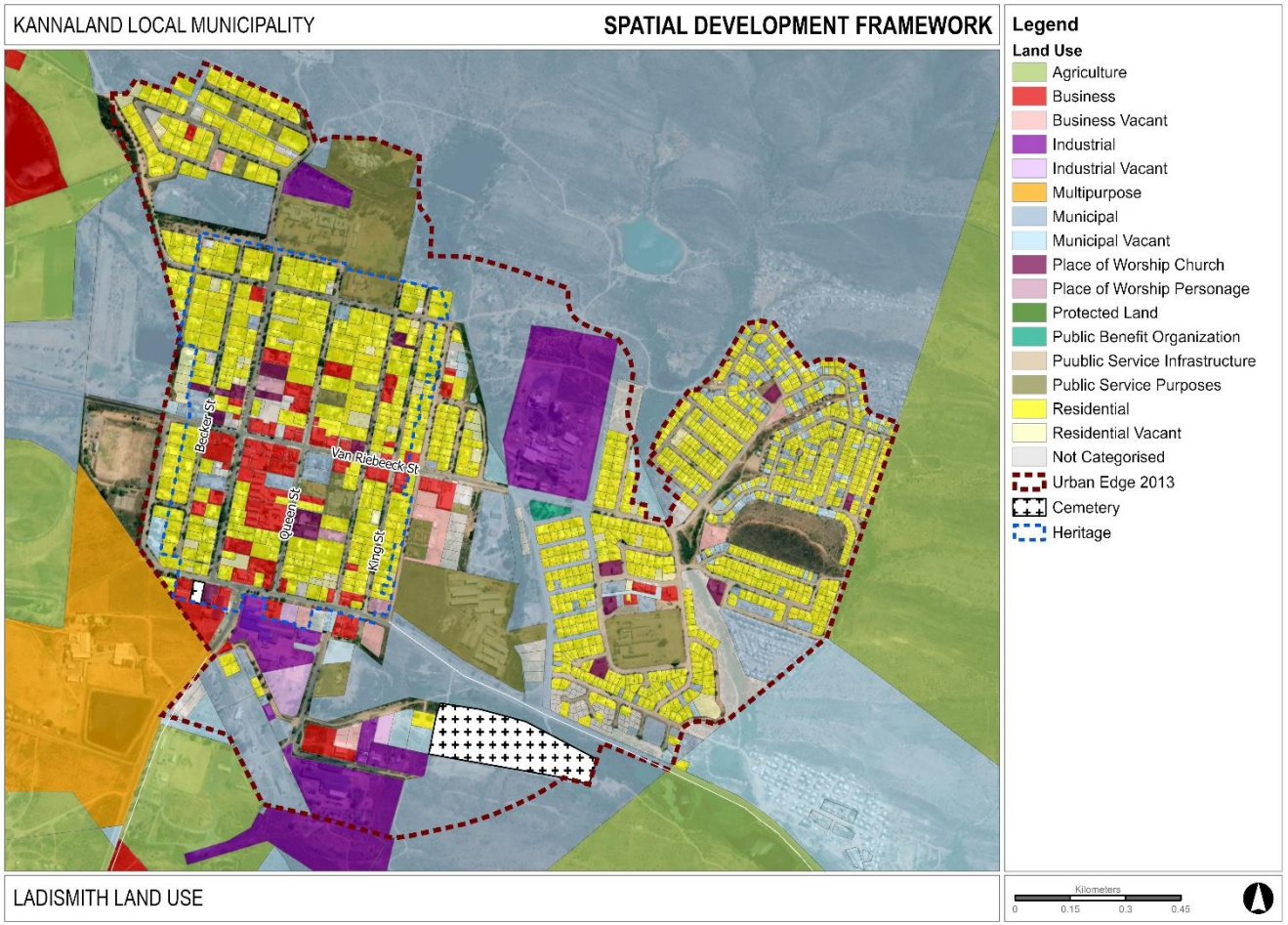
The following information is based on the valuation role which was used to determine the land use within the municipality.

3.2.2.1: Ladismith

Ladismith is a small service town located along the R62 tourism route. The R62 has significant economic benefits for the town, the majority of which is located to the north of this route.

There is a good distribution of residential and non-residential land uses in Ladismith. There is a concentration of business along the main roads (Van Riebeeck Street and Queen Street).

A portion of a site zoned for industrial use is located on the south of the town and falls outside of the urban edge. The land between Becker Street and King Street is situated within a heritage area.

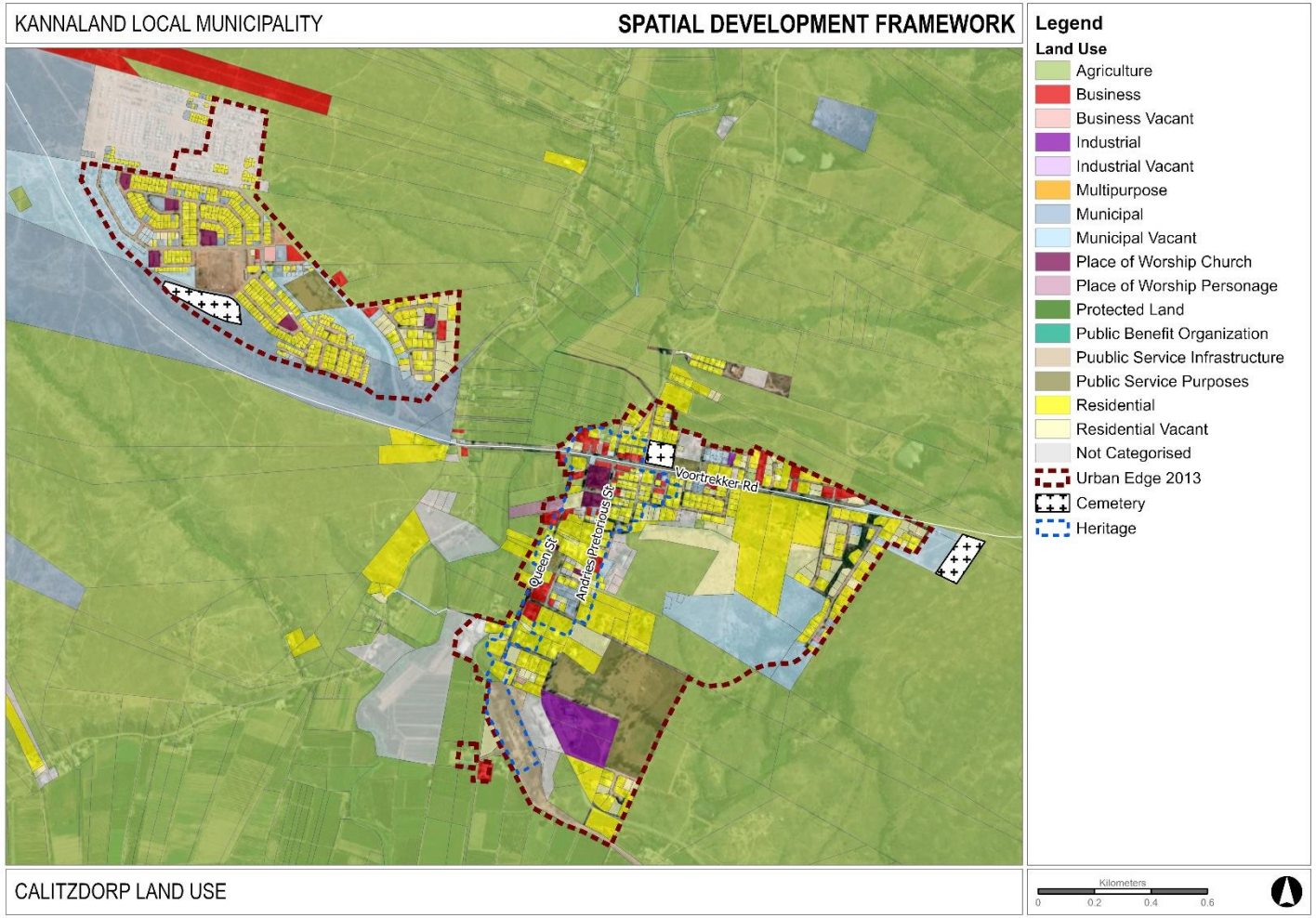


Map 18: Ladismith Land Use

3.2.2.2: Calitzdorp

Calitzdorp is a local town/ settlement node which is also known as the "Port Wine Capital". It is also located along the R62 tourism route along which various opportunities for business development exist such as restaurants, art galleries and accommodation.

There is a good distribution of residential and non-residential land uses as well as a concentration of business along the main road (Voortrekker Road). There are numerous properties zoned for residential, municipal and business uses located outside of the northwestern urban edge that's needs amendment. The land between Queen Street and Andries Pretorius Street exists within a heritage area. There are a number of properties that are not categorised meaning they do not reflect under any land use according to the valuation roll of the municipality.

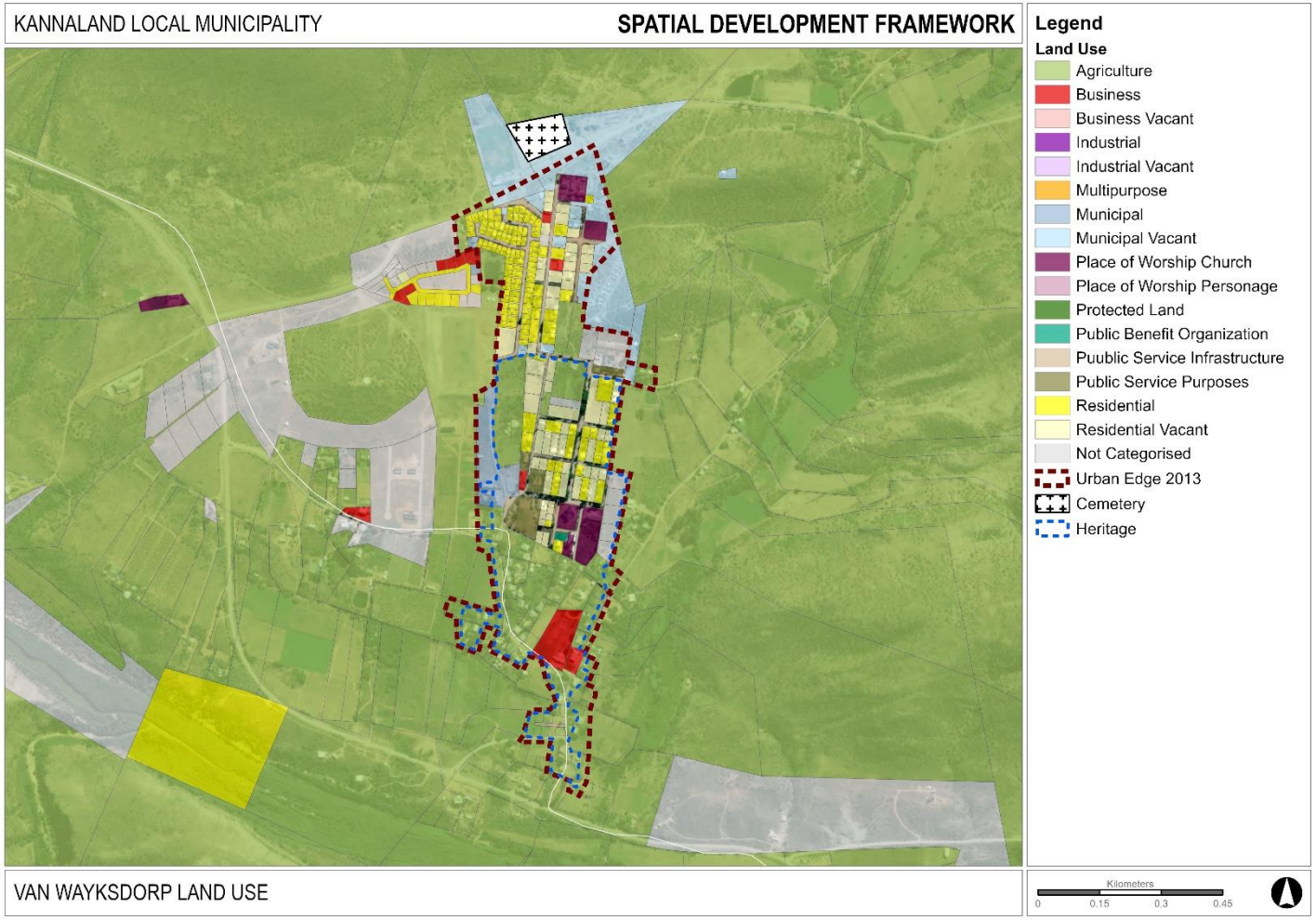


Map 19: Calitzdorp Land Use

3.2.2.3: Van Wyksdorp

Van Wyksdorp is a dense rural settlement that is located along the R327, approximately 42km south of Ladismith. It has a linear/elongated layout and is framed by agriculture on nearly all sides.

According to the valuation roll there are a number of vacant residential properties in Van Wyksdorp suggesting considerable opportunity for *infill development*, potentially allowing for population growth without expanding the urban footprint.



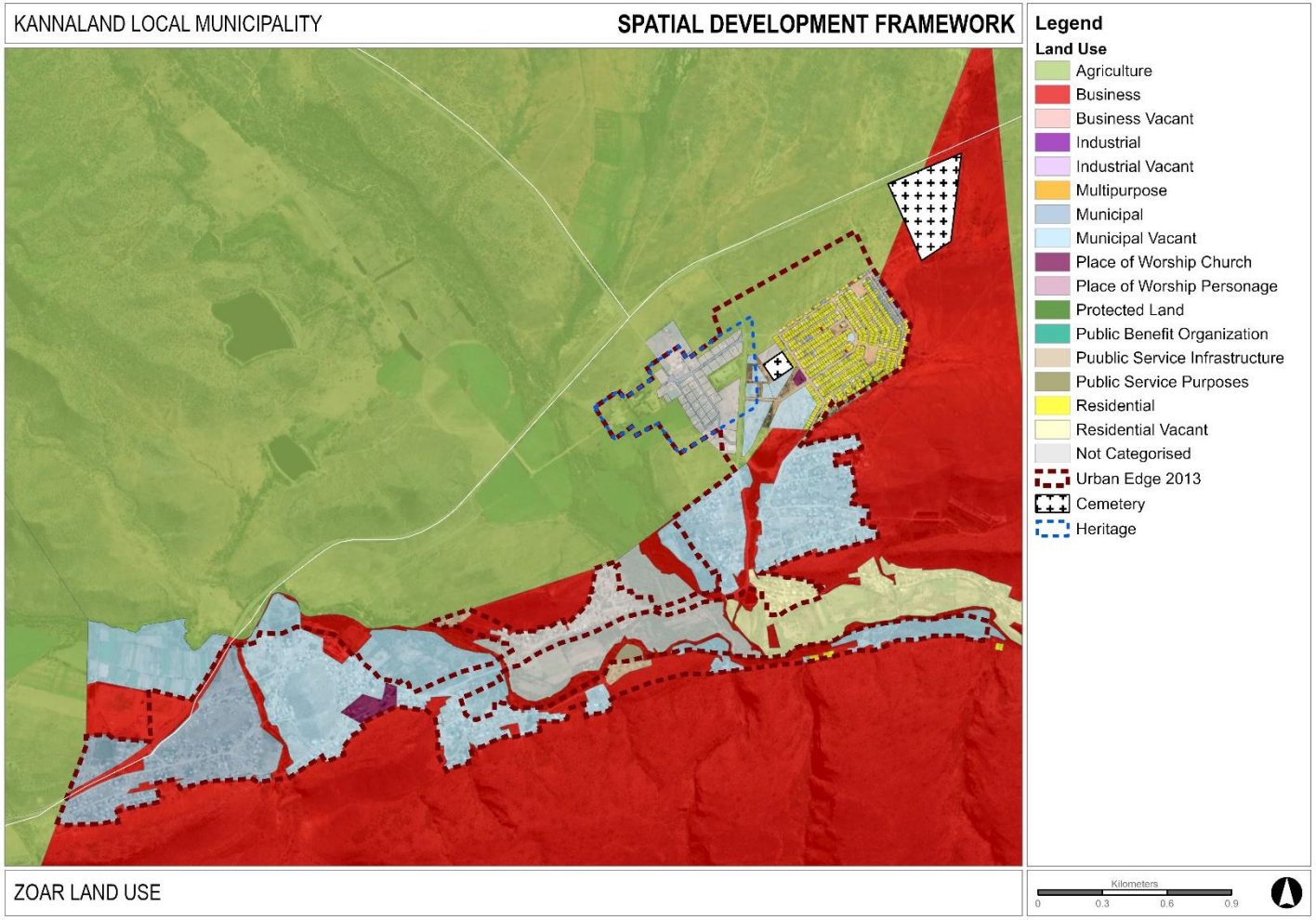
Map 20: Van Wyksdorp Land Use

3.2.2.4: Zoar

Zoar is rural settlement which is located along the Nels River and R62. There are very limited commercial opportunities. According to the valuation roll, most of the land use falls under business. There isn't a good distribution of land uses.

Residential land uses are located on the east and other land uses are located towards the west of the settlement.

The settlement has a lot of land zoned as municipal land to the west.



Map 21: Zoar Land Use

3.2.3: Human Settlements

Figure 2 illustrates the number of households in the municipality contained in each housing typology in the years 2011 and 2022. During both periods, the majority of households within the municipal area resided in formal dwellings whereas 3.5% of households lived in informal dwellings in 2022 compared to 2.6% in 2011. The increase in informal dwellings from 2022 to 2011 reflects that there is room for improvement in enhancing the living conditions of vulnerable households in the municipal area.

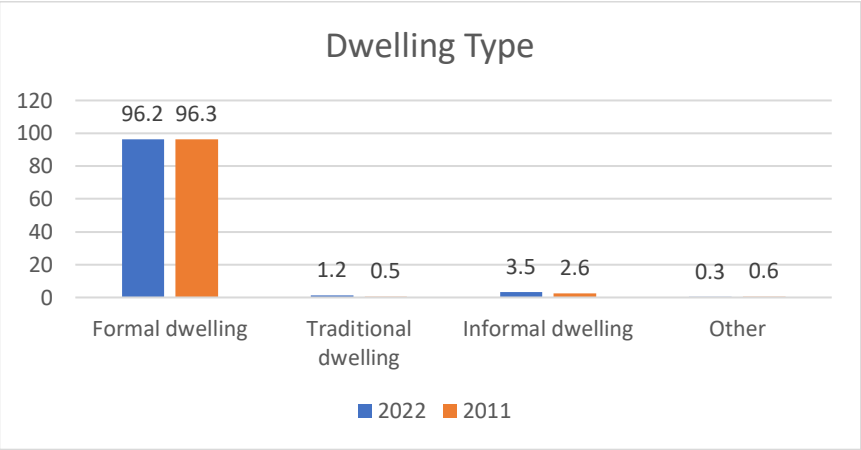


Figure 2: Dwelling type

Source: 2024 Socio-Economic Profile: Kannaland Municipality (Western Cape Treasury) and Census 2011

3.2.3.1: Housing Waiting List

The Western Cape Province under the Department of Infrastructure put together a report which analysed housing data that was generated by the Western Cape Housing Demand Database and City of Cape Town (CoCT) Housing waiting list. According to the report, 3420 applicants were recorded on the housing waiting list. A breakdown of the towns in which these applicants are located is given in Table 4. It is evident that most of the population are based in Ladismith followed closely by Calitzdorp.

Table 4: Housing demand by locality

Area	Total Housing Demand
Ladismith	1 321
Zoar	545
Calitzdorp	1 093
Van Wyksdorp	126
Not identified	335
Total	**3 420**

Source: Western Cape Housing Demand Database, 2024

Figure 3 indicates the preference of residents to live in various locations in the Municipality. Figure 3 shows that the majority of applicants prefer to live in Ladismith as compared to Van Wyksdorp (5%). This could be attributed to a number of reasons such as the perceived lack of economic opportunities in Van Wyksdorp or the distant location of Van Wyksdorp in the south of the municipality relative to the other towns which are closer together.

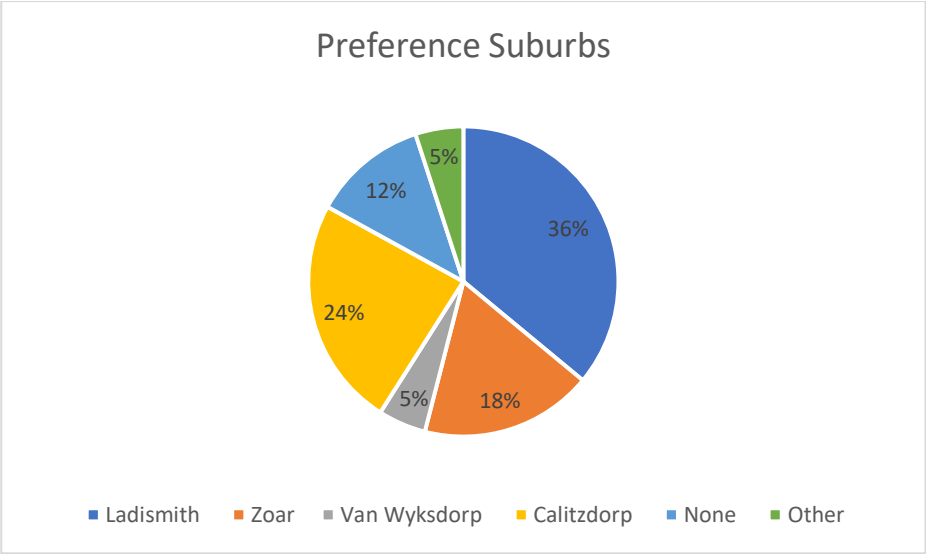


Figure 3: Preference Suburbs

Source: Western Cape Housing Demand Database, 2024

Figure 4 illustrates the income bracket per household in the municipality and it is clear that the majority of households earn between R0 – R3 500, which is very low. This shows that more households depend on the provision of housing from the government.

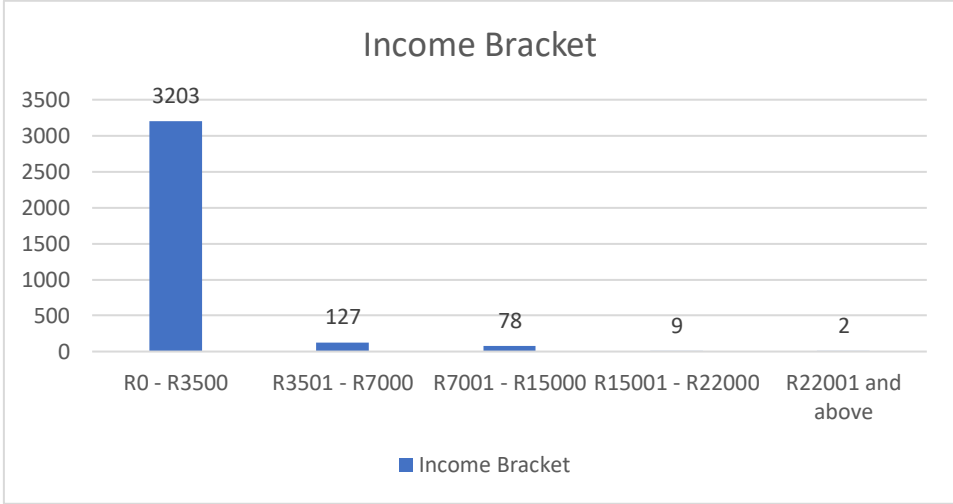


Figure 4: Income bracket

Source: Western Cape Housing Demand Database, 2024

3.2.3.2: Informal Dwelling Count

Table 5 reflects the number of informal dwellings within the municipality. There is total of 306 shacks within the municipality, the majority of which are located in Ladismith and Zoar.

Table 5: Informal Dwelling Count

Towns	No of shacks
Ladismith	206
Zoar	45
Calitzdorp	28
Van Wyksdorp	27
Total	306

Source: 5th Generation Kannaland Integrated Development Plan 2022-2027

Table 6 details the number of informal households living in informal settlements in Kannaland that have access to basic services. Out of all the informal households, Varrkieskloof 1 on Mossie Street in Ladismith has access to electricity.

Table 6: Number of Informal Households with Access to Basic Services

Number of Informal Households with Access to Basic Services in the municipal area

No.	Town	Area	Households (HH)	Electricity	Ablution	Water
1	**Ladismith**	Varrkieskloof 1 (Mossie Street)	130	50	6	130
2		Varkieskloof 2 (January Street)	20	0	0	20
3		Landjie	4		0	0
4		September Street	8		0	0
5		Sakkiesbaai	30		3	30
6	**Zoar**	Karoolande	45		1	45
7		Lovedale	12		1	12
8		Sandkraal	6		0	6
9	**Calitzdorp**	Valentynskamp	35		2	35
10		Klinierand	15		1	15
11	**Van Wyksdorp**	Erf 110	37		3	37
Total			**342**	**50**	**17**	**330**

3.2.3.3: Housing Pipeline Projects

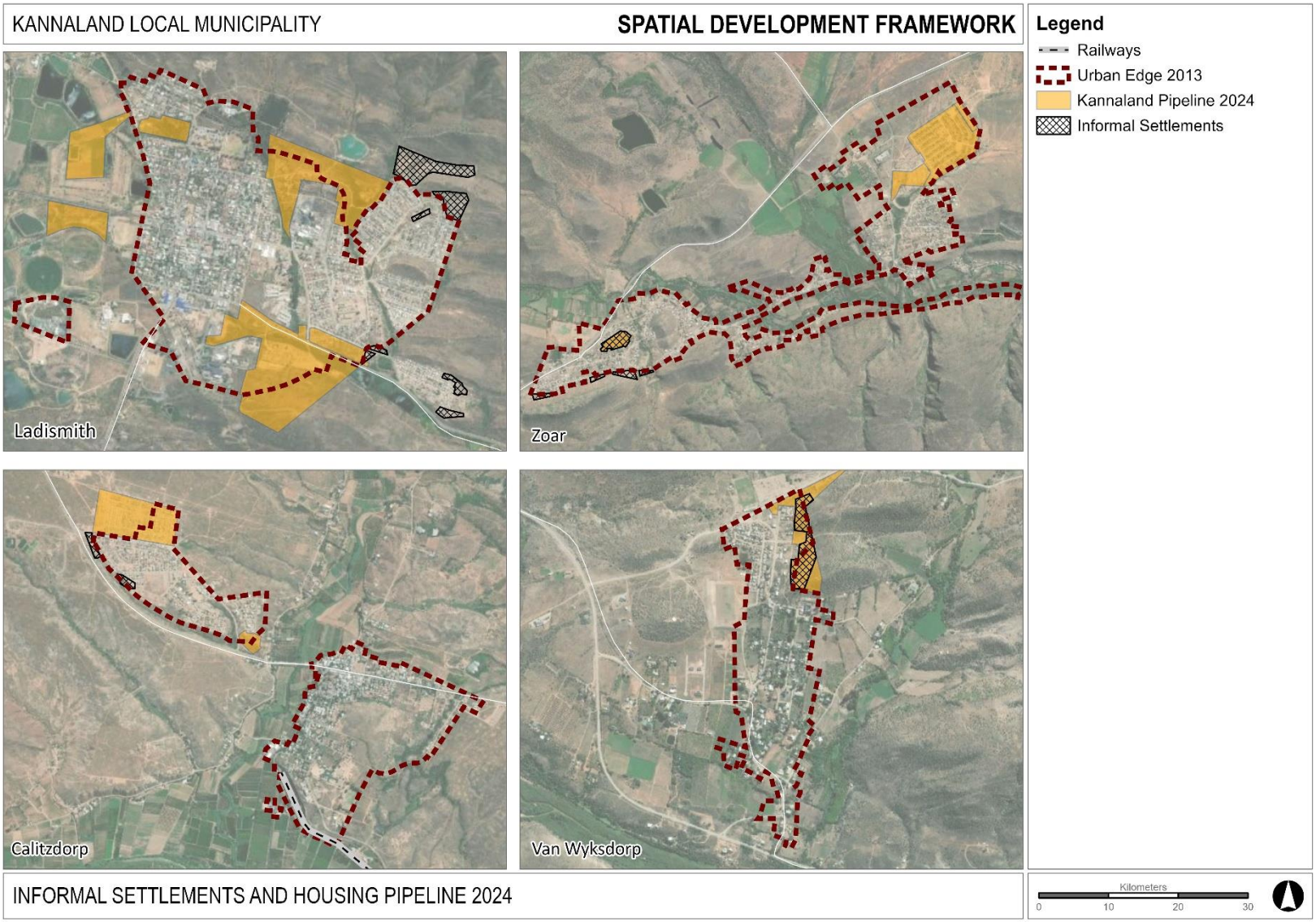
Table 7 details the current housing projects that are underway in the Municipality. This has been extracted from the Kannaland list of Housing Pipeline Projects, 2022.

Table 7: Housing Projects

PROJECT NAME	HOUSING PROGRAMME	LOCATION	YIELD	STATUS
3321: Zoar Protea Park Infill (100 units) IRDP	IRDP	"1834, 1835 (Public open space) and 1836" Zoar	100	Project approved. Project is currently being implemented, "The Environmental Impact Study (EIA) was completed in October 2022"
Ladismith Parmalat 280	IRDP	RE / 95 & 2267, Ladismith	280	Infill site, first establish whether bulks is sufficient to service these sites, The Environmental Impact Study (EIA) was completed in October 2022"
Calitzdorp Royal Heights	IRDP	Erf 2182, Calitzdorp	179	"This project is implementation ready"
Zoar UISP	"Individual Subsidy"	1416	65	"Infrastructure should be upgraded and installed to ensure that we can deliver basic services to the housing project"
MEDIUM TERM PROJECTS				
Van Wyksdorp	UISP/IRDP	Erf 110	100	"Spatial Development Framework needs to be updated because a portion of the erf is located outside of the urban edge"
Ladismith	FLISP	Erf 1194	29	"Sites identified for this project are serviced"
"Calitzdorp Old Hospital Site"	UISP/IRDP	Erf 45	30-50	"Infrastructure to deliver basic services to this project should be installed and existing infrastructure should be upgraded"

"Ladismith Golf Club"	FLISP	Erf 128/95	3	"Infrastructure to deliver basic services to this project should be installed and existing infrastructure should be upgraded"

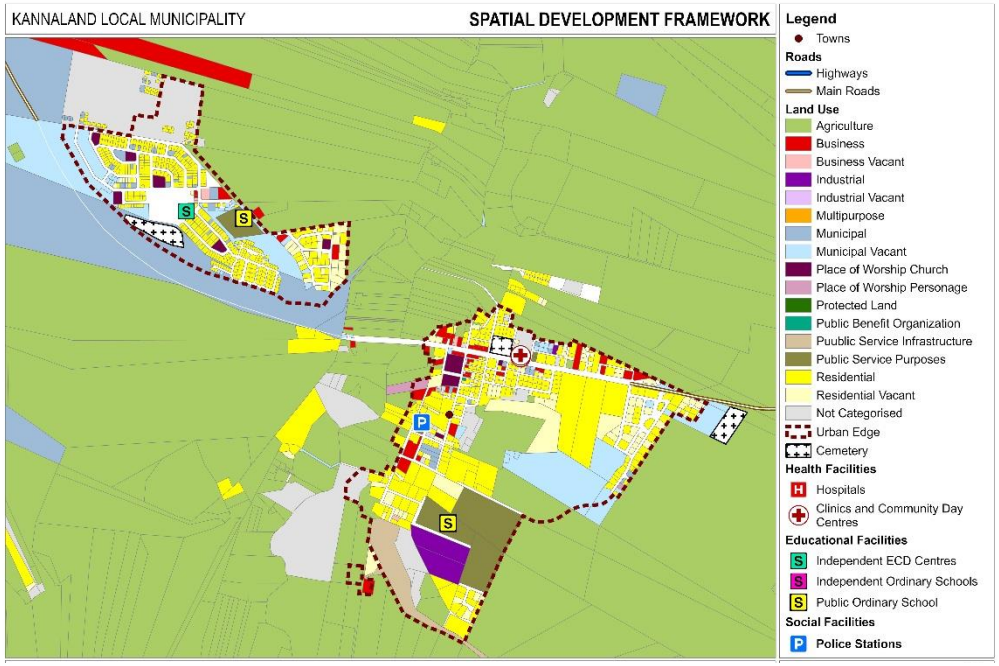
Source: Garden Route Human Settlement Sector Plan



Map 22: Kannland Informal Settlement and Housing Pipeline 2024

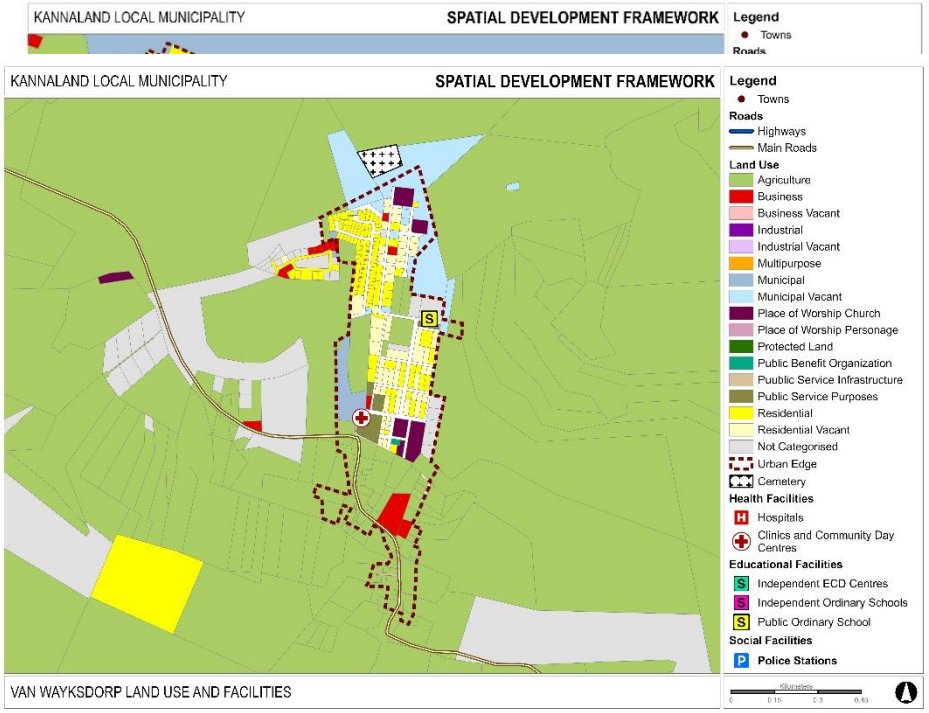
3.2.4: Social Facilities

As illustrated on Map 23, Map 24, Map 25 and Map 26, there are 14 schools across the municipality, 4 primary healthcare institutions, 5 mobile/satellite clinics, and 1 district hospital that serves the municipality healthcare requirements. Residents have access to 5 antiretroviral therapy treatment centers and 7 tuberculosis clinics. The municipal area was equipped with four provincial ambulances, equivalent to a ratio of 1.80 ambulances per 10 000 people. This exceeds the district average of 0.4 ambulances per 10 000 inhabitants.

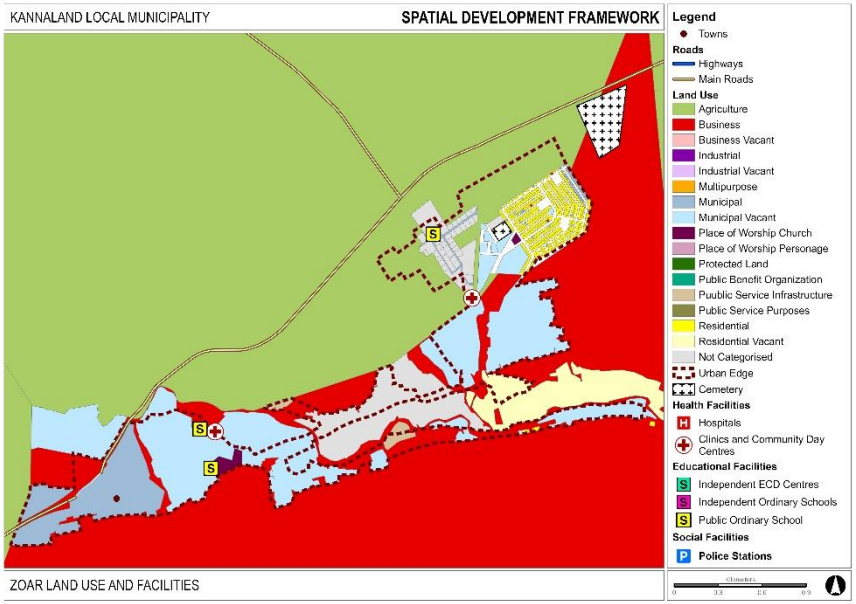


Map 23: Calitzdorp land use and social facilities

There are 2 police stations in the municipality. Finally, there are 3 cemeteries in Calitzdorp, 2 in both Ladismith and Zoar and 1 in Van Wyksdorp.



Map 25: Van Wyksdorp land use and social facilities



Map 26: Zoar land use and social facilities

3.2.5: Transport Movement Services

Effective and functional linkages through transport systems is one of the critical building blocks towards stimulating economic growth, positive and effective spatial integration and connectivity. These linkages allow for the effective movement of people, goods and services within and through an area.

Regional Movement

- The R62 which is also an important scenic route runs from the south-west all the way to the eastern side of the municipality connecting Ladismith, Calitzdorp and Zoar.
- The R327 runs on the south of Kannaland Municipality connecting Van Wyksdorp with Mossel Bay. This route is also regarded as a scenic route. [9]
- The R323 connects to the N2 in further south of the municipality. The R323 also connects to the N1 further north of the municipality.

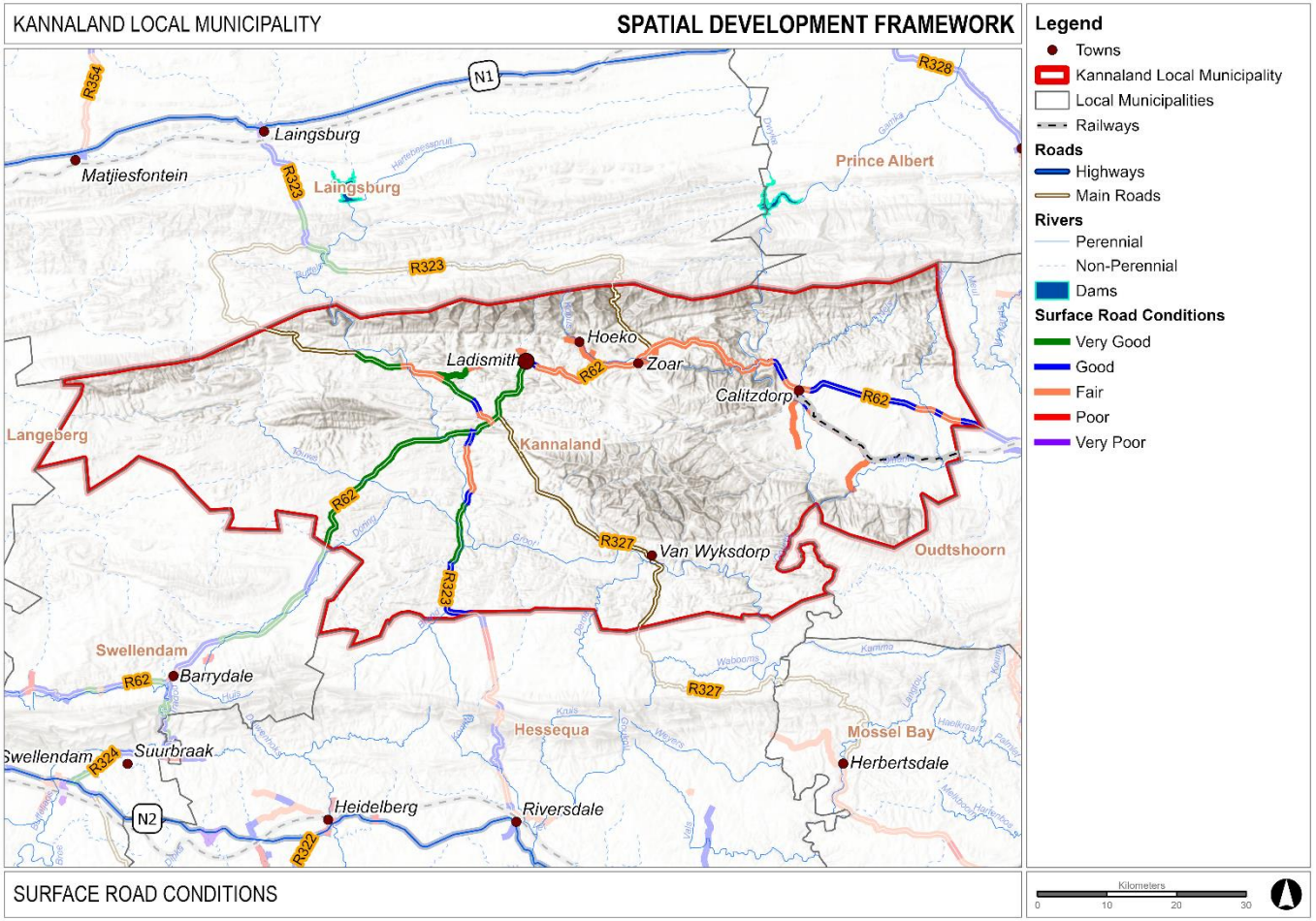
Role and function of main provincial routes:

- The main provincial routes include the R62, R323, and R327.
- The regional routes link towns of varied size and function.
- The network provides good north-south linkages but limited east-west linkages. The road network appears to be well integrated reflecting the impact of the N2 and N1. Although the N2 is not directly linked, Kannaland is integrated into Western Cape's broader economic corridor, in part because of its proximity to the N2 through feeder routes. The N1 connects Kannaland particularly Route R62 which intersects with the N1 at Worcester.
- The continuous deterioration of these roads due to limited maintenance is evident in the quality of the roads. **This limits and exacerbates the effective movement of goods and people, which limits economic growth, positive and effective spatial linkages and the integration of economic activities across the municipal area**.

[9] 2022-2027 Kannaland Local Economic Development and Tourism Strategy

3.2.5.1: Surface Road Conditions

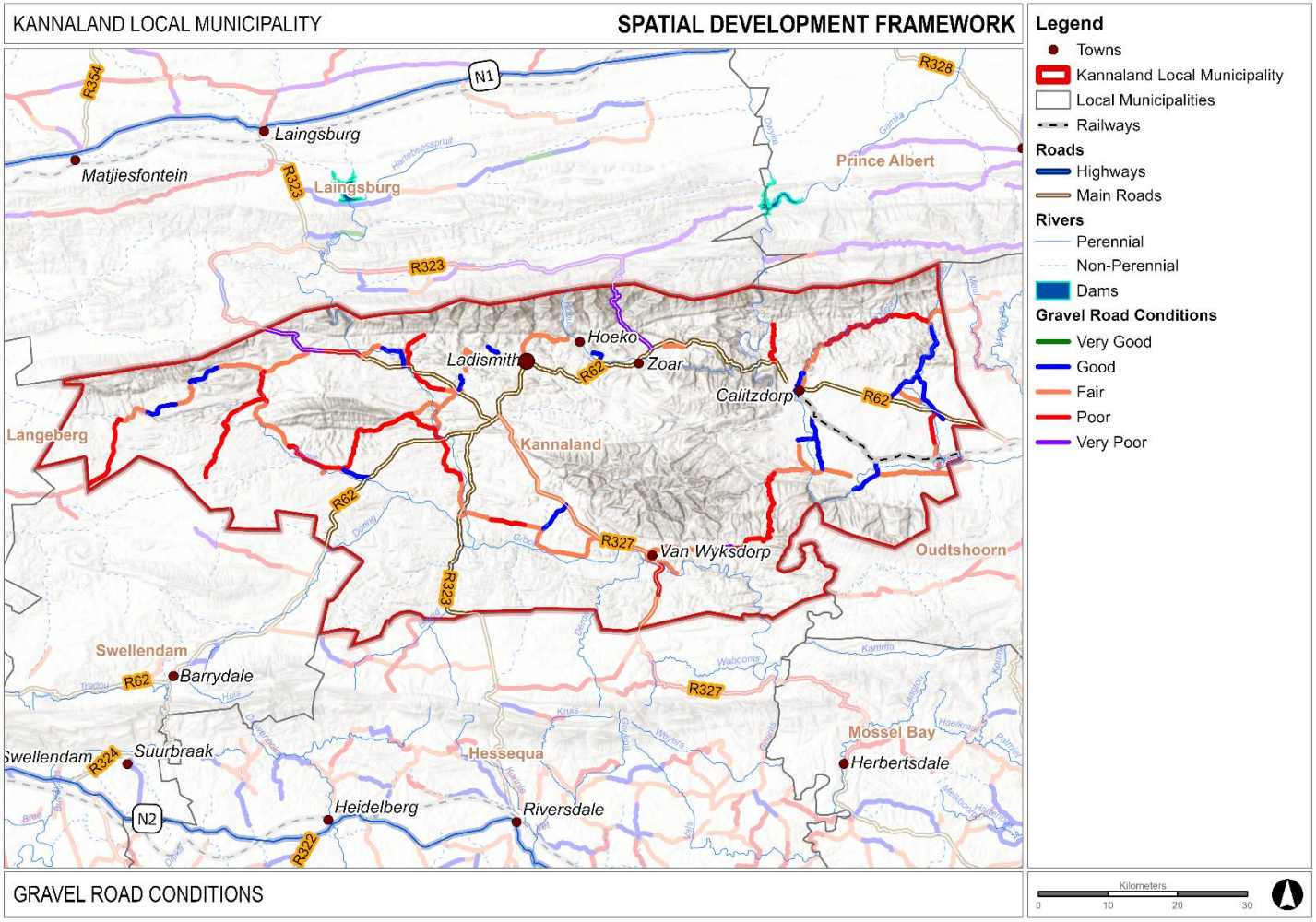
- Effective and functional linkages are critical building blocks in support of growth, spatial integration and connectivity.
- The R323 connects to the N2 on the south of the municipality at Riversdale and the N1 towards the north in Laingsburg
- Intra-regional routes are the R62, R323 and R327.
- The R62 and R323 run through the municipality and the majority of these routes are in good condition.
- Between Calitzdorp, Zoar, Hoeko and Ladismith through the R62, the condition of the surface road is fair.
- The rail to rail only stops at Calitzdorp and is currently closed.



Map 27: Surface Road Conditions

3.2.5.2: Gravel Road Conditions

- Within the municipality, there are gravel roads which connect to the prominent regional roads which play a role in connectivity.
- The majority of the roads are either fair or in a poor condition.



Map 28: Gravel Road Conditions

3.2.6: Infrastructure Services

3.2.6.1: Water

According to the 2024 Socio-Economic Profile prepared by the Western Cape Province, approximately 98.8% of households have access to piped water in their dwelling, yard or via communal taps which means that 1.2% of households do not have access to piped water.

Table 8: Pressing issues in overall municipality (High priority only)

Priority	Town	Project	Description
1	Calitzdorp	PRJ-KCW-001*	Calitzdorp: Bergsig bulk supply augmentation- Phase 1
2	Ladismith	PRJ-KLW-001*	Ladismith: Implement new Waterworks PRV 1 zone
3	Van Wyksdorp	PRK-KVW-001*	Van Wyksdorp: Additional reservoir storage capacity at Plakkerskamp reservoir site
4	Zoar	PRJ-KZW-001*	Zoar: Bulk supply augmentation-Phase 1
5	Zoar	PRJ-KZW-003*	Zoar: Implement new Droevlei PRV zone
6	Calitzdorp	PRJ-KCW-002*	Calitzdorp: Implement Bergsig booster zone
7	Ladismith	PRJ-KLW-002*	Ladismith: Implement new Waterworks PRV 2 zone
8	Van Wyksdorp	PRJ-KVW-002*	Van Wyksdorp: Bulk supply augmentation to Stanley reservoir

9	Zoar	PRJ-KZW-002*	Zoar: Additional reservoir storage capacity at Droevlei
10	Calitzdorp	PRJ-KCW-003*	Calitzdorp: Bloekomlaan zone network upgrades- Phase 1
11	Ladismith	PRJ-KLW-005*	Ladismith: Additional reservoir storage capacity at Waterworks
12	Zoar	PRJ-KZW-006*	Zoar: Additional reservoir storage capacity at Karoolande
13	Calitzdorp	PRJ-KCW-005*	Calitzdorp: Bloekomlaan bulk supply augmentation- Phase 1
14	Calitzdorp	-	Calitzdorp: Equipped the deep borehole
15	Zoar	-	Zoar: Repair and maintenance of the WTW

The Blue Drop Certification programme was aimed at identifying and developing core competencies that are required to sustainably improve the level of drinking water management in South Africa. It is a regulation that aims to synergise the current goodwill from municipalities, businesses, the Department of Public Works and other existing government support programmes to give focus and commitment to achieving quality drinking water management. Table 9 indicates the categories of blue drop scores as specified in the report.

Table 9: Blue drop scores

Percentage	Category
≥95 - 100%	Excellent situation, need to maintain via continued improvement
≥80 - <95%	Good performance, some room for improvement
≥50 - <80%	Average performance, ample room for improvement
≥ 31 - <50%	Very poor performance, need targeted intervention towards gradual sustainable improvement
0 - < 31%	Critical state, need urgent intervention for all aspects of the water services business

Source: Blue Drop Report National 2023

According to Table 10, in terms of the Blue Drop Report, the municipality has very poor quality of drinking water in the municipality, which is illustrated by the low percentage scores. There were extended periods when the water quality did not comply with the standard and there was no monitoring to confirm the actual quality of tap water.

Ladismith, Van Wyksdorp and Zoar all have water supply systems that are critical and are in need of urgent intervention as shown in Table 10.

Table 10: Kannaland Blue Drop Scores

Key Performance	Weight	Calitzdorp	Ladismith	Van Wyksdorp	Zoar
Bulk Water Supplier					
Blue Drop Score 2023		35.03%	23.93%	22.83%	22.48%
Blue Drop Score 2014		41.58%	32.39%	20.57%	25.46%
System Design Capacity	kL/d	2 160	2 500	600	1 400
Systems Available Capacity	kL/d	1 200	2 500	600	1 400
System Input Value	kL/d	1 000	3 083	93	983
Capacity Utilisation	%	83.33%	123.32%	15.50%	70.21%
Resource Extracted from		Calitzdorp Dam	Boreholes & Swartbergrivier	Buffelsfontein River	Tierkloof Dam
Blue Drop Risk Rating 2023		33.44%	65.81%	75.54%	47.90%

Source: Blue Drop Report National 2023

According to the Draft Human Settlements Sector Plan for Garden Route District Municipality, the following water infrastructure upgrades need to be made in order to accommodate new residential developments within the municipality:

- Ladismith bulk infrastructure to accommodate the projected future population needs is raw water storage.
- Water treatment works and reservoir capacity in Zoar needs to be upgraded.
- Bulk water supply is required in Calitzdorp.
- Need for water source, water treatment works and raw water storage in Van Wyksdorp.
- New boreholes are being planned to increase water supply in Van Wyksdorp.
- Replacement of pipeline from Nels Dam to Calitzdorp Water Treatment Works.
- Repairing of the water collection channel (Syfer sloot en pyp) beneath the Little Swartberg River should be completed to ensure 24h00 per day water delivery to the Ladismith water treatment works.
- All water pipes, channels and manholes to be inspected and repaired to standard specifications in order to minimize water losses and to safeguard the water supply infrastructure.
- The water reservoir known as the "Goewermentsdam" that is already enclosed with security fencing, should be locked with strict access control.

- Zoar Reticulation Project: This project is aimed at upgrading water infrastructure in the municipality.
- Van Wyksdorp Reticulation Project: This project is aimed at upgrading water infrastructure which is cost effective and sustainable to the Vanwyksdorp community with potable water.
- Ladismith Reticulation Project: This project is aimed at upgrading water infrastructure which is cost effective and sustainable to the Ladismith community in order to ensure that supply of potable water.
- Swartberg Water Storage Dam Project: The municipality will initiate the process for the establishment of a bulk water storage facility (dam) for the municipal area.
- Calitzdorp Water Project:
    - Replace raw water supply pipeline from the Nelsdam to the WTW;
    - Construct a new reservoir at Bloekomlaan;
    - Construct a new direct pipeline to Bloekomlaan;
    - Construct a high pressure pump station and reservoir in Bergsig.
- Future developments planned for Van Wyksdorp with regards to water are as follows:
    - Upgrading of Raw Water Reservoir Project.
    - Upgrading of water reticulation networks.
    - Additional boreholes drilling and equipping.
    - Upgrading of the new WTW.

3.2.6.2: Sanitation

South Africa uses various sanitation technologies, including flush toilets with on-site septic tanks, flush toilets with waterborne and central treatment works, pit latrines, and chemical toilets.

An estimated 87.3% of households in the municipality have access to flush or chemical toilets.

The Green Drop Progress Assessment Tool Report 2023 highlights critical risks in South Africa's wastewater treatment services. The report assessed 1,003 Wastewater Treatment Works (WWTWs) plants, with four of them categorised as critical-risk facilities due to insufficient data on design and operational capacity.

The Ladismith and Van Wyksdorp WWTWs lack verified capacity, making it impossible to assess their effectiveness which poses environmental risks. Immediate action is required, including the installation and calibration of flow meters to determine the actual operational capacity.

Another major issue is the lack of qualified staff, as no process controllers or supervisors are registered at the WWTW sites. This severely affects maintenance and operations, further reducing efficiency. Only Van Wyksdorp WWTW has maintenance capacity which impacts overall plant performance.

A laboratory contract has been awarded to conduct analyses of effluent quality, marking a positive step toward monitoring wastewater quality. However, the municipality has not submitted key compliance documents, including the Municipal Information Spreadsheet, Wastewater Risk Abatement Plan or Green Drop Improvement Plan (GDIP). This has affected the results of the calculation of the risk rating.

To prevent system failure, the municipality must develop a corrective strategy, including a W2RAP (risk-based methodology) and process audits for each WWTW. The GDIP will help identify gaps and allocate budgets, responsibilities, and timelines for improvements. Addressing staffing shortages and implementing risk-based planning are essential to improving wastewater management in the region.

Table 11 details the overall Cumulative Risk Rating (CRR) percentage score in 2022 and 2023. The CRR reflects the total risk rating of each supply system expressed as a percentage of the maximum risk that a plant can experience. According to the Green Drop Progress Report, Kannaland's overall CRR sits at 96.6% which is critical (Green Drop Progress Assessment Tool Report, 2023).

Table 11: Kannaland Municipality Green Drop Assessment

Risk Assessment Areas	Weight	Calitzdorp	Ladismith	Van Wyksdorp	Zoar
Class of Works		D: Approved	D: Incomplete	D: Incomplete	E: Approved
Treatment Technology		None	Oxidation ponds	None	Oxidation ponds
Total Design Capacity	Kl/d	320	1 200	3200	261
Effluent Quality Non-Compliance	#	6	7	6	6
Cumulative Risk Rating 2023 (% CRR/CRRmax)	**%**	**100.0%**	**94.1%**	**100%**	**100%**
Cumulative Risk Rating 2022 (% CRR/CRRmax)	%	88.2%	82.4%	-	88.2%

Source: Green Drop Progress Report 2023

According to the Draft Human Settlements Sector Plan for Garden Route District Municipality, the following wastewater infrastructure upgrades need to be made to accommodate new residential developments within the municipality:

- Ladismith: Upgrade and extend of Wastewater Treatment Works.
- Upgrading of wastewater treatment works in Van Wykdorp.
- Bulk sewer is required for new developments.
- Refurbishment of all sewer pump stations.
- Upgrading and refurbishment of the Klein Karoo Rural Water Supply Scheme.
- Calitzdorp: Upgrade and extend Wastewater Treatment Works.

3.2.6.3: Waste Management

In terms of solid waste management, 81.5% of households in the municipality have their solid waste removed by the local authority at least once a week. At present, there are 4 landfill sites within the municipality located in Ladismith, Calitzdorp, Zoar and Van Wyksdorp.

According to the Draft Human Settlements Sector Plan for Garden Route District Municipality, the following solid waste infrastructure upgrades are required to be made in order to accommodate new residential developments within the municipality:

- Solid Waste Transfer Station Project.
- Further cleaning of illegal dumping sites in Kannaland Municipal Area.
- Recycling of solid waste.
- Van Wyksdorp: Solid Waste Transfer Station Project.
- Repair and upgrade of the Ladismith Central Business Area drainage.

3.3: Socio-Economic Environment

The socioeconomic environment analysis aims to provide a comprehensive understanding of the municipality's socio-economic conditions, such as demography, educational attainment and employment, to aid in the identification of critical themes that could contribute to the development of the SDF.

3.3.1: Demographic Trends

Kannaland Municipality had a population of 21 852 in 2024. This municipality has the smallest population in the Garden Route District, accounting for only 3.24% of the district's total population although occupying 20.4% of the district's land area.

Kannaland Municipality's population is projected to decrease by an average of -1.6% between 2023 and 2027, reaching 20 087 people in 2029, based on 2024 Mid-Year population estimates by StatsSA. The municipal population's negative growth rate may imply a migration of residents to other towns / cities in pursuit of better economic prospects.

As shown in Table 12, if the current trend continues beyond 2027, the municipality's population is predicted to decline to 19 698 in 2030.

Table 12: Existing and Estimated Population

Year	2024	2025	2026	2027	2028	2029	2030
Population	21 852	21 519	21 182	20 818	20 459	20 087	19 698

Source: 2024 Socio-Economic Profile: Kannaland Municipality (Western Cape Treasury) based on StatsSA Mid-Year Population Estimation 2024

Kannaland can be classified as a low-density municipality due to its population density of only 4.6 people per square kilometre. The municipality has the lowest urbanisation rate in the district, at 62.4%. The important urban settlements in the municipality are Ladismith, Calitzdorp, and Zoar.

Table 13 indicates the Low, Medium and High Bound Population Growth Estimates. Low and High Bound growth rates were estimated according to the medium growth rate that was sourced from Stats SA Mid-Year Population Estimations for 2022.

Table 13: Low, Medium & High Bound Population Growth Estimates

Area	Growth Rate %	Growth Ranking	Projected Population 2025	Projected Households 2025	Projected Population 2030	Projected Households 2030	Projected Population 2035	Projected Households 2035	Additional Population 2025-2035	Additional Households 2025-2035	Housing Waiting List at 2024
Ladismith	1	High	7,460	2,308	7,841	2,350	8,241	2,549	781	241	
	-1.6	**Medium**	**6,899**	**2,134**	**6,364**	**1,969**	**5,871**	**1,816**	**-1,028**	**-318**	**1,321**
	-1.8	Low	6,857	2,121	6,262	1,937	5,718	1,769	-1,139	-352	
Calitzdorp	1	High	6,456	2,004	6,785	2,040	7,131	2,214	675	210	
	-1.6	**Medium**	**5,970**	**1,853**	**5,507**	**1,710**	**5,081**	**1,577**	**-889**	**-276**	**1,093**
	-1.8	Low	5,934	1,842	5,419	1,682	4,948	1,536	-986	-306	
Zoar	1	High	4,794	1,526	5,039	1,604	5,296	1,686	502	160	
	-1.6	**Medium**	**4,433**	**1,411**	**4,090**	**1,302**	**3,773**	**1,201**	**-660**	**-210**	**545**
	-1.8	Low	4,406	1,402	4,024	1,281	3,674	1,170	-732	-233	
Van Wyksdorp	1	High	1,017	281	1,069	286	1,123	311	106	29	
	-1.6	**Medium**	**940**	**260**	**868**	**240**	**800**	**221**	**-140**	**-39**	**126**
	-1.8	Low	935	259	854	236	779	216	-155	-43	
	1	High	23,160	8,949	24,342	9,406	25,583	9,885	2,423	936	**3,420**

Area	Growth Rate %	Growth Ranking	Projected Population 2025	Projected Households 2025	Projected Population 2030	Projected Households 2030	Projected Population 2035	Projected Households 2035	Additional Population 2025-2035	Additional Households 2025-2035	Housing Waiting List at 2024
Municipal Wide	**-1.6**	**Medium**	**21,417**	**8,276**	**19,758**	**7,635**	**18,227**	**7,043**	**-3,190**	**-1,233**	
	-1.8	Low	21,287	8,225	19,439	7,511	17,751	6,859	-3,536	-1,366	

3.3.2: Households

The total number of households in the municipal area is 4 983 in 2024. The average household size in the municipality has increased marginally from 4.0 people per dwelling in 2011 to 4.1 people per dwelling in 2024. The average household size in the municipality is larger than the district average of 3.4 people per dwelling. The relatively large household sizes are primarily due to the inability of families to afford separate living arrangements, resulting in several family members being compelled to share a single dwelling unit.

3.3.3: Gender Ratio

The municipality's estimated female population percentage is 52.7 in 2024, which is slightly higher than the national (51.5%), provincial (51.5%), and district (51.4%) averages. This could be attributed to the migration of working males outside the municipality in search of better employment prospects.

3.3.4: Age Structure

Figure 5 depicts the proportion of male and female residents in the municipality by age group. Females constitute a bigger cumulative proportion of the child population (under 15 years of age). The proportion of females in the population increases after the age of 15, indicating that working-age males possibly leave the municipality in pursuit of better employment opportunities.

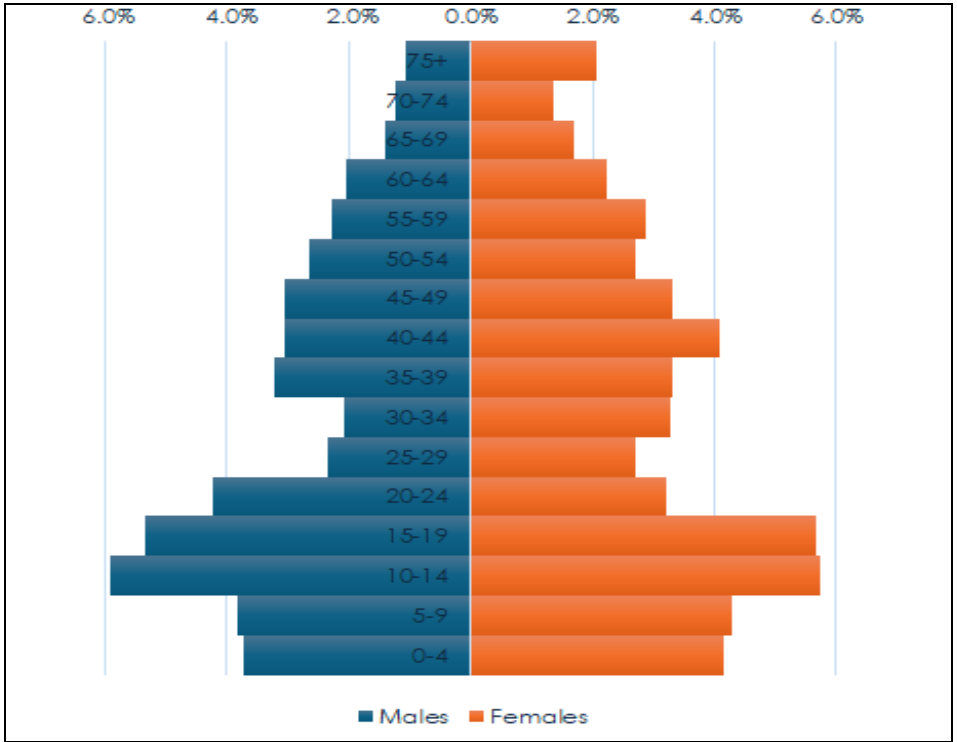


Figure 5: Population Pyramid- Age & Gender Structure
Source: StatsSA, Census 2022

As shown in 5, 63.6% of the municipal population is of working age (aged are 15 to 64), 27.6% are children (aged 14 or below), and 8.8% elderly (65+). The share of youth population (aged 15-34) in the municipality is 28.8%. This large number of children shows that there is a growing need for educational resources and job opportunities in the municipal area.

The municipality's dependency ratio, or the average number of economically dependant persons per 100 working-age people, is 57.2, which is greater than the provincial (42.2) and district (47.9) ratios. A high dependency ratio is often seen unfavourably since it implies that there is a greater financial burden on working individuals. A high proportion of economically dependent people necessitates greater resources for education, health care, and pensions while reducing the government's tax base. This is because there is a smaller pool of income, profits, spending, or assets from which the government can collect taxes.

3.3.5: Racial Composition

The major racial demographic category in the municipality is the coloured population, which accounts for 84.8% of the total, followed by the white population at 8.8% and the black african population at 6.1%. The indian/asian group accounts for only 0.3% of the municipal population.

3.3.6: Socio-Economic Indicators

3.3.6.1: Gross Domestic Product per Capita

As shown in Figure 6 in 2023, the Kannaland municipal area had a per capita GDP of R 40 510, which was lower than the District (R53 875). However, the municipality's per capita GDP has grown significantly in recent years. The municipal GDP experienced an increase from R 37 288 in 2020, owing to considerable population decline and economic growth, particularly after the COVID-19 pandemic.

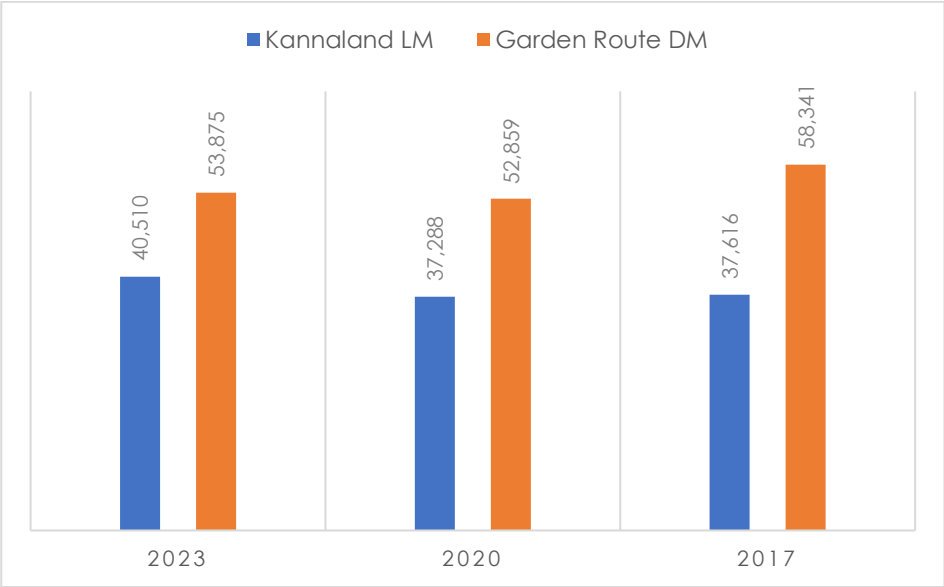


Figure 6: GDP Per Capita
Source: 2024 Socio-Economic Profile: Kannaland Municipality (Western Cape Treasury)

3.3.6.2: Poverty

Poverty is often defined as the proportion of persons living below the Upper Bound Poverty Line (UBPL) or those who cannot afford to buy sufficient quantities of food and non-food products. The UBPL in South Africa is R 1558 per person per month (April 2023 prices). As seen in Figure 7, in 2022, 73.7% of the municipal population fell below the UBPL, marginally higher than the district (74%) and provincial average (72%). The municipality's poverty eradication rate improved marginally, with individuals who are living below the UBPL decreasing from 73.9% in 2020 to 73.7% in 2022.

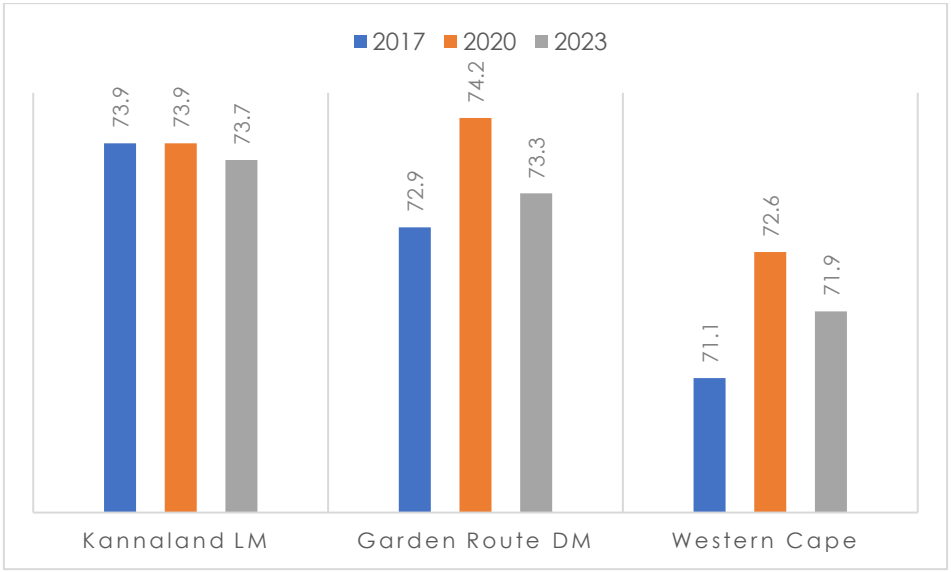


Figure 7: Portion of People below UBPL (%)
Source: 2024 Socio-Economic Profile: Kannaland Municipality (Western Cape Treasury)

3.3.6.3: Income Inequality

Income inequality is the disproportionate distribution of income among individuals within a population. Inequality expresses itself as an uneven income distribution, unequal access to opportunities, and geographical inequities. The Gini coefficient is a popular statistical technique for measuring income inequality. It ranges from 0 to 1, where 0 indicates complete equality and 1 indicates inequality.

South Africa has one of the world's highest Gini coefficients, at 0.63. Kannaland municipality's Gini coefficient is 0.58, which falls within the National Development Plan's target range. However, it is to be noted that the municipality's GDP per capita is lower than the district and provincial averages. This could indicate that a sizable population in the municipality is struggling with limited economic prospects.

3.3.6.4: Education

Education is regarded as one of the key drivers of change, assisting people in acquiring knowledge and skills that may then be used to obtain jobs. In 2023, there were 14 schools in the municipality, 93% of which did not require payment of school fees. Six schools were equipped with libraries. Hence, there is considerable scope for the establishment of libraries to more schools in the municipality.

In the same year, a total of 4 922 learners were enrolled within the municipal area, which was marginally lower than the previous year. The learner-to-teacher ratio in 2023 was 31.4:1, which was higher than the district average. It still falls within the acceptable ratios of 35:1 for public ordinary high schools and 40:1 for public ordinary primary schools.

(a) Learner Retention

Learner retention refers to the ability of a school, college, or training institution to keep students enrolled from the time they start a course or grade until they complete it. As shown in Figure 8, in 2023, the learner retention rate in the municipal area was 62.5%, much lower than the district average of 71.7%. The low retention rate raises concerns about the overall development of human capital and the availability of skilled labour. Though it should be noted that the municipality has made progress in learner retention since 2020.

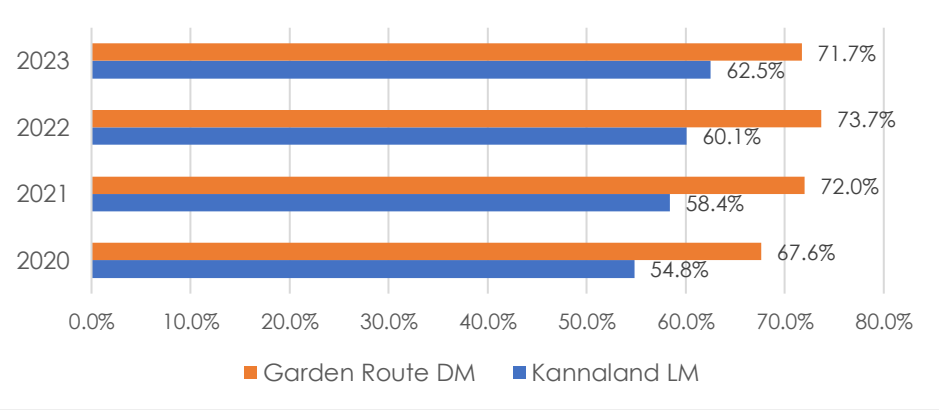


Figure 8: Learner Retention Rates
Source: 2024 Socio-Economic Profile: Kannaland Municipality (Western Cape Treasury)

(b) Education Outcomes

Education remains one of the primary channels through which the state participates in the economy. In educating individuals for future employment, educational policy choices and decisions are crucial in deciding the amount to which future economic and poverty reduction initiatives can be fulfilled. In 2023, Kannaland Municipality's matric pass rate was marginally lower than the district average, as demonstrated in Figure 9. In the years before, the municipality's matric pass rate exceeded district averages.

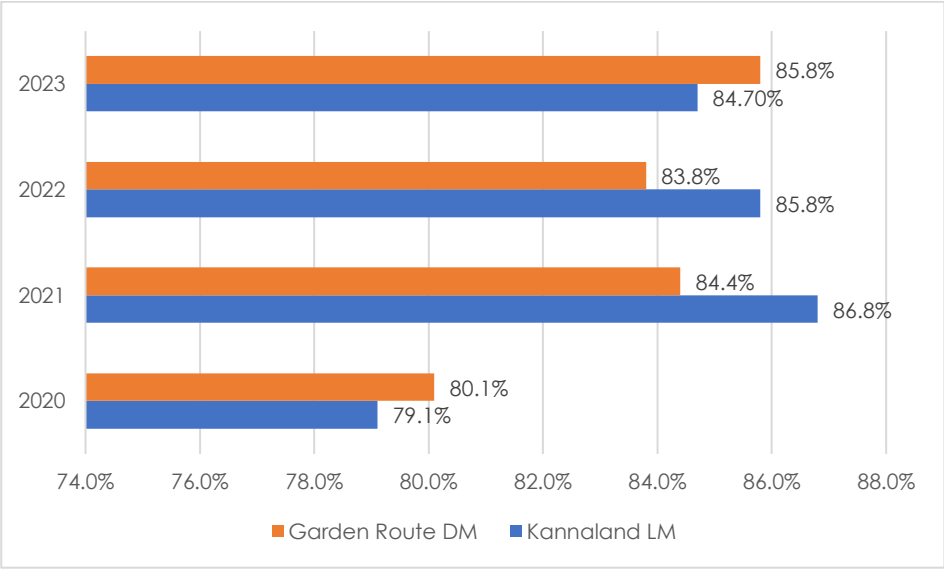
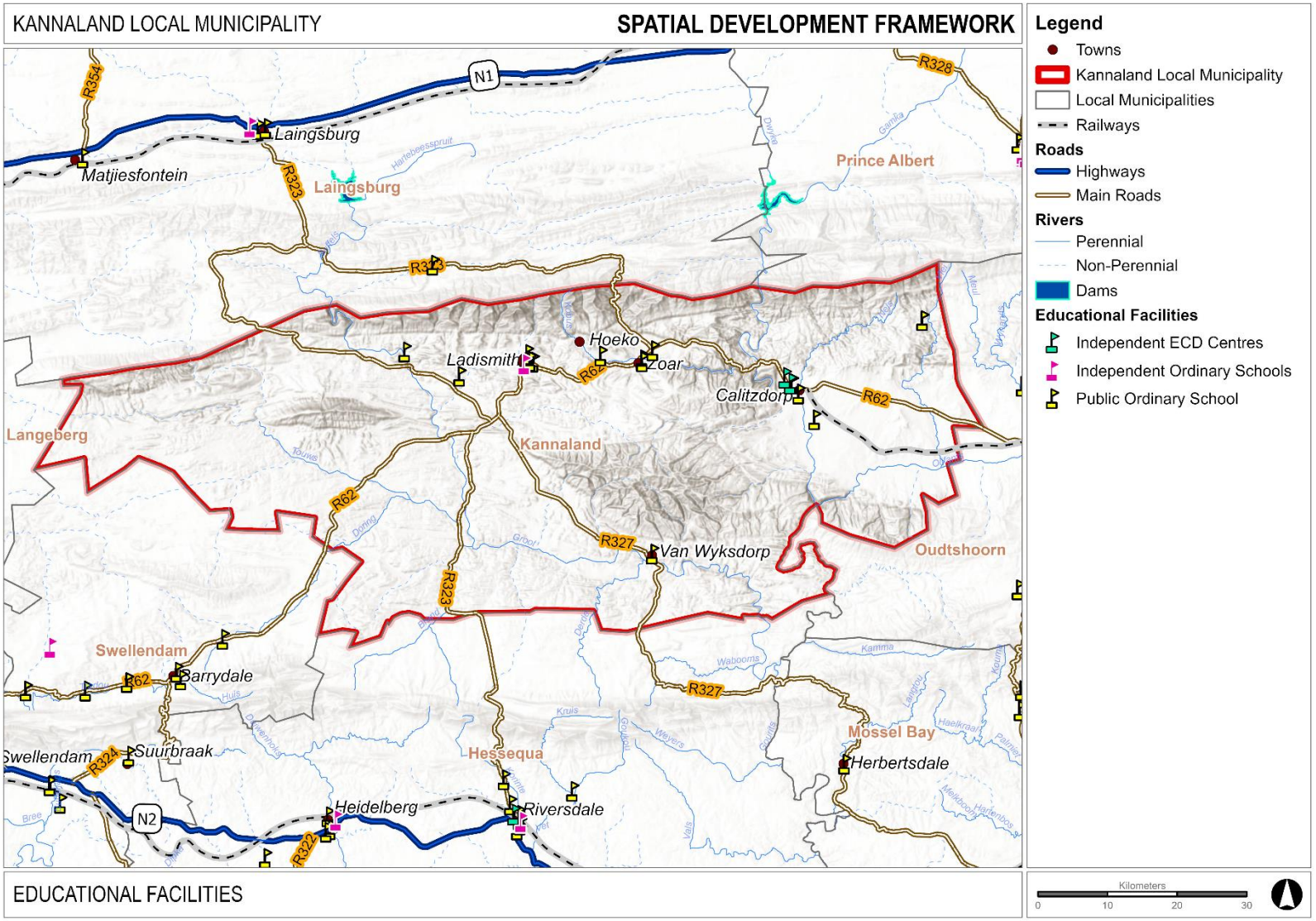


Figure 9: Matric Pass Rates
Source: 2024 Socio-Economic Profile: Kannaland Municipality (Western Cape Treasury)



Map 29: Educational Facilities

3.3.6.5: Employment

(a) Skill Levels

There are a number of 9 699 jobs recorded in 2022, According to the 2024-25 Municipal Economic Review and Outlook (MERO) 19.5% were skilled, 34.0% were semi-skilled, 46.5% were low skilled, and the rest 32.6% worked in the informal sector- refer to Figure 10. The primary employment-generating sectors include dairy product manufacturing, government services, farming and agricultural cultivation, and other social work activities. It is clear that the labour market is strongly reliant on agriculture, which employs many semi-skilled and low-skilled individuals and generates seasonal employment.

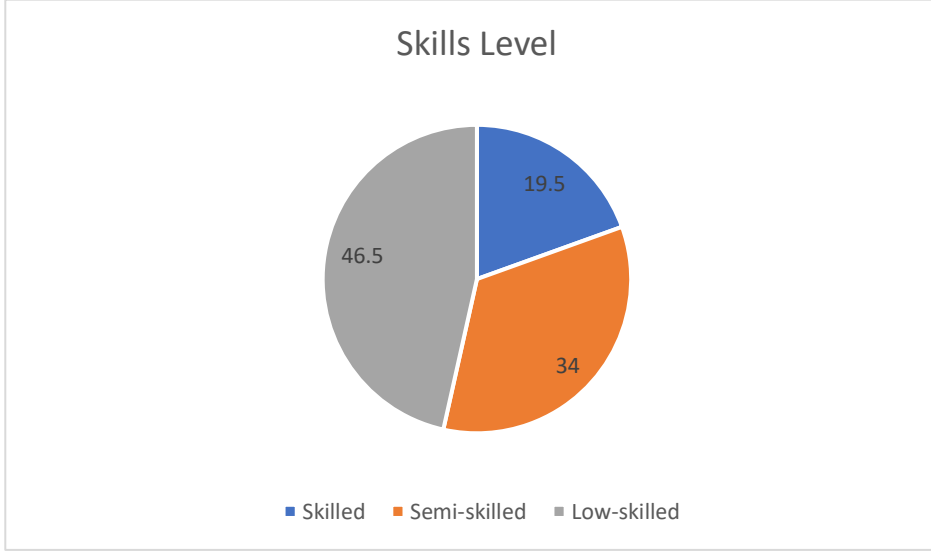


Figure 10: Skill Levels
Source: 2023 Socio-Economic Profile: Kannaland Municipality (Western Cape Treasury)

The labour force participating rate increased from 51.3% in 2022 to 52.6 in 2023. The top 5 jobs within the municipality are as follows:

Job	Number of Jobs
Mixed farming	3 731
Growing of pome fruits and stone fruits	3 375
General public administration at Local Government Level	3 242
Manufacture of butter and cheese	3 150
General public administration at Provincial Government level	1 600

Source: 2024-25 Municipal Economic Review and Outlook (MERO)

However, as of 2022, net employment in the municipality had yet to return to pre-pandemic levels. Only skilled employment has recovered from the job losses when compared to pre-pandemic levels. The municipal area has a high number of lower-income employees earning between R 0 and R 400 and R 1 600 to R 3 200. This concentration considerably contributes to the widespread problem of poverty.

(b) Unemployment

12.8% the Kannaland Municipality had one of the district's lowest unemployment rates in 2023. Both labour force participation and absorption rates were expected to improve by an estimated 2.6%, respectively, in 2023. In 2023, the labour force participation improved by 1.3%. Approximately, 71.3% of people are not economically active proportion of working-age population in 2023.

3.3.6.6: Access to Housing and Basic Services

Section 26 of the Constitution states that every resident has the right to adequate housing. Access to housing also involves access to amenities such as potable water, basic sanitation, safe energy sources, and removal of waste, which ensure that households have an acceptable level of living.

Of the 4 983 households in Kannaland Municipality, 96.2% had access to formal housing, 98.8% to piped water inside their homes, 87.3% to a flush/chemical toilet, 93.9% to electricity, and 81.5% to a refuse removal facility at least once a week. In some areas, the municipality's performance in delivering basic services exceeds the district average as seen by the statistics in Figure 11.

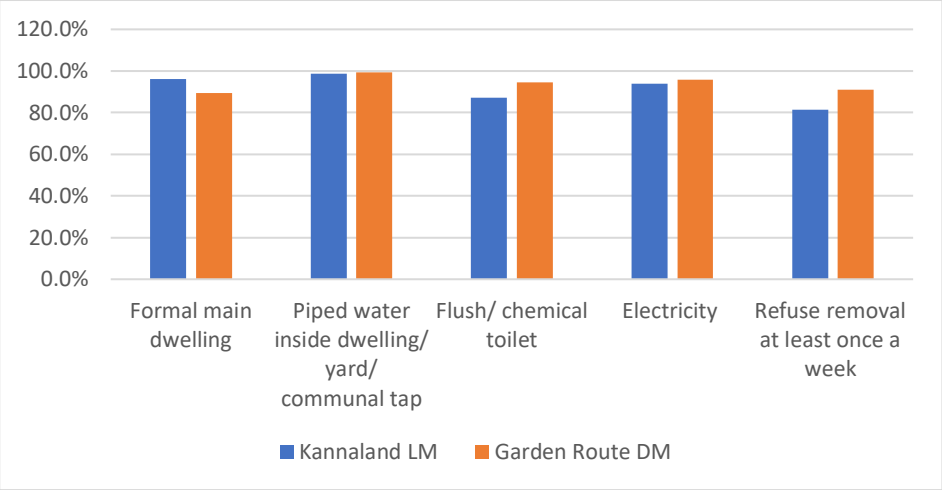


Figure 11: Access to Formal Housing and Basic Services
Source: 2023 Socio-Economic Profile: Kannaland Municipality (Western Cape Treasury)

Access to formal housing in the municipality decreased from 96.3% in 2011 to 95.2% in 2022. The municipal area had the highest housing demand within the district, as indicated by the fact that 65.2% of households in the area were registered on the Western Cape Housing Demand Database. The mismatch in housing demand and supply led to the growth of informal settlements. Poverty and low wages contributed to high housing demand. Due to poor financial condition of households, a large number of households (2 631 or 52.8%) in the municipal area were deemed indigent and eligible for receiving free and subsidised municipal services.

3.3.7: Economic Environment

3.3.7.1: Economy

Kannaland has a small economic base. The municipality's economy was valued at R1.556 billion in 2021 (GDPR), which was a mere 2.7% of the district economy. This municipal economy is predominantly driven by contributions from the tertiary industry, with financial and business services dominating at R 329 million, accounting for 21.1% of the whole GDPR in 2021. The agriculture sector followed closely after with a GDPR of R 249.9 million, accounting for 16.1 percent of the Municipality's total GDPR. Other key contributing sectors included trade (14.7%), manufacturing (13.5%), communal, social, and personal services (10.8%)- refer to Figure 12.

The estimated GDPR growth for the area is 3.5%. The COVID-19 closure regulations presented significant challenges for the trade sector, particularly tourism. Although there was an increase in 2022, it has not yet reached pre-pandemic levels. However, it is anticipated that the trade sector will expand by 4.8% in 2022. In contrast, the construction sector was expected to experience a contraction of approximately 4.6% in 2022, indicating a sluggish recovery from its 2019 performance. The construction sector was significantly impacted by the COVID-19 pandemic, which was characterised by closure regulations and an increase in input costs. It is anticipated that the GDPR will remain 26.4% lower in 2022 than it was in 2019.

The municipality is renowned for its thriving agricultural sector, which is involved in the production of cheese and wine. Nevertheless, the sector experienced a contraction of 0.6% in 2021, and no exports were recorded. Despite the relatively rapid growth between 2019 and 2022, the municipality experienced a more significant contraction of 3.3% in 2022 due to challenges such as rising input costs, load shedding, and locust infestations.

3.3.7.2: Economic Opportunities

Agriculture is a significant component of the local economy in Kannaland. The agricultural foundation of the municipality is robust. Calitzdorp, which is acknowledged as the port wine capital of South Africa, is a critical component of the municipality's agricultural prowess. This region is renowned for the production of high-quality port wines and brandy by companies such as Boplaas De Krans, Axehill, and Calitzdorp Wine Cellars.

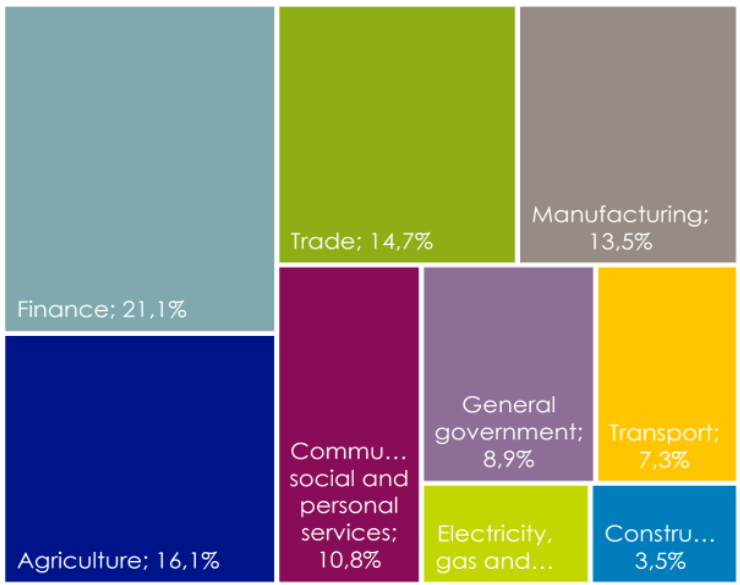


Figure 12: Contribution of Economic Sectors
Source: 2023 Socio-Economic Profile: Kannaland Municipality (Western Cape Treasury)

Kannaland's climate is ideal for growing apricots, peaches, plums, nectarines, and grapes. This region accounts for almost 30% of the entire apricot export market. The municipal area is also home to a flourishing dairy industry, which is bolstered by the presence of dairy processing and cheese factories. Several well-known Parmalat and Ladismith dairy products are produced in the municipal area.

Agricultural activities provide opportunities for the creation of local employment, the production of wines, fruits, and dairy products for domestic consumption, as well as for export to international markets. The agricultural activities also benefit the local tourism and hospitality industry, as visitors are attracted to the orchards, vineyards, and wineries.

Tourism is an important component of the local economy. The municipality provides a wide range of tourist activities. The area is crisscrossed by numerous picturesque routes. One can enjoy the views of Hoeko Valley and orchards, spectacular rock formations along the Seweweekspoort pass, and the valleys and vistas of the Great Karoo. Visitors can explore orchards, vineyards, rustic rural regions, and historic farmhouses of Dwarsrivier, Voorbaat, and Van Zylsdamme. The area's natural splendour attracts artists, hikers, cyclists, bird watchers, environment lovers, and off-road enthusiasts.

The municipality also offers opportunities for heritage and cultural tourism. Kannaland has its own distinctive architectural style, known as the Ladismith Style. A few additional architectural types, including NeoGothic, Georgian, Victorian, Regency, and Rural (Karoo), may be found throughout Kannaland. Visitors come to the municipality to experience its diverse architectural styles, heritage, and cultural festivals such as the Church Festival (Amalienstein and Zoar), the Harvest Festival (Ladismith), the Heritage Festival (Calitzdorp), the Full Moon Festival (Amalienstein and Zoar), and the Winter Festival (Calitzdorp).

The agricultural activities and tourism resources help to position the municipality as an excellent agri-tourism, eco-tourism, and event destination. The agriculture sector can help to further grow small-scale manufacturing units, agri-processing enterprises and agritourism. Tourism may serve as a stimulus for development in many areas of the economy, particularly transportation, arts and crafts, trade and accommodation, and personal services. There are also opportunities to train, upskill, and empower locals to undertake tasks in many areas of the economy, particularly agriculture, trade, arts & crafts, and tourism.

3.3.7.3: LED Strategic Projects and Interventions

Table 14 summarises the strategic projects and interventions specified in the Kannaland Local Municipality's 2022 - 2027 Local Economic Development (LED) Strategy. It is clear that strategic projects and interventions will promote agriculture and tourism activities and upskilling of youth and the local populace.

Table 14: LED Strategic Projects and Interventions

LED Project Reference No	Project Name	Project Description
P001	Establish strategic partnerships to lead LED in which stakeholders are represented	To partner the municipality with meaningful and productive role players in economic development
P002	The establishment of a Kannaland Emerging business Forum	To organize entrepreneurs/ SMMEs into one structure in order for them to derive benefit from projects identified and implemented by the KLF and municipality and to have one unified voice representing SMMEs.
P003	Upgrade of caravan park	The redevelopment of Cravan Park- creating overnight accommodation, picnic/ play spaces for locals and tourists and a cultural village.
P004	Neighborhood Street Markets (The iKasi Experience)	Income generating activities for poor neighborhoods and communities
P005	The establishment of Renaissance Farms	The establishment of a mechanism that will assist emerging farmers in Kannaland to develop into more commercialized farmers. The establishment of a cooperatives is a potential vehicle that can be utilized to capacitate communities who lack financial resources
P006	Procurement and promotion of SMME activities	Establishment of business linkages (funding access, technology, business opportunity etc.), emerging entrepreneurial business forums
P007	Community Capacity Building	Skills audit, incubation associated with development potential of the municipality; training of the community on LED and its benefits; SMME training, co-operatives training; mentorship projects
P008	Tourism Sector Development	This project aims to cluster the available Tourism opportunities in Kannaland. Economic opportunities in tourism will be matched with available emerging entrepreneurs. These opportunities include tour operations, accommodation establishments and the promotion of eco-tourism
P009	The cleaning and Greening of Towns	The beautification/landscaping of Towns in Kannaland as one of the mechanisms to unlock Tourism and increase visitation
P010	Waste Management and Recycling	The creation of small enterprises aimed at beneficiating waste at landfill sites- building rubble into bricks plastics into plants and garden compost and agriculture fertilizer. Waste management can also provide another source of opportunity in extracting reusable resources from residential and industrial waste streams
P011	Arts and Craft development	The indigenous arts and craft trade has a role to play in economic development in that, is has a relatively high labour absorption potential and it can be used by the poor, rural women and marginalized groups as a means for survival. It will therefore provide an opportunity for commercialization and

LED Project Reference No	Project Name	Project Description
		development of small medium and micro enterprises (SMME's)
P012	Urban Regeneration	The town of Ladismith serves as a regional service centre and an economic development hub. However, the visual character and quality of the environment remains the same. It was thus suggested that an urban renewal programme targeting the towns area be initiated. The programme focus areas are the following: • Infrastructure upgrading in selected precincts and town entrance areas • Landscaping • Urban design
P013	The marketing of festival and local villages as Tourist attractions	
P014	Upgrade of "Liggiepad" and "Towersig" pad	Hiking plays a big part in our community. The Liggiepad" is a well known road by not on
P015	Ladismith "Lekka" weekend	This is a community based festival with big celebration on the 31st of May-50 years of the "Liggie" in the Elandsberg. The festival looks closely at how to inform the community of Kannaland how to be eco friendly and display some art, culture and experience extreme 4X4
P016	ABSA Calitzdorp Port en Wine festival	Exploring the wine and port from Calitizdorp spin-off projects can also be initiated e.g. local arts and crafts, the sale of indigenous food and beverages and township tours.
P017	The marketing of the Zoar Heritage Festival	Community awareness about their heritage
P018	SSME Incubation	The established private sector in Kannaland to incubate smaller related enterprises/training and mentoring of these SMME's/Technology transfer/Management advice and services/Finance in the form of loans and providing markets
P019	Kannaland Investment Summit	One of the objectives of this summit is to create a platform for LED partners to engage on possible investment options for Kannaland. This summit must identify and promote such options.
P020	Medium Scale Arts and Craft Manufacturing Centre	The main aim if this project is to formalize the arts and crafts sector in Kannaland, thereby providing employment opportunities and inclusion of the second economy into the mainstream economy.

Source: Kannaland Local Municipality, 2022 - 2027 Local Economic Development Strategy

3.4: Sector Plan Alignment

The section highlights the sector plan alignments within the municipality. The table below shows that there are a number of sector plans which need to be reviewed that will have an impact on the development of the Spatial Development Framework. This includes; Water Master Plan, Sewer Master Plan, Roads and Stormwater Management Plan, Bulk Infrastructure Master, Bulk Infrastructure Master Development and Electricity Master Plan.

Table 15: Sector Plan Allignment

Sector Plan	Status	Adopted by Municipal Council
Water Master Plan	Complete and will be reviewed in the 2015/16 financial year.	February 2012
Sewer Master Plan	Complete and will be reviewed in the 2015/16 financial year	October 2009
Roads and Stormwater Management Plan	Not completed. The municipality plans to develop this plan during the 2015/16 financial year	In process
Spatial Development Framework	In process. To be completed during 2025/2026	Adopted in 2013
Integrated Transport Plan	Completed	May 2014

Disaster Management Plan	Completed, with the assistance of the Garden Route District Municipality	February 2022
Waste Management Strategy	Completed	October 2022
Human Settlement Plan	Completed	The 2023/24 – 2028/29 HSP was adopted by Council during August 2023.
Bulk Infrastructure Master Development Plan	Completed, needs to be updated	August 2012
Bulk Infrastructure Master Plan: Sanitation	Completed, needs to be updated	February 2012
Local Economic Development Strategy	Completed	30 June 2023
Air quality management Plan	Completed, with the assistance of the Western Cape Province Government	
Integrated Water Management Strategy for Ladismith (Storage, boreholes, water rights, runoff)	Not yet developed	-
Integrated Municipal Infrastructure Maintenance Plan	Not yet developed	-
Integrated Infrastructure Asset Management Plan	Not yet developed	-
Electricity Master Plan	Not yet developed	-
Ward Committee Policy	Completed	2022

Client Services Charter	Completed	2022
Water Services Development Plan	Completed, needs to be reviewed	-
Spatial Maps Investment	In process	To be finalized during 2025/2026

4: KEY OPPORTUNITIES AND CHALLENGES

Following the status quo analysis, key opportunities and challenges were extracted to direct the way forward for the spatial development framework.

4.1: Key Opportunities

4.1.1: Good distribution of non-residential uses

Most of the towns have a good distribution of social and commercial uses.

4.1.2: Infrastructure and connectivity

Majority of the surface roads such as the R62 and R323 are in good condition. There is an increase in housing delivery to address the backlog.

4.1.3: Low unemployment rates

The municipality has the lowest unemployment rates within the district which means that people are eager to work and/or they are able to secure employment within the municipality. This creates a good labour base within the municipality which ultimately has a good impact on the economic growth of the municipality.

4.1.4: Agriculture to support

Focus on primary agricultural production as well as secondary agro-processing factories.

4.1.5: Social facilities

Develop a medical Centre in Vanwyksdorp.

Extend the Thusong Centre to serve as a business hub.

Establish ECD Centre in Zoar.

New development of a private skills development school in Ladismith.

Set up a data base of education services and facilities available which can be made available to members of the community in order to facilitate education and skills training.

4.1.6: Tourism

Develop Kannaland Municipality as a brand emphasizing the municipality as a destination for eco- and adventure tourism, culture and heritage, health and wellness, the Port capital of South Africa and retirement. In order for this to be achieved, the limited health care facilities need to be addressed.

4.1.7: LED projects to alleviate poverty

Promote the arts and culture industry.

Repair municipal owned heritage buildings as fulcrums for art and craft centres and tourism points of interest.

4.2: Key Challenges

4.2.1: Climate change

The impact of annual temperature/ rainfall within the municipality can have an impact on agriculture output.

4.2.2: Poor Administration

Due to lack of capacity within the municipality, it is difficult to track the conditions of infrastructure, maintenance and whether land use management within the municipality is being enforced.

4.2.3: Poor Engineering Service Provision

Although the access to basic services such as water, housing, sanitation and waste management has increased within the municipality, the municipality struggles to maintain acceptable standards in the quality of the basic services being provided.

4.2.4: Population and economic disparity

Urban growth exceeds economic growth.

4.2.5: Restructuring Zones and Priority Human Settlement and Housing Development Area

The municipality does not have any declared restructuring zones and PHSHDAs localities which are defined and delineated.

4.2.6: Lack of Public-Private Participation

Create cooperatives and partnerships to address the socio-economic challenges of the municipality. It has become difficult for investors to invest in the area.

4.2.7: Lack of Mobility

Lack of mobility into well located areas – entrenched poverty entrapment zones.

5: SPATIAL DEVELOPMENT CONCEPT

According to Section 12 of SPLUMA, local municipalities have to prepare Municipal Spatial Development Frameworks that will establish a clear vision for the future. This chapter will provide an overarching spatial direction, spatial development policy that is associated with the strategies for the development, protection and administration of Kannaland Local Municipality.

This chapter will confirm the spatial vision set out for Kannaland, the spatial concept for future growth and development in the municipality and the spatial strategies.

5.1: Spatial Development Vision

The vision statement will give expression to the desired future for Kannaland Municipality based on the synthesis of the key challenges and opportunities and will guide the development of spatial proposals and policies.

The 2025/26 Kannaland IDP vision for the municipality is "The Place of Choice" To create the ideal environment in which the people of Kannaland would like to live and work.

In establishing the vision for Kannaland, seven strategic focus areas were set forth:

1. Creating a knowledge economy, offering opportunities for training and skills development.
2. Building a tourist economy, offering a range of attractions from the environment to entertainment.
3. Building economic infrastructure in the municipality, notably in disadvantaged areas.
4. Focusing on good governance and social development.
5. Enhancing the agricultural economy in which farming and production prospers.
6. Focusing on creating an industrial economy in which various industries can expand.
7. Enhancing the cultural and creative economy; creating economic and social opportunities through the arts, heritage, and sport.

The vision for Kannaland was expanded into 5 main principles:

1. Live: fostering social development, regeneration of wards, infrastructure.
2. Work: fostering job creation, good governance, agriculture, and industrial development.
3. Learn: fostering earning & teaching and the knowledge economy.
4. Play: supporting and developing tourism, arts, and culture.
5. Prosper: bringing together the principles of Live, Work, Learn, and Play.

The aforementioned strategic areas and principles were taken into consideration and resulted in the following proposed spatial vision for the region:

"A sustainable Kannaland Municipality that grows, works, plays and prospers through resilience"

5.2: Spatial Strategies

In order to realise the spatial vision, the SDF will unpack it by focusing on the following spatial strategies that have been derived and adapted from the Garden Route SDF (2018) and the 2013 Kannaland SDF.

1. **Strategy One:** The Economy Is the Environment - Towards Sustainable Resource Use
2. **Strategy Two:** Accessibility For Inclusive Growth and Liveability
3. **Strategy Three:** Sustainable Growth Management Enabling New Development Opportunities
4. **Strategy Four:** Partnership-Driven Governance and Administration Towards Improved Financial and Non-Financial Sustainability and Resilience

These spatial strategies are expanded upon below and will form the conceptual and theoretical basis and framework of the spatial development concept and all spatial policy proposals made in subsequent sections of this report.

5.2.1: Strategy One: The Economy is the Environment - Towards Sustainable Resource Use

The economy of Kannaland Municipality is highly dependent upon its underlying natural resource base. For example, the vitality of the agricultural economy (being the home of nationally significant agri-processing plants for fortified wine and dairy products, and indeed the entire economy of the municipality) is intrinsically linked to the availability of water and the health of the associated ecological systems which protect the river system of the municipality. The importance of this natural resource base in supporting livelihoods and its potential to improve the quality of life of all the municipality's residents cannot be underestimated and thus the protection and enhancement of the environment is one of the main strategies of the spatial vision.

The spatial strategy is to protect, enhance and develop the distinct attributes and resources of Kannaland's Klein Karoo landscape with its varied:

- Natural and agricultural resource base (such as the critically important prime river corridors along the, Groot, Dwyka/Gourits river systems where agricultural activity is prominent, enabling irrigation and agricultural production);
- Settlements with different economic roles and potential (Ladismith, Calitzdorp Zoar and Van Wyksdorp, for example, holding significant built heritage assets, as well as historic farmsteads, churches and buirial sites);
- Diverse landscape, lifestyle, and tourism offerings (the Calitzdorp prominence as the "port capital" of the country, 4x4 routes, game farms, mountain biking trails etc.) very much underpin the tourism economy of the municipality, with scenic routes and passes being the R62, the Seweweekspoort Huisrivier and Rooiberg passes being the most significant.

5.2.2: Strategy Two: Accessibility For Inclusive Growth and Liveability

Access, with the intent of achieving inclusivity and liveability, refers to the ability of people to access economic opportunities, social services and recreational amenities affordably and with ease. Ease of access is dependent on the functionality of the road and pedestrian (non-motorised transport) network to connect communities, as well as the availability and viability of transport services. Ease of access is also dependent on the distribution of community facilities and economic opportunities in the municipal area, and people's proximity to these.

International best practice, SPLUMA, and the PSDF underscore that access is not only a matter of mobility for cars. Rather, walkability, the liveability of towns, land use mix, and density are the ingredients that make it possible to improve access. These attributes allow for efficiency and equity of access for all communities to the regional economy, services, and amenities.

There is a need to create and transform our settlements into places that work for all people and in a gender sensitive manner, including those who do not have private car access, who rely on walking and other forms of non-motorised transport, and who need to have safe and efficient access to a range of opportunities (services, facilities, employment, and living arrangements). This means that land and space need to be used more efficiently (i.e. denser development typologies promoted) and land uses mixed (i.e. providing a mix of residential, commercial and retail development along key intensification corridors and in the CBD of both Ladismith and Calitzdorp).

This strategy directs the municipality to enable appropriate accessibility within and between settlements, as well as across the Garden Route more broadly by:

- Establishing a clear primary and secondary regional route hierarchy, role and investment priorities (N12 versus R62 and R328); and
- Addressing connectivity between Barrydale, Ladismith, Calitzdorp and Oudtshoorn as well as the Great Karoo and Garden Route coastal belt areas; and

- Enabling physical accessibility to improve access to opportunity and services, as well as virtual accessibility where long distances are a barrier to physical access.
- Providing the framework for the investment in non-motorised transport (pedestrian) pathways, side-walks and infrastructure within the settlements of Ladismith and Calitzdorp.

5.2.3: Strategy Three: Sustainable Growth Management Enabling New Development Opportunities

The third leg of a holistic approach to a prosperous and sustainable municipality, is the management of growth and the associated infrastructure systems so that:

(1) The physical resource base (i.e. agricultural land, critical biodiversity, water and river systems) is protected and managed well;

(2) Opportunities are created for residents to prosper in inclusive and just settlements by preventing outward sprawl, disconnected and low-density development;

(3) Municipal financial sustainability becomes a key and central concern in municipal and government infrastructure investment, growth management and expansion; and

(4) Limited resources are used efficiently to protect long term financial sustainability of households, businesses, and government.

This SDF indicates the future role of settlements and their potential to absorb growth. Specifically, Ladismith and to a lesser degree, Calitzdorp are service centres of the municipality, in which most services, employment opportunities and facilities are and should continue to be consolidated.

The development approach of the municipality is that infrastructure development, investment, and migration should be directed so that growth is matched to capacity, resources, and opportunity. Specifically, this requires the following:

- Align service and infrastructure capacity with need, jobs, social services, and opportunity; and
- Recognise population dynamics in infrastructure investment (more diverse housing products and opportunities in the centralised locations); and
- Optimise the accessibility network to improve livelihood and sustainable service delivery.

The overarching aim is to achieve balance within settlements so that they function optimally and within finite resource constraints and prevent situations where low growth settlements expand to accommodate low income persons without the requisite employment growth.

5.2.4: Strategy Four: Partnership-Driven Governance and Administration Towards Improved Financial and Non-Financial Sustainability and Resilience

There is a growing understanding that an 'integrated governance' and partnership driven approach is required to ensure better coordination, alignment, and impact of planning, budgeting and delivery. The Kannaland Municipality must pursue a range of partnerships to achieve desired impacts, as well as explore shared service solutions within the broader region to ensure financial viability as well as sharing of administrative and logistical burdens associated with servicing the region. Partnerships are therefore central to governance within the municipality going forward.

For example, Ladismith and Calitzdorp's ambitions to achieve the following will require a range of partnerships of different kinds, such as:

(1) The desire to reinvigorate and revive the CBD's of Ladismith and Calitzdorp, will require cooperation with private sector businesses, retailers, and investors of these towns, possibly in the form of a Special Ratings Area, in order to ensure improved levels of service to create a beautiful, desirable, walkable and indeed 'investable' CBD for these towns. The interlinkage with Zoar and in recognition of the population dynamic of the area, it will be essential to strengthen economic connection with the R62 tourist route along with the opportunities of tapping into specific events such as the annual port festival or large sporting and cultural events which periodically occur in Kannaland.

(2) The desire to provide social housing opportunities will require partnerships with the provincial government and a social housing institute (in the form of entering into smart partner agreements) in order to deliver hundreds of social housing opportunities in well-located areas;

(3) The desire to promote government facility and service clustering for increased accessibility will require a partnership between the municipality and national and provincial Department of Public Works or any department seeking to deliver facilities and realise clustering synergies.

5.3: Spatial Development Concept

As articulated in the spatial vision, the spatial concept for the municipality focusses on creating a region – the Klein Karoo regional asset - that:

- Promotes **sustainable resource use** by protecting the environment, enhancing the resilience of the region and capitalising on and enhancing the unique Klein Karoo sense of place. In essence, the health of the economy is very much reliant upon the health of the environment;
- Promotes **accessibility and inclusive growth**; and
- **Promotes sustainable growth management**, ultimately ensuring municipal financial sustainability, as well as ecological and social sustainability**.**

The strategies described in the previous section will now be 'unpacked' in terms of what it means for Kannaland's structuring elements. The municipality must:

1) **Protect and enhance** the **natural systems** of the Klein Karoo (such as the Towerkop, Rooiberg and Anysberg Nature Reserves). The Municipality is framed by the Swartberg Mountain Range in the north to the Langeberg in the south. The municipality stretches from the Anysberg in the west to the Gamkaberg in the east. These unique biomes should continue to be prioritised as Critical Biodiversity Areas and designated as Environmental Support Areas for protection. The Municipality is also home to three mountain passes with significant tourist potential: The Huisrivier Pass, the Seweweekspoort and Rooiber Pass. The Touwsberg, Rooiberg and Bakenkop are scenic high points within the interior of the municipality.
2) **Protect and enhance** water **catchment** areas, **water resources,** and ensure **continuity** in the natural systems and river corridors in the municipality. This means providing the necessary buffers and setbacks (of at least 32m from the side of each riverbank) to preserve **continuity and integrity** of these biodiverse systems. Specifically, this means that the Groot, Touws, Olifants and the Gamka River systems draining the municipality should be prioritised for protection.
3) **Capitalise on the tourism appeal** of the various assets that exist in the Klein Karoo, such as the heritage appeal of existing town centres (i.e. Ladismith and Calitzdorp), as well as historic scenic hamlets and agricultural settlements, such as Amalienstein, Van Wyksdorp and Zoar, that provide a **sense of place, character and charm**. This intrinsic value creates lifestyle, tourism and hospitality opportunities. Barrydale (in neighbouring Swellendam) which has succeeded in rebranding itself as a tourist and alternative lifestyle destination for urbanites seeking a change of pace is one good example of marketing the competitive advantage of remoteness. The aim must be to invigorate the main

towns of Kannaland to similarly benefit from the enormous potential of location along the R62 in Ladismith, Calitzdorp and Zoar, and hence create jobs and assist in poverty alleviation, with low barriers to entry to employment opportunities.

4) Ensure the **development and maintenance** of the **road network** that provides mobility in the region. The R62 corridor is a key economic and tourism asset that must be maintained and enhanced where appropriate, also from a road safety perspective. This east-west route is the economic lifeline of the municipality.

5) Specific focus is also needed on **non-motorised transport** within the municipality, within Ladismith and Calitzdorp and connecting historically under-served areas to the CBD. Non-motorised transport, particularly pedestrian movement, is the primary transport mode among residents. Key interventions for implementation in this area are pedestrian walkways, and cycle paths. An important consideration in the planning of such interventions is safety, security (good lighting and visual surveillance) as well as shelter from the heat, as a means to mitigate the impacts of climate change.

6) Ensure that Ladismith provides the **primary administrative services and facilities** in the municipality, with Calitzdorp and Zoar also playing local service centre roles. Business opportunities within these towns should be maximised to encourage the multiplier effect of investment and expenditure. From a capital investment and maintenance perspective, these towns – particularly the towns of Ladismith and Calitzdorp – are the crucial drivers of growth and development opportunities.

7) Strongly encourage **value-add, industrial and agri-processing industries** locating in the primary and local service centres to create employment opportunities and add value to the region's agricultural goods and services. Specifically, Ladismith, Calitzdorp and Vanwyksdorp present opportunities for value-added and agri-processing activities.

8) Focus **government investment, facilities, services and housing opportunities** in Ladismith and to a lesser extent Calitzdorp, Van Wyksdorp and Zoar. Prevent the creation of new low-income housing developments in low growth, job deficient settlements that have little prospects of creating employment.

Figure 13 illustrates the spatial development concept for the municipality.

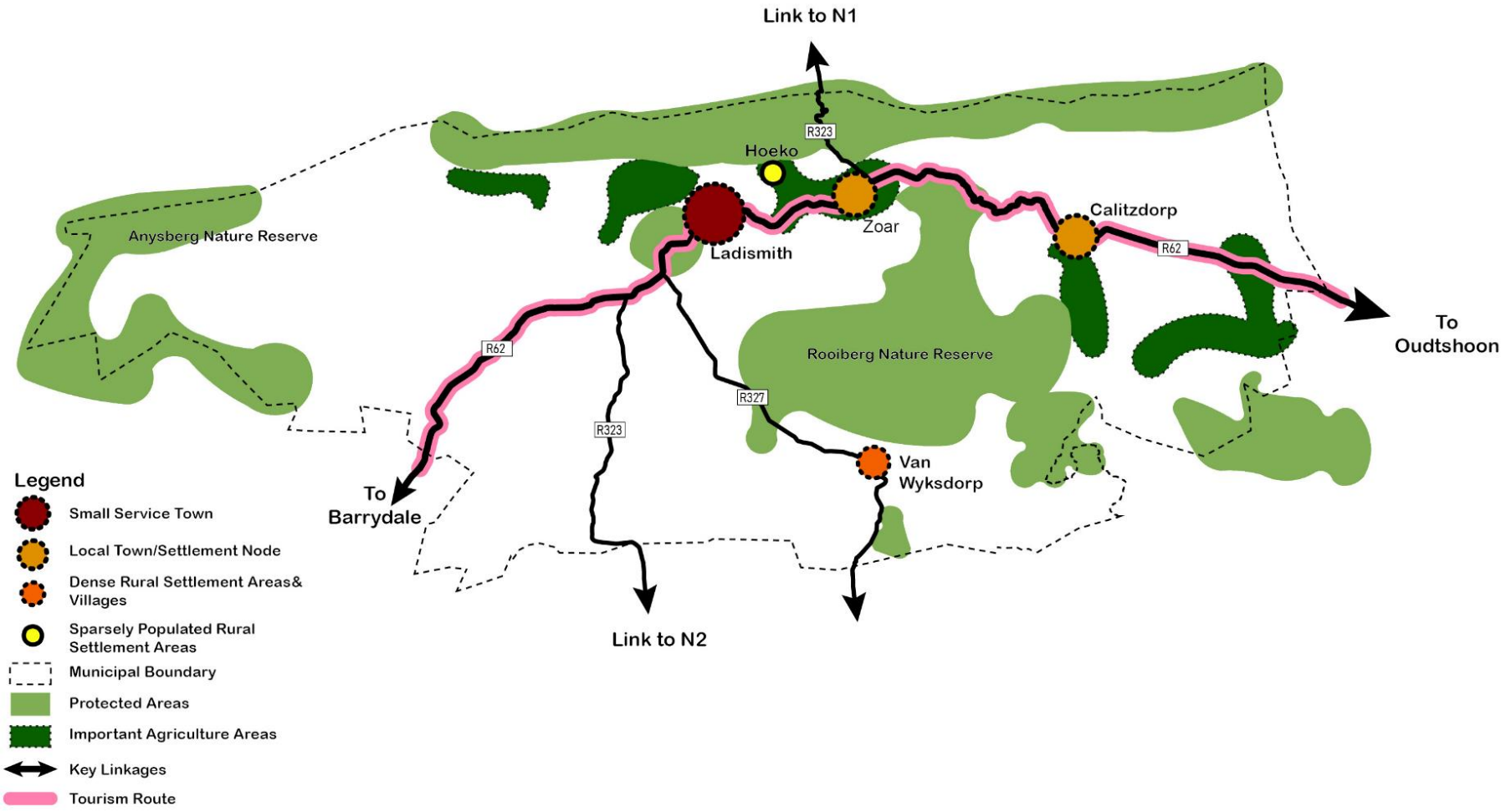


Figure 13: Kannaland Spatial Concept

6: SPATIAL DEVELOPMENT FRAMEWORK

6.1: Population Projection and Land Use Budget

6.1.1: Population Projection

The important urban settlements in the municipality are Ladismith, Calitzdorp, and Zoar. The table below indicates Low, Medium and High Bound Population Growth Estimates. Low and High Bound growth rates were estimated according to the medium growth rate that was sourced from Stats SA Mid-Year Population Estimations for 2022. The current and projected populations of the municipality are determined by the population growth rate observed between 2023 and 2027. The population of the municipality declined at an annual rate of -1,6 % between 2025 and 2035. The negative growth rate may imply a migration of residents to other towns / cities in pursuit of better economic prospects. It is assumed that the municipality's population will continue to decline at the same rate into the near future.

The municipality's population is estimated to be 19758 in 2030 with households projected at 7635 in 2030. The majority of the population resides in Calitzdorp according to the table below.

Table 16: Towns and Settlement Populations

Area	Growth Rate %	Growth Ranking	Projected Population 2025	Projected Households 2025	Projected Population 2030	Projected Households 2030	Projected Population 2035	Projected Households 2035	Additional Population 2025-2035	Additional Households 2025-2035	Housing Waiting List at 2024
Ladismith	1	High	7,460	2,308	7,841	2,350	8,241	2,549	781	241	
	-1.6	**Medium**	**6,899**	**2,134**	**6,364**	**1,969**	**5,871**	**1,816**	**-1,028**	**-318**	**1,321**
	-1.8	Low	6,857	2,121	6,262	1,937	5,718	1,769	-1,139	-352	
	1	High	6,456	2,004	6,785	2,040	7,131	2,214	675	210	

Area	Growth Rate %	Growth Ranking	Projected Population 2025	Projected Households 2025	Projected Population 2030	Projected Households 2030	Projected Population 2035	Projected Households 2035	Additional Population 2025-2035	Additional Households 2025-2035	Housing Waiting List at 2024
Calitzdorp	**-1.6**	**Medium**	**5,970**	**1,853**	**5,507**	**1,710**	**5,081**	**1,577**	**-889**	**-276**	**1,093**
	-1.8	Low	5,934	1,842	5,419	1,682	4,948	1,536	-986	-306	
Zoar	1	High	4,794	1,526	5,039	1,604	5,296	1,686	502	160	**545**
	-1.6	**Medium**	**4,433**	**1,411**	**4,090**	**1,302**	**3,773**	**1,201**	**-660**	**-210**	
	-1.8	Low	4,406	1,402	4,024	1,281	3,674	1,170	-732	-233	
Van Wyksdorp	1	High	1,017	281	1,069	286	1,123	311	106	29	**126**
	-1.6	**Medium**	**940**	**260**	**868**	**240**	**800**	**221**	**-140**	**-39**	
	-1.8	Low	935	259	854	236	779	216	-155	-43	
Municipal Wide	1	High	23,160	8,949	24,342	9,406	25,583	9,885	2,423	936	**3,420**
	-1.6	**Medium**	**21,417**	**8,276**	**19,758**	**7,635**	**18,227**	**7,043**	**-3,190**	**-1,233**	
	-1.8	Low	21,287	8,225	19,439	7,511	17,751	6,859	-3,536	-1,366	

6.1.2: Housing Demand

Meeting the demand for housing in the coming years is one of the objectives of this SDF. Although the population is projected to decline this does not negate the need for housing. The future demand for housing is influenced by the current gap in housing supply and the amount of housing needed to accommodate the resident population. In order to estimate the number of housing units and the amount of residential land required for future population growth, it was assumed that the number of new housing units will consist of 40% medium and 60% low density typologies, with a desired household size of 3.5.

Table 17: Housing Demand Projection Assumptions

Housing Type/ Density	% of New Households	Density (households/ha)
Low Density	60%	15
Medium Density	40%	25

Based on the above assumptions, the municipality will need an additional **3420 dwelling units** to accommodate the future populations. The table below shows the numbers and types of additional dwelling units required in the towns and settlements of the municipality.

Table 18: Additional Dwelling Units Required per Town/Settlement

Town/Settlement	Low Density	Medium Density	Total Dwelling Units
Ladismith	793	528	1321
Calitzdorp	656	437	1093
Zoar	327	218	545

Van Wyksdorp	76	50	126
Oher & Rural Areas	201	134	335
KNLM	2053	1367	3420

According to the valuation roll, there is vacant land in the municipality that is zoned for residential use. The table below shows the additional land that is required to meet the future housing backlog. Table 19 shows that Ladismith, Calitzdorp, Van Wyksdorp and other and rural areas need additional 27Ha, 28Ha, 2Ha and 19Ha of land, respectively, to accommodate the housing backlog and future housing demand. Zoar on the other hand has a surplus (as indicated by the negative figure) of 106Ha of vacant land available to accommodate future housing demand. From Table 4 it appears that collectively, in Kannaland Municipality, there is no additional land required as confirmed by the -31Ha figure, however, it should be noted that this surplus vacant residential land is only available in Zoar.

Table 19: Residential Land Required per Town/Settlement (Hectares)

Town/Settlement	Low Density (Ha)	Medium Density (Ha)	Total (Ha)	Vacant Residential Land (Ha)	Net Residential Land requirements (Ha)
	Current Gap				
Ladismith	53	21	74	46,23	27
Calitzdorp	44	17	61	33,28	28
Zoar	22	9	31	137,45	-106

Van Wyksdorp	5	2	7	5,18	2
Other & Rural Areas	13	5	19	0	19
KNLM	137	54	192	222	-31

6.1.3: Land Budget

This section focuses on evaluating the need for additional land within the Municipality, including its towns and settlements, to better understand their future urban development. The analysis is limited to urban or built-up land needs—such as areas for housing, social and economic amenities, industrial and business uses, public open spaces, and transport infrastructure. These requirements are estimated based on projected population growth and guided by CSIR land use standards. Essentially, the study forecasts how much additional land will be necessary to accommodate future residents and the services that they will require. The next section outlines the projected land needs and the key assumptions used in making these forecasts.

- **Residential**: There is insufficient vacant land available in Ladismith, Calitzdorp, Van Wyksdorp and other and rural areas to accommodate the housing requirement. On the other hand, Zoar has a surplus of vacant land available.
- **Industrial and warehousing**: A total of 7,08Ha of land is available for industrial use in Ladismith.
- **Business (includes Offices and Retail):** A total of 65,65Ha is available for commercial and business uses in Ladismith and Calitzdorp.

The table below describes the additional land requirements in Kannaland Municipality's towns and settlements. The positive figures indicate additional land required and the negative figures indicate that there is surplus land available. The forecasts show negative figures due to the fact that the population is projected to see a decline and because there is vacant land available according to the valuation roll.

Table 20: Additional Land Requirements (ha)- 2024-29

Land Use	Ladismith	Calitzdorp	Zoar	Van Wyksdorp	Other and Rural Areas	KNLM
Residential	24,28	25,07	-108,33	1,54	17,92	**-39,53**
Industrial and Warehouse	-7,08	-	-	-	-	**-7,08**
Business	-36,27	-29,38	-	-	-	**-65,65**
Open Space	-2.54	-0,58	-14,44	0,21	2,39	**-14,44**
Roads	-3.81	-0,86	-21,67	0,31	3,58	**-22,45**
Total Hectares	**-25,43**	**-5,75**	**-144,44**	**2,05**	**23,89**	**-149,68**

6.1.4: Bulk Infrastructure Requirements

The population projection will have a direct impact on bulk infrastructure due to the increase in demand and usage. At present, the existing bulk infrastructure in the municipality is not able to accommodate the existing population. The table below highlights the priority infrastructure projects that the municipality should focus on.

Table 21: Infrastructure Priorities

% Priority	Town	Project	Description
1	Calitzdorp	PRJ-KCW-001*	Calitzdorp: Bergsig bulk supply augmentation- Phase 1
2	Ladismith	PRJ-KLW-001*	Ladismith: Implement new Waterworks PRV 1 zone
3	Van Wyksdorp	PRK-KVW-001*	Van Wyksdorp: Additional reservoir storage capacity at Plakkerskamp reservoir site
4	Zoar	PRJ-KZW-001*	Zoar: Bulk supply augmentation-Phase 1
5	Zoar	PRJ-KZW-003*	Zoar: Implement new Droevlei PRV zone
6	Calitzdorp	PRJ-KCW-002*	Calitzdorp: Implement Bergsig booster zone
7	Ladismith	PRJ-KLW-002*	Ladismith: Implement new Waterworks PRV 2 zone
8	Van Wyksdorp	PRJ-KVW-002*	Van Wyksdorp: Bulk supply augmentation to Stanley reservoir
9	Zoar	PRJ-KZW-002*	Zoar: Additional reservoir storage capacity at Droevlei
10	Calitzdorp	PRJ-KCW-003*	Calitzdorp: Bloekomlaan zone network upgrades- Phase 1
11	Ladismith	PRJ-KLW-005*	Ladismith: Additional reservoir storage capacity at Waterworks
12	Zoar	PRJ-KZW-006*	Zoar: Additional reservoir storage capacity at Karoolande
13	Calitzdorp	PRJ-KCW-005*	Calitzdorp: Bloekomlaan bulk supply augmentation- Phase 1

14	Calitzdorp	-	Calitzdorp: Equipped the deep borehole
15	Zoar	-	Zoar: Repair and maintenance of the WTW

6.1.5: Social Facilities Demand

Social amenities and infrastructure are required to expand with the housing supply, and the absence of this corresponding growth would result in overcrowding in schools, long queues at clinics and overused recreational areas, leading to service delivery issues and resident dissatisfaction. The increase in the demand for housing will result in an increased need for social facilities to accommodate the additional households. A social facilities threshold calculator was used to calculate the number of social facilities that would be needed to accommodate the additional houses across the municipality. The sum of the amount of housing on the waiting list (3420) and the high growth ranking of house holds projected between 2025-2035 (936) is 4356 dwelling units and this figure was used to calculate the facilities required as shown in the table below.

There are 14 schools across the municipality, 4 primary healthcare institutions, 5 mobile/satellite clinics, and 1 district hospital that serves the municipality's healthcare requirements. Residents have access to 5 antiretroviral therapy treatment centres and 7 tuberculosis clinics. The municipal area was equipped with four provincial ambulances, equivalent to a ratio of 1.80 ambulances per 10 000 people. This exceeds the district average of 0.4 ambulances per 10 000 inhabitants. There are 2 police stations in the municipality. Finally, there are 3 cemeteries in Calitzdorp, 2 in both Ladismith and Zoar and 1 in Van Wyksdorp. When considering the projected social facility requirements in the table below against existing social facilities within the municipality and bearing in mind that the population trend indicates a decline, we can realistically estimate that new social facilities will not be required across the municipality for the next 5 years.

Table 22: Social Facilities Threshold

Social Facility	Calculated Requirement	Rounded Requirement

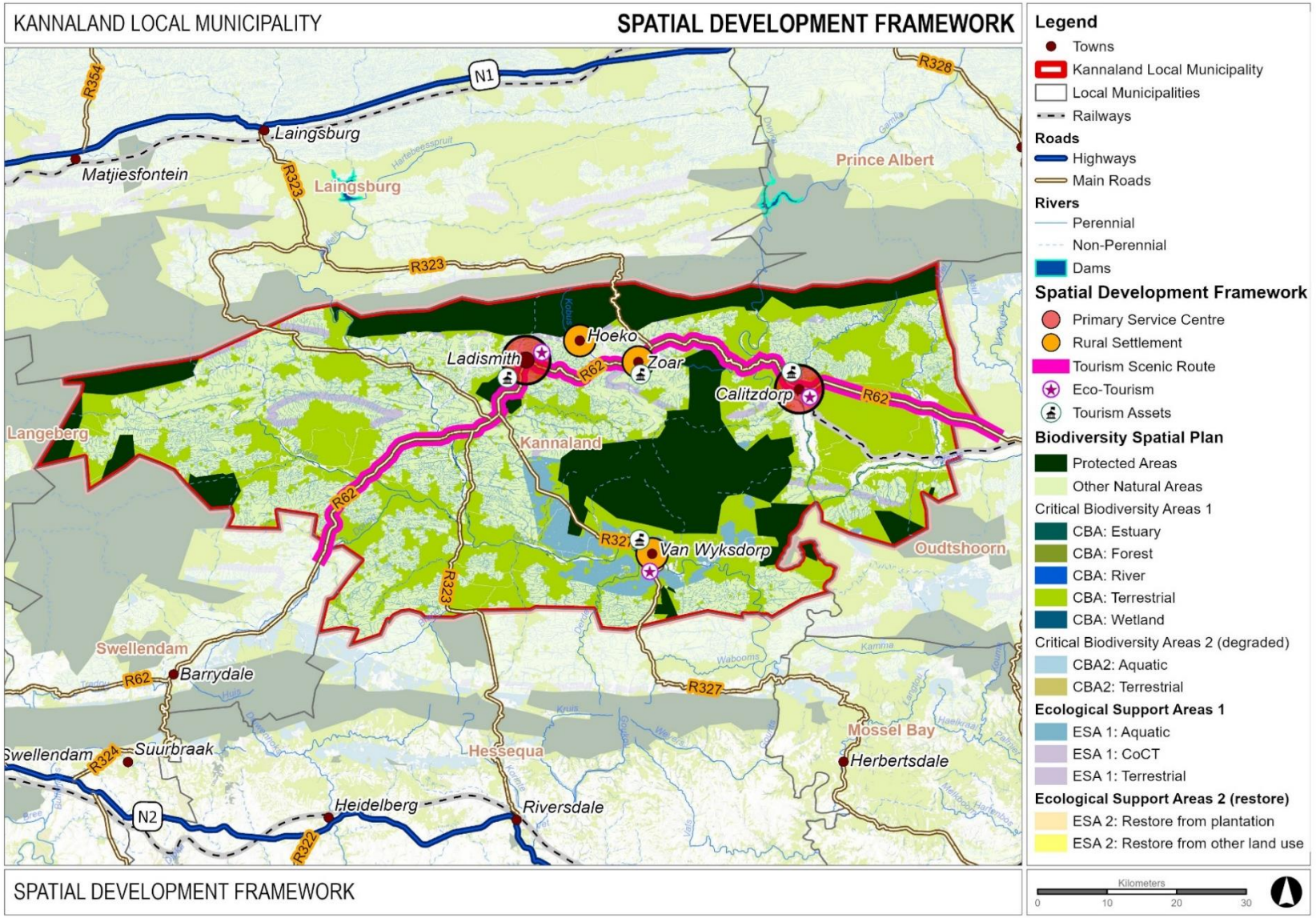
Early Childhood Development Centres	6,4614	6
Primary Schools	5,1691	5
Secondary Schools	2,5846	3
Community Sports Field	3,1015	3
Local Library	1,5507	2
Community Health Care Centre	0,7754	1
District Hospital	0,0517	0
Children's Homes	0,3692	0
Homes for the Aged	0,2386	0
Community Halls / Centres	1,5507	2
Municipal Offices	0,3101	0
Firestations	0,2585	0
Public Open Space (Community Parks)	7,7537	8
Cemetries	3,1015	3
Police Stations	0,6203	1

6.2: Spatial Proposals

6.2.1: Composite Spatial Development Framework

The accompanying plan serves as the Spatial Development Framework for Kannaland Local Municipality. It is based on the earlier Spatial Development Concept and the representation of development elements throughout the municipal area. The plan is further supported by the following sections, which outline how its various components and municipality-specific aspects should be interpreted and implemented to promote sustainable development over the next five years.

Map 30 shows the composite spatial development framework map for Kannaland.



Map 30: Composite Spatial Development Framework

6.2.1.1: Conservation

The unique attributes, resources, and risks of the Klein Karoo are different from the Garden Route. These systems are, however, two different yet complementary, mutually reinforcing sub-regions. Designated Spatial Planning categories (SPCs) must be taken into account in terms of land use management, so that Critical Biodiversity Areas (CBAs) and protected areas are conserved and restored. Land use change should always favour rehabilitation of indigenous species in degraded areas that have the potential to connect protected areas, CBAs and Ecological Support Areas (ESA's).

Manage land use in the rural areas of the Klein Karoo which includes the towns of Ladismith, Calitsdorp, Zoar and Amalienstein through the application of Spatial Planning Categories (SPC's) as set out in the Western Cape Rural Land Use Planning Guidelines and the Western Cape Biodiversity Spatial Plan, and ensure that all investment in the Klein Karoo landscape seeks to underpin the principles of spatial sustainability and spatial resilience.

The Kannaland Municipality SDF adopts and recommends the application of the Draft WCG Rural Land Use Planning and Management Guidelines (2017) and their definitions of rural and agricultural Spatial Planning Categories.

Greater detail on each SPC layer can be found in the Western Cape Rural Land Use Guidelines. The Kannaland SDF map Map 31 sets out development proposals that are in line with the inherent land use suitability of its varying landscapes.

(i) Kannaland municipal area:

- Core 1 Areas: Critical Biodiversity Areas (CBA) and protected areas, these include habitats classified as highly irreplaceable, critically endangered, or endangered terrestrial (land), aquatic (rivers, wetlands, and estuaries) and marine habitats. It also includes essential biological corridors vital to sustain their process and pattern functionality. These areas must be regarded as "no-go" for development and must be kept in a natural state, with a management plan focused on maintaining or improving the state of biodiversity. There should be no further loss of natural habitat and degraded areas should be rehabilitated.

- Core 2 Areas: Consists of two areas: Critical Biodiversity Area 2 (Degraded) and Ecological Support Area 1. These areas are in a degraded or secondary condition that are required to meet biodiversity targets, for species, ecosystems, or ecological processes and infrastructure. These areas should be maintained in a natural or near-natural state with no further loss of natural habitat. These areas should be rehabilitated.

- Buffer 1 Areas: These areas may be degraded but still play an important role in supporting the functioning of Core Areas (either Protected Areas or CBAs) and are essential for delivering ecosystem services. These areas should be restored and/or managed to minimize impact

on ecological infrastructure functioning; especially soil and water-related services. Two components of the rural landscape make up Buffer 1 areas:

(i) Ecological Support Area 2: Restore and/or manage to minimize impact on ecological infrastructure functioning; especially soil and water-related services.

(ii) Other Natural Areas: Minimize habitat and species loss and ensure ecosystem functionality through strategic landscape planning. Offers flexibility in permissible land-uses, but some authorisation may still be required for high impact land-uses.

- Buffer 2 Areas: This category includes areas designated as Other Natural Areas, located in an extensive and/or intensive agriculture matrix (i.e. livestock production) as the dominant land use. The Buffer 2 SPC requires that habitat and species loss is minimized and that ecosystem functionality is preserved through strategic landscape planning. Buffer 2 areas offer flexibility in permissible land-uses, but some authorisation may still be required for high-impact land-uses.

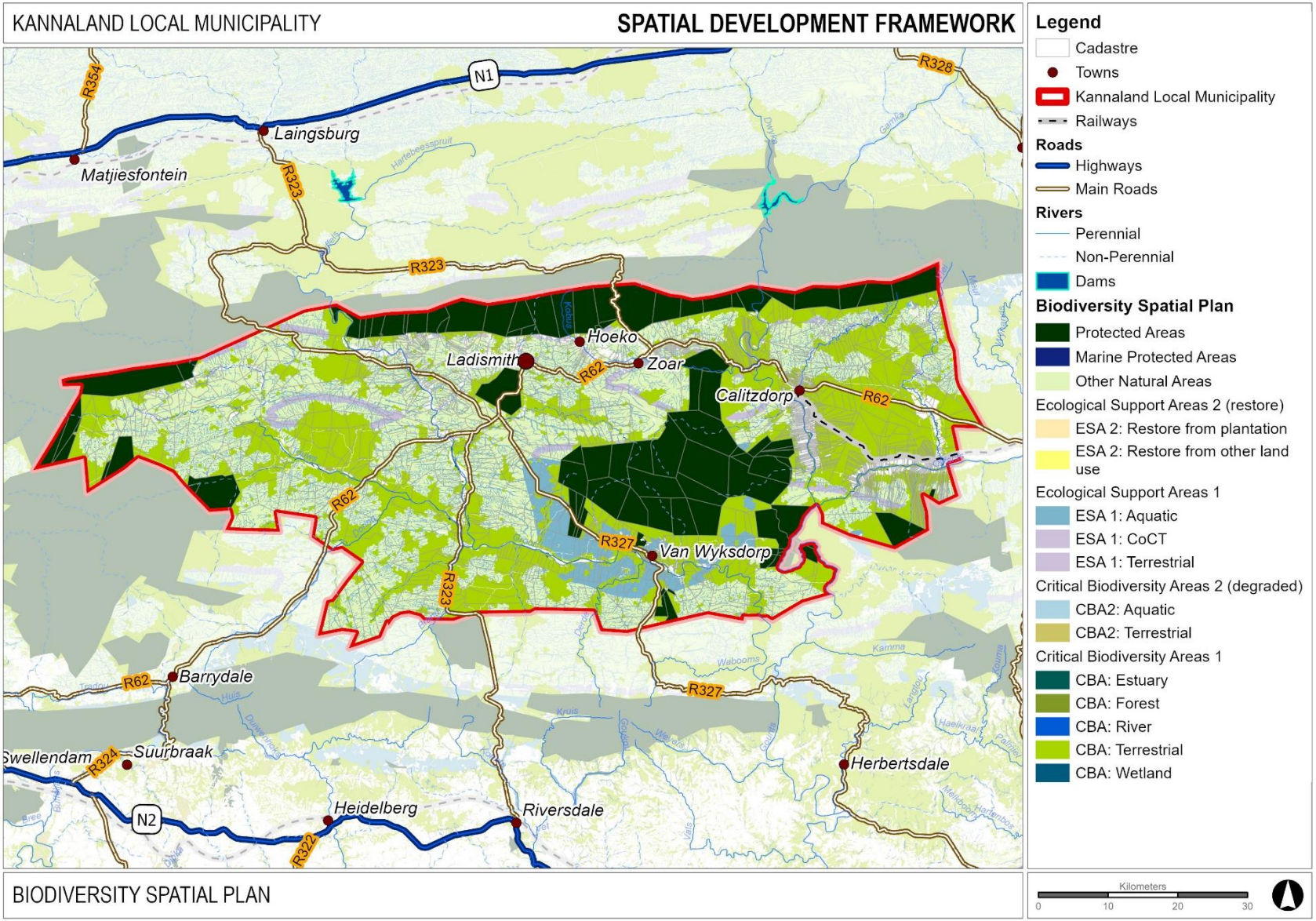
- Agriculture Areas: Comprises of existing and potential intensive agriculture footprint (i.e. homogenous farming areas made up of cultivated land and production support areas). It includes areas in which significant or complete loss of natural habitat and ecological functioning has taken place due to farming activities. Existing and potential agricultural landscapes should be consolidated and protected; sustainable agricultural development, land and agrarian reform, and food security should be facilitated and ecosystems must be stabilised and managed to restore their ecological functionality.

- Settlement Areas: This category includes all existing settlements, large and smaller towns, villages and hamlets. Settlements are delineated by municipalities in terms of an urban edge or by DEA&DP in terms of the 2014 NEMA Listing Notices as urban areas. The purpose is to develop and manage settlements in a sustainable manner. Wherever possible existing settlements should be used to accommodate non-agricultural activities and facilities.

The table below demonstrates Protected Areas, Critical Biodiversity Areas, Ecological Support Areas and other natural areas are converted to the various Spatial Planning Categories mentioned previously, as set out in the Western Cape Biodiversity Spatial Plan.

WCBSP Map Category → / Spatial Planning Category ↓	Protected Areas PA	Critical Biodiversity Area 1 (Terrestrial/ Aquatic) CBA 1	Critical Biodiversity Area 2 (Degraded) CBA 2	Ecological Support Area 1 (Terrestrial/ Aquatic) ESA 1	Ecological Support Area 2 ESA 2	Other Natural Areas (Natural to Near-natural / Degraded) ONA	No Natural Remaining NNR
CORE 1	•	•					
CORE 2			•	•			
BUFFER 1						•	
BUFFER 2					•	•	
AGRICULTURE							•
SETTLEMENT							•

Figure 14: Spatial Planning Categories



Map 31: Western Cape Biodiversity Spatial Plan

6.2.1.2: Agriculture

Agriculture plays a significant role in the Kannaland Municipality. It provides opportunities to increase employment and grow products for local and international markets. Agriculture contributes to the region's Gross Domestic Product (GDP), provides food security, and is a basis of many tourism activities. Protecting and promoting the agricultural economy is therefore a priority for the municipality.

The preservation of agricultural land and the integrity of agricultural operations must be protected and enhanced. The conversion of irrigated, arable land is not supported in terms of this SDF and the Subdivision of Agricultural Land, Act (Act 70 of 1970), section 3 (f), which states that "no area of jurisdiction, local area, development area, peri-urban area or other area … of the definition of 'agricultural land' in section 1, shall be established on or enlarged so as to include, any land which is agricultural". See Map 32 that shows the extent of the agricultural crops of the municipality.

Development directed at ensuring water security for the agricultural sector and job creation for the inhabitants of the municipality is a priority. In order to achieve this, disaster risk management measures may be implemented in order to protect important agricultural land, resources, and employment that may be lost through flooding, water shortage, and wildfires.

This underscores the need to protect agricultural land as stipulated in the Draft Preservation and Development of Agricultural Land Bill (2016):

- It is in the national interest to preserve, and promote sustainable use and development of agricultural land for the production of food, fuel, and fibre for the primary purpose to sustain life further recognising that high value agricultural land is a scarce and non-renewable resources; and recognising that it is in the interest of everyone to have agricultural land protected, for the benefit of present and future generations;
- The sustainable development of agricultural land requires the integration of social, economic and environmental considerations in both forward planning and ongoing agricultural land management to ensure that development of agricultural land.

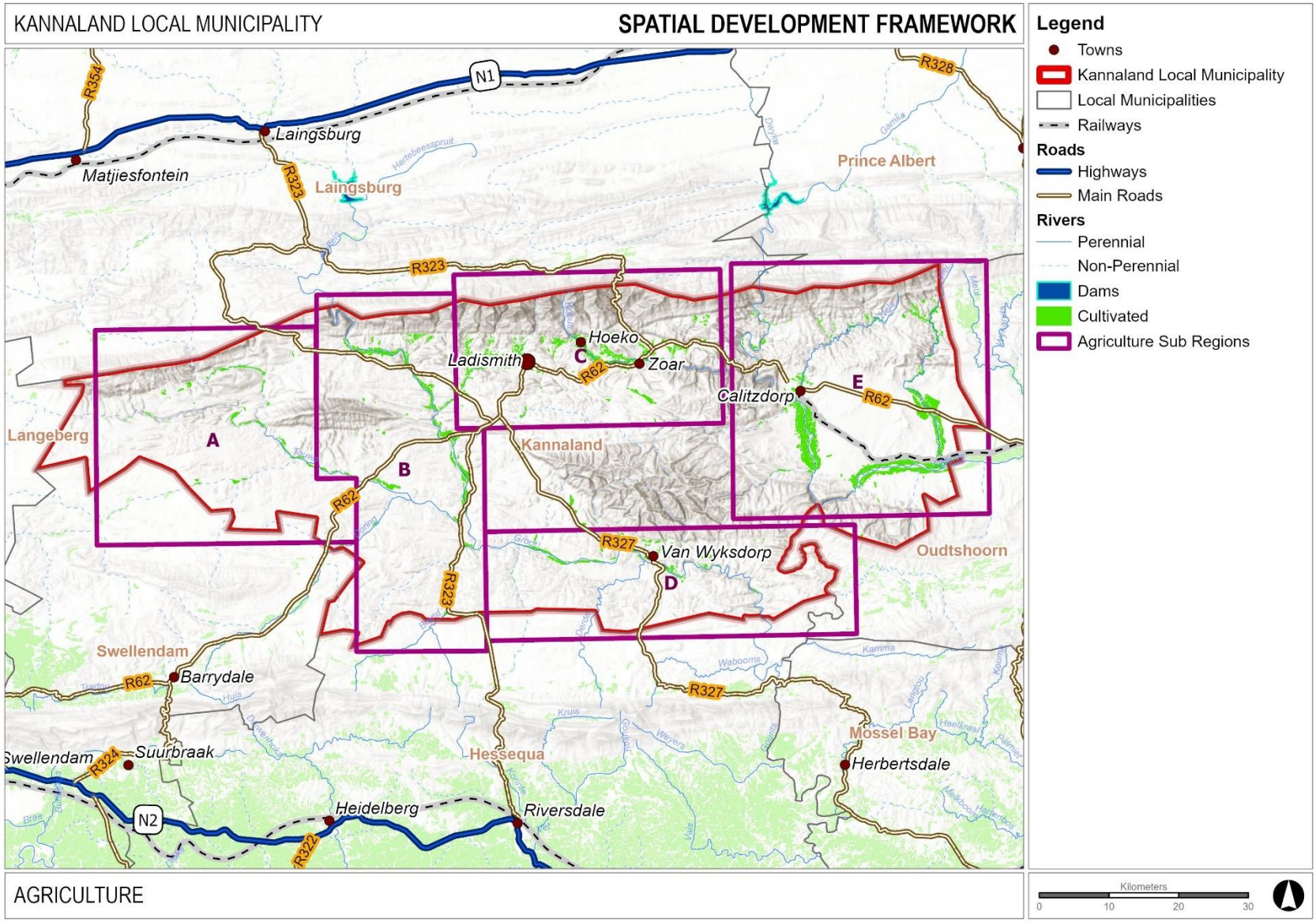
Given the above, the rural landscape and its agricultural resources must be protected and, where sustainable, expanded to create an agricultural economy which is commensurate with the assets and resources found within the municipality. The potential broadening of production and expansion of agricultural products should also be explored, in order to make a more significant contribution to food security, employment creation and gross value add of the municipality.

Agri-hubs and agri-processing zones have been identified in Garden Route District Rural Development Plan. This is only partially relevant to Kannaland Municipality as DR&DLR has designated the town of Oudtshoorn as the nearest Agri-hub and no Agri-hub has been identified within the municipal borders.

The agricultural crops that are produced in the municipality that need to be protected and enhanced are listed in the following table.

Table 23: Agricultural Sub Regions

Agriculture Sub Regions				
Kannaland West (A)	**Grootrivier Area (B)**	**Ladismith & Calitzdorp (C)**	**Van Wyksdorp Area (D)**	**Calitzdorp Area (E)**
Lucerne/ Medics	Lucerne/ Medics	Lucerne/ Medics	Lucerne/ Medics	Lucerne/ Medics
Natural Grazing	Other	Other	Olives	Other
Olives	Weeds	Wine grapes	Natural Grazing	Planted Pastures
Planted Pastures	Natural Grazing	Apricot	Other	Fallow
Fallow	Wine grapes	Plums	Fallow	Wine grapes
Other	Fallow	Peach	Apricot	Onions



Map 32: Agriculture

6.2.1.3: Tourism

The Kannaland Municipal Area holds substantial potential for tourism-led economic growth, supported by its rich historical, cultural, and natural assets. These features provide a strong platform for advancing local development, strengthening community cohesion, and preserving the area's distinctive cultural heritage. Targeted investment in tourism infrastructure, the rehabilitation of strategic attractions, and the promotion of cultural and recreational activities can elevate Kannaland's status as a viable, inclusive, and sustainable tourism destination.

Tourism is identified as a key economic driver and a major source of employment within the municipality. To unlock the sector's full potential, an integrated planning approach and focused policy interventions are required to address critical enablers and barriers to development.:

- **Accessibility**
  Effective access to and within the municipality is fundamental to tourism growth. At present, inadequate transportation infrastructure—particularly the poor condition of road networks—limits the movement of tourists, most of whom rely on private vehicles. In addition, the unreliability of essential services such as electricity and water supply continues to detract from the visitor experience and dampens investor confidence. Addressing these infrastructural and service constraints is critical to improving regional connectivity, enhancing competitiveness, and supporting sustainable tourism development.

- **Amenities**
  The presence and quality of amenities—both natural and built—play a significant role in enhancing a destination's appeal. Kannaland is endowed with diverse natural resources, including mountain ranges, rivers, wetlands, and dams, offering numerous opportunities for outdoor and eco-tourism activities such as hiking, boating, and nature exploration. Complementary to this, strategic investment in man-made amenities—such as visitor centres, event venues, and hospitality infrastructure—is needed to meet the expectations of a diverse tourist base and to encourage local enterprise development.

- **Attractions**
  Tourism depends on distinctive attractions that motivate visitation. Kannaland's cultural and natural assets—including historic settlements, heritage buildings, scenic landscapes, and local festivals—form the foundation of its tourism offering. Enhancing these assets through cultural preservation, event programming, and strategic marketing will be crucial in increasing tourist numbers, extending their length of stay, and generating local economic benefits.

- **Accommodation**
  The availability of suitable accommodation is essential to support overnight stays, in line with international tourism definitions. While larger hotel developments may be appropriate in urban centres, rural areas such as Kannaland are better suited to locally managed, high-quality accommodation offerings. These facilities should reflect the local identity and provide personalised experiences, thereby reinforcing inclusive economic development objectives and contributing to visitor satisfaction.

Key Tourism and Heritage Assets

Kannaland boasts several flagship attractions that support both tourism and agriculture as key economic sectors. Notably, the Calitzdorp Wine Route, featuring scenic vineyards and wine tastings, draws significant visitor interest. Nature-based tourism is supported by the Gamka Mountain Range and Route 62, offering dramatic landscapes, small-town charm, hiking trails, birdwatching opportunities, and access to local caves. The tranquil environment and natural beauty position the area as a destination for relaxation and reconnection with nature.

Agriculture continues to play a foundational role in the local economy. The municipality benefits from fertile soils and a moderate climate conducive to a range of agricultural activities. The integration of agri-tourism initiatives offers further potential to diversify the economy and enhance local value chains.

Preservation of Scenic and Cultural Landscapes

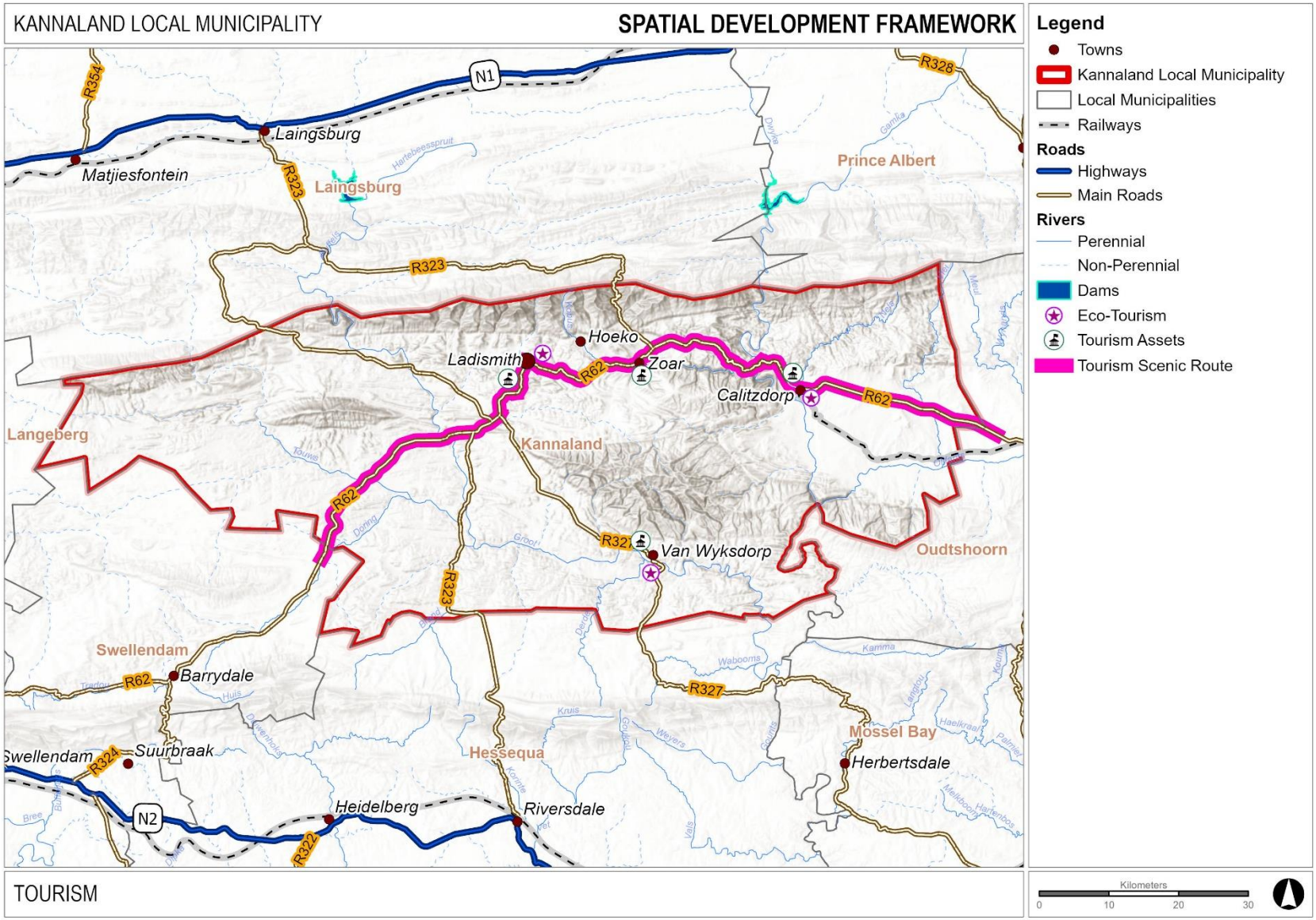
Recognising the economic and intrinsic value of Kannaland's landscapes and heritage, key areas have been identified for protection. These include agricultural landscapes, mountainous terrains, valleys, river corridors, and open plains. Historical urban fabric—such as the traditional streetscapes and vistas in Ladismith, Amalienstein (Zoar), and Calitzdorp—must be preserved through careful heritage management.

The 2013 Provincial Spatial Development Framework (PSDF) Heritage and Scenic Resources Specialist Study offers strategic guidance on settlement character and spatial form. These guidelines have been adopted within this Spatial Development Framework (SDF) and should inform all land use and development decision-making processes. New developments should be compact, contextually appropriate, and sensitive to the existing topography and historical layout of settlements.

Priority Scenic and Heritage Resources Identified:

- Scenic routes and passes: R62, Seweweekspoort, Rooiberg Pass, and Huisrivier Pass.
- Historic settlements and heritage assets: Amalienstein, Zoar, Calitzdorp, Ladismith, and Van Wyksdorp, featuring heritage buildings, churches, Boer War sites, and historic farmsteads.
- Notable landscapes: Towerkop, Rooiberg, and Anysberg Nature Reserves; key river systems such as the Groot, Gamka, Touws, and Olifants Rivers, which are vital for agriculture and ecological health.

To maintain the character and integrity of these assets, inappropriate development—especially along ridgelines and key visual corridors—must be strictly avoided. Protecting these irreplaceable resources is central to sustainable tourism development and long-term spatial planning in Kannaland Municipality.



Map 33: Tourism

6.2.1.4: Business Node

Economic activity is prevalent throughout human settlement areas within the municipality, much of it informal and operating without formal land use rights. Acknowledging and planning for these activities is essential in shaping a more functional and inclusive urban spatial structure.

Informal economic activities are widely dispersed, creating a mixed-use urban environment that offers certain advantages, such as vibrancy, accessibility, and livelihood opportunities. However, this informality should not preclude efforts to introduce greater structure, order, and spatial efficiency in the long-term development of settlement areas.

Insights drawn from Central Business District (CBD) development strategies highlight the benefits of clustering complementary land uses. Encouraging such clustering in settlement areas can help to optimise service delivery, improve accessibility, and create synergies between businesses and community services.

To support this, the creation of formalised business nodes within urban areas is proposed. These nodes should serve as designated areas where non-residential, business-related activities—such as government services, municipal offices, Home Affairs branches, retail shops, cafés, and restaurants—can be consolidated. Ideally, these nodes should be centrally located along main collector roads to ensure ease of access via public transport. Their design should prioritise pedestrian movement, incorporate public transport facilities (including taxi ranks), and provide adequate parking, while being guided by appropriate urban design frameworks.

These business clusters enable enterprises to benefit from mutual proximity and shared foot traffic. When located along high-mobility routes, they further benefit from visibility and accessibility, which can support commercial growth and employment creation.

6.2.1.5: Movement Networks (Rail, Road Air)

The standard of living for residents is heavily influenced by the state of transport infrastructure, which is essential in addressing the needs of both daily commuters and the broader community, thereby helping to reduce social issues. Well-designed and accessible transport systems enhance the quality of life for everyone, particularly individuals with disabilities, and support meaningful societal improvements (Naberushkina, 2022). To accommodate the growing number of commuters, it is vital that existing and future public transportation systems are effectively coordinated (Chetty and Phayane, 2012). The R62 corridor is a key economic and tourism asset that must be maintained and enhanced where appropriate, from a user perspective as well as from a road safety perspective. This east-west route is the economic lifeline of the municipality.

Specific focus is also needed on non-motorised transport within the municipality, within Ladismith and Calitzdorp and connecting historically under-served areas to the CBD. Non-motorised transport, particularly pedestrian movement, is the primary transport mode among residents. Key interventions for implementation in this area are pedestrian walkways, and cycle paths.

To promote regional mobility, it is essential to develop an affordable and accessible transport network that connects areas across municipal boundaries. In this context, the R62 plays a vital role by supporting both regional tourism and freight movement, thereby serving as an alternative route to the N2. Maintaining the R62 and other major roads in good condition is necessary to sustain a high-performing road network.

To ease congestion on the N2—especially during peak holiday periods—it is recommended that the R62 be upgraded to better accommodate tour buses and freight vehicles. Such improvements would enhance regional connectivity and logistics. Upgrading the R62 could yield three main benefits:

1. It would serve as an alternative freight route during peak seasons,
2. It would provide a backup route in case the N2 is closed due to emergencies, and
3. It would stimulate local economies along the R62 corridor, particularly in towns like Ladismith and Calitzdorp.

These proposals have significant budget implications for the Provincial Department of Transport and Public Works and should be incorporated into long-term planning for the R62's development. As a prominent tourism route—ranked by CNN as one of the world's top ten road trip destinations (Bremmer & Shadbolt, 2017)—it is vital to preserve the scenic appeal of the R62. Instead of building bypasses, land use conflicts should be addressed through thoughtful urban planning and street design to retain the route's attractiveness.

Examples of successful scenic freight routes include the Montagu–Barrydale section and portions of the N2. Specific road maintenance actions proposed include:

- Upgrading the Oudemuragie Road to De Rust,
- Ensuring regular upkeep of the Swartberg Pass gravel road,
- Including these routes in the Department of Transport and Public Works' asset management strategies.

Further, it is suggested to explore the installation of a weighbridge to manage heavy vehicle traffic through Kannaland and Oudtshoorn. Infrastructure maintenance should also be prioritized in Ladismith and Calitzdorp CBDs, as well as key routes like the R327 to Van Wyksdorp. Spatial development plans also highlight these areas as investment priorities.

Additionally, low-cost, high-impact interventions should be explored to enhance settlement appeal for tourism. This will require collaboration with the public and local business sectors to identify practical solutions.

The Kannaland Integrated Transport Plan highlights that improving mobility between rural settlements is a crucial social need. Local and provincial governments must work together to deliver affordable transport solutions to ensure residents can access essential services, education, and employment. Given that walking and cycling are the primary modes of transport for many, there is an urgent need for well-designed non-motorised transport (NMT) infrastructure.

Kannaland should develop and implement NMT strategies focusing on areas like Ladismith and Calitzdorp, while also recognizing the strategic role of Zoar as a midpoint between them. Enhancing connectivity between these settlements is vital to addressing socio-economic disparities.

A basic Mobility Strategy should be introduced—even at a reduced level—to guarantee minimum transport services. Authorities should also assess the feasibility of establishing a shuttle route connecting Calitzdorp, Zoar, Amalienstein, and Ladismith to support intra-municipal connectivity along the R62. Investment in rural pedestrian safety, NMT networks, and school transport safety should also be prioritized.

6.2.1.6: Flood Risk

Climate change is increasing the frequency and severity of extreme weather events, posing a growing risk to the Kannaland Municipality. Flood-prone areas must be carefully managed to protect lives, property, and infrastructure. When vital infrastructure is located in flood-risk zones, the resilience of these areas is reduced. Flooding, while natural, requires proactive planning. Sustainable urban drainage systems and eco-friendly rural practices should be implemented to reduce future flood risks and associated economic and social costs. Land use and infrastructure planning must integrate flood mitigation strategies, especially where towns intersect with river systems. Strict no-development zones should be enforced within the 1:100-year flood lines—especially along major rivers like the Gamka and Groot, and their tributaries such as the Prins, Derde, and Brand Rivers. Exceptions should only be made with strong hydrological justification. Buffer zones of 150 m for large rivers, 75 m for medium rivers, and 32 m for smaller rivers should be observed to protect water quality and habitats. Stormwater infrastructure must be designed with increasing flood risks in mind, avoiding hard structures in favour of sustainable drainage. Accurate flood line mapping should be incorporated into future planning, guiding where development is allowed and preventing pollution in waterways.

6.3: Spatial Proposals

This section highlights the spatial proposals for each town/settlement.

6.3.1: Ladismith Proposals

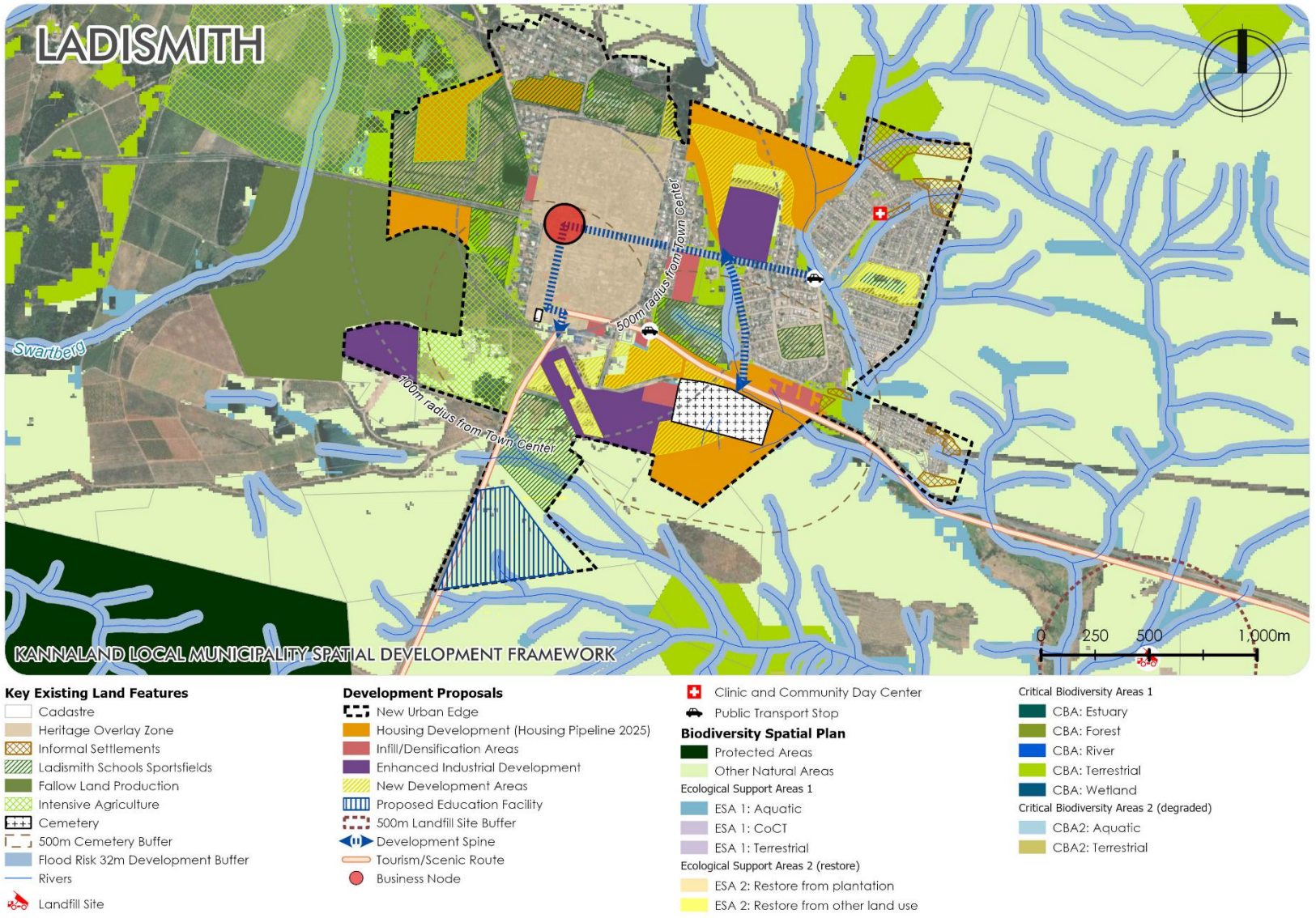
Table 24: Ladismith Spatial Proposals

Spatial Structuring Element	Proposals/Comments
Small Service Town **It acts as a main centre for public services such as municipal offices and other social services. It also serves as a economic node[10].** **Third Order Node** **Perform the function of meeting the local convenience needs with basic social facilities. Limited development (low-cost housing) should be permitted in the smaller nodes to present long-term economic burdens on the respective local municipalities.[11]**	
Residential Development	• Ladismith Parmalat 280 on RE/95 & erf 2267 which will be an Integrated Residential Development Programme that will yield approximately 280 units. • A Finance Linked Individual Subsidy Programme on Erf 1194 that will yield 29 units • Ladismith Golf Club which will be a finance Linked Individual Subsidy Programme on Erf 1128/95 that will yield 3 units.
Business Development and the CBD	• The CBD is primarily concentrated along Van Riebeeck Street, extending towards the municipal complex and the central market area. • Direct expansion of commercial activities along this street, emphasising pedestrian-friendly developments and enhancing public spaces. • Infill business vacant spaces on Middleton Street as mixed-use developments. • No decentralisation of CBD-development should be approved; hence no decentralised shopping centre or business complex should be accommodated.
Business Node	• There is a suggestion for a business node along Van Riebeeck Street between Queen and Albert Street the clustering of non-residential uses such as shops, salons, restaurants, internet café, cell phone shop, etc.

[10] Settlement Hierarchy by CSIR
[11] Garden Route District Spatial Development Framework 2025 (Draft)

Spatial Structuring Element	Proposals/Comments
Industrial / Commercial Development	• Enhance and upgrade the existing industrial area to the south. • Possible development of agri-processing west of R62 to support the agriculture base / market, allow for agricultural economic activities such as farmers markets. Scale, scope and access are concerns pertaining to this development.
Social Facilities	• Education, healthcare, and recreation facilities are required, given the town's role as a small service centre and the manufacturing activities which are within the town. • Extend the Thusong Centre to serve as a business hub. • New development of a private skills development school in Ladismith on Section 3 of the farm Ylands Valley no.95. • A new healthcare clinic in the east to accommodate the communities in the residential area.
Access	• Maintain and enhance existing primary access routes through surface road, particularly the R62 and R323. • Improve the surface road of R62 between Ladismith, Zoar and Calitzdorp. • Upgrading and maintained on all public transport routes.
Development spines	• Van Riebeeck Street, all the way to Golding Lane.
Transit Oriented Facilities	• Taxi Rank to be developed along the Van Riebeeck Street development spine, preferably near the CBD (employment zone).
Urban Edge	• Urban edge to be amended to accommodate the new skills development centre in Ladismith on the south of the town along the R62. • Expand the urban edge to accommodate housing pipeline as well as the informal settlements.
Cemetery	• Appoint an appropriate service provider to undertake this work alongside a trained environmentalist by instruction and under the authority of the Environmental Manager.
Landfill site	• A landfill site buffer of 500m to be implemented as a health precaution. • The following to be undertaken: - License renewal; - Fencing of the site; and • Management: proper control of the site; monitoring of methane/carbon dioxide; monitoring volume and source of waste, sorting of waste and recycling.
Tourism	• Enhance the mission route including the Lutheran mission complex and Church.

Spatial Structuring Element	Proposals/Comments
Heritage assets	• Protect built heritage assets and historic farmsteads, churches and burial sites especially those located within the heritage overlay zone delineated in the Kannaland SDF 2013. Other heritage assets include the Ladismith Cheese Factory, Georgian style, heritage synagogue and church buildings. • Upgrade and enhance the existing caravan park by allowing creative shops, social events (open-air cinemas) and hiking trails.
Surrounding agricultural land	• Support agri-processing industries, farmer's markets, and other initiatives that add value to local agricultural products – apples, pears, wheat, barley and plums and livestock farming including sheep, goats, and cattle.



Map 34: Ladismith Spatial Proposals

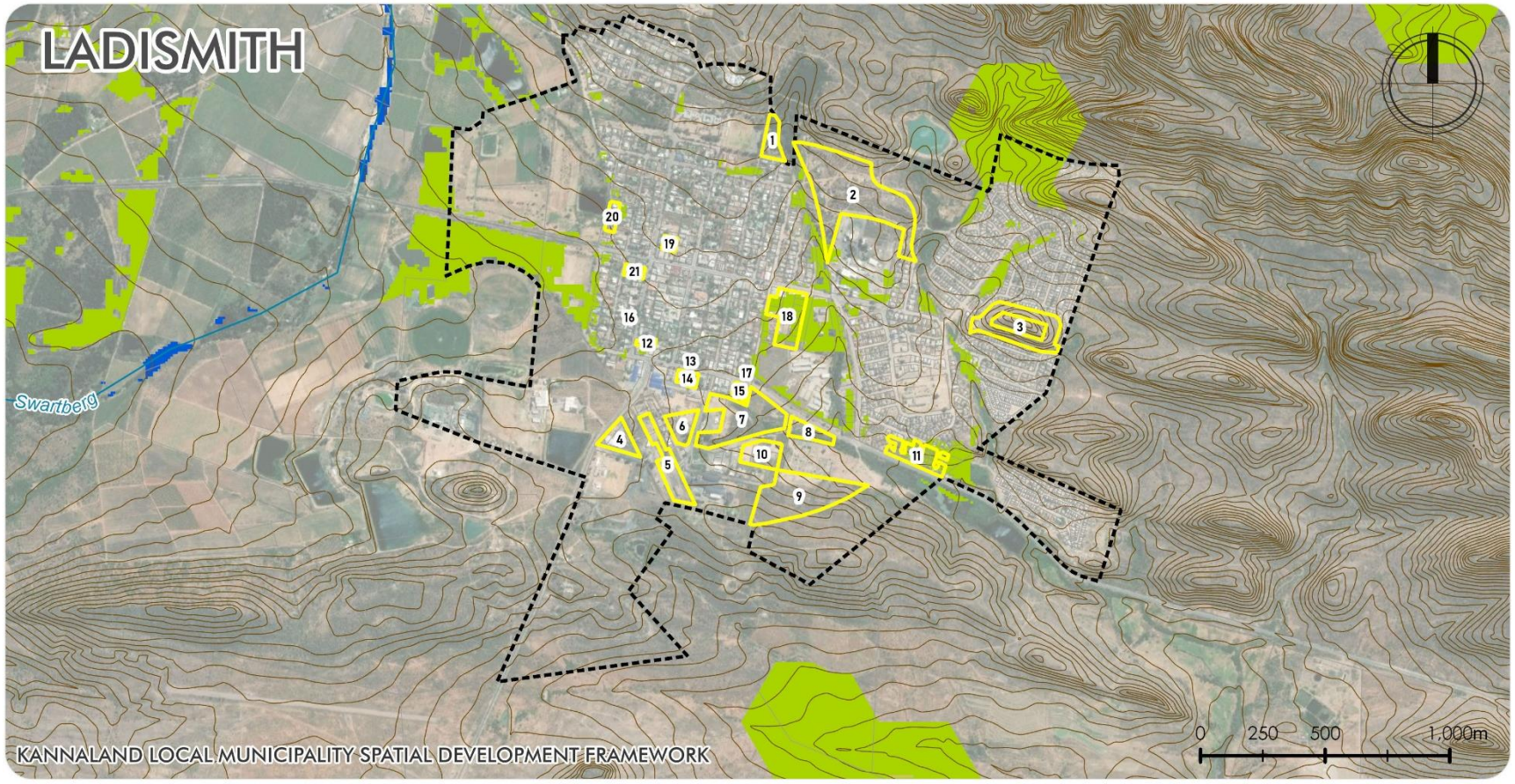
The Western Cape Biodiversity Act, 2021 defines biodiversity offsets as "measurable conservation actions designed to counterbalance the residual adverse effects of any activity, or of the implementation of any plan, on biodiversity or ecological infrastructure after every effort has been made sequentially to avoid and minimise such effects, and to rehabilitate or restore damage, and includes the outcome of such measures" (WCBA, 2021: p.7). Consideration has been given to the delineation of biodiversity offset areas or trade off areas that allow for development projects in certain areas whilst ensuring that impacts on biodiversity are offset through conservation actions in designated offset receiving areas.

The table below shows areas that have been identified for new development and an estimation of the number of dwellings which may be accommodated based on the size of the property. Furthermore, it highlights the biodiversity category on the site which determines whether or not further investigations need to be undertaken before the site can be considered for development. The corresponding map shows the location of these areas in the town.

Table 25: Ladismith Biodiversity Trade-off Areas

New Development Area	Size (Ha)	Dwelling Density	Estimated Number of Dwelling Units	Notes
2	9.98	25	249 units	As per Human Settlement Pipeline
3	3.29	10	32 units	No CBA but contains steep slopes, caution required regarding erosion, landslide or drainage risks. Further detailed planning required.
7	4.61	25	115 units	As per Human Settlement Pipeline
8	0.98	10	9 units	As per Human Settlement Pipeline
9	5.65	25	141 units	As per Human Settlement Pipeline

				No CBA but contains steep slopes, caution required regarding erosion, landslide or drainage risks. Further detailed planning required.
10	1.46	10	14 units	As per Human Settlement Pipeline
11	1.68	10	16 units	As per Human Settlement Pipeline. Contains CBA 1. Trade off may be required through EIA determination.
18	2.56	10	25 units	Contains CBA 1. Trade off may be required through EIA determination.
20	0.48	10	4 units	Contains CBA 1. Trade off may be required through EIA determination.



Map 35: Biodiversity Trade-off Areas

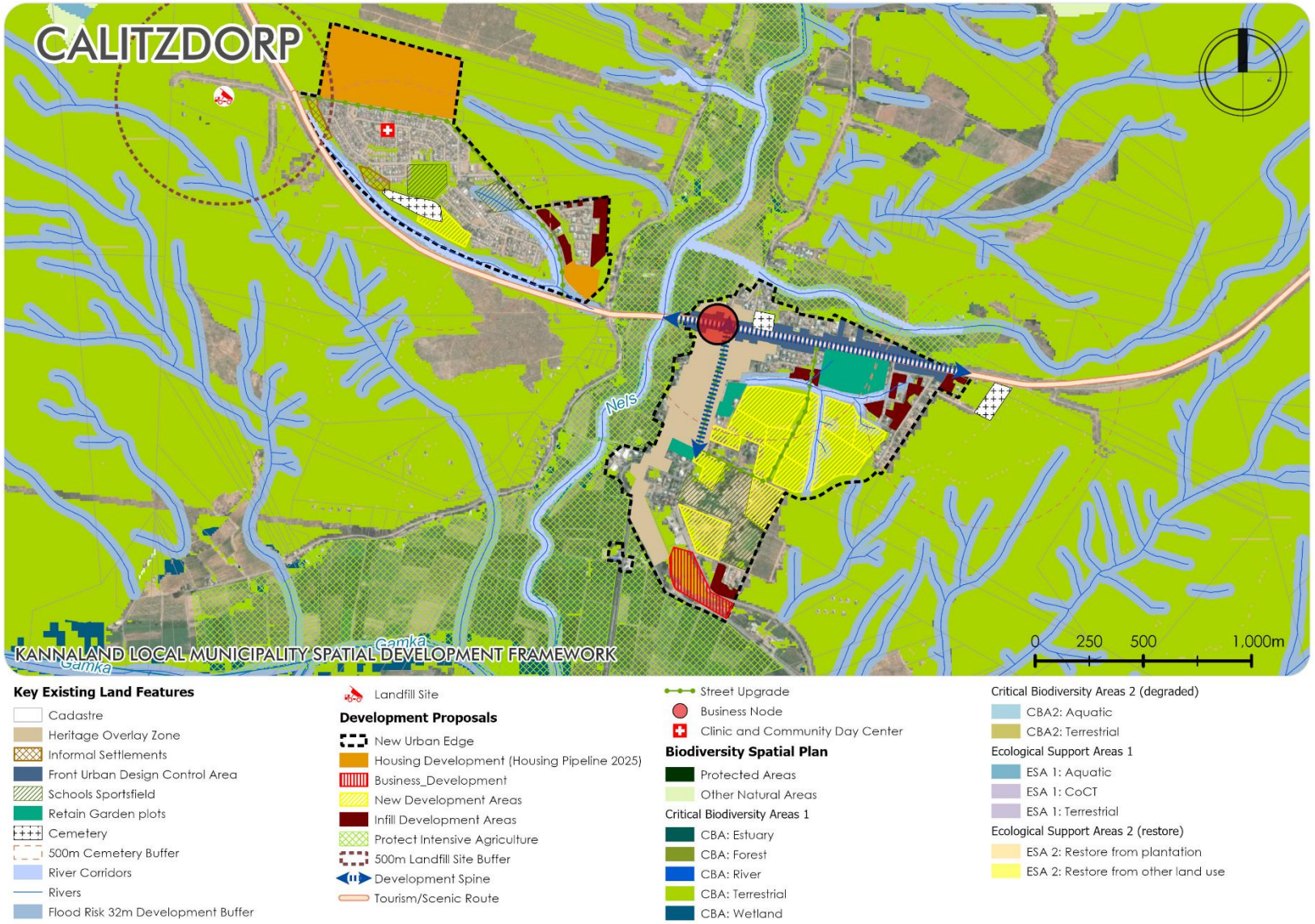
6.3.2: Calitzdorp Proposals

Table 26: Calitzdorp Spatial Proposals

Spatial Structuring Element	Proposals/Comments
Local Town/ Settlement Node **It acts as a key service node, providing essential public services and acting as an economic and transport hub for surrounding settlements.[12]** **Third Order Node** **Perform the function of meeting the local convenience needs with basic social facilities. Limited development (low-cost housing) should be permitted in the smaller nodes to present long-term economic burdens on the respective local municipalities.[13]**	
Residential Development	• Calitzdorp Royal Heights on Erf 2182 which will be an Integrated Residential Development Programme that will yield approximately 179 units. • Calitzdorp Old Hospital Site on Erf 45 which will be either an Integrated Residential Development Programme or an Upgrading of Informal Settlements Programme that will yield approximately 30-50 units.
Business Node	• Business nodes can be developed along Voortrekker Road between Van Riebeek Streek and Andries Pretorious Street which permits a clustering of business-related uses, round which other uses can cluster and grow. These business-related uses include shops, restaurants, guest houses etc. • Business development Calitzdorp will be favoured to support not only neighbourhoods and communities but also tourists at a convenience.
Access	• Enhance and maintain access point on the R62. • Upgrading and maintained on all public transport routes.
Development spines	• Voortrekker Road and Andries Pretorious could mature into a development spine with gradual and acceptable land use transformation along the road. • Direct expansion of economic, social and commercial activities south-east along Voortrekker Road

[12] Settlement Hierarchy by CSIR
[13] Garden Route District Spatial Development Framework 2025 (Draft)

Spatial Structuring Element	Proposals/Comments
Urban Edge	• Amend urban edge to accommodate housing pipeline on the north west of the municipality.
Landfill site	• Calitzdorp Transfer Station to control waste that goes to the landfill site.
Historic Assets	• Protect the boundaries of the heritage overlay zone that was delineated in the Kannaland SDF 2013. • Protect Calitzdorp Port and wine estates as well as spring water from SPA Gamka Mountain reserve (Cape Mountain Zebra)
Surrounding agricultural land	• Enhance agri-processing such as wine production, • Enhance eco-tourism to accommodate scenic drives, hiking trails, and 4x4 routes in the surrounding mountains and valleys. Popular spots include the Swartberg Pass, Gamkaberg Nature Reserve, and Rooiberg Pass.



Map 36: Calitzdorp Spatial Proposals

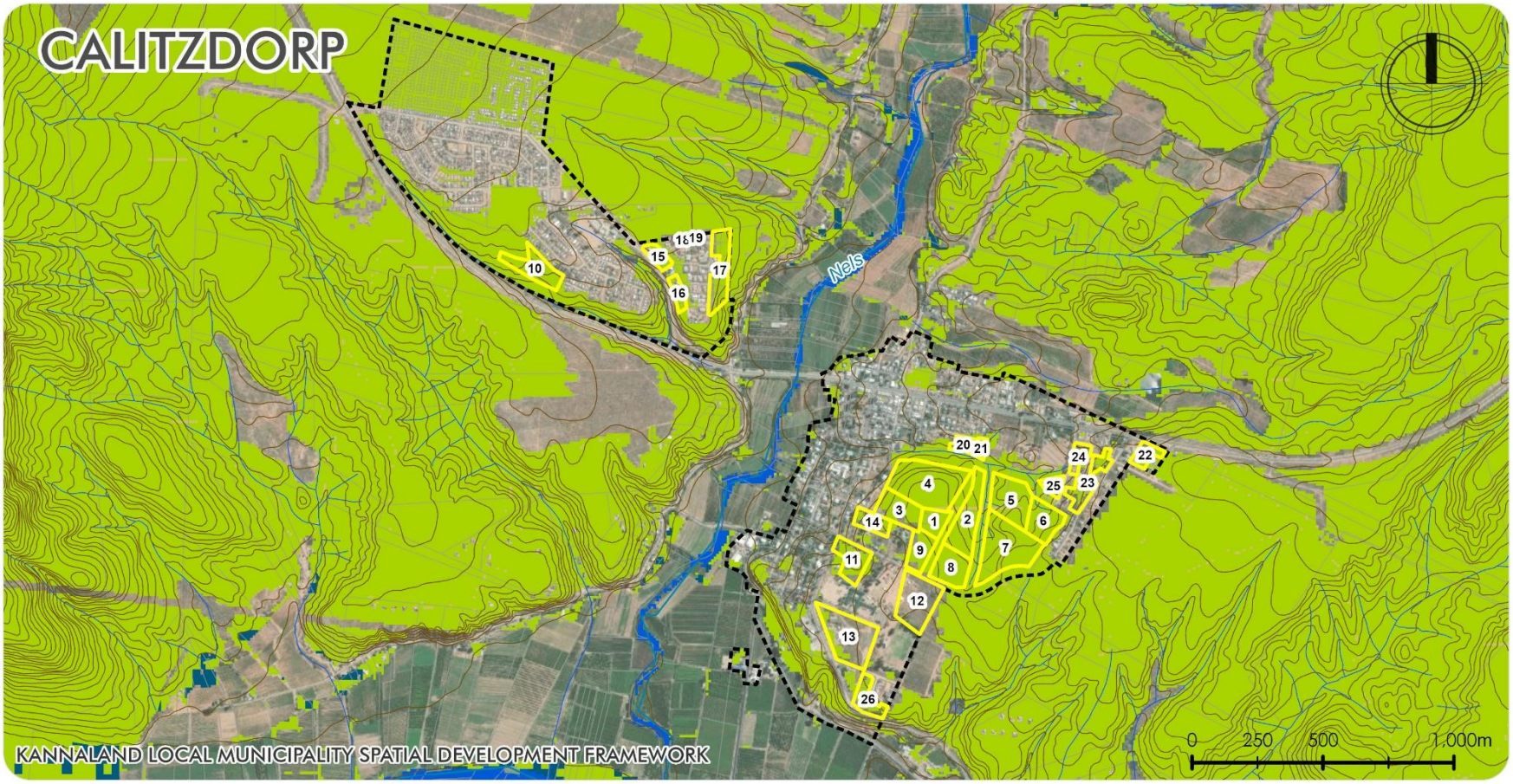
The table below shows areas that have been identified for new development and an estimation of the number of dwellings which may be accommodated based on the size of the property and the corresponding map shows the location of these areas in the town.

Table 27: Calitzdorp Biodiversity Trade-off Areas

New Development Area	Size (Ha)	Dwelling Density	Estimated Number of Dwelling Units	Notes
1	0.92	10	9 units	Contains CBA 1. Trade off may be required through EIA determination.
2	2.35	10	23 units	Contains CBA 1. Trade off may be required through EIA determination.
3	1.75	10	17 units	Contains CBA 1. Trade off may be required through EIA determination.
4	4.21	25	105 units	Contains CBA 1. Trade off may be required through EIA determination.
5	2.40	10	24 units	Contains CBA 1. Trade off may be required through EIA determination.
6	1.63	10	16 units	Contains CBA 1. Trade off may be required through EIA determination.
7	3.81	25	95 units	Contains CBA 1. Trade off may be required through EIA determination.

8	1.70	10	17 units	Contains CBA 1. Trade off may be required through EIA determination.
9	1.19	10	11 units	Contains CBA 1. Trade off may be required through EIA determination.
10	1.65	10	16 units	Contains CBA 1. Trade off may be required through EIA determination.
11	1.44	10	14 units	Contains CBA 1. Trade off may be required through EIA determination.
12	2.61	10	26 units	
13	3.18	10	31 units	Contains CBA 1. Trade off may be required through EIA determination.
14	0.88	10	8 units	Contains CBA 1. Trade off may be required through EIA determination.
15	0.57	10	5 units	Contains CBA 1. Trade off may be required through EIA determination.
16	0.51	10	5 units	Contains CBA 1. Trade off may be required through EIA determination.
17	1.82	10	18 units	Contains CBA 1. Trade off may be required through EIA determination.

20	0.45	10	4 units	Contains CBA 1. Trade off may be required through EIA determination.
21	0.27	10	2 units	Contains CBA 1. Trade off may be required through EIA determination.
22	0.63	10	6 units	Contains CBA 1. Trade off may be required through EIA determination.
23	1.34	10	13 units	Contains CBA 1. Trade off may be required through EIA determination.
24	0.52	10	5 units	Contains CBA 1. Trade off may be required through EIA determination.
25	0.46	10	4 units	Contains CBA 1. Trade off may be required through EIA determination.
26	1.01	10	10 units	Contains CBA 1. Trade off may be required through EIA determination.



Map 37: Calitzdorp Biodiversity Trade-off Areas

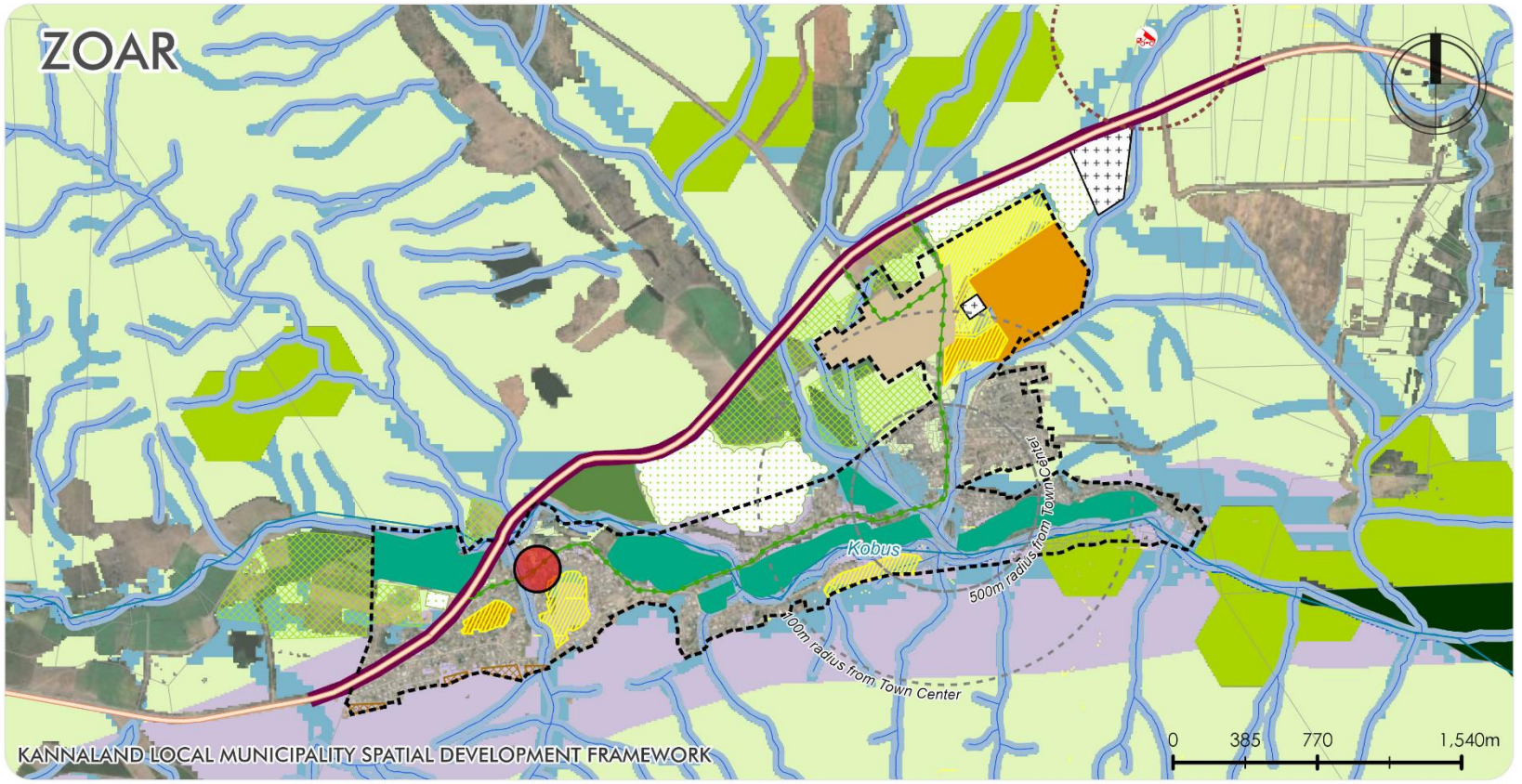
6.3.3: Zoar Proposals

Table 28: Zoar Spatial Proposals

Spatial Structuring Element	Proposals/Comments
Local Town/ Settlement Node **Provides essential services and supporting local economic activities within the Kannaland Municipality. While dependent on nearby larger towns for higher-order services, Zoar plays a critical role in meeting the daily needs of its residents and maintaining social cohesion.**[14] **Rural Service Node** **Perform the function of meeting the local convenience needs with basic social facilities. Limited development (low-cost housing) should be permitted in the smaller nodes to present long-term economic burdens on the respective local municipalities.**[15]	
Residential Development	• Erf 3321 Zoar Protea Park Infilll on erven 1834, 1835 (public open spaces) and erf 1836 which will be an Integrated Residential Development Programme that will yield approximately 100 units. • Upgrading of Informal Settlements Programme on erf 1416 that will yield approximately 65 units.
Industrial / Commercial Development	• Have an industrial node along Hoof Street. This will feed into the vacant land that is zoned for industrial.
Social Facilities	• Have a cluster of social facilities that will form a social facilities node
Access	• Maintain access on the R62 which cuts across the town.
Urban Edge	• Amend urban to accommodate municipal vacant land on the south west of the town.
Heritage Assets	• Protect the boundaries of the heritage overlay zone that was delineated in the Kannaland SDF 2013. • Protect the historic mission stations offering donkey cart and hiking trails through vineyards and orchards, including indigenous cultural festivals. • Protect the Seweweekspoort Mountain biking, hiking, fynbos and protea flowers [also the National Flower]

[14] Settlement Hierarchy by CSIR
[15] Garden Route District Spatial Development Framework 2025 (Draft)

Spatial Structuring Element	Proposals/Comments
Surrounding agricultural land	• Protect agricultural land around the town to create more job opportunities for the residents of Zoar.

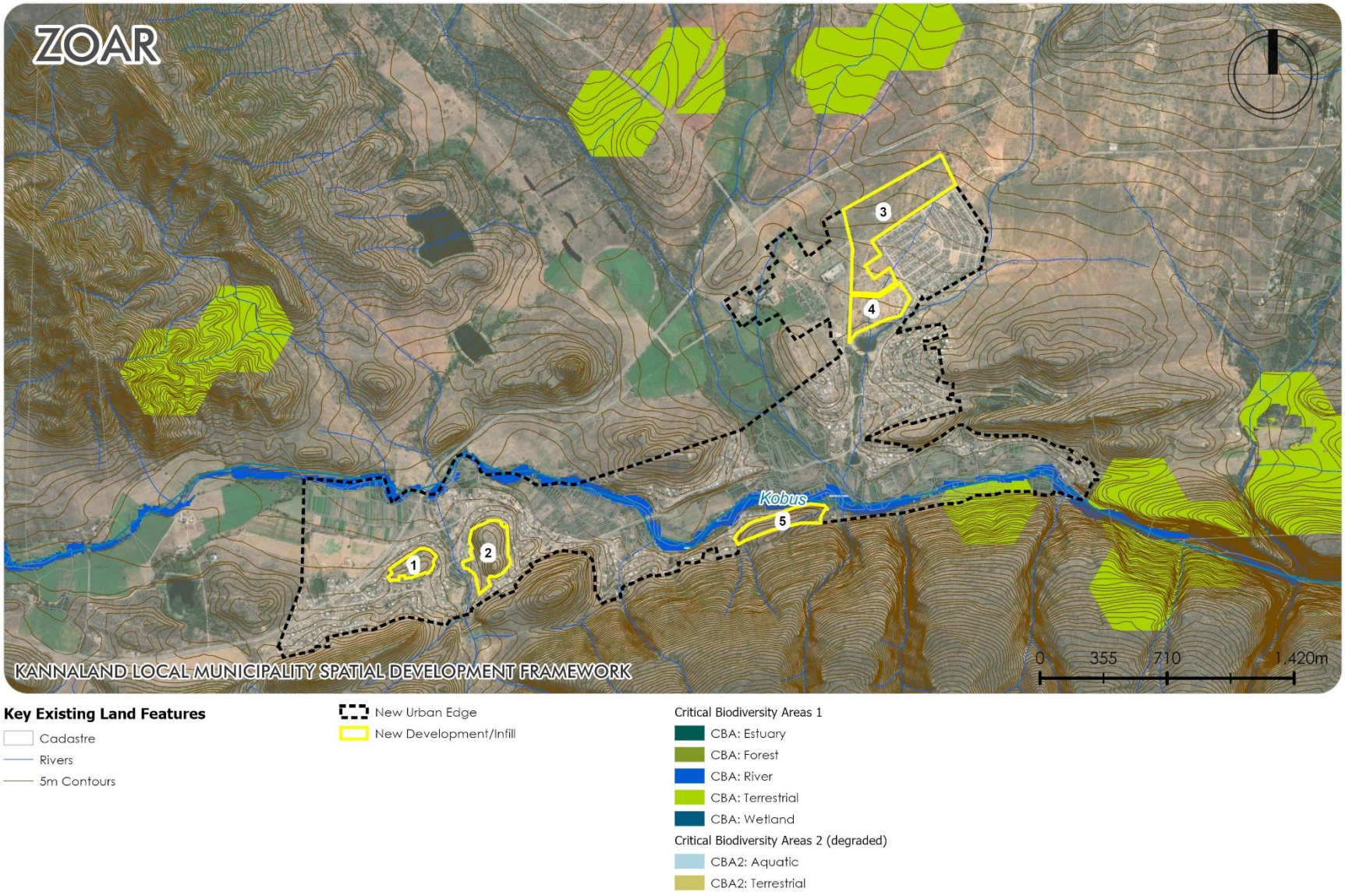


Map 38: Zoar Spatial Proposals

The table below shows areas that have been identified for new development and an estimation of the number of dwellings which may be accommodated based on the size of the property and the corresponding map shows the location of these areas in the town.

Table 29: Zoar Biodiversity Trade-off Areas

New Development Area	Size (Ha)	Dwelling Density	Estimated Number of Dwelling Units	Notes
1	2.76	10	27 units	As per Human Settlement Pipeline. No CBA but contains steep slopes, caution required regarding erosion, landslide or drainage risks. Further detailed planning required.
2	6.65	10	66 units	No CBA but contains steep slopes, caution required regarding erosion, landslide or drainage risks. Further detailed planning required.
4	5.46	10	54 units	As per Human Settlement Pipeline
5	4.28	10	42 units	No CBA but contains steep slopes, caution required regarding erosion, landslide or drainage risks. Further detailed planning required.



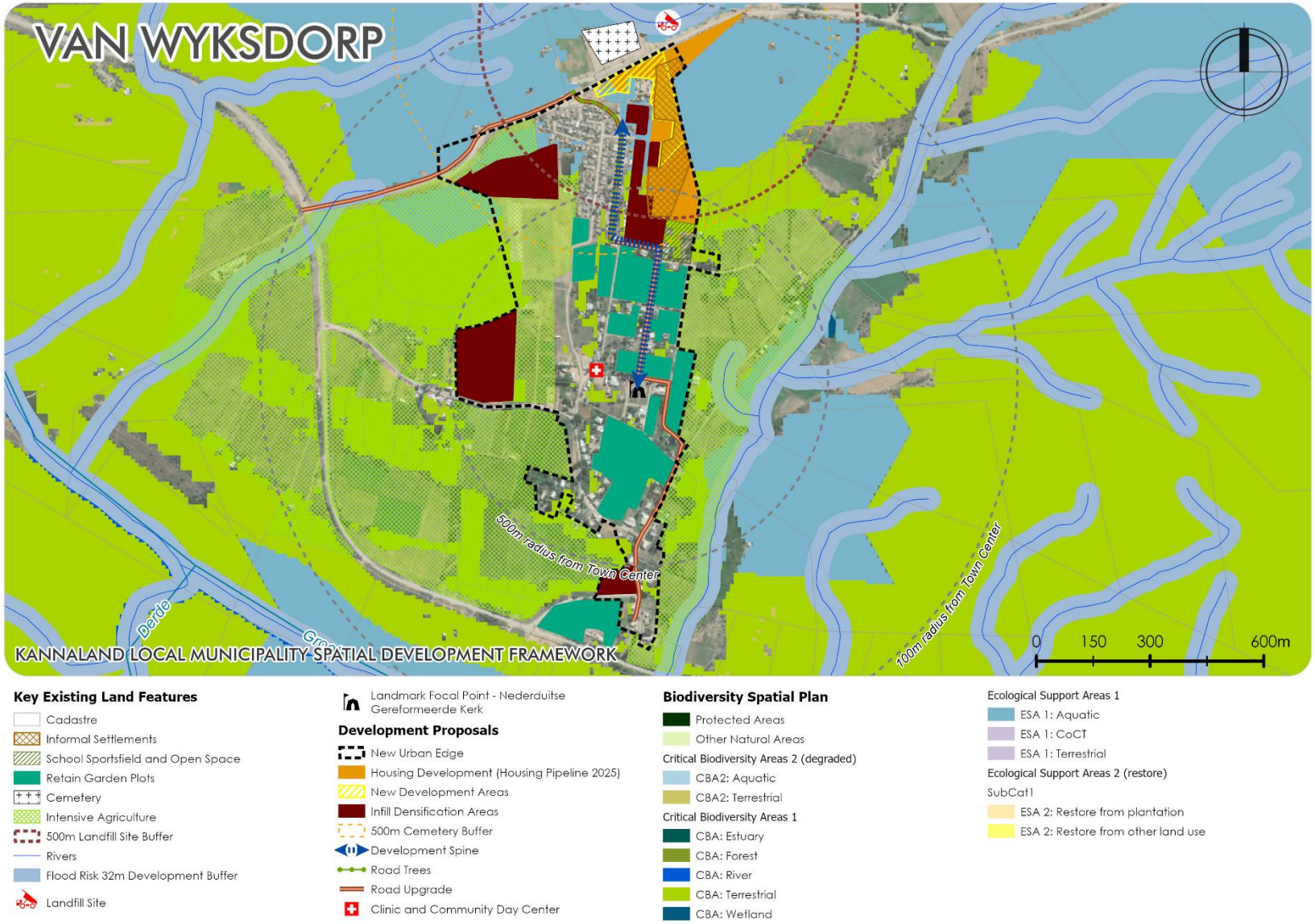
Map 39: Zoar Biodiversity Trade-off Areas

6.3.4: Van Wyksdorp Proposals

Table 30: Van Wyksdorp Spatial Proposals

Spatial Structuring Element	Proposals/Comments
Dense Rural Settlement Areas & Villages **These are primarily residential and agricultural communities with limited service and economic functions. They typically depend on nearby towns and nodes for access to higher-order services.[16]** **Rural Service Node** **Perform the function of meeting the local convenience needs with basic social facilities. Limited development (low-cost housing) should be permitted in the smaller nodes to present long-term economic burdens on the respective local municipalities.[17]**	
Residential Development	• Erf 110 which will be either an Integrated Residential Development Programme or an Upgrading of Informal Settlements Programme that will yield approximately 100 units.
Social Facilities	• Clinic or community date centre
Development spines	• Development Spines passing from north to south
Urban Edge	• New urban edge to accommodate the densification areas
Historic Assets	• Protect the Vanwyksdorp Fynbos processing, donkey cart rides to Anglo- Boer/ SA War grave sites.
Surrounding agricultural land	• Protection, but allow agri-processing related uses should a market develop for it, because of proximity to market.

[16] Settlement Hierarchy by CSIR
[17] Garden Route District Spatial Development Framework 2025 (Draft)

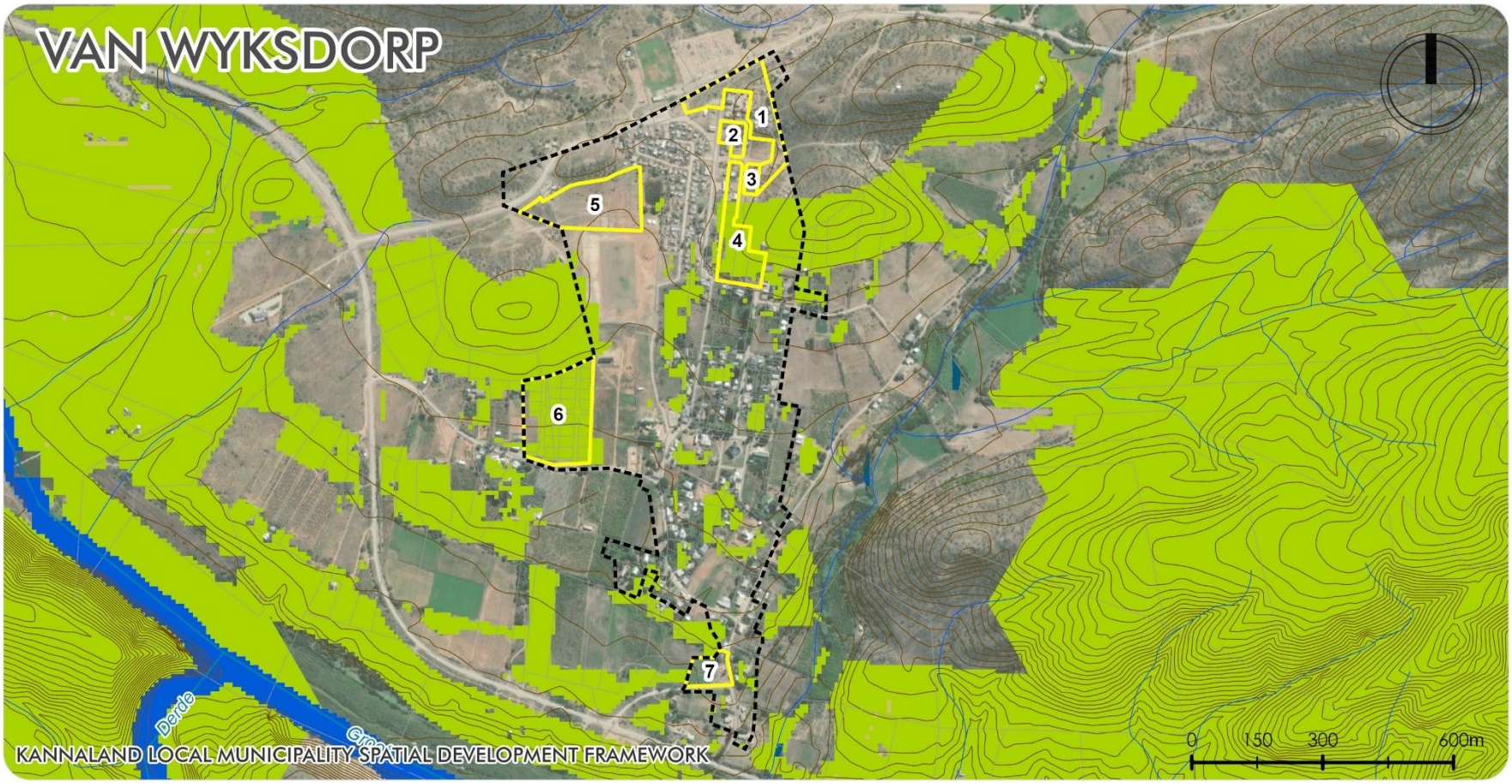


Map 40: Van Wyksdorp Spatial Proposals

The table below shows areas that have been identified for new development and an estimation of the number of dwellings which may be accommodated based on the size of the property and the corresponding map shows the location of these areas in the town.

Table 31: Van Wyksdorp Biodiversity Trade-off Areas

New Development Area	Size (Ha)	Dwelling Density	Estimated Number of Dwelling Units	Notes
1	1.99	10	19 units	As per Human Settlement Pipeline
2	0.38	10	3 units	As per Human Settlement Pipeline
3	0.21	10	2 units	As per Human Settlement Pipeline
4	1.58	10	15 units	As per Human Settlement Pipeline Contains CBA 1. Trade off may be required through EIA determination.
5	2.55	10	22 units	Contains CBA 1. Trade off may be required through EIA determination.
6	3.24	10	32 units	Contains CBA 1. Trade off may be required through EIA determination.



Map 41: Van Wyksdorp Biodiversity Trade-off Areas

6.3.5: Compliance with SPLUMA Principles

SPLUMA principles aim to rectify historical spatial injustices, promote sustainable and efficient land use, enhance resilience to environmental pressures, and ensure transparent, fair, and efficient administration of land use planning. The spatial proposals for the municipality have been developed with these principles in mind:

6.3.5.1: Spatial Justice

Spatial justice addresses past injustices caused by apartheid-era planning by ensuring equitable access to land, resources, and services. The proposals aim to formalise informal settlements, ensuring these communities have access to essential services and are integrated into the urban fabric. Expansion areas and new growth opportunities are identified with a focus on inclusivity, ensuring all residents have equal opportunities for housing and economic participation, redressing spatial imbalances and promoting more equitable urban development.

6.3.5.2: Spatial Sustainability

Sustainability emphasises the need for environmentally responsible and resource-efficient planning. The proposals encourage the protection of agricultural lands surrounding the towns, advocating for agri-processing uses that sustain local economies without compromising environmental integrity. The promotion of open spaces and conservation areas aligns with this principle, aiming to preserve natural ecosystems and biodiversity. By directing growth to areas with existing infrastructure and advocating for densification, the intention is to minimise the ecological footprint of urban expansion, ensuring long-term environmental sustainability.

6.3.5.3: Efficiency

Efficiency in SPLUMA relates to the optimal use of resources, including land, to achieve economic prosperity and quality urban environments. The proposals for industrial and commercial development, especially in Villiers and Frankfort, are positioned to leverage existing transportation networks and economic hubs, thereby maximising the impact of investments and minimising unnecessary land consumption. Residential infill and densification strategies are meant to make the most efficient use of urban land, reducing sprawl and focusing development within defined urban development boundaries.

6.3.5.4: Spatial Resilience

Spatial resilience focuses on the ability of towns and cities to withstand and adapt to economic, social, and environmental shocks. By enhancing connectivity and integration within and between the municipal towns and the hinterland, the proposals aim to build robust urban systems that can adapt to changes and shocks. The emphasis on transit-oriented development and non-motorised transport options contributes to a more resilient urban form that can adapt to future transportation and mobility trends.

6.3.5.5: Good Administration

Good administration under SPLUMA implies transparent, coordinated, and efficient processes in spatial planning and land use management. By advocating for the formalisation of informal settlements and the strategic placement of social facilities, the proposals emphasise the need for fair and accessible planning processes.

7: LAND USE MANAGEMENT

The proposals outlined in this Municipal Spatial Development Framework (MSDF) must be implemented through appropriate zoning or rezoning of the affected properties within the Kannaland Land Use Management Scheme (LUMS), following the prescribed formal application procedures. The LUMS serves as a legal and regulatory framework that governs land use within the municipal jurisdiction. Its purpose is to guide land development in a manner that ensures compatibility and promotes public health, safety, orderly development, aesthetic quality, convenience, and overall well-being, while also supporting economic vitality and the preservation of heritage resources.

7.1: Objectives of a Land Use Management Scheme

7.1.1: Objectives of a Land Use Management Scheme (LUMS):

- Define and regulate appropriate land uses, providing clear guidance on permissible and prohibited activities for specific properties.
- Ensure legal and planning certainty for property owners while safeguarding property values.
- Promote, maintain, and enhance public amenities and shared spaces.
- Address and mitigate potential conflicts between incompatible land uses.
- Strike a fair balance between private property rights and the broader public interest.
- Support economic development through effective land use planning.
- Conserve natural resources and protect ecosystem services, including agricultural land and its productivity.
- Safeguard distinctive landscape features and environmentally sensitive areas.
- Protect heritage assets, as well as sites of religious, cultural, and historical importance.

7.1.2: Contents of a Municipal Land Use Management Scheme

The plan should include the following components:

- A comprehensive introduction outlining the context and purpose of the document.
- A clearly articulated vision along with supporting statements of intent to guide development.
- Identification of zones, management areas, and the corresponding management plans relevant to the area in question.
- Land use matrices and development control schedules specifying permissible, restricted, and prohibited land uses.
- Definitions of key terms and planning terminology used throughout the document.
- Applicable policies and guidelines to inform land use decision-making.
- Detailed procedures for submitting land use applications, obtaining consent, lodging appeals, and managing related administrative processes.
- Official land use scheme maps illustrating zoning and development designations.

7.1.3: General Guidelines for Development in Kannaland

All land use and development applications must align with applicable legislation, including SPLUMA and the Municipal Town Planning By-Laws. The following core requirements apply:

- Completed and signed municipal application form
- Power of attorney where an agent acts on behalf of the owner
- Proof of registered property ownership
- Motivation report for the proposed land use change
- Surveyor General diagram
- Locality and site development plans (where relevant)
- Water Use License Application for properties involving water bodies

- Minimum 500m buffer from landfill sites
- Compliance with waste management licensing conditions
- Adherence to NHRA processes for heritage-related applications
- Alignment with approved residential densification policy

Heritage Area Management Plans (as per SAHRA and NHRA Section 31) must include:

- Statement of significance and site description
- Historical context and environmental setting
- Identification of stakeholders and legal framework
- Record of past and current site use and condition
- SWOT analysis and guiding principles
- Visitor, conservation, and risk management strategies
- Clear objectives, implementation plan, and evaluation mechanisms
- Defined approval procedures and responsible entities

7.1.4: Land Use Management Implications and Overlay Zones

7.1.4.1: Heritage Overlay Zones

A heritage overlay zone was already identified in the Kannaland Spatial Development Framework for 2013. If a new heritage overlay zone is formulated, it will require input from a heritage specialist and should address at least the following:

- The demarcation of the overlay zone area to include important streetscapes and buildings of heritage significance as well as the small holding area.
- The development rules that will apply to new development and alterations in this zone. These rules should give the municipality control over the bulk, height, placement, materials and architectural design of buildings and boundary walls as well as landscaping and aspects of the public realm such as parking and requirement for upgrading the public realm.

7.1.4.2: Densification

According to Kannaland Spatial Development Framework 2013, densification should be promoted in the following ways:

- Within areas that demonstrate strong economic potential at provincial, district, or local levels;
- Along major transportation corridors to enhance and support public transit systems;
- On the edges of open spaces to improve visibility and safety through passive surveillance;
- In zones designated for public-sector investment;
- In selected locations experiencing significant private-sector investment.

For each settlement where an urban edge is to be defined, the following elements should be mapped:

- Agricultural land and facilities related to agricultural processing near urban zones;
- Smallholdings, rural properties, and small-scale farms;
- Open spaces and natural areas at both urban and regional scales;
- Rivers and areas prone to flooding;
- Landscapes recognized for their significant environmental or cultural value.

8: CONCLUSION AND WAY FORWARD

The Draft MSDF outlines the crucial aspects of the legislative context that will guide elements of the SDF review process. Working towards the adoption of a holistic and consistent approach to the SDF, an overarching framework is needed within which the evaluation and development of proposals can take place.

It furthermore highlights the technical status quo analysis, which essentially captures the current state of the LM across a multi-sectorial spectrum by examining the bio-physical, built environment, and socio-economic components of the municipality in order to assess and understand the existing conditions, spatial patterns and influencing factors that shape Kannaland LM and its towns. The analysis provided the foundation to extract key opportunities and key challenges as a means to synthesise the current state of affairs in an effort to direct planning and decision-making to wise resource allocation going forward.

Additionally, it highlights the development of the Kannaland Spatial Development Framework (SDF) represents the culmination of all preceding planning phases, consolidating prior analyses and stakeholder engagements into a unified vision statement and a spatial development concept. Building on the municipal SDF, detailed town-level development plans were also prepared. These provide guidance on land use allocation, identify areas for future growth, propose spatial integration strategies, and outline zones for focused development .The spatial proposals are underpinned by population growth forecasts and a land use budget, designed to meet projected development needs over the next five years, based on current trends and spatial demands.In support of the spatial vision—particularly the goal of enabling local-level development and economic opportunity—recommendations have been made to enhance the municipal Land Use Management System (LUMS). These aim to foster a more enabling, pro-growth regulatory environment.

While Chapter 5 is referenced in this document, it has not yet been completed, as it forms part of Phase 5 of the overall project. However, the close relationship between the Spatial Proposals and the Capital Expenditure Framework (CEF) is acknowledged. The CEF is integral to implementing the spatial strategies, and its development will be undertaken in the subsequent phase (Phase 5).

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