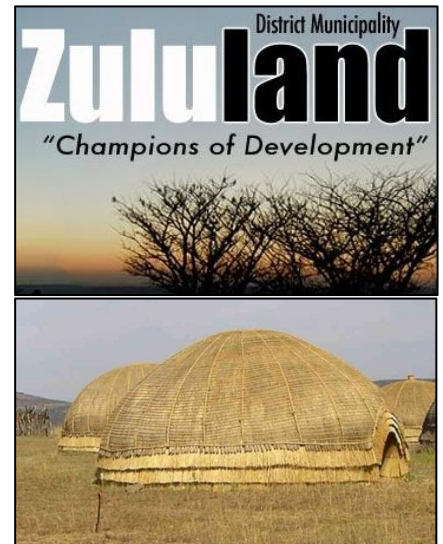




SPATIAL DEVELOPMENT FRAMEWORK FOR THE ZULULAND DISTRICT MUNICIPALITY

DRAFT SPATIAL DEVELOPMENT FRAMEWORK



MARCH 2018

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1 Background & introduction

1.1 Background to the study

This status quo report contains the realities on the ground within Zululand Local Municipality, and aims to identify specific socio-economic and physical trends within the municipality. This document should not be seen as an analytical document, as a more detailed analysis of the area, and the implications of these realities will be conducted during the following phase. The content of this document is based on existing cadastral and GIS information, which will be augmented as more information becomes available from the District Municipality and Relevant Local Authorities.

The current Zululand SDF was prepared, as part of the Zululand Integrated Development Plan and the Municipal Council is required to periodically review it in accordance with the requirements of the Municipal Systems Act.

Section 26 (e) of the Local Government: Municipal Systems Act, No. 32 of 2000 (the “MSA”) requires all municipalities to compile Spatial Development Frameworks (the “SDF”) as a core component of Integrated Development Plans (the “IDP”). Many Municipalities have developed SDFs, either in silos or supported (technically and/or financially) by the Department of Rural Development and Land Reform (DRDLR) or by their respective provinces. Different SDF development approaches were applied depending on who was managing or has been contracted to undertake the project.

1.2 Study Objectives

The main objective of the project is to develop a Spatial Development Framework in order to address spatial, environmental and economic issues confronting the Zululand District Municipality.

This process will be guided by and comply with a number of legislative pieces which includes the Municipal Systems Act and the Municipal Planning and Performance Management Regulations, 2001, read together with the Spatial Planning and Land Use Management Act (Act 16 of 2013). The required SDF must therefore-

- 1) give effect to the principles contained in chapter 1 of the Development facilitation Act 1995 (Act no. of 67 1995);
- 2) set out objectives that reflect desired- spatial form of the municipality;
- 3) contain strategies, policies and plans which must-
 - Indicate desired patterns of land use within the municipality;
 - Address the spatial reconstruction of the location and nature of development within the municipality; and
 - Provide strategic guidance in respect of the location and nature of development within the municipality;
- 4) contain a strategic assessment of the environmental impact of the SDF;
- 5) identify programs and projects for the development of land within the municipality;
- 6) be aligned with the SDFs reflected in the integrated development plans of neighbouring municipalities; and
- 7) provide a visual representation of the desired spatial form of the municipality, which representation:
 - must indicate where public and private land development and infrastructure investment should take place;
 - must indicate desired or undesired utilisation of space in a particular area;
 - delineate the urban edges;
 - must identify areas where strategic intervention is required; and
 - must indicate areas where priority spending is required.

1.3 Study Approach

The approach and execution of this study is guided by the following key principles;

1. **Integration:** Using the spatial basis of the study for:
 - a) the integration of development intention between the various local municipalities and surrounding district and local municipalities,
 - b) the physical integration of fragmented areas within the district towards improved economic imputes and service delivery and
 - c) sectoral integration of various public and private contributors and departments toward co-ordinated development of individual projects.
2. **Strategic Direction:** Providing strategic analysis and direction to the effective utilisation of land within the district towards social, economic and environmental development while addressing current and historic deficiencies and providing future spatial direction within the context of the unique spatial structure of the municipality.

1.4 Delineation Of Study Area

The Zululand District Municipality is one of ten District Authorities within the KwaZulu-Natal Province Municipality, which is situated on the northern boundary of the KwaZulu-Natal Province. Zululand District Municipality is approximately 14 810 km² in extent, and consists of the following municipalities:

- aBaqulusi Local Municipality
- eDumbe Local Municipality
- Nongoma Local Municipality
- Ulundi Local Municipality
- uPhongolo Local Municipality

2 LEGAL AND POLICY FRAMEWORK

2.1 Legal Framework

The SDF is guided by, amongst others, the following Legislation and Policies at a National and Provincial Level:

- South African Constitution and Principles of Sustainable Development
- The Municipal System Act (MSA)
- The National Environment Management Act (NEMA)
- Social Housing Act (SHA)
- The KwaZulu-Natal Heritage Act (1997)
- The Provincial Growth and Development Strategy (PGDS)
- Provincial Spatial Economic Development Strategy (PSEDS)
- Spatial Planning and Land Use Management Act (SPLUMA)

2.1.1 South African Constitution and principles of sustainable development (NO. 108 OF 1196)

Chapter 7 of the Constitution deals with *local government* and section 152 deals with the *objectives of local government*. It indicates that these objectives are:

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

- To encourage the involvement of communities and community organizations in the matters of local government.

2.1.2 Municipal Systems Act (NO. 32 OF 2000)

Section 23 (1) of the Act indicates that a municipality must undertake developmentally- orientated planning and Section 24 (1) indicates that planning undertaken by the municipality must be aligned with and compliment plans of other municipalities and organs of state.

Section 26 of the Act indicates that a core component of an IDP is a SDF which must include the provision of basic guidelines for a land use management system for the municipality.

Section 35 of the Act also indicates that a SDF contained in an IDP prevails over a plan as identified in Section 1 of the Physical Planning Act (No. 125 of 1991).

Regulation GN796 OF 2001 promulgated in terms of the Act outline the following requirements for a SDF:

"A spatial development framework reflected in a municipality's integrated development plan must:

- a) give effect to the principles contained in Chapter 1 of the Development Facilitation Act, 1995 (Act 67 of 1995);*
- b) set out objectives that reflect the desired spatial form of the municipality;*
- c) contain strategies and policies regarding the manner in which to achieve the objectives referred to in paragraph (b), which strategies and policies must-*

- i) indicate desired patterns of land use within the municipality;*

- ii) address the spatial reconstruction of the municipality; and*

- iii) Provide strategic guidance in respect of the location and nature of development within the municipality.*

- d) Set out basic guidelines for a land use management system in the municipality;*

- e) Set out a capital investment framework for the municipality's development programmes;*

- f) Contain a strategic assessment of the environmental impact of the spatial development framework;*

- g) Identify programmes and projects for the development of land within the municipality;*

- h) Be aligned with the spatial development frameworks reflected in the integrated development plans of neighbouring municipalities; and*

- i) provide a visual representation of the desired spatial form of the municipality, which representation-*

- i) must indicate where public and private land development and investment should take place;*

- ii) must indicate desired or undesired utilization of space in a particular area;*

- iii) may delineate the urban edge;*

- iv) must identify areas where strategic intervention is required; and*

- v) Must indicate areas where priority spending is require.*

These legislative requirements provide a clear framework for the development of the Jozini SDF and provide a legislative checklist for its contents.

2.1.3 National Environmental Management Act (NO. 107 OF 1998)

The National Environmental Management Act (No. 27 of 1998) was drawn up to provide for co-operative, environmental governance by establishing principles for decision-making on matters affecting the environment, institutions that will promote co-operative governance and procedures for co-coordinating environmental functions exercised by organs of state; and to provide for matters connected therewith.

Section 28 of the Act that falls within Chapter 7 – Compliance, Enforcement and Protection can be related to future developments. Part 1 of the Chapter focuses on environmental hazards and Section 28 relates to the duty care and redemption of environmental damage. Section 28 provides that every person who causes, has caused, or may cause, significant pollution or degradation of the environment, must take reasonable measures to prevent such pollution or degradation from occurring, continuing or reoccurring or, insofar as such harm to the environment is authorized by law or cannot reasonably be avoided or stopped, to minimize and rectify such pollution or degradation of the environment.

2.1.4 Social Housing Act (NO.16 OF 2008)

The Social Housing Act of 2008 was drawn up to establish and promote a sustainable social housing environment; to define the functions of national, provincial and local governments in respect of social housing; to provide for the establishment of the Social Housing Regulatory Authority in order to regulate all social housing institutions obtaining or having obtained public funds; to allow for undertaking of approved projects by other delivery agents with the benefit of public money; to give statutory recognition to social housing institutions; and to provide for matters connected therewith.

In giving priority to the needs of low and medium income households in respect of social housing development, the national, provincial and local spheres of government and social housing institutions must-

- a) Ensure their respective housing programmes are responsive to local housing demands, and special priority must be given to the needs of woman, children, child-headed households, person with disabilities and the elderly;
- b) Support the economic development of low to medium income communities by providing housing close to jobs, markets and transport and by stimulating job opportunities to emerging entrepreneurs in the housing services and construction industries;
- c) Afford residents the necessary dignity and privacy by providing the residents with a clean, safety and healthy environment;
- d) Not discriminate against residents on any of the grounds set out in section 9 of the constitution, including individuals affected by HIV and AIDS;
- e) Consult with interested individuals, communities and financial institutions in all phases of social housing development;
- f) Ensure the sustainable and viable growth of affordable social housing as an objective of housing policy;
- g) Facilitate the involvement of residents and key stakeholders through consultation, information sharing, education, training and skills transfer, thereby empowering residents;
- h) Ensure secure tenure for residents in social housing institutions, on the basis of the general provisions governing the relationship between tenants and landlords as set out in the rental housing act, 1999 (Act No. 50 of 1999), and between primary housing co-operatives and its members as set out in the co-operatives Act. 2005 (Act No.14 of 2005);
- i) Promote:
 - i. an environment which is conducive to the realization of the roles, responsibilities and obligations by all role-players entering the social housing market;
 - ii. training opportunities for stakeholders and interested parties who wish to enter the social the social housing market;
 - iii. the establishment, development and maintenance of socially and economically viable communities to ensure the elimination and prevention of slums and slums conditions;
 - iv. social, physical and economic integration of housing development into existing urban or town areas through the creation of quality living environments
 - v. medium to higher density in respect of social housing development to ensure the economical utilization of land and services;
 - vi. the provision of social, community and recreational facilities close to social housing development ;
 - vii. the expression of cultural identity and diversity in social housing development;
 - viii. the suitable location of social housing stock in respect of employment opportunities;
 - ix. the conversion of upgrading of suitable residential and non-residential buildings for social housing use;
 - x. incentives to social housing institutions and other delivery agents to enter the social housing market;
 - xi. an understanding and awareness of social housing processes;
 - xii. transparency, accountability and efficiency in the administration and management of social housing stock;
 - xiii. best practices and minimum norms and standards in relation to the delivery and management of social housing stock;
 - xiv. the provision of institutional capacity to support social housing initiatives;
 - xv. the creation of sustainable, viable and independent housing institutions responsible for providing, developing, holding or managing social housing stock and;

- xvi. the use of public funds in a manner that stimulates or facilitates private sector investment and participation in the social housing sector.

2.1.5 Accelerated and Shared Growth initiative (ASGI-SA)

The Goals of ASGI-Sa is the following:

- Formulate medium-term educational interventions to raise the level of skills in areas needed by the economy as immediate measures to acquire the skills needed for the implementation of ASGI-SA projects.
- Ensure skills transfer to new graduates by deployment of experienced professionals and managers to local governments to improve project development, implementation and maintenance capabilities.
- Leverage the increased levels of public expenditure, especially investment expenditure, to promote small businesses and Broad-Based Black Economic Empowerment.
- Focus on expanding and accelerating access to economic opportunities including skills development and finance for women.
- Leverage through Broad Based Black Economic Empowerment to support shared growth.
- Support efforts to establish new venture funds for small, medium and micro enterprises.

The Accelerated and Shared Growth Initiative (ASGI-SA) is aimed at the development of South Africa as a whole, but with the emphasis on development of previously disadvantaged areas. The broader aim is therefore not only to promote economic development, but to empower the communities through active involvement in projects. This empowers communities through skills development to be able to participate in the formal economy and labour market.

This obviously has implications on an institutional as well as physical/spatial level. To have an impact on communities, it is necessary to ensure that public investment expenditure, which are to promote small businesses and Broad-Based Black Economic Empowerment, be implemented in areas with the highest economic need. The occurrence of Economic need should coincide with areas which have the highest physical need as well, translated into the lack of services. The provision of services through a labour intensive, Extended Public Works Program will provide investment in the municipality as well as provide training and skills. Through preferential procurement procedures, emerging contractors/entrepreneurs will be able to participate in the formal economy.

The goal of uplifting poor areas implies that the strategies to be implemented by ASGISA, targets communities within the poorest rural areas of South Africa, where the second economy (which needs to be combatted) functions.

The National Spatial Development Perspective indicated that the poverty levels of Jozini are of such significance that it is depicted on national level as one of the poorer areas. The philosophy for implementing projects geared towards Asgi-Sa in Jozini is thus obvious.

2.1.6 The KwaZulu-Natal Heritage Act (NO 4 OF 2008)

Apart from provisions in the act that allow for the proclamation and listing of individual buildings, the act also allows for the protection of groups of buildings forming a conservation area and it provides for the general protection of buildings that are over sixty years in age.

Section 34 (1) of the act states that “No person may alter or demolish any structure or part of a structure which is older than 60 years without a permit issued by the relevant provincial heritage resources authority”.

Under Section 26 (1) the Act deals with demolitions, additions and alterations. Section 19 deals with Heritage Landmarks, Section 20 with Provincial Landmarks. Section 22 deals with the opening of a Heritage Register, and Section 23 deals with Heritage Conservancies.

Section 51 of the act allows for a fine and imprisonment for a period not exceeding two years or both such imprisonment and fine of anyone contravening Section 31 (1) of the Act.

2.1.7 SPLUMA (NO 16 OF 2013)

The Spatial Planning and Land Use Management Act (No 16 of 2013) seek to provide a framework for spatial planning and land use management. This framework presents the monitoring, coordination, review of the spatial planning and land use management system and efficient spatial planning.

The Act allows for:

1. Policies, principals, norms and standards for development.
2. Address past spatial and regulatory imbalances
3. To promote greater consistency and uniformity in the application procedures and decision making by authorities responsible for land use decisions and development applications
4. To provide for the facilitation and enforcement of land use and development measures
5. To supply for the inclusive, developmental, equitable and efficient spatial planning at the different spheres of the Government.

All the land use and development measures will be indicated in the SDF.

Chapter 4 Part A of SPLUMA sets out the focus and general requirements that must guide the preparation and compilation of SDF products at the various scales. Chapter 4 is divided into six parts of which Part A provides an extensive introduction to the purpose and role of SDFs and sets out the preparation requirements and expectations of the SDF process.

Section 12 (1) sets out general provisions which are applicable to the preparation of all scales of SDFs. These provisions require that all SDFs must:

- a) interpret and represent the spatial development vision of the responsible sphere of government and competent authority;
- b) be informed by a long-term spatial development vision;
- c) represent the integration and trade-off of all relevant sector policies and plans;
- d) guide planning and development decisions across all sectors of government;
- e) guide a provincial department or municipality in taking any decision or exercising any discretion in terms of this Act or any other law relating to spatial planning and land use management systems;
- f) contribute to a coherent, planned approach to spatial development in the national, provincial and municipal spheres;
- g) provide clear and accessible information to the public and private sector and provide direction for investment purposes;
- h) include previously disadvantaged areas, areas under traditional leadership, rural areas, informal settlements, slums and land holdings of state-owned enterprises and government agencies and address their inclusion and integration into the spatial, economic, social and environmental objectives of the relevant sphere;
- i) address historical spatial imbalances in development;
- j) identify the long-term risks of particular spatial patterns of growth and development and the policies and strategies necessary to mitigate those risks;
- k) provide direction for strategic developments, infrastructure investment, promote efficient, sustainable and planned investments by all sectors and indicate priority areas for investment in land development;
- l) promote a rational and predictable land development environment to create trust and stimulate investment;
- m) take cognizance of any environmental management instrument adopted by the relevant environmental management authority;
- n) give effect to national legislation and policies on mineral resources and sustainable utilisation and protection of agricultural resources; and
- o) consider and, where necessary, incorporate the outcomes of substantial public engagement, including direct participation in the process through public meetings, public exhibitions, public debates and discourses in the media and any other forum or mechanisms that promote such direct involvement.

Section 12 (2) stipulates that:

- a) The national government, a provincial government and a municipality must participate in the spatial planning and land use management processes that impact on each other to ensure that the plans and programmes are coordinated, consistent and in harmony with each other.
- b) A spatial development framework adopted in terms of this Act must guide and inform the exercise of any discretion or of any decision taken in terms of this Act or any other law relating to land use and development of land by that sphere of government.

The five founding principles as set out in **Section 7 (a) to (e)** of SPLUMA that apply throughout the country and to all SDFs covered in these Guidelines are:

1. **Spatial Justice:** past spatial and other development imbalances should be redressed through improved access to and use of land by disadvantaged communities and persons.

2. **Spatial Sustainability:** Relates to the need to promote spatial planning and land use management and land development systems that are based on and promote the principles of socioeconomic and environmentally sustainable development in South Africa.
3. **Spatial Efficiency:** The spatial efficiency pillar places significant importance on the optimization of existing resources and the accompanying infrastructure, including the oiling of development application procedures in order to promote growth and employment.
4. **Spatial Resilience:** Relates to mitigation, adaptability and innovations to secure communities from spatial dimensions of socio-economic and environmental (climate change) shocks.
5. **Good Administration:** The spatial governance principle is the fulcrum of this framework largely because implementation of the spatial planning vision and objectives is not only highly dependent upon a strong coordinating role of central government, but is also predicated upon good governance mechanisms, incorporating meaningful consultations and coordination with a view to achieving the desired outcomes across the various planning spheres and domains.

2.1.8 KZN Planning and Development Act (NO 6 OF 2008)

In terms of the Provincial Gazette Notice No. 54 of 22 April 2010, the KwaZulu-Natal Planning and Development Act, Act No. 6 of 2008 came substantially into operation on 1 May 2010.

In terms of the preamble to the Act, the purpose of the Act is to:

- (a) promote a uniform planning and development system that treats all citizens of the Province equitably;
- (b) provide a fair and equitable standard of planning and development to everyone in the Province while accommodating diversity such as urban and rural needs;
- (c) incorporate and build on good practices and approaches to planning and development which have evolved outside of the formal planning and development system;
- (d) promote a planning and development system that redresses the historic injustices perpetuated by a fragmented planning and development system;
- (e) favour lawful development;
- (f) be clear, including the relationship between different laws;
- (g) be practical;
- (h) promote certainty;
- (i) require timeous action by decision makers;
- (j) guide decision makers;
- (k) Require decision makers to obtain expert advice before making a decision; and be enforceable.

The Act requires that planning and development decisions be taken by local government, with appeals being resolved by an independent tribunal appointed by the responsible Provincial Member of the Executive Council.

This Act provides for the adoption, replacement and amendment of a scheme. The purpose of a scheme is to regulate land use and to promote orderly development in accordance with the Municipality's Integrated Development Plan. The Act requires that a municipality must within five years from the commencement of the Act adopt a scheme or schemes for its whole area of jurisdiction. Once adopted a municipality must review a scheme within six months after it has adopted an Integrated Development Plan for its elected term as contemplated in section 25 of the Municipal Systems Act.

In terms of the transitional arrangements set in the Act, the provisions of a town planning scheme already adopted must be treated as a scheme adopted in terms of the Act. The Act provides for procedures for application for development of land outside of schemes.

2.2 Policy Environment

2.2.1 Provincial Growth and Development Strategy

Cabinet adopted PGDS Review Framework at the February 2011 Cabinet Lekgotla. The Draft 2030 Vision and PGDS adopted by Cabinet on 31 August 2011. The purpose of the PGDS is to:

- focus on a clear vision for the Province;
- promote vertical, horizontal and spatial alignment;
- mobilise all development partners to achieve predetermined development objectives and targets; and

- Build on the strengths and opportunities of the Province, while addressing weaknesses and threats.

The provincial vision as contained in the PGDS:

KwaZulu-Natal, a prosperous Province with a healthy, secure and skilled population, acting as a gateway to Africa and the World.

The Strategic Goals for the province as indicated in the document:

1. Job Creation
2. Human Resource development
3. Human and Community Development
4. Strategic Infrastructure
5. Response to Climate change
6. Governance and policy
7. Spatial Equity

The implementation of Vision and Strategic Goals aspire to lead to:

- Position the Province as a Gateway to South Africa and Africa
- Human & Natural Resources
- Safe, Healthy & Sustainable Living Environments
- Healthy Educated Communities
- Employable people are employed
- Basic Services
- More equitable Society
- World Class Infrastructure
- Investors' Confidence
- Skilled Labour Force
- Focus on People centeredness.
- Strong & Decisive Leadership
- Foster Social Compacts

The PGDS identified a hierarchy of nodes for the province defined as follows:

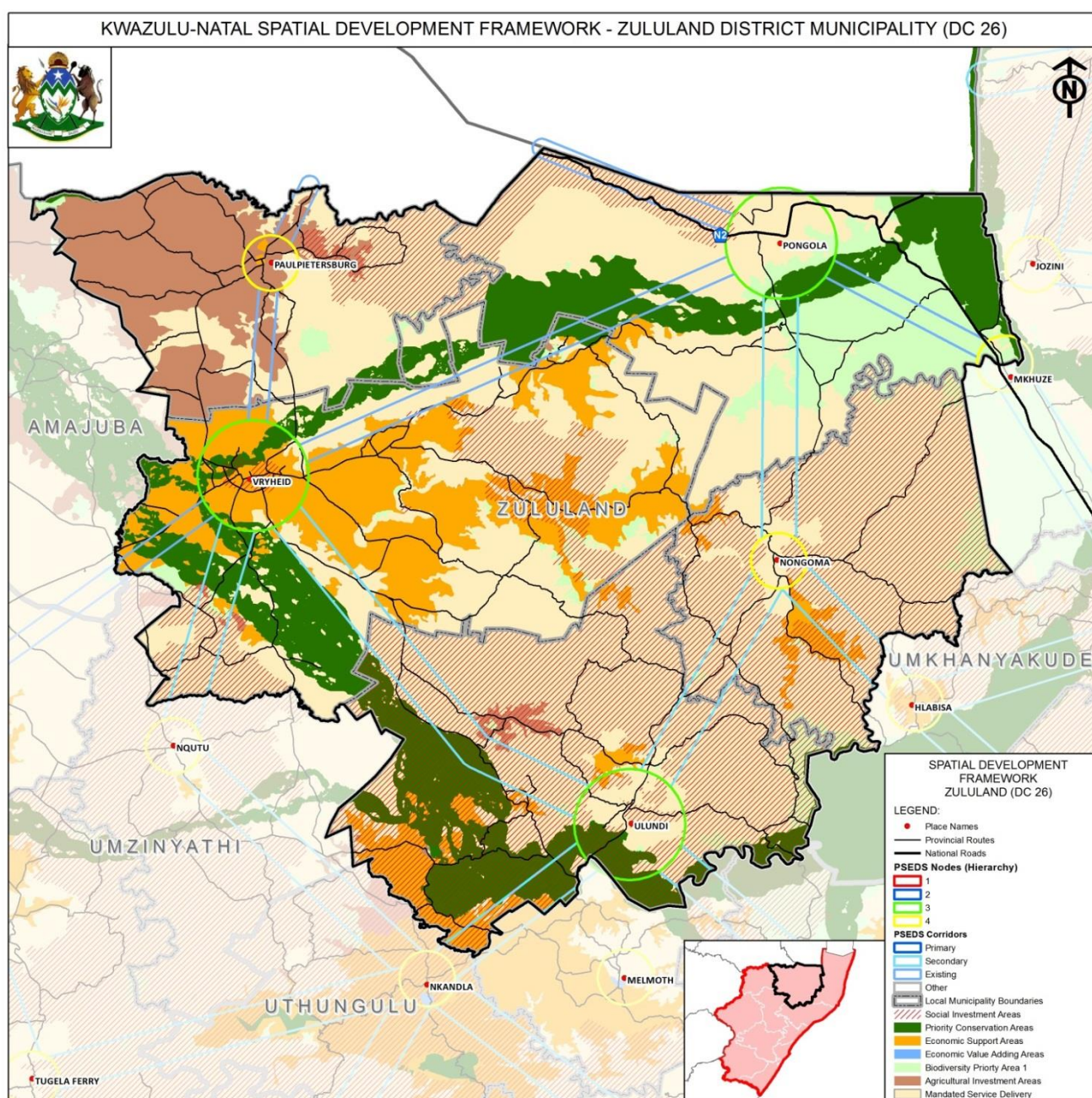
Table 1 Hierarchy of Nodes

Primary Node	Only eThekweni is classified as a Primary Node within the Provincial Context as an urban centre with very high existing economic growth and the potential for expansion thereof. Provides service to the national and provincial economy.
Secondary Nodes	Richards Bay/ Empangeni, Msunduzi, Newcastle and Port Shepstone has been identified as provincial Secondary Nodes and thus urban centres with good existing economic development and the potential for growth and services to the regional economy.
Tertiary Nodes	These nodes are mainly centres which should provide service to the sub-regional economy and community needs and is represented by the following towns such as Pongola, Vryheid, Ulundi, Dundee, Ladysmith, Estcourt, Howick, KwaDukuza, Ixopo, Scottburgh, Hibberdene, Kokstad, Margate.
Quaternary Nodes	These nodes are mainly centres which should provide service to the local economy and community needs and is represented by 31 towns, such as but not limited to: Nongoma, Nkandla, Eshowe, Bergville, Paulpietersburg, Jozini, Mkhuze etc.

Rural Service Centres

The proposed rural service centres are envisaged to serve as the lowest level of provincial nodes and could typically be established around existing traditional administration centres as well as other accessible rural points identified as periodic markets. These will be identified in consultation with the district municipalities and should serve as first access to basic services within rural areas.

The information used to compile a SDF for the province was based on environmental sensitivity, social need, economic potential and accessibility. The use of these informants leads to the compilation of a spatial representation of the provincial SDF.



Please refer to the plan above for an extract of the Provincial Spatial Development Strategy related to the Zululand District Municipality, and to the figure below for a depiction of the above. The largest grouping of economic activities is situated around Vryheid where a large number of economic support areas are situated. This related mainly to agricultural activities. The Main Agricultural investment areas are situated in eDumbe LM around Paulpietersburg and are aimed at Forestry activities. Areas to the South of Pongola are identified as Critical Biodiversity Priority 1 areas and as is depicted later in the document, target the dense bush lands. The rural areas, which is mainly owned by the Ingonyama Trust, is earmarked as social intervention areas which depicts the high poverty levels and need for government intervention in these areas.

The provincial SDF identified the following intervention areas on which the Integrated Provincial Infrastructure Plan will be based:

- Social Investment areas
- Priority Conservation areas
- Economic Support areas
- Economic value adding areas
- Biodiversity Priority areas
- Agricultural investment areas
- Mandated Service Delivery

It is the intention that District and Local municipalities align their respective SDF's with the provincial plan to structured and sensible development that work towards a common goal and ensure that development on local level does not take place in an ad hoc silo on its own.

2.2.2 National Spatial Development Framework

The Policy Co-ordination and Advisory Services (PCAS) in the Presidency produced a National Spatial Development Perspective (NSDP) that was endorsed by Cabinet in March 2003.

The National Spatial Development Perspective (NSDP) guides government in implementing its programmes. The NSDP is built on four basic principles. These are:

- Principle 1:** Rapid economic growth that is sustained and inclusive is a pre-requisite for the achievement of poverty alleviation
- Principle 2:** Government spending on fixed investment should be focused on localities of economic growth and / or economic potential in order to gear up private sector investment, stimulate sustainable economic activities and create long-term employment opportunities
- Principle 3:** Where low economic potential exists investments should be directed at projects and programmes to address poverty and the provision of basic services in order to address past and current social inequalities
- Principle 4:** In order to overcome the spatial distortions of Apartheid, future settlement and economic development opportunities should be channelled into activity corridors and nodes that are adjacent to or link the main growth centres in order for them to become regional gateways to the global economy.

The National Spatial Development Vision reads as follows:

"South Africa will become a Nation in which investment in infrastructure and development programmes support Government growth and development objectives:

- By focusing economic growth and employment creation in areas where this is most effective and sustainable
- By supporting restructuring, where feasible, to ensure greater competitiveness
- By fostering development on the basis of local potential
- By ensuring that development institutions are able to provide basic needs throughout the country."

The NSDP identifies Core Regions and Spatial Economic Linkages outside the country's three main Metropolitan Areas.

The clustering of economic activities in areas with high potential for economic development provides regional competitive advantages. At the same time, where feasible, economic benefits from those growth sectors which are not dependant on clustering should be spread to those parts of the municipality where relatively low economic potential exists.

2.2.2.1 Minimum Level Of Living

The Minimum Living Level indicates those areas where the largest number of people is living below the minimum standard of living. These areas include some rural districts of the former homelands but the highest number of people below the minimum living level is in the large metropolitan areas.

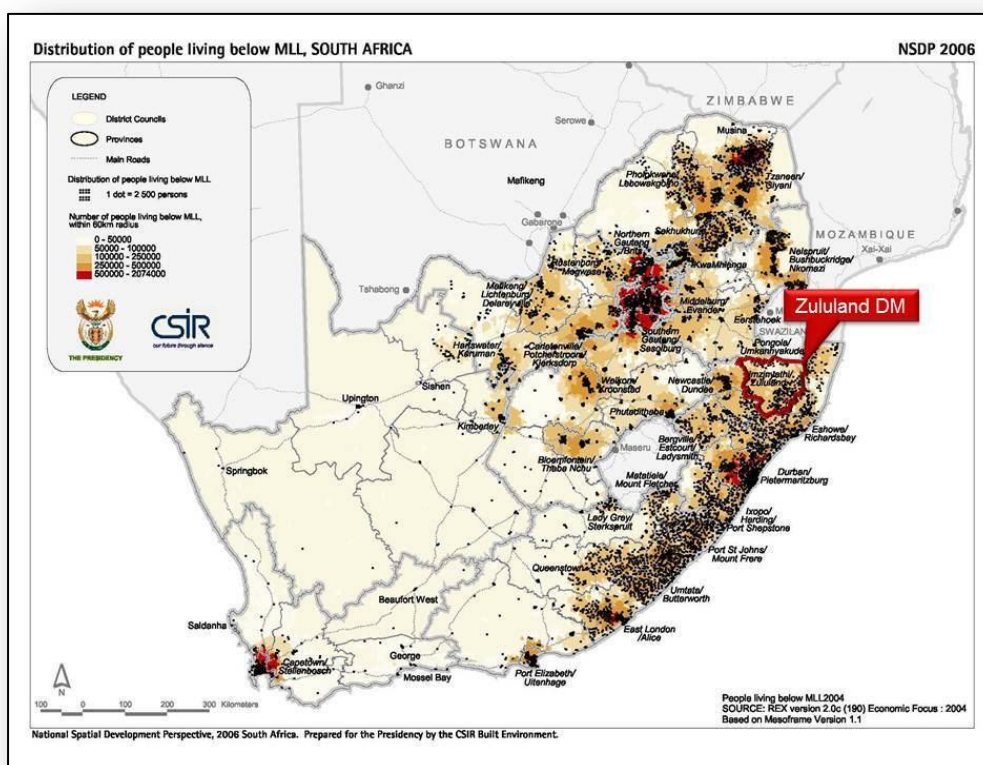
The Minimum Living Level reflects the minimum income required to sustain a household, and varies in accordance with household size – the larger the household, the larger the income required to keep its members out of poverty. Although no updated estimate is available, the MLL for 2004 as depicted in the National Spatial Development Perspective is only R2,042-00 per household of 5 population, which is the average household size in general. It is further a good indication of the little income this population is surviving on.

The MLL considers the following items:

- Clothing;
- Compulsory payments to local authorities in respect of rent, miscellaneous services, water and electricity;
- Contributions to medical funds and medical and dental expenses;
- Education;
- Food;
- Fuel and light;
- Replacement of household equipment;
- Support of relatives (applicable only to singles)
- Taxes; and
- Transport;
- Washing and cleaning materials;

On the map below, Zululand marked by its boundary in red on the map, has a population between 250,000 and 500,000 population living below Minimum Level of Living. Only the areas towards the North around Pongola have a distribution of below 100,000 population per 80km living below MLL. It is subsequently clear that the District Municipality has a high rate and concentrations of poverty.

Figure 1: Households Living Below MLL

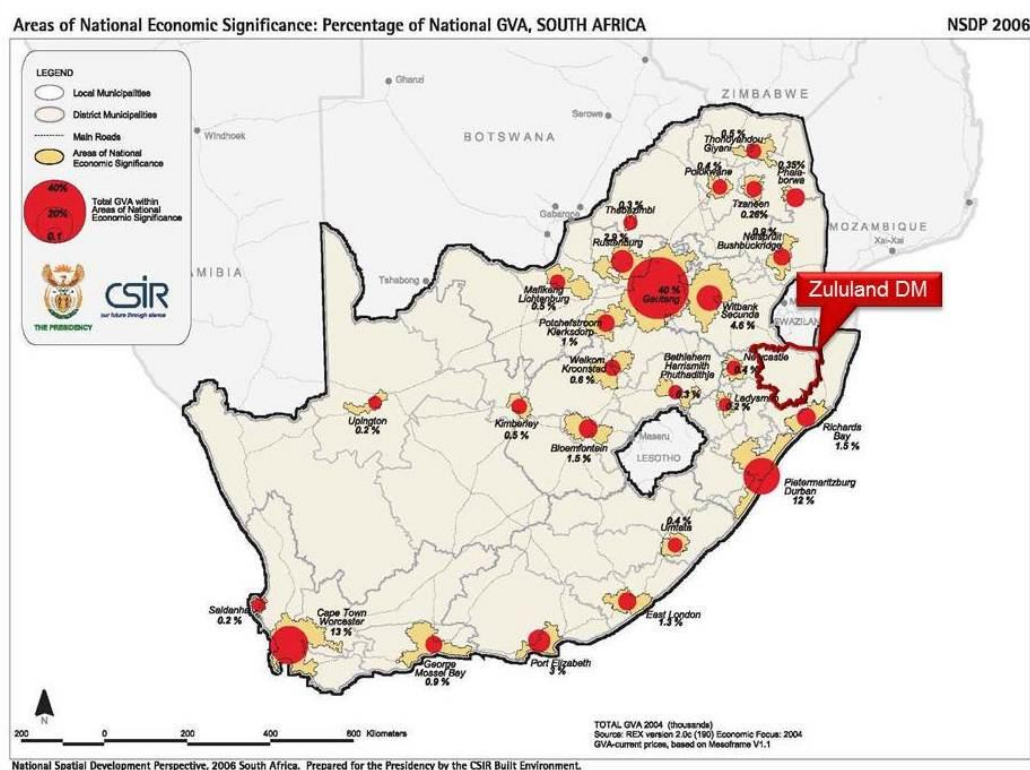


Source: NSDP, 2006 South Africa.

2.2.2.2 Areas Of National Significance

According to the National Spatial Development Plan, no locality in Zululand district Municipality is seen as an area with Economic significance on a national or provincial level.

Figure 2: Areas of National Economic Significance



2.2.3 New Growth Path

The New Growth Path starts by identifying where employment creation is possible, both within economic sectors as conventionally defined and in cross-cutting activities. It then analyses the policies and institutional developments required to take advantage of these opportunities.

In essence, the aim is to target our limited capital and capacity at activities that maximize the creation of decent work opportunities. To that end, we must use both macro and micro economic policies to create a favourable overall environment and to support more labor-absorbing activities. The main indicators of success will be jobs (the number and quality of jobs created), growth (the rate, labour intensity and composition of economic growth), equity (lower income inequality and poverty) and environmental outcomes.

To achieve profound changes in the structure of savings, investment and production, the government must steadily and consistently pursue key policies and programmes over at least a decade. Moreover, the state must coordinate its efforts around core priorities rather than dispersing them across numerous efforts, however worthwhile, that do not contribute to a sustained expansion in economic opportunities for our people. These are the core characteristics of a developmental state.

The requisite policy stability and coherence will be supported by effective social dialogue that helps establish a broad consensus on long-run policy goals and a vision for the country, and facilitates the necessary trade-offs and sacrifices by ensuring a visibly fair distribution of the benefits from growth. Engagement with stakeholder representatives on policy, planning and implementation at national, sectoral and local levels is central to achieving coherent and effective strategies that are realized without endless debates and delays. That, in turn, means

government must both strengthen its own capacity for engagement and leadership, and re-design delivery systems to include stakeholders meaningfully.

Long-term structural change also requires phasing to establish the preconditions for success over time. In the case of employment, for instance, the steps that the state can take vary over time:

1. In the very short run, the state can accelerate employment creation primarily through direct employment schemes, targeted subsidies and/or a more expansionary macroeconomic package.
2. Over the short to medium term, it can support labour-absorbing activities, especially in the agricultural value chain, light manufacturing and services, to generate large scale employment. Government can provide effective inducements to private investment in targeted sectors principally by prioritizing labour-absorbing activities for the provision of appropriate and cost-effective infrastructure, regulatory interventions that effectively address market and state failures, measures to improve skills systems, and in some cases subsidies to production and innovation.
3. In the longer run, as full employment is achieved, the state must increasingly support knowledge- and capital-intensive sectors in order to remain competitive.

This inherent phasing means that in the medium term the state must focus on facilitating growth in sectors able to create employment on a large scale. But it should not neglect more advanced industries that are crucial for sustained long-run growth. Government must encourage stronger investment by the private and public sectors to grow employment-creating activities rapidly while maintaining and incrementally improving South Africa's core strengths in sectors such as capital equipment for construction and mining, metallurgy, heavy chemicals, pharmaceuticals, software, green technologies and biotechnology. These industries build on our strong resource base and our advanced skills and capacity in some economic sectors.

The connection between economic and social measures needs to be further strengthened. In addition to their important social goals, basic and secondary education plays a critical role in long-run equality, access to employment and competitiveness. So does investment in health, including effective measures to address HIV/AIDS. Government has prioritized health and education investment and delivery.

Apartheid left South Africa with an extraordinary spatial divergence between the economic centres of the country, linked to the metro areas, and the densely settled rural areas of the former Bantustans, which have very limited economic resources and investments. Within metros, too, there are vast disparities and spatial challenges, with townships located far from most employment opportunities. A core task for the New Growth Path is to break with this legacy through a coherent approach to spatial development backed by strong investment in infrastructure and the identification of viable and sustainable opportunities for historically disadvantaged regions. Rural development will necessarily depend largely on links to the main urban areas.

It is acknowledged that while urbanization will continue, a significant share of the population will remain in rural areas, engaged in the rural economy. Enhancing rural employment requires finalization of a spatial perspective that sets out the opportunities available and the choices that we must make in order to lay the basis for aligning government spending, infrastructure and housing investment and economic development initiatives. In addition, government must do more to support small-scale agriculture, including through community food gardens and marketing and service coops as well as accessible banking facilities.

2.2.4 National Development Plan 2030

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

The National Planning Commission's *Diagnostic Report*, released in June 2011, set out South Africa's achievements and shortcomings since 1994. It identified a failure to implement policies and an absence of broad partnerships as the main reasons for slow progress, and set out nine primary challenges:

1. Too few people work
2. The quality of school education for black people is poor
3. Infrastructure is poorly located, inadequate and under-maintained
4. Spatial divides hobble inclusive development
5. The economy is unsustainably resource intensive
6. The public health system cannot meet demand or sustain quality
7. Public services are uneven and often of poor quality
8. Corruption levels are high
9. South Africa remains a divided society.

South Africans from all walks of life welcomed the diagnostic as a frank, constructive assessment. This led to the development of the draft national plan, released in November 2011. Building on the diagnostic, the plan added four thematic areas: rural economy, social protection, regional and world affairs, and community safety.

The plan focuses on the critical *capabilities* needed to transform the economy and society. Achieving these capabilities is not automatic, nor will they emerge if the country continues on its present trajectory. Rising levels of frustration and impatience suggest that time is of the essence: failure to act will threaten democratic gains. In particular, South Africa must find ways to urgently reduce alarming levels of youth unemployment and to provide young people with broader opportunities.

Progress over the next two decades means doing things differently. Given the complexity of national development, the plan sets out six interlinked priorities:

- Uniting all South Africans around a common programme to achieve prosperity and equity.
- Promoting active citizenry to strengthen development, democracy and accountability.
- Bringing about faster economic growth, higher investment and greater labour absorption.
- Focusing on key capabilities of people and the state.
- Building a capable and developmental state.
- Encouraging strong leadership throughout society to work together to solve problems.

While the achievement of the objectives of the National Development Plan requires progress on a broad front, three priorities stand out:

- Raising employment through faster economic growth
- Improving the quality of education, skills development and innovation
- Building the capability of the state to play a developmental, transformative role.

A sustainable increase in employment will require a faster-growing economy and the removal of structural impediments, such as poor-quality education or spatial settlement patterns that exclude the majority. These are essential to achieving higher rates of investment and competitiveness, and expanding production and exports. Business, labour, communities and government will need to work together to achieve faster economic growth.

Social cohesion needs to anchor the strategy. If South Africa registers progress in deracialising ownership and control of the economy without reducing poverty and inequality, transformation will be superficial. Similarly, if poverty and inequality are reduced without demonstrably changed ownership patterns, the country's progress will be turbulent and tenuous.

Longer term interventions from the local authority need to take cognizance of the following:

- Promote mixed housing strategies and more compact urban development to help people access public spaces and facilities, state agencies, and work and business opportunities.
- Invest in public transport, which will benefit low-income households by facilitating mobility.

For infrastructure that supports human settlements (housing, water, sanitation, roads, parks and so on) the picture is unnecessarily complicated. The planning function is located at local level, the housing function is at provincial level, and the responsibility for water and electricity provision is split between those responsible for bulk services and reticulation. In practice, these arrangements do not work. In general, human settlements are badly planned, with little coordination between those installing water reticulation infrastructure and those responsible for providing bulk infrastructure.

Responsibility for housing should shift to the level at which planning is executed: the municipal level. The plan sets out recommendations for effective urban development.

Local government faces several related challenges, including poor capacity, weak administrative systems, undue political interference in technical and administrative decision-making, and uneven fiscal capacity. The Commission believes that within the framework of the Constitution, there is more room for the asymmetric allocation of powers and functions and for more diversity in how developmental priorities are implemented. To achieve this, longer-term strategies are needed, including addressing capacity constraints, allowing more experimentation in institutional forms and working collaboratively with national and provincial government.

Reshaping South Africa's cities, towns and rural settlements is a complex, long-term project, requiring major reforms and political will. It is, however, a necessary project given the enormous social, environmental and financial costs imposed by existing spatial divides. The Commission proposes a national focus on spatial transformation across all geographic scales. Policies, plans and instruments are needed to reduce travel distances and costs, especially for poor households. By 2030, a larger proportion of the population should live closer to places of work, and the transport they use to commute should be safe, reliable and energy efficient. This requires:

- Strong measures to prevent further development of housing in marginal places
- Increased urban densities to support public transport and reduce sprawl

- More reliable and affordable public transport and better coordination between various modes of transport
- Incentives and programmes to shift jobs and investments towards the dense townships on the urban edge
- Focused partnerships with the private sector to bridge the housing gap market.

Rural areas present particular challenges. Policies are required to bring households in these areas into the mainstream economy. There are rural areas, however, where transport links are good and where densification is taking place in the absence of effective land-use management and urban governance. These require urgent interventions.

2.2.5 The Comprehensive Rural Development Programme Framework

The Comprehensive Rural Development Programme (CRDP) is aimed at being an effective response against poverty and food insecurity by maximizing the use and management of natural resources to create vibrant, equitable and sustainable rural communities. The strategic objective of the CRDP is therefore to facilitate integrated development and social cohesion through participatory approaches in partnership with all sectors of society.

The vision of the CRDP is to create vibrant, equitable and sustainable rural communities include:

- contributing to the redistribution of 30% of the country's agricultural land;
- improving food security of the rural poor;
- creation of business opportunities, de-congesting and rehabilitation of over-crowded former homeland areas; and
- Expanding opportunities for women, youth, people with disabilities and older persons who stay in rural areas.

The ultimate vision of creating vibrant, equitable and sustainable rural communities will be achieved through a three-pronged strategy based on:

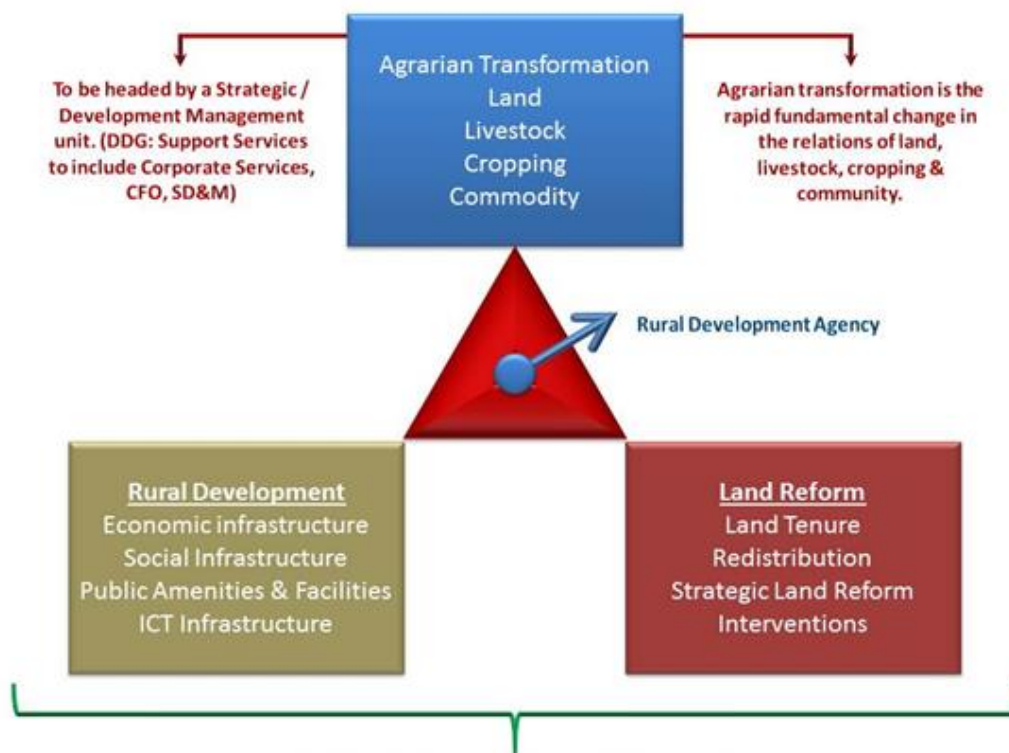
- a coordinated and integrated broad-based agrarian transformation;
- strategically increasing rural development; and
- An improved land reform programme.

Agrarian transformation is the rapid fundamental change in the relations of land, livestock, cropping and community. It will focus on, but is not limited to, the establishment of rural business initiatives, agro industries, co-operatives, cultural initiatives and vibrant local markets in rural settings, the empowerment of rural people and communities (especially women and youth), and the revitalization of old, and revamping of new economic, social, and information and communication infrastructure, public amenities and facilities in villages and small rural towns.

Rural development is about enabling rural people to take control of their destiny, thereby dealing effectively with rural poverty through the optimal use and management of natural resources. It is a participatory process through which rural people learn over time, through their own experiences and initiatives, how to adapt their indigenous knowledge to their changing world.

Land reform is a national priority and is further entrenched in Section 25 (4) of the Constitution of the Republic of South Africa, 1996 (Act No.108 of 1996). A three-pronged land reform programme aiming at *tenure reform, restitution and land redistribution*, was launched in 1994. In relation to the CRDP, the land reform agenda will focus on reviewing the Restitution, Redistribution and Tenure Reform Programmes. In relation to Restitution, the focus will be on expediting the processing of settled claims and the settlement of outstanding claims. In addition, the work of the Land Claims Commissions will be rationalized within the Department of Rural Development and Land Reform. The focus of the Redistribution and Tenure Reform Programmes will be to develop less costly alternative models of land redistribution while reviewing legislation and policies that apply to both programmes.

Figure 3: Strategic Objectives Social Cohesion & Development



2.2.6 Social Housing Policy

The primary objectives of the Social Housing Programme include:

- Contributing to the national priority of restructuring South African society in order to address structural, economic, social and spatial dysfunctional ties and imbalances to achieve Government's vision of an economically empowered, non-racial, and integrated society living in sustainable human settlements.
- Improving and contributing to the overall functioning of the housing sector and in particular the rental sub-component, as far as social housing is able to contribute to widening the range of housing options available to the poor.

The most important elements of urban restructuring include:

2.2.6.1 Spatial Restructuring

Spatial restructuring is necessary to address the needs of the urban poor (most black), who are located far away or completely excluded from the economic opportunities. The majority of these people also have limited or inadequate access to housing. Therefore; it is necessary to restructure the town by means of identifying appropriately located land for the provision of social housing, where places work, live, and play can be created.

2.2.6.2 Economic Restructuring

Economic restructuring will occur when social housing is used as a tool for economic revitalization of poorly performing cities or towns. Introduction of social housing in economically underperforming cities has had a positive impact in a number of cities world-wide. The number of fully completed houses will determine the scale and number of sustainable jobs created during construction. The end result will be an empowered population, which is able to use the building skills to make a living whilst creating sustainable human settlements.

2.2.6.3 Social Restructuring

Social housing can be used as a tool to create stable social environments that integrate with town with the rest of the LM. This also means the creation of a "sense of place" where residents have a sense of belonging and feel secured.

Social housing can also be used to achieve social integration amongst people of different racial groups and backgrounds.

The Guiding Principles for Social Housing include:

- Promoting urban restructuring through the social, physical, and economic integration of housing development into existing areas.
- Promoting establishment of well-managed, quality rental housing options for the poor.
- Responding to local housing demand.
- Delivering housing for a range of income groups, in such a way as to allow social integration and financial cross subsidisation.
- Supporting the economic development of low income communities in a number of ways.
- Fostering the creation of quality living environments for low-income persons.
- Promoting a safe, harmonious, and socially responsible environment both internal to the project and in the immediate urban environs.
- Promoting the creation of sustainable and viable projects.
- Encouraging the involvement of private sector where possible.
- Facilitating the involvement of residents in the project and/or key stakeholders in the broader environment.
- Ensuring secure tenure for the residents of projects, on the basis of the general provisions for the relationship between residents and landlords as defined in the Housing Act, 1997 and the Rental Act, 50 of 1999.
- Supporting mutual acceptance of roles and responsibilities of tenants and social landlords, on the basis of the general provisions for the relationship between residents and landlords as defined in the Rental Act, 50 of 1999, the Co-operatives Act, 91 of 1981c, as well as the Social Housing Act, 16 of 2008.
- Facilitation, support and driven by all spheres of government.
- Ensuring transparency, accountability and efficiency in the administration and management of social housing stock.
- Promoting the use of public funds in such a manner that stimulates and/or facilitates private sector investment and participation in the social housing sector.

2.2.7 Porvincial Spatial Economic Development Strategy (PSEDS)

The KwaZulu-Natal Spatial Economic Development Strategy (PSEDS) was formulated in 2007 as a spatial economic assessment of the areas of need and potential within the province. The PSEDS is intended as a guide to service delivery within the cluster to achieve the goals set in ASGI-SA to halve poverty & unemployment by 2014.

The PSEDS sets out to: Focus where government directs its investment and development initiatives; capitalize on complementarities and facilitate consistent and focused decision making; bring about strategic coordination, interaction and alignment;

The PSEDS recognises that: Social & economic development is never uniformly distributed; apartheid created an unnatural distortion of development and this distortion must be addressed. The PSEDS has been developed in order to achieve the objectives of ASGISA within the framework of the NSDP and the PGDS and aims to achieve the following:

- Eradication of extreme poverty and hunger;
- Promotion of gender equality & empowerment of women;
- Reduction in child mortality;
- Improvement of maternal health;
- Combating HIV-AIDS, malaria and other diseases;
- Ensuring environmental sustainability;
- Developing a global partnership for development;
- Sustainable governance and service delivery;
- Sustainable economic development and job creation;
- Integrating investment in community infrastructure;
- Developing human capability;
- Developing comprehensive response to HIV-AIDS;
- Fighting poverty & protecting vulnerable groups in society.

The PSEDS prescribed that Zululand District can achieve some of its economic and financial needs by focusing on agriculture and tourism industries.

2.2.7.1 Norms & Standards For Provision Of Facilities

The norms and Standards as outlined in the table below were researched from various sources, which are also captured in the table. These standards were utilised in the analysis of service and facility provision, to determine whether services are under provided, and where additional services needs to be installed.

Table 2 : Norms & Standard for Provision of Facilities

Facility	Thresholds Standard (1 Facility / X People)	Access Standard
Education *		
Pre-school (Inch Crèche & Day Care)	5 000	Walking Distance
Multi skilling / Training Centre / ABET	Need	Combined with other Community Facilities
Primary School	3 000	1,5km / 20min travel
Secondary School	6 000	5km Walking Distance
Tertiary Training (Excl. University)	100 000	
Library	50 000	Accessible Via Public Transport
Health **		
Clinic	5 000	Within Nodal Area. Accessible via Public Transport
Hospital	50 000	Within Nodal Area close to Major Public Transport Route
Safety & Security Facilities ***		
Magistrates Court	1 / Town	Within Primary Nodes
Fire Station	60 000	High Access Routes
Emergency Services Facility	25 000	High Access Routes
Community Safety Centre	200 000	Nodal Area
Police Station	50 000	Within Accessible nodal Areas
Police Station Mobile	25 000	
Social		
Cemetery	Need	Need
Orphanage	200 000	Within Accessible nodal Areas
Church	2 500	Near (Not on) Transport Routes
Civic Centre	1	
Multi Purposed Community Centre / Thusong Centre	1	Within Accessible nodal Areas
Community Hall	20 000	Within Accessible nodal Areas
Old Age Home and Service Centre	1 / Town	
Pension Pay Point	Need - Min of 1 / Node	30 Min Travel
Post Office	11 000	1km/20min Walking
Post Boxes	16 500	500m/10min Walking distance
Traditional Admin Centre	1 / Tribal Authority	
Sport & Recreation		
Sport Complex (Incl Swimming Pool)	50 000	Within Primary Nodes
Sports Field	12 000	Clustered with schools
Transport		
Bus Service on Regular Basis	1/Node	Clustered within Nodal Areas
Taxi Rank and/or Bus Depot	1/Node	Clustered within Nodal Areas

Source: "Guidelines for Planning of Facilities in KwaZulu-Natal"

2.2.8 Provincial Growth and Development Strategy (PGDS)

The provincial Government has developed its own Growth and Development Strategy, which is closely aligned to both the Millennium Development Goals and national development goals in 2011. The PGDS is essentially a tool through which the provincial government can address the legacies of the apartheid space economy, promote sustainable development and ensure poverty eradication and employment creation.

The Provincial Vision is indicated as:

By 2030, the PROVINCE OF KWAZULU-NATAL should have maximized its position as a GATEWAY to South and Southern Africa, as well as its human and natural resources so creating a safe, healthy and sustainable living environment.

Abject poverty, inequality, unemployment and current disease burden should be history, basic services must have reached all its people, domestic and foreign investors are attracted by world class infrastructure and a skilled labour force.

The people shall have options on where and how they opt to live, work and play, where the principle of putting people first and where leadership, partnership and prosperity in action has become a normal way of life.

This PGDS provides KwaZulu-Natal with a reasoned strategic framework for accelerated and shared economic growth through catalytic and developmental interventions, within a coherent equitable spatial development architecture, putting people first, particularly the poor and vulnerable, and building sustainable communities, livelihoods and living environments. Concomitant attention is also given to the provision of infrastructure and services, restoring the natural resources, public sector leadership, delivery and accountability, ensuring that these changes are responded to with resilience, innovation and adaptability. This will lay the foundations for attracting and instilling confidence from potential investors and developing social compacts that seek to address the interconnectedness of the Provincial challenges in a holistic, sustainable manner, whilst nurturing a populous that is productive, healthy and socially cohesive.

The purpose of the 2011 KZN PGDS is to:

- Be the primary strategy for KwaZulu-Natal that drives growth and development in the Province to 2030;
- Mobilize and synchronize strategic plans and investment priorities of all spheres of government, state owned entities, business, higher education institutions, labour, civil society and all other social partners towards achieving the desired growth and development goals, objectives and outcomes;
- Spatially contextualise and prioritise interventions so as to achieve greater spatial equity;
- Develop clearly defined institutional arrangements ensuring decisive leadership, robust management, implementation and on-going reviewing of the growth and development plan.

The PGDS identifies the following strategic goals, framework and objectives for the province of KZN:

Figure 4 KZN PGDS Strategic Framework



2.2.9 Industrial Policy Action Plan

In January 2007 Cabinet adopted the National Industrial Policy Framework (NIPF) which sets out Government's broad approach to industrialisation with the following core objectives:

- To facilitate diversification beyond our current reliance on traditional commodities and non-tradable services. This requires the promotion of increased value-addition characterised particularly by movement into non-traditional tradable goods and services that compete in export markets as well as against imports.
- The long-term intensification of South Africa's industrialisation process and movement towards a knowledge economy.
- The promotion of a more labour-absorbing industrialisation path with a particular emphasis on tradable labour-absorbing goods and services and economic linkages that catalyse employment creation.
- The promotion of a broader-based industrialisation path characterised by the increased participation of historically disadvantaged people and marginalised regions in the mainstream of the industrial economy.
- Contributing to industrial development on the African continent, with a strong emphasis on building its productive capacity.

Prior to the global economic crisis of 2008, South Africa achieved a relatively high growth rate, which masked a number of structural challenges within the South African Economy.

By further investigating these challenges it became clear that a need exist to develop a comprehensive and integrated response to scale up industrial development.

Important to note is the role of IPAP in relation to other policies, which advances the work of the Economic Sectors and employment clusters in the following ways:

- Rural development through interventions in a range of sectors such as agro processing, bio-fuels, forestry, cultural industries, aquaculture, tourism
- Advanced technological capabilities through interventions in the nuclear, advanced materials, aerospace, and ICT industries
- A serious first step towards the systematic promotion of Green and energy-efficient goods and services.
- Downstream mineral beneficiation
- Strengthened linkages between Tourism and Cultural industries
- Stronger integration between sector strategies, skills development plans and commercialisation of publicly funded innovation.
- Macro-economic stability through:
 - Improvements in the trade balance
 - Lowering of inflationary pressures through increased supply and competition in a range of sectors
 - It has a profound positive net revenue impact
 - It contributes to medium to long-term diversification of the economy and hence risks mitigation.
- A substantial contribution to the creation of decent jobs, both directly and indirectly.

To support IPAP the following policies were developed, and is critical to facilitate the implementation of Industrial Development. These policies include:

1. Stronger articulation between macro and micro economic policies
2. Industrial financing channelled to real economy sectors.
3. Leveraging public and private procurement to raise domestic production and employment in a range of sectors, including alignment of B-BBEE and industrial development objectives, and influence over private procurement.
4. Developmental trade policies which deploy trade measures in a selected and strategic manner, including tariffs, enforcement and SQAM (standards, quality assurance and metrology) measures.
5. Competition and regulation policies that lower costs for productive investments and poor and working class households.
6. Skills and innovation policies that are aligned to sectoral priorities.
7. Deploying these policies in general and in relation to more ambitious sector strategies, building on work already done

Each of the above policies identifies key programmes, including milestones to monitor the progress of implementation of the strategy.

The Industrial Policy Action Plan focuses on three clusters of production sectors to be developed/expanded.

Cluster 1 – Qualitatively new areas of focus

- Realising the potential of the metal fabrication, capital and transport equipment sectors, particularly arising from large public investments;
- 'Green' and energy-saving industries;
- Agro-processing, linked to food security and food pricing imperatives;

Cluster 2 – Scale up and broaden interventions in existing IPAP sectors

- Automotive, components, medium and heavy commercial vehicles
- Plastics, pharmaceuticals and chemicals
- Clothing, textiles, footwear and leather
- Biofuels
- Forestry, paper, pulp and furniture
- Strengthening linkages between cultural industries and tourism
- Business process servicing'

Cluster 3 – Sectors with potential for long-term advanced capabilities

- Nuclear
- Advanced materials
- Aerospace

The realities and impact on local authorities includes the implementation and enforcement of policies:

- Procurement of Industrial Financing
- Development and implementation of a Competition Policy
- Implementation of Developmental Trade Policy
- Public Procurement Policies

2.3 Legislation Impacting On The Development Of Spatial Development Frameworks

The table below outlines the legislative pieces, and their respective areas of influence where they impact on the development of the Spatial Development Framework.

Table 3: Legislation Impacting on Development of Spatial Development Frameworks

Municipal Systems Act (Act 32 of 2000)

Chapter 5 of this Act provides for the preparation of IDP. S. S26(e) lists an SDF as a core component of an IDP and requires that the SDF provides basic guidelines for a municipal land use management system.

Local Government: Municipal Planning and Performance Management Regulations (GN R796 of 2001)

S2(4) requires that an SDF should:

- Give Effect To The DFA Principles;
- Set Out Objectives That Reflect The Desired Spatial Form Of The Municipality;
- Contain Strategies And Policies To Achieve The Objectives And Which Should Indicate Desired Patterns Of Land Use;
- Address The Spatial Reconstruction;
- Provide Strategic Guidance Regarding The Location And Nature Of Development;
- Set Out Basic Guidelines For A Land Use Management System In The Municipality;
- Set Out A Capital Investment Framework For The Municipality's Development Programs;
- Contain A Strategic Assessment Of The Environmental Impact Of The SDF;
- Identify Programs And Projects For The Development Of Land Within The Municipality;
- Be Aligned With The Spatial Development Frameworks Reflected In The Integrated Development Plans Of Neighbouring Municipalities;
- And Provide A Plan Of The Desired Spatial Form Of The Municipality, Which Should:
 - Indicate Where Public And Private Land Development And Infrastructure Investment Should Take Place;
 - Indicate Desired Or Undesired Utilisation Of Space In A Particular Area;
 - Delineate An Urban Edge;
 - Identify Areas For Strategic Intervention; And
 - Indicate Priority Spending Areas.

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

The role of local government in spatial planning has been re-energized through the introduction of the Spatial Planning and Land Use Management Act No. 16 of 2013 (commonly known as SPLUMA). The intention of this national legislation is to introduce the norms and standards for spatial planning and to specify the relationship between spatial planning and land use management. This is intended to create uniformity and consistency on the manner in which both spatial planning and land use management is practiced within the whole country. Chapter 4 of SPLUMA stipulate the need to prepare Spatial Development Frameworks (SDFs) by all municipalities including the Districts. Part D (19) stipulates that the Regional Spatial Development Framework must cover the following minimum issues:

- a) Give effect to the development principles and applicable norms and standards set out in Chapter 2;
- b) Give effect to national and provincial policies, priorities, plans and planning legislation;
- c) Reflect the current state of affairs in that area from a spatial and land use perspective of the region;
- d) Indicate desired patterns of land use in that area;
- e) Provide basic guidelines for spatial planning, land development and land use management in that area;

- f) Propose how the framework is to be implemented and funded; and
- g) Comply with environmental legislation.

The preparation of the Zululand District Municipality SDF is guided the following spatial principles listed under Chapter 2 of the SPLUMA legislations:-

a) Spatial Justice: Ensures equitable distribution and increase access to social infrastructure and addresses the injustices of the past.

b) Spatial Sustainability: Ensures protection of agricultural prime land and uphold consistency of land use measures in accordance with environmental management instruments; promote and stimulate the effective and equitable functioning of land markets; consider all current and future costs to all parties for the provision of infrastructure and social services in land developments; promote land development in locations that are sustainable and limit urban sprawl; and result in communities that are viable.

c) Spatial Efficiency: which ensures that land development optimises the use of existing resources and infrastructure; decision-making procedures are designed to minimise negative financial, social, economic or environmental impacts; and development application procedures are efficient and streamlined and timeframes are adhered to by all parties

d) Spatial Resilience: promote flexibility in spatial plans, policies and ensure that land use management systems accommodate sustainable livelihoods in communities most likely to suffer the impacts of economic and environmental shocks.

e) Good Governance: Ensures that all spheres of government carry-out an integrated approach to land use and land development that is guided by the spatial planning and land use management systems. The preparation and amendment of spatial plans, policies, land use schemes as well as procedures for development applications, to include transparent processes of citizen participation and all parties to have the opportunity to provide inputs on matters affecting them; and policies, legislation and procedures must be clearly set out and inform and empower citizens.

- develop an argument or approach to the development of the area of jurisdiction which is clear enough to allow decision-makers to deal with the unexpected (for example, applications from the private sector);
- develop a spatial logic which guides private sector investment. This logic primarily relates to establishing a clear hierarchy of accessibility;
- ensure the social, economic and environmental sustainability of the area;
- establish priorities in terms of public sector development and investment; and
- identify spatial priorities and places where public-private partnerships are a possibility.

S51 (1) further requires district and local municipalities to align their spatial development frameworks and land use schemes as required by the MSA.

Municipal Financial Management Act (56 of 2003)

To secure sound and sustainable management of Municipal financial affairs, and in particular the management and disposal of public assets, particularly land.

Subdivision of Agricultural Land Act 70 of 1970

Application Regulations regarding the subdivision of agricultural land for development within a municipality:

Subject to the provisions of section 2 a Surveyor-General shall only approve a general plan or diagram relating to a subdivision of agricultural land

—(d) any subdivision of any land in connection with which a surveyor has completed the relevant survey and has submitted the relevant sub-divisional diagram and survey records for examination and approval to the surveyor-general concerned prior to the commencement of this Act.

, and a Registrar of Deeds shall only register the vesting of an undivided share in agricultural land referred to in

section 3 (b), or a part of any such share referred to in section 3 (c), or a lease referred to in section 3 (d) or, if applicable, a right referred to in section 3 (e) in respect of a portion of agricultural land, if the written consent of the Minister in terms of this Act has been submitted to him.

(b) no undivided share in agricultural land not already held by any person, shall vest in any person;

(c) no part of any undivided share in agricultural land shall vest in any person, if such part is not already held by any person;

(d) no lease in respect of a portion of agricultural land of which the period is 10 years or longer, or is the natural life of the lessee or any other person mentioned in the lease, or which is renewable from time to time at the will of the lessee, either by the continuation of the original lease or by entering into a new lease, indefinitely or for periods which together with the first period of the lease amount in all to not less than 10 years, shall be entered into;

(e) (i) no portion of agricultural land, whether surveyed or not, and whether there is any building thereon or not, shall be sold or advertised for sale, except for the purposes of a mine as defined in section 1 of the Mines and Works Act, 1956 (Act 27 of 1956); and

(ii) no right to such portion shall be sold or granted for a period of more than 10 years or for the natural life of any person or to the same person for periods aggregating more than 10 years, or advertised for sale or with a view to any such granting, except for the purposes of a mine as defined in section 1 of the Mines and Works Act, 1956;

[Para. (e) Substituted by s. 2 of Act 12 of 1979 and by s. 2 (1) (a) of Act 33 of 1984.]

National Environmental Management Act no.107 of 1998

The SDF promotes (4) (a) Sustainable development, which requires the

consideration of all relevant factors including the following:

i. That the disturbance of ecosystems and loss of biological diversity are avoided, or, where they cannot be altogether avoided, are minimised and remedied;

ii. that pollution and degradation of the environment are avoided, or, where they cannot be altogether avoided, are minimised and remedied;

iii. that the disturbance of landscapes and sites that constitute the nation's cultural heritage is avoided, or where it cannot be altogether avoided, is minimised and remedied;

iv. that waste is avoided, or where it cannot be altogether avoided, minimised and reused or recycled where possible and otherwise disposed of in a responsible manner;

v. that the use and exploitation of non-renewable natural resources is responsible and equitable, and takes into account the consequences of the depletion of the resource;

vi. that the development, use and exploitation of renewable resources and the ecosystems of which they are part do not exceed the level beyond which their integrity is jeopardised;

vii. that a risk averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions; and

viii. That negative impacts on the environment and on people's environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimised and remedied.

(d) Equitable access to environmental resources, benefits and services to meet basic human needs and ensure human wellbeing must be pursued and special measures may be taken to ensure access thereto by categories of persons disadvantaged by unfair discrimination.

(f) The participation of all interested and affected parties in environmental governance must be promoted, and all

people must have the opportunity to develop the understanding, skills and capacity necessary for achieving equitable and effective participation, and participation by vulnerable and disadvantaged persons must be ensured.

(g) Decisions must take into account the interests, needs and values of all interested and affected parties, and this includes recognising all forms of knowledge, including traditional and ordinary knowledge.

(h) Community wellbeing and empowerment must be promoted through environmental education, the raising of environmental awareness, the sharing of knowledge and experience and other appropriate means.

(p) The costs of remedying pollution, environmental degradation and consequent adverse health effects and of preventing, controlling or minimising further pollution, environmental damage or adverse health effects must be paid for by those responsible for harming the environment.

(q) The vital role of women and youth in environmental management and development must be recognised and their full participation therein must be promoted.

(r) Sensitive, vulnerable, highly dynamic or stressed ecosystems, such as coastal shores, estuaries, wetlands, and similar systems require specific attention in management and planning procedures, especially where they are subject to significant human resource usage and development pressure.

2.4 District Policies

2.4.1 Vision and Mission of the Zululand District Municipality

In developing the Spatial Development Framework it is necessary to consider the vision of the Municipality, to ensure efforts are aligned to facilitate the vision to be achieved. The long term vision of the Municipality is as follows:

We are the Zululand region and proud of our heritage. We are mindful of the needs of the poor and we seek to reflect the aspirations of our communities. We are committed to responsible and accountable actions, tolerance and concern for racial harmony, the protection of our environment, and the strengthening of the role of women and youth. We will strive to improve the quality of life in Zululand by providing sustainable infrastructure, promoting economic development and building capacity within our communities.

2.4.2 LED Strategy

The Zululand District Municipality Local Economic Development strategy (2003) has a number of set objectives, strategies and principles that needs to be considered during the development of the SDF. These are briefly discussed in the sections below.

LED Objectives

The ZDM LED strategy has the following overall objectives to be achieved.

Table 4: ZDM LED Strategy Objectives

Reduction in income leakage	Ensure spendable income is utilised within district itself.
To increase investment (Local and external)	Investment in tourism, agriculture and business is to be promoted
To promote local business development and business interaction	Interaction between businesses will contribute to countering income leakage and establishing a new vibrancy in the economy.
To increase entrepreneurial opportunities and employment	All the objectives need to be supported by a strong focus on entrepreneurial development, micro and small business establishment, and employment creation through appropriate support mechanisms.

Source: ZDM LED Strategy revised 2015

Principles

In addition to the above mentioned objectives, the following principles need to be considered during development of the ZDM Spatial Development Framework.

Table 5: ZDM LED Strategy Principles

Process approach:	Local economic development is a process and the planning for implementation should consider the logical steps involved in such a process, i.e. a focus on small scale community tourism if tourists cannot be attracted to the area will not be sustainable.
Sustainability	Local economic development processes should be economically, socially and environmentally sustainable, e.g. the impact of coal mining on the environment and specifically on tourism needs to be considered, because it makes economic sense does not suggest that it is sustainable.
Collaborative effort / Coordination	The District Municipality views economic development as a collaborative effort in which a wide range of stakeholders have a role to fulfil. The successful implementation of the strategies will be dependent on all stakeholders fulfilling its specific role in a coordinated fashion.
Market based	Support for new economic development ventures will be based on a clearly defined market for the products / services which the venture will deliver.
Integration	Integration of existing and new economic development ventures is essential. The upstream and downstream impact of ventures within the District needs to be considered. The impact of ventures should not be considered in isolation.

Source: ZDM LED Strategy revised 2015

Strategies

The sector specific strategies relating to the District are outlined in the table below:

Table 6: ZDM LED Strategy – Strategies

DISTRICT STRATEGIES	<ol style="list-style-type: none"> 1. Establishing LED institutions and processes 2. Changing attitudes 3. Addressing the fundamentals 4. Raising the profile of the region 5. Improving and Promoting Access 6. Visible Delivery
BUSINESS STRATEGIES	<ol style="list-style-type: none"> 1. Institutional structuring for delivery 2. Capacity building and training 3. Establishing/building agri-industries 4. Establishing small scale mining 5. Municipal business strategies
AGRICULTURE STRATEGIES	<ol style="list-style-type: none"> 1. Institutional structuring for agricultural delivery 2. Sustainable land reform 3. Improved market access for agricultural produce 4. Visible delivery in agricultural sector 5. Municipal agricultural strategies
TOURISM STRATEGIES	<ol style="list-style-type: none"> 1. Institutional structuring for tourism 2. Tourist information inside the District 3. Tourist information outside the District 4. Making tourists feel safe and welcome 5. Community tourism 6. Visible tourism delivery 7. Municipal tourism strategies

Source: ZDM LED Strategy revised 2015

The above strategies are summarised and depicted on the diagram below:

Figure 5: Integrated LED Strategy

	INSTITUTIONS	FUNDAMENTALS	MARKETING	ACCESS	DELIVERY	SUMMARY: STRATEGY MATRIX
OVERALL	Establishing LED Institutions and Processes	Changing Attitudes Addressing the Fundamentals	Raising the Profile of the Region	Improving and Promoting Access	Visible Delivery	
BUSINESS	Institutional Structuring for Business	Capacity Building and Training	Raising the Profile of the Region	Improving and Promoting Access	Establishing/building agri-industries Establishing Small Scale Mining	
AGRICULTURE	Institutional Structuring for Agriculture	Sustainable Land Reform	Raising the Profile of the Region	Improving and Promoting Access Market Access for Agricultural Produce	Visible Agricultural Delivery	
TOURISM	Institutional Structuring for Tourism	Making Tourists Feel Safe and Welcome	Raising the Profile of the Region Tourism Information Outside District	Improving and Promoting Access Tourism Information Inside the Region	Visible Tourism Delivery Community Tourism	

Source: ZDM LED Strategy

2.4.3 WSDP Strategy

The Water Services Development Plan has an impact on the Spatial Development of the District, as physical development initiatives needs to be timed to link/coincide with the roll-out strategy of water & Sanitation projects. In addition to the roll-out plan and projects to be implemented, the WSDP does not contain specific strategies that will impact on the compilation of the Spatial Development Framework.

The WSDP contains strategies to manage water usage and conservation, which are listed below. As indicated above, this does not impact directly onto the compilation of the SDF but assist in managing water utilisation. These strategies are the following:

- Influencing the behaviour of consumers:
 - School and public educational and awareness programmes aimed at promoting effective usage of water (brochures, advertising, newsletters, demonstrations, exhibits, informative billing, etc);
 - Water services tariff that promotes efficient water usage;
 - Any other “win-win” initiatives that could influence consumers positively;
- Specific targeted projects like:
 - Repair plumbing leaks inside properties;
 - Installation of water flow control devices, etc;

The roll-out plan for the WSDP will be discussed in more detail in the status quo section, and will provide the timeframes for rollout of the SDF.

3 CURRENT REALITIES

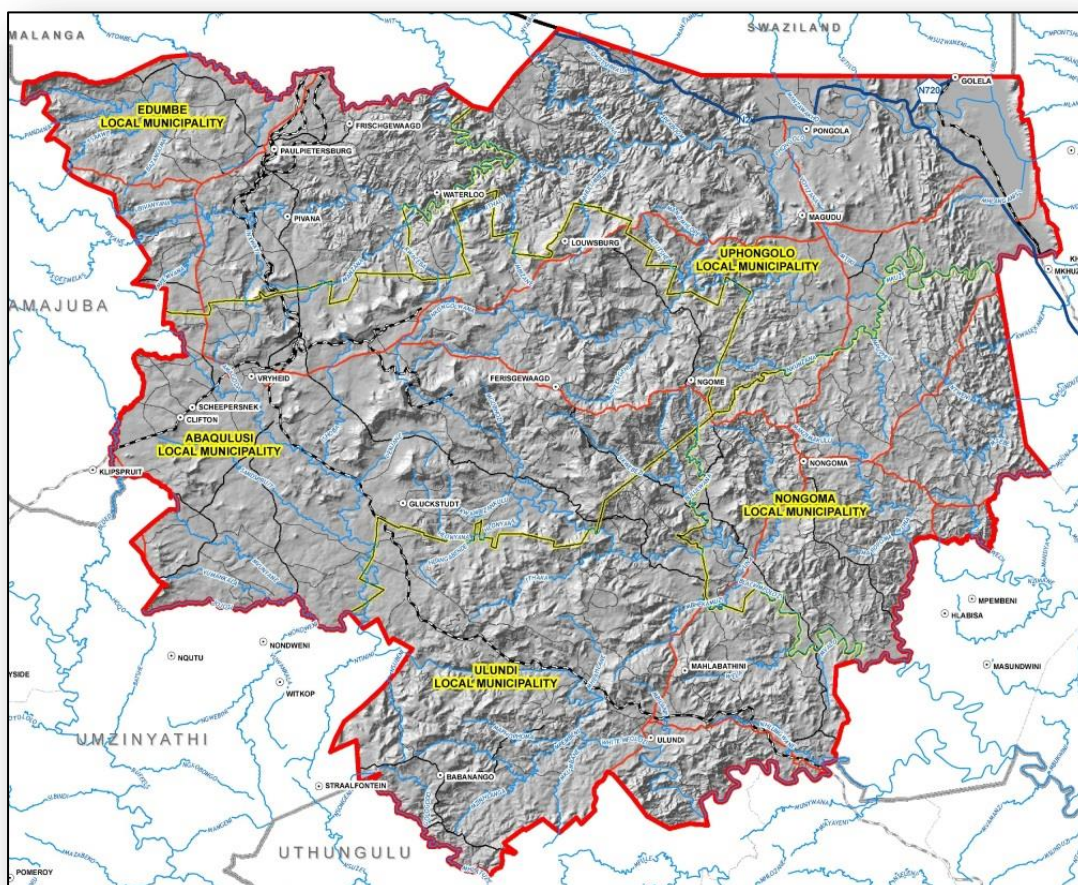
The following section aims to provide an overview of the Status Quo, or the current situation within the Zululand District Municipality. The section addresses the following aspects:

- Natural Resources, which looks at the physical features of the Municipality such as the topography and landscape, water bodies etc. These features will influence the spatial distribution proposed land uses, and guide inputs into the planning scheme to protect natural features and environmental services.
- Human Resources, which looks at the demographics, the population distribution and the distribution of poverty pockets. This will guide focused investments aimed at poverty eradication and social upliftment projects.
- Social Resources, which address availability of social infrastructure to service the community, such as medical facilities, educational facilities, public safety facilities etc. This will guide the spatial distribution of facilities to ensure optimum accessibility to such facilities by the public.
- Physical Resources, looks at basic services such as water & sanitation, roads and transportation facilities. This will guide the identification of areas lacking accessibility via roads, and subsequently allow for the establishment of the linkages that increase accessibility and from economic activities.
- Financial Resources, addressing the economic climate within the municipality, to guide the identification of projects that can increase economic activities within the municipality.

3.1 Natural Resources

3.1.1 Locality

The Zululand District Municipality is situated on the northern boundary of the KwaZulu-Natal Province which is also an International border (via uPhongolo Municipality) with the Kingdom of Swaziland. The eDumbe Municipality is also situated on a Provincial Boundary with the Mpumalanga Province, and as such has implications on the management of cross border aspects. Please refer to the Image below as well as **Map 1: Regional Locality** on overleaf.



Map 1: Regional Locality

3.1.2 Elevation

The map “Elevation” attached as **Map 2** depicts the elevation and general topographical characteristics of the Zululand District Municipality. The mean elevation (m above sea level) ranges from 0m above sea level, to 6987m above sea level. The map displays a typical increase in height above sea level as one move away from the Coast, with uPhongolo LM and Nongoma LM (eastern areas) ranging from 0m to 910m above sea level, whilst eDumbe and aBaqulusi in the west ranges from 655m to 4,559m above sea level. The height above sea level influences climate, which impacts on agricultural production and the crops cultivated.

3.1.3 Topography And Slope Analysis

Map 3: Slope Analysis illustrates the slope variance across the municipality and depicts slope ranges of “< 1:10”, “1:10 to 1:6”, “1:6 to 1:3” and “>1:3” incline. The central part of the District is clearly very mountainous and has extreme topographical features. Two distinct areas where extreme topographical areas is observed is firstly along the Pongola River on the boundary between the uPhongolo and eDumbe Municipalities, and secondly along the eastern boundary of the Municipality along the N2 National Routes. The mountainous areas on the eastern border divides two evenly sloped agricultural production areas from each other.

Slope further has an impact on the development of areas and ease of implementation of projects. The greater the gradient (20-58%), the more difficult and more expensive construction becomes and this should be considered during infrastructure intervention planning. The terrain therefore plays an integral part in determining settlement patterns or the line of roads which needs to be built cost-effectively. Apart from infrastructure provision and housing, the slope of the land will be a determining factor in potential economic activity especially agricultural product potential.

With the above mentioned in mind it is notable how the agricultural activities coincide with the more evenly sloped areas.

Map 2: Elevation

Map 3: Slope Analysis

3.1.4 Water Catchment Areas

Catchment areas is an extent or area of land where water from rain drains downhill into a body of water, such as a river, lake or dam. The drainage basin includes both the streams and rivers that convey the water as well as the land surfaces from which water drains into those channels, and is separated from adjacent basins by a catchment divide. **Map 4A: Water Catchment Areas** depicts the catchment areas for Zululand municipality.

The Zululand District Municipality is affected by two Primary Water Catchment areas Namely the Mfolozi/Pongola Catchment Area, although the area west of Clifton and Scheepersnek, is situated within the Tugela Primary Catchment Areas.

Ecological aspects also need to be taken into account when considering Catchment Areas/Drainage Basins. The water flowing from the catchment areas, flows to a dam which is ultimately used for service provision such as water used for household purposes. It is therefore necessary to consider the impact that settlements have on the quality of water, and where sanitation services are critically needed to prevent cholera for example. The use of pesticides on large scale for agricultural use must be limited where commercial farming can have a negative impact on the quality of water. The spatial development framework must therefore highlight the critical aspects which need to be addressed as a matter of urgency, and ensure that no land use is proposed in an area, where the specific land use can have detrimental effects on the environment.

The presence of a large number of rivers and high volumes of water implies that safety of communities also needs to be considered by locating them outside possible flood line areas.

Annual precipitation in the District tend to be highest in the southern area of Abaqulusi municipality, the Northern area of Ulundi Municipality and the western area of Nongoma Municipality, as depicted in **Map 4B: Annual Precipitation**.

3.1.5 Land Cover

The broad land cover found in Zululand District Municipality, as depicted on **Map 5: Land Cover** consist of:

- Annual Commercial Crops (Dry Land)
- Annual Commercial Crops (Irrigated)
- Bare Rock and Sand
- Bush land
- Degraded Bush land (All Types)
- Degraded Forest
- Degraded Grassland
- Dense Bush
- Erosion
- Forest
- Golf Courses
- Grassland
- Grasslands / Bush Crumps Mix
- Mines and Quarries
- Old Cultivated Fields
- Permanent Orchards (Banana & Citrus) Irrigated
- Plantation
- Plantation Clear-felled
- Rural Dwellings
- Smallholdings (Grassland)
- Sugarcane (Commercial)
- Sugarcane (Emerging Farmer)
- Subsistence (Rural)
- Urban
- Water (Natural)
- Wetlands
- Wetlands (Mangrove)
- Woodland

In considering the above broad land uses it is necessary to identify main groupings of economic activities (agriculture) developed areas, and environmental sensitive area. On the district scale a number of main or prominent groupings of land uses can be observed:

Map 4a: Water Catchment Areas

Map 5b: Annual Precipitation

Map 6: Land Cover

- **Sugarcane:** Large sugarcane plantations are observed around Pongola, as well as an area on the R66 towards Nongoma just south of Magudu where the R66 crosses over the Mkhuze River.
- **Woodland Areas:** West of the Pongola Poort Dam, reaching the R66 near Magudu. An area just north of Mahlabathini in the Ulundi Local Municipality.
- **Plantations:** Although found scattered throughout the central to western areas of the District, the largest grouping of plantations are found on the northern Mpumalanga Provincial Boundary around Paulpietersburg. When comparing the elevation map, the forestry activities are all situated in the higher lying areas of the district. There are further significant forestry activities in the following areas:
 - North of Vryheid up to the groupings at Paulpietersburg.
 - Around Ferisgewaagd and along the road to Ngome.
 - Areas north of Gluckstuddt leading to the R69, and along the R69 toward Louwsburg.
 - Clifton & Scheepersnek.
 - Babanango in the Ulundi Local Municipality.
- **Erosion Pits:** Although situated throughout the District a large erosion area can be identified just north of Nquthu along the Jojosi River at Telezeni.

3.1.6 Land Capability And Agricultural Potential

The land capability map depicts land capability as classified by the Department of Agriculture, Forestry and Fisheries, with classes 1 to 4 being suitable for arable agriculture, and classes 5 to 8 more suitable for keeping of livestock units. The figure below depicts the agricultural uses proposed by the Department of Agriculture, Forestry and Fisheries suitable for the various land classifications.

Table 7: Land Use Options

LAND CAPABILITY CLASS	LAND USE OPTIONS									LAND CAPABILITY GROUPS
	Wildlife	Forestry	Light Grazing	Moderate Grazing	Intensive Grazing	Poor Cultivation	Moderately Cultivation	Intensive Cultivation	Very Intensive Cultivation	
I										ARABLE LAND
II										
III										
IV										
V										GRAZING
VI										
VII										
VIII										WILDLIFE

Source: Department of Agriculture

The land Capability map attached as **Map 6: Land Capability** depicts that the areas best suited for arable agriculture is situated in the western parts of the District within aBaqulusi and eDumbe Municipalities, and stretches from Vryheid northwards up to the Mpumalanga KZN Provincial Border.

The largest part of the aBaqulusi Municipality has good to moderate arable land potential with the highest potential north of Vryheid and around Gluckstuddt.

Although the Land Potential depicts the largest part of the uPhongolo LM as having grazing potential instead of arable potential, the development of irrigation schemes makes the municipality suitable for crop cultivation.

The municipalities of Ulundi and Nongoma in general has low arable potential with marginal agricultural potential., with the higher potential in these municipalities situated on the more evenly sloped higher lying areas.

Map 7: Land Capability

The Zululand Agricultural Sector Plan (prepared by PR Africa in 2006) indicates that the White and Black Umfolozi Rivers provides opportunities for the development of irrigation schemes which, due to the moderate climate of the area, will allow for horticultural activities during off-peak or winter seasons. These river valleys throughout the district, but especially in the eastern low arable potential areas, have potential for intensive agricultural practices linked to proposed irrigation schemes¹.

The Zululand Agricultural Sector Plan proposes interventions to be employed to develop the agricultural sector. These interventions include:

- Institutional structuring for agriculture
- Sustainable land reform
- Visible delivery in agriculture sector
- Improved market access for agricultural products

Also linked to the agricultural potential is the soil clay content of the District, although further site specific studies is required to determine exact contents of soil. The Soil/Clay Content within the Municipal Area ranges from <15% to >35%, and in excess of 35%. (Refer to **Map 7: Soil Clay Content**). The vast majority of the district has soil clay content between 15 to 35% with very limited and scattered areas having clay content outside of this range.

Current Agricultural Activities, as depicted on **Map 8: Agricultural Land Uses**, is classified as Cultivated land, Commercial Agriculture, Conservation, Forestry and subsistence Agriculture.

The primary groupings of Commercial Agricultural Activities is situated around Pongola, with scattered commercial farming activities around Gluckstadt, Vryheid, areas west of Clifton in the aBaqulusi LM, and areas along the R33 connecting Vryheid to Paulpietersburg.

Occurrence of subsistence agriculture coincides with the rural and informal settlements especially in the Nongoma and Ulundi Local Municipalities.

Forestry activities are restricted to the steeper sloped and mountainous areas which are higher lying with a climate conducive for forestry activities. Although the largest grouping of forestry activities is situated north of Paulpietersburg, there are also large scale forestry activities within the aBaqulusi LM around Ferisgewaagd, as well as in the Ulundi LM south of Babanango.

The district further has a number of conservation areas which includes the following areas:

aBaqulusi	Vryheid Mountain Reserve
eDumbe	Pongola Bush Reserve
Nongoma	None
Ulundi	Opathe Reserve Matshitsholo
uPhongolo	iThala Game Reserve Pongola Poort Reserve Pongola Reserve Hlatikulu Reserve

The comparison of the agricultural land uses, with the land potential and broad land cover, allows for the identification of uncultivated land and areas for agricultural expansion. It is clear that the arable areas in the aBaqulusi LM is underutilised, and that the forestry industry in northern eDumbe LM can be expanded.

¹ Zululand Agriculture Sector Plan: (revised 2015); pg. 17.

Map 8: Soil Clay Content

Map 9: Agricultural Land Uses

3.1.7 Protected & Conservation Worthy Areas

Ezemvelo KZN Wildlife has embarked on a process, during 2005, whereby it systematically mapped Critical Biodiversity Areas (CBA's) in Kwazulu-Natal with increasing accuracy. This dataset is based on various studies on fauna, flora and water resources, identifying key local biodiversity areas to be considered in spatial planning. The analysis identify a minimum optimal selection of sites that will best meet the conservation targets for all the biodiversity features housed within the conservation plan of Ezemvelo KZN Wildlife using a number of predefined rules. The identification of these minimum optimal sites is called the Minimum Set Analysis Process or MINSET abbreviated. CBA's depicts landscapes that need to be maintained in a natural or near-natural state in order to ensure the continued existence and functioning of species and ecosystems as well as facilitate the continued delivery of ecosystem services. Maintaining an area in a natural state can include a variety of land uses compatible with the present biodiversity resources.

The purpose of CBA's is simply to indicate spatially the location of critical or important areas for biodiversity in the landscape. The CBA, through the underlying land management objectives that define the CBA, prescribes the desired ecological state in which we would like to keep this biodiversity. Therefore, the desired ecological state or land management objective determines which land-use activities are compatible with each CBA category based on the perceived impact of each activity on biodiversity pattern and process.

The **Map 9: Critical Biodiversity Areas** on overleaf depicts the Critical Biodiversity areas as identified through the MinSet Process.

The Critical Biodiversity Priority areas are linked to the vegetation that can house a number of Species. Subsequently the Priority Conservation areas are distributed as follow:

- The woodland areas between Pongola and the Pongola Poort Dam (uPhongolo LM);
- The forest areas south of and between Ngome and Ferisgewaagd (aBaqulusi LM);
- Forests South of Louwsburg (aBaqulusi LM);
- The Mixture of Grasslands, woodlands and forests south of Clifton and Scheepersnek (aBaqulusi LM);
- The Bush lands and Woodlands linking to the Hluhluwe-uMfolozi Park (Ulundi LM);

A number of smaller CBA Priority 1 Areas are scattered throughout the District. A large number of CBA Priority 3 Areas are scattered all over the western side of the Municipality and links to a number of land uses/cover. Areas that have been transformed 100% and have no conservation value is largely associated with the cultivated and forestry activities in eDumbe Municipality, although small pockets of 100% transformed areas are scattered all over the district. No biodiversity Priority 2 areas are identifiable.

Map 10: Critical Biodiversity Areas

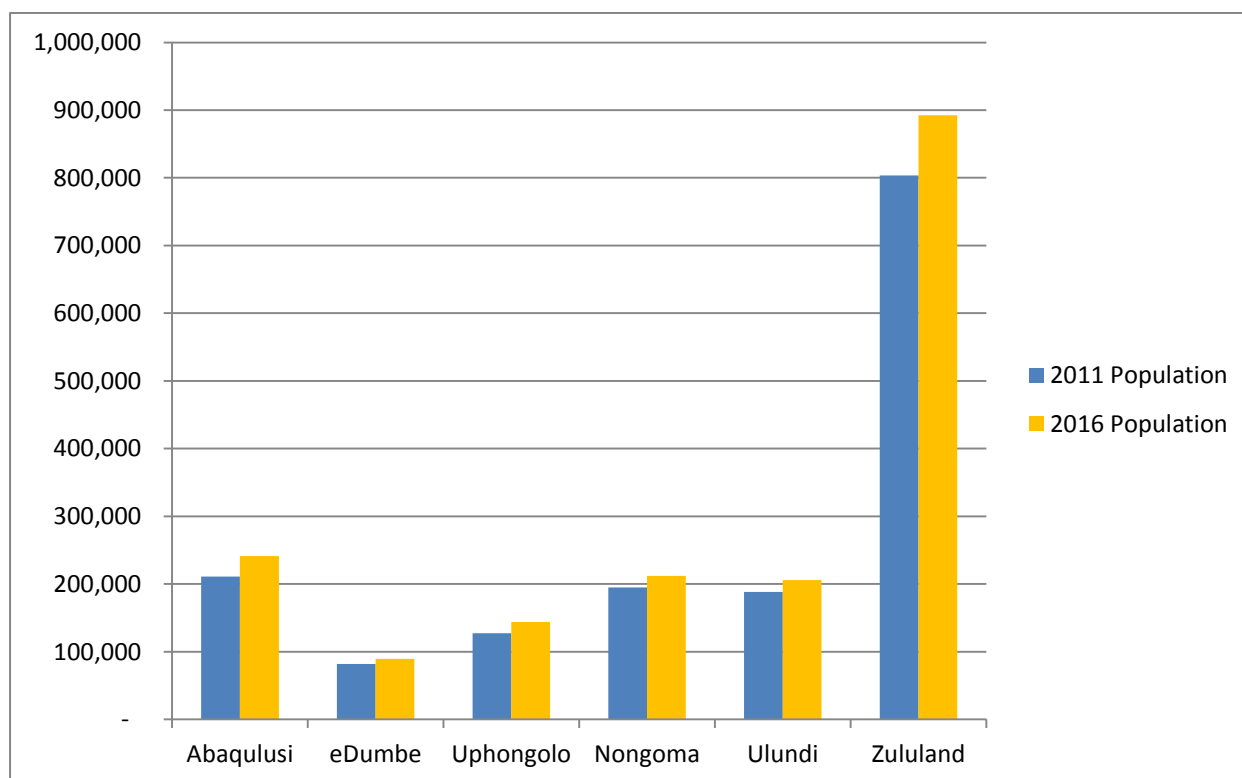
3.2 Human Resources

This section relies on the accuracy and reliability of statistical data. Although the 2016 HH survey might have updated the estimated population figures of the Municipality, the 2016 HH survey is deemed to be less accurate than a physical census. Apart from the population figures which consider the population figure contained in the Draft Integrated Development Plan 2017-2022, the sections dealing with trends within the Municipalities related to infrastructure availability etc., the 2011, and where available, 2016 Household Survey statistical data was utilised.

3.2.1 Population

The 2011 census data depicts the population of the Zululand District Municipality as being 803,575 whilst the 2016 household census data depicts that the Population of the Zululand District as being 892,310 with an increase of 88,735 population over 5 years. The population distribution between the various municipalities remained fairly similar. Only aBaqulusi and uPhongolo Municipalities indicated a growth, whilst the other municipalities had a slight decrease in population.

Graph 1: Population per Municipality



Source: Zululand Stats SA Census 20011 & 2016 Household Survey

The table below depicts the figures presented in the above Graph:

Table 8: Population Figures per Municipality

Municipality	2011	2011
Abaqulusi	211 060	241 196
eDumbe	82 053	89 614
Uphongolo	127 238	143 845
Nongoma	194 908	211 892
Ulundi	188 317	205 762
Total	803 575	892 310

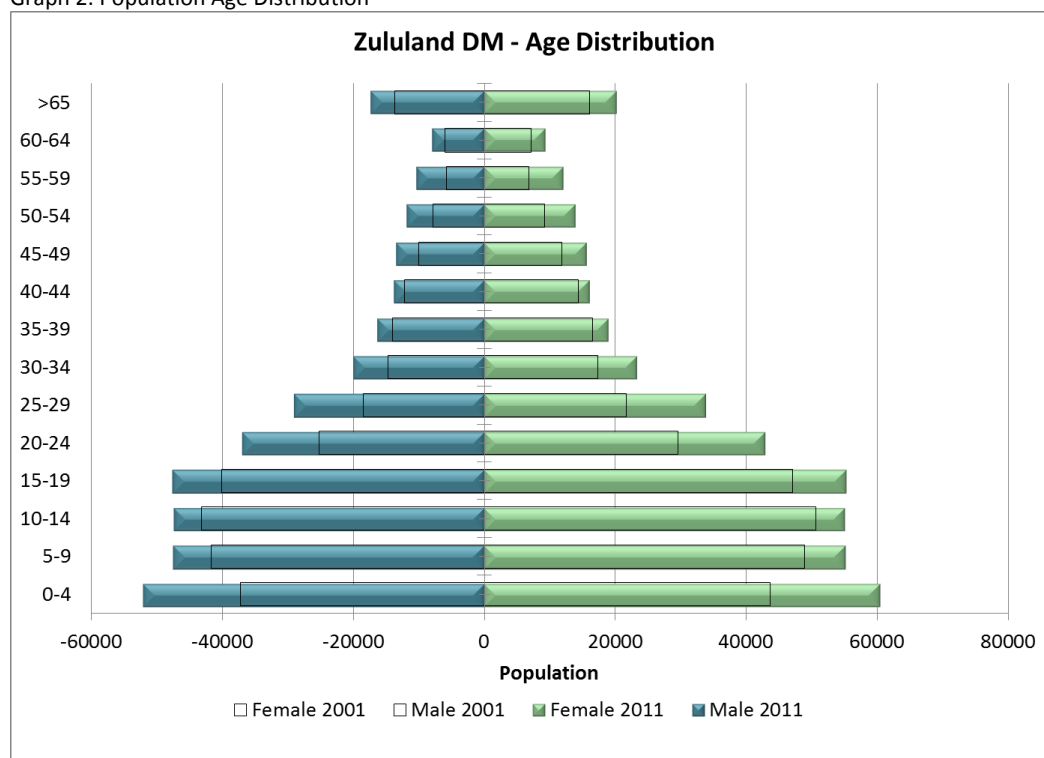
Source: Census 2001 & 2011

3.2.2 Age & Gender Distribution

The demographic pyramid below depicting the Zululand Age and Gender distribution depicts that the current population of working age is far less than the school going population and retired age groups. A large portion of the population is therefore dependent on a relatively small portion of the population for a livelihood. Considering this fact with the high unemployment rate, the situation seems dire.

The bell-curved changed slightly to depict an increase of population aged 0-4 (relative to other age groups). This suggests an increase in level and quality of medical services provided in the province.

Graph 2: Population Age Distribution

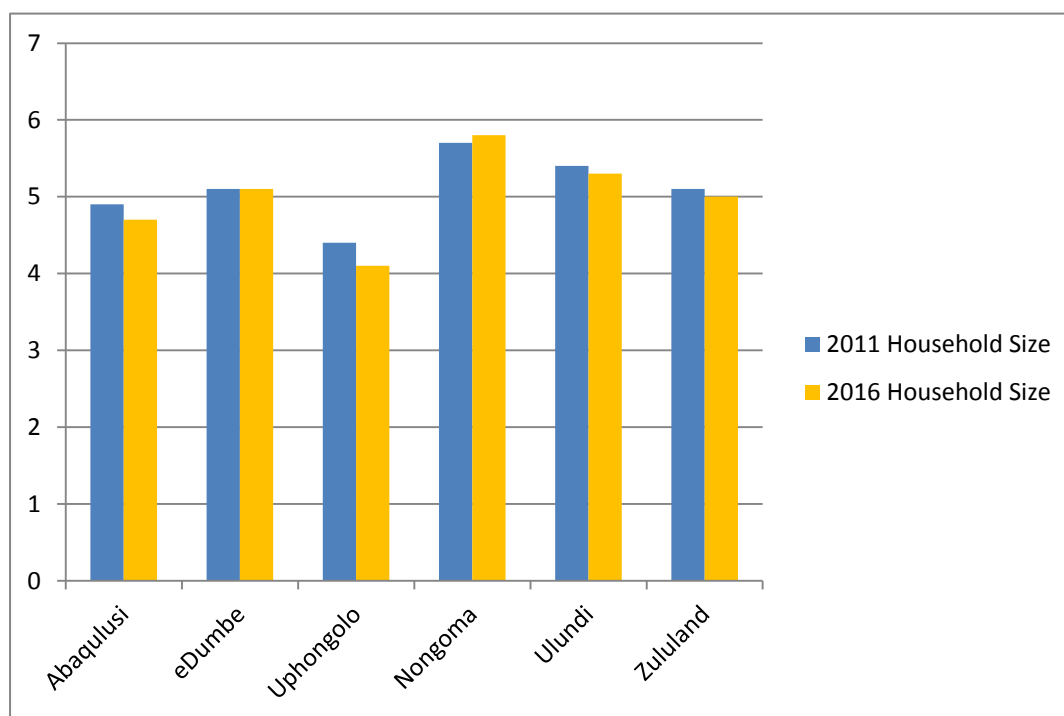


Source: Stats SA Census 2001 & 2011

3.2.3 Household Size

The average household size for Zululand is calculated by subdividing population with the number of households recorded. From the graph below it is evident that the average household size has decreased from 2011 to 2016, with the exception of Nongoma Municipality, where population size has increased within the same period from 5.7 to 5.8 persons per household. The average household size for Zululand LM is 5 person population per household. Since the majority of the households are located within the rural areas of the municipality, this average will be used for all areas.

Graph 3: Household size per Municipality



Source: STATS SA 2011 and 2016 data

3.2.4 Population Density and growth

The population density within the District is illustrated by **Map 10A: Population Density** and depicts the number of household's within the Zululand District Municipality.

It is clearly visible that a high densities and concentrations of population south eastern part of the municipality as well as on the northern boundary of the district (Swaziland Border).

Comparing the population density map with land ownership it is clear that the largest densities are found in the Nongoma and Ulundi Local Municipalities where large rural areas are owned by the Ingonyama Trust. It is further noticeable that the population groupings are situated along movement and distributions routes, of which the N2 and the population groupings west of Pongola is a good example. This allows the population to be close to transportation routes and to the relative accessibility of economic activities provided by the transportation infrastructure. There is however a lot of households not residing near transportation routes which create a lot of challenges with regard to equal provision of services.

It will be necessary to identify potential areas for densification, where provision of services can be done cost-effectively, and efficient economic initiatives could be implemented.

Population growth is indicated in Map10B: Population Growth, and depicts where the highest population growth has taken place since 2001. It is very clear that the Eastern part of the District has experienced positive population growth, and especially the rural areas within Ulundi and Nongoma municipality.

Rural areas around eDumbe, and areas around Mondlo in Abaqulusi municipality, has seen a negative population growth, which may be attributed to a number of factors, of which the most pertinent is probably migration due to economic considerations.

The area adjacent to the N2 corridor in uPhongolo municipality has seen a significant population growth that can mainly be attributed to access to services and economic opportunities. The population growth indicators, as well as the spatial representation thereof is a valuable spatial development tool that can assist with the positioning of future social and service infrastructure.

3.3 Social Resources

3.3.1 Land Tenure

Map 11: Land Ownership attached overleaf classifies the property ownership in terms of the following:

Redistribution	Land to be redistributed to Previously Disadvantaged Individuals
Restitution	Land to be returned to previous owners
Labour Tenant Applications	Labour tenants claiming residential rights in terms of Extension of Security of Tenure Act.
Unalienated State Land	Land in the process of being transferred for redistribution or restitution purposes, but still registered in the name of a Government Department.
Privately Owned Farm Portions	Farm Land privately owned.
Ingonyama Trust land	Land under administration of the Ingonyama Trust Board.

The Ingonyama Trust Board (ITB) is the largest land owner within the District with the whole of Nongoma, as well as a significant part of the Ulundi LM registered in its name. The ITB further owns properties on the Northern Border of the District on Swaziland Border in the area west of Pongola. A third grouping of properties is situated on the Nquthu LM Boundary directly north of Nquthu and the Jojosi River, and west of the Mvunyane River within the Abaqulusi Local Municipality.

A Number of Restitution claims and redistribution applications have been submitted and is either finalised or being processed by the land Claims Commissioner and the Department of Rural Development and Land Reform.

The largest number of properties in the district is privately owned farm land, although a large number of Labour Tenant Applications have been submitted where farm workers have been residing on farms where they work for a significant number of years.

Map 11a: Population Density

Map 12b: Population Growth

Map 13: Land Ownership

The labour tenant applications depicts a need for housing opportunities in close proximity to work opportunities as all applications will not be successful. The increasing size of communities will increase the demand for housing which will not and cannot be catered for on the farms.

The Urban Cadastral areas depicted are privately owned.

3.3.2 Settlement Pattern

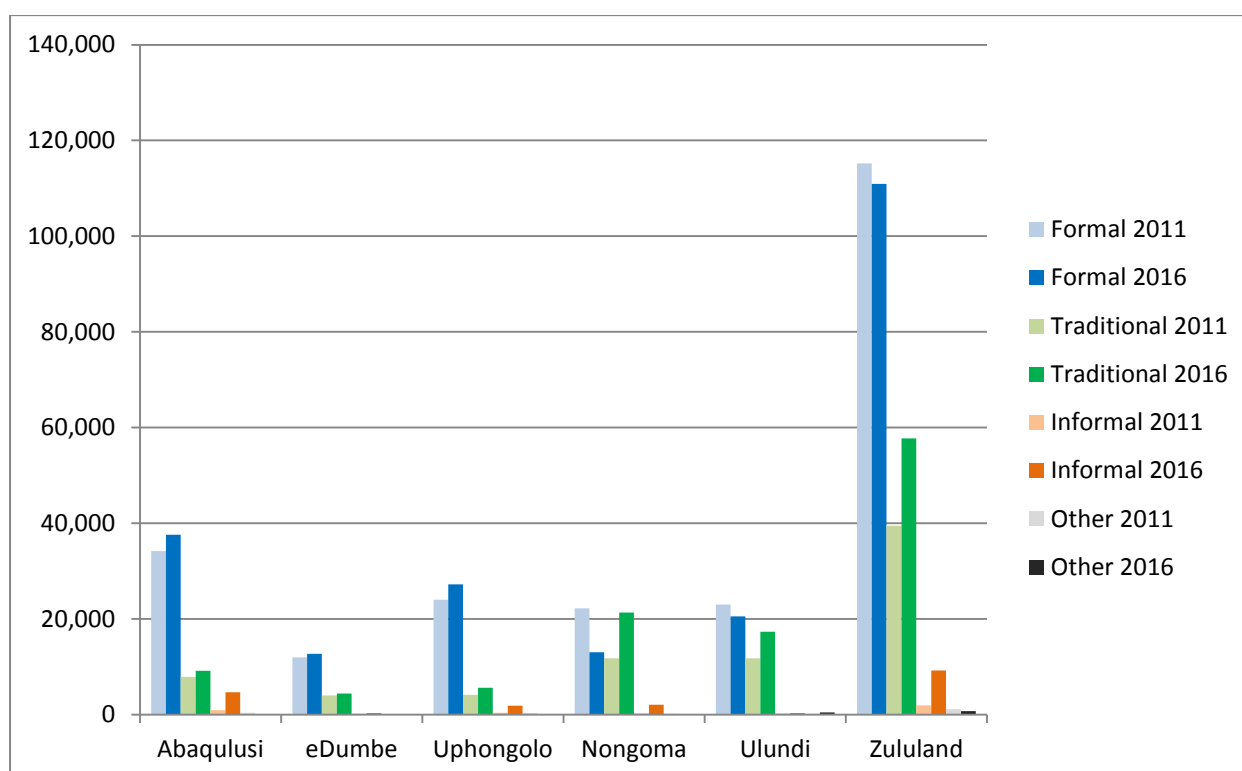
In similar fashion to the population density map, the settlement distributions are linked to land ownership. The settlement pattern map further depicts the urban edges of the areas with formal cadastral boundaries namely the following areas as depicted on **Map 12: Settlement Pattern**:

- Paulpietersburg;
- Pongola;
- Nongoma;
- Ulundi;
- Mondlo;
- Vryheid;

3.3.3 Housing

According to the Draft Zululand DM IDP the dwelling typologies and distribution between dwelling types only changes slightly. The graph below depicts the dwelling types utilised by the ZDM Population.

Graph 3: Housing Typologies:



Source: StatsSA 2016 Household Survey data

Map 14: Settlement Pattern

The above housing typologies clearly distinguish the more urban Municipal areas from the rural Municipalities. Nongoma and Ulundi are clearly more rural orientated due to the high number of traditional dwellings being occupied, whilst eDumbe, uPhongolo, and aBaqulusi are more urban orientated although it still has a very strong rural component. In general the highest number of population resides in Traditional Housing throughout the District.

In response to the high number of traditional housing units, the following projects are to be implemented within the various Local Municipalities of ZDM.

Table 9: Proposed Housing Projects

Project Name	Local Municipality	Project Type	Instrument	Total Units
Bhekumthetho	Abaqulusi M	Rural	Rural	1 000
Bhekuzulu Phase 6-B	Abaqulusi M	Urban	PLS	1 078
Coronation	Abaqulusi M	Urban	PLS	1 200
Coronation HIV/AIDS	Abaqulusi M	Institutional	PLS	500
Frischgewaagd	Abaqulusi M	Urban	PLS	3 094
Mzamo	Abaqulusi M	Urban	PLS	500
Vryheid Ext 16	Abaqulusi M	Conditional Approved	PLS	1 016
Baxedene	Nongoma M.	Rural	Rural	1 400
Holinyoka	Nongoma M.	Rural	Rural	1 100
Maye/Dabhasi	Nongoma M.	Rural	Rural	1 000
Siyazama	Nongoma M.	Rural	Rural	1 000
Ekudubekeni	Ulundi M	Rural	Rural	1 600
Ekushumayeleni	Ulundi M	Rural	Rural	1 600
KwaXimba	Ulundi M	Rural	Rural	2 000
Nsukazi	Ulundi M	Rural	Rural	1 000
Ntsabekhuluma	Ulundi M	Rural	Rural	2 000
Ulundi HIV / AIDS	Ulundi M	institutional	PLS	1 000
Ulundi L ext	Ulundi M	urban	PLs	954
Zondela	Ulundi M	Urban	PLS	873
Ncotshane Pongola	Pongola	Urban	PLS	1 100
Dumbe lindelani	Dumbe M	Urban	PLS	200

Source: ZDM Draft Integrated Development Plan 2017-2022

3.3.4 Health Facilities

The spatial distribution of health facilities (Clinics and hospitals) are depicted on **Map 13 and 14** respectively. The standards for provision of and access to Health Facilities was derived from standards developed by the Erstwhile KZN Planning Commission and published in a document Titled “Guidelines for Planning of Facilities in KwaZulu-Natal”. There are various standards throughout the country for provision of social facilities and even the KZN standards are not considered as realistic by all departments. Subsequently it is necessary for the District to decide on a set of standards acceptable within the ZDM.

Map 15: Clinics

Map 16: Hospitals

Map 17: Housing Projects

Table 10: Standards for Provision of Health Facilities

Facility	Provision Standard	Access Standard
Clinic	1 Clinic for every 12 500 persons	None prescribed, thus standard of maximum 5 km access distance used
Hospital	1 Hospital for every 100 000 persons	None prescribed, thus standard of maximum 20 km access distance used

Source: KZN Planning Commission

Clinics

Map 13: Access to Clinics depicts the distribution of clinics within the District. There is a relatively even distribution of clinics especially within the areas owned by the Ingonyama Trust Board in Nongoma and Ulundi. This can be attributed to the mode of transport which is mainly pedestrian within these areas. The municipalities of uPhongolo, aBaqulusi, eDumbe and the western parts of Ulundi consist mainly of commercial farms and subsequently the population densities are much lower in these areas. These areas are also utilising vehicle transport which makes facilities much more accessible.

Hospital

The District has 7 Government Hospitals within its boundaries and has access to another on the eastern boundary from Mkhuze. Refer to Map 14: Hospitals for a depiction of the following hospitals:

- Vryheid District Hospital (aBaqulusi LM)
- Hlobane Mine Hospital (aBaqulusi LM)
- Longridge Mine Hospital
- Ceza District Hospital (Ulundi LM)
- Nkonjeni District Hospital (Ulundi LM)
- Nongoma Hospital (Nongoma LM)
- Mahlabathini (Ulundi LM)
- Itshelejuba (uPhongolo LM)
- Benedictine District Hospital

The District also has access to the following Hospitals which are situated in the adjacent Municipalities:

- Bethesda District Hospital
- Nquthu District Hospital
- Hlabisa District Hospital

3.3.5 Education Facilities

Zululand is served only by primary and secondary education facilities. These facilities are depicted on **Maps 15: Primary Schools**, and **Map 16: Secondary Schools**.

The spatial distribution of educational facilities (Basic Educational Facilities) are based on standards derived from the standards developed by the Erstwhile KwaZulu-Natal Planning Commission and Published in a document Titled “Guidelines for Planning of Facilities in KwaZulu-Natal”. Each Province has its own standards for provision of educational facilities. Basic Education Facilities (Primary and Secondary Schools) are in general provided in abundance with the challenge of providing quality education at the existing schools rather than to increase access to educational facilities.

Map 18: Primary Schools

Map 19: Secondary Schools

Table 11: The standards for provision of educational facilities

Facility	Provision Standard	Access Standard
Primary School	1 Primary School for every 750 Households	Maximum walking distance of 5 km
High School	1 High School for every 1000 to 1500 Households	Maximum walking distance of 5 km

Source: "Guidelines for Planning of Facilities in KwaZulu-Natal" (KZN Planning Commission)

The District is very well serviced in terms of primary schools, as is depicted on **Map 15: Primary Schools**. Access to Primary Schools are expressed in distance from households ranging from closer than 1km to distances in excess of 15 km. there are very few areas in the municipality that does not have access to a primary school within 5km distance. The areas not within a distance of 5km from a primary school is situated on the north eastern corner of the district at Golela, as well as in the south west corner on the boundary between Babanango and Straalfontein (Nquthu LM).

Areas not serviced by a primary school within 5km radius are situated in areas where population densities are relatively low and the population not predominantly pedestrianized.

Access to Secondary Schools is also expressed within distances from 1 to 15 km radius. In similar fashion to the primary schools, the north eastern and south western areas of the municipality is not as well serviced as the other areas, with a large area not serviced along the R66 just south of Magudu.

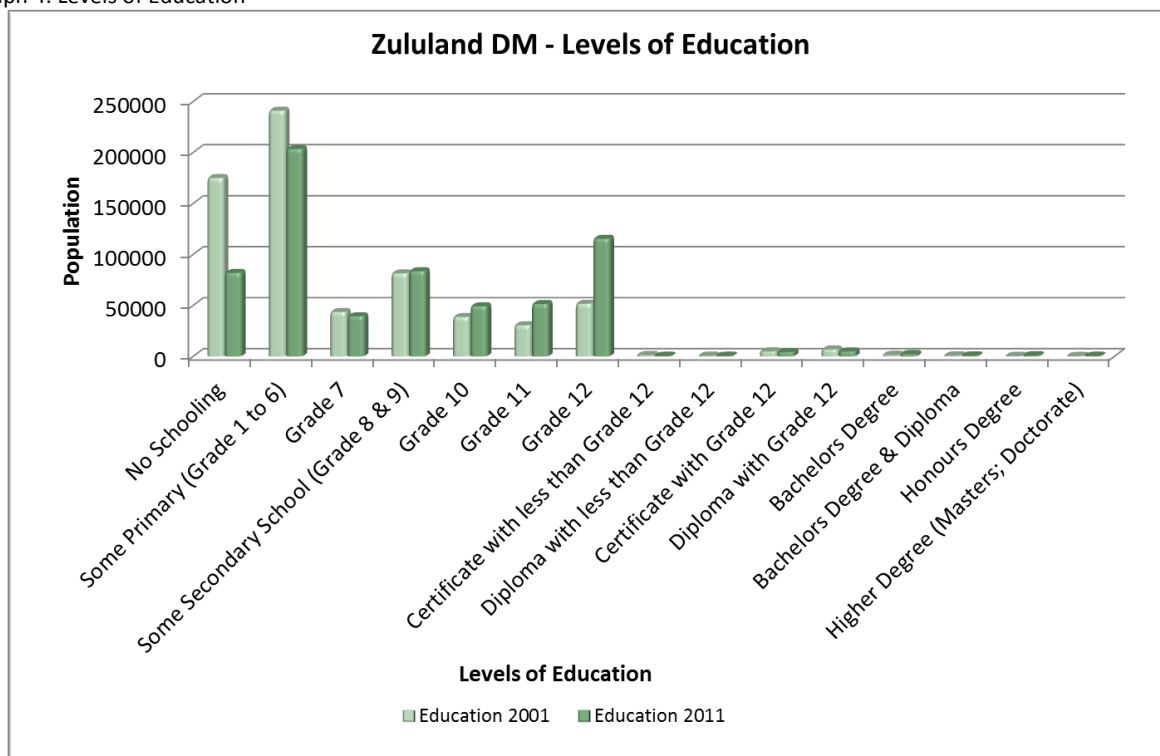
The challenges not apparent from the concentric circle analysis, is localised accessibility challenges presented by topography and water bodies which prohibit access. Maintenance, upgrading and quality of these facilities are other challenges not considered when counting/surveying facilities. The topography and density of settlements amongst other factors therefore influences the ability to service certain areas effectively in the future.

3.3.6 Levels Of Education

The graph below depicts the levels of education within the Zululand District Municipality. In both 2001 and 2011 the largest number of the population had some primary education, although in 2001 an alarmingly large part of the population had no schooling at all, and in 2011 most of the population has some primary school education going up to grade 6. The graph does suggest that the levels of education increased, and that efforts to improve levels of education are fruitful.

Unskilled & semi-skilled labour can be used for labour intensive projects such as infrastructure implementation, but in order for the communities to benefit from opportunities such as tourism, or other opportunities presented by the unique locality of the area, it might be possible or required that additional training be presented to the communities to empower them to exploit the opportunities presented.

Graph 4: Levels of Education

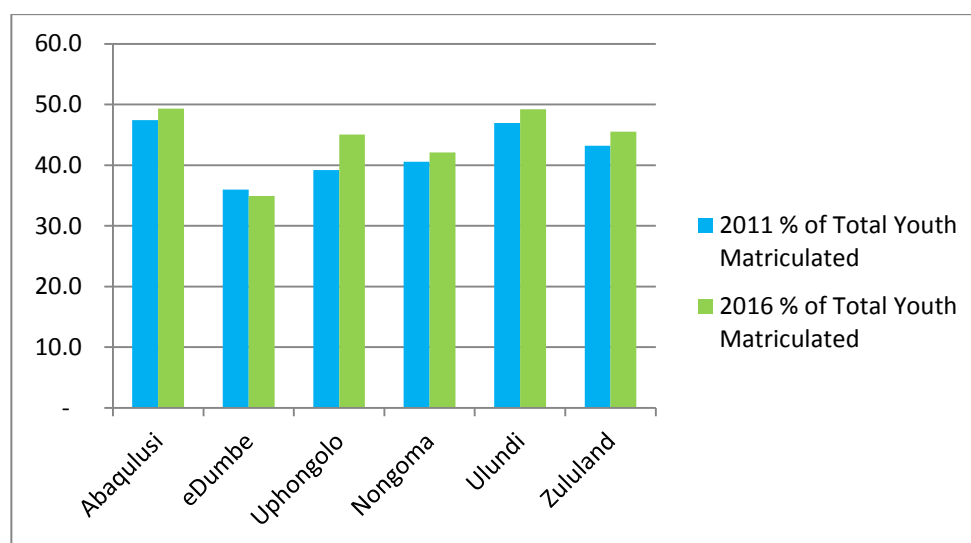


Source: Stats SA Census 2001 & 2011

When comparing the education levels within the different municipalities, in 2001 Nongoma and Ulundi Municipalities had the highest percentage in population with no schooling as well as some primary education, in comparison to 2011 uPhongolo and Ulundi have the highest percentage of population with no schooling and uPhongolo and Nongoma have the highest percentage in population with some primary training. This can be attributed to the fact that these have larger rural components within the Ingonyama trust areas, with lower access to quality education. It is clear that an overall increase in education levels was experienced which indicates successful implementation of education programmes.

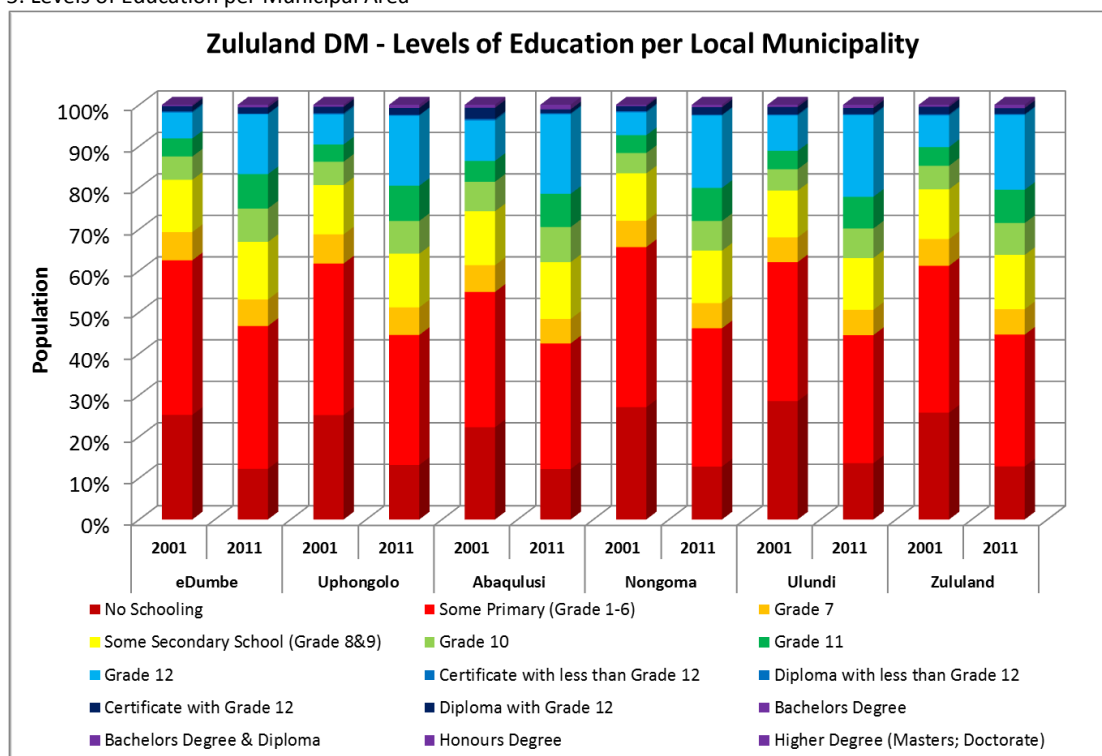
Although the 2016 household survey does not break down statistics as per the 2011 StatsSA census, it is clear from the graph below that access to education facilities (secondary schools) has significantly increased throughout all municipalities within Zululand District Municipality.

Graph 6: Total youth matriculated



Source: 2011 StatsSA and 2016 Household survey data

Graph 5: Levels of Education per Municipal Area



3.3.7 Libraries

The KZN Librarian services provided the following standards for provision of Libraries:

Table 12: Standards for provision of Libraries

Facility	Provision Standard	Access Standard
Public Library	1 Public Library for every 60 000 Persons.	Maximum walking distance of 3 km

Although this is the official standard, the KZN Librarian Services indicated that these levels of provision are not at all achievable, and is not cost effective. In a densely populated city such as Durban this might be achievable, but in rural KZN it is difficult to provide a number of cost-effective libraries within the limited budget. The situation is constantly assessed and libraries are then provided in close proximity to a concentration of schools, urban areas, where the accessibility to the library is the highest, and the largest number of people can be reached.

The table below depicts the number of Libraries present within each Municipality:

Table 13: Libraries Per Municipality

Municipality	Libraries
aBaqulusi	4
eDumbe	2
Nongoma	1
Ulundi	1
uPhongolo	2
Total	10

Source: KZN Librarian services

3.3.8 Police Services

According to **Map 17: Access to Police Stations**, Zululand is serviced by 14 Police Stations. The standards for provision of Police Stations are as follows:

Table 14: Standards for Provision of Police Stations

Facility	Provision Standard	Access Standard
Police Station	1 Police Station for every 25 000 households	Accessible within 20 km radius

The table below depicts the required Police stations vs. the existing police stations.

Table 15: Police Stations: Existing and Required per Municipality.

Local Municipality	Required	Existing
Abaqulusi Municipality	5	6
eDumbe Municipality	2	1
Nongoma Municipality	5	1
Ulundi Municipality	5	4
uPhongolo Municipality	3	2

Please refer to Map 17: Overleaf for a depiction of the Locality of the Police Stations.

MOBILE CLINICS AND EMERGENCY MEDICAL RESPONSE SERVICES

Although Social facilities refer to all Social Infrastructure, **Map 18: Social Facilities** further only depict Emergency Medical Response Services (EMRS), as well as mobile clinic base stations.

There are two mobile clinic base stations at the following localities:

- Paulpietersburg.
- Vryheid.
- Boundary of uPhongolo and eDumbe LM.

There are only two Emergency Medical Response Services (EMRS) within the district and located at the following localities:

- Paulpietersburg.
- Mondlo

Map 20: Police Stations

Map 21: Social Facilities

3.3.9 Community Halls

The locality of the community halls could not be accurately plotted, although the Zululand Draft Integrated Development Plan 2017 – 2022 provides statistical information regarding the availability of the halls. Please refer to the table below.

Table 16: Community Halls/Centres: Existing and Required Facilities Per Municipality

Local Municipality	Required	Existing
Abaqulusi Municipality	12	8
eDumbe Municipality	5	3
Nongoma Municipality	12	2
Ulundi Municipality	12	10
uPhongolo Municipality	7	6

Source: Draft ZDM IDP 2017-2022

The exact localities of community halls have not been captured, although the areas where community halls have been provided and where they are required have been sourced from the Draft ZDM 2012-2016 IDP. These are depicted in the tables below:

Table 17: Traditional Authorities with Community Halls

<ul style="list-style-type: none"> ▪ Buthelezi ▪ Hlahlindlela ▪ Matheni ▪ Mavuso ▪ Mbatha ▪ Mlaba ▪ Mpungose ▪ Msibi 	<ul style="list-style-type: none"> ▪ Mthethwa ▪ Ndebele ▪ Ndlangamandla ▪ Nobamba ▪ Ntshangase ▪ Simelane ▪ Usuthu
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Source: Draft ZDM IDP 2017-2022

The table below depicts area where community halls are still required.

Table 18: Traditional Authorities without Community Halls

<ul style="list-style-type: none"> ▪ Ndlangamandla Ext ▪ Disputed Area ▪ Khambi 	<ul style="list-style-type: none"> ▪ Khambi Ext ▪ Mandhlakazi ▪ Zungu
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Source: ZDM IDP 2017-2022

3.4 Physical Resources

3.4.1 Transportation Network

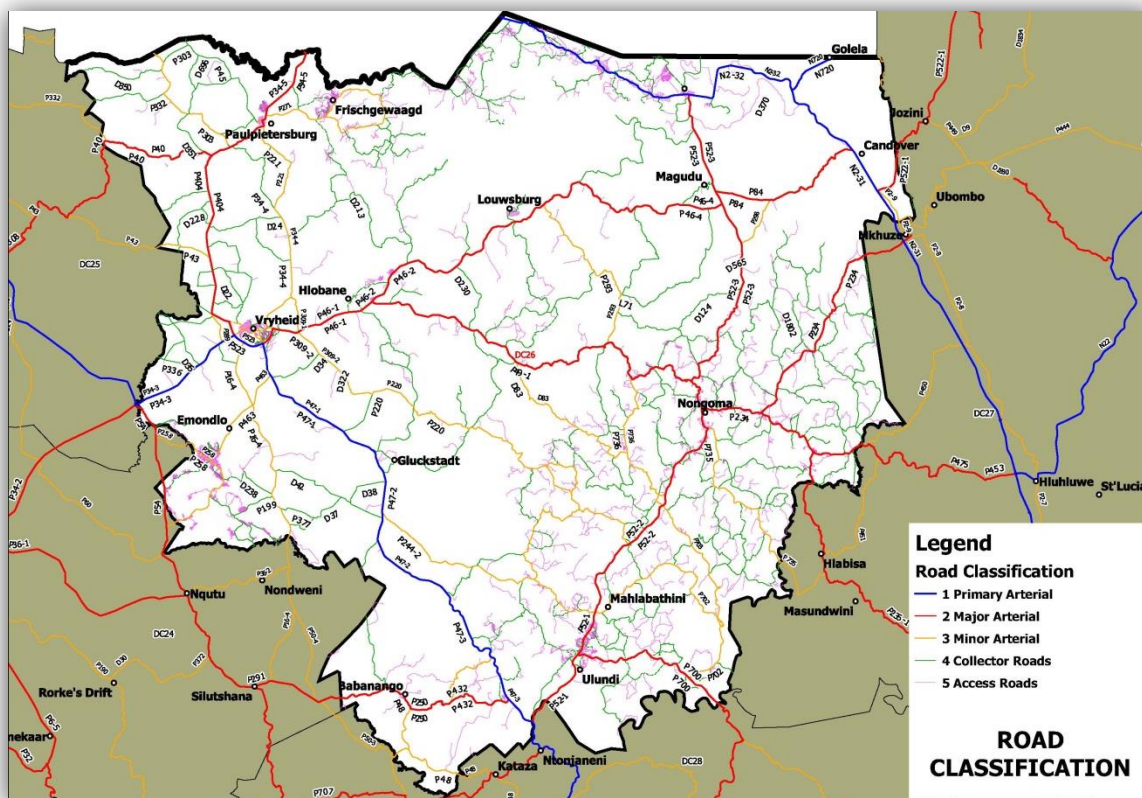
The following modes of transportation are present within the District:

- Road
- Rail
- Air

3.4.1.1 Road Infrastructure

The road infrastructure within the urban areas of the District is well developed. The rural roads are not maintained on a regular basis and results in low accessibility of the rural areas. The Draft ZDM 2012-2016 IDP evaluated the accessibility of roads for the residents. These are depicted in the table below. As indicated above, maintenance is problematic, and the fact that the below table depicts the distance of the population to roads, it might be rural roads that are inaccessible. Please refer to Map 19: Road Infrastructure for a depiction of the existing road infrastructure. Also refer to the below image for a Depiction of the RIFSA Road Classifications by the KwaZulu-Natal Department of Transport.

Figure 6: KZN Roads RIFSA Classification



Source: KwaZulu-Natal Department of Transport

Table 19: % Population within accessible distance from road infrastructure

Municipality	<1km	1 – 2.5km	>2.5km
aBaqulusi	95 %	1 %	5 %
eDumbe	89 %	8 %	2 %
Nongoma	99 %	0 %	1 %
Ulundi	94 %	1 %	5 %
uPhongolo	95 %	3 %	2 %
Average	94.4 %	2.6%	3%

Source: ZDM PTP

The table above depicts that on average 94.4% of the municipality is situated within 1km from a road and is possible of being serviced by public transport facilities.

The ZDM IDP further highlights a number of roads that is of strategic importance to the District and needs to be upgraded.

In order of priority these roads are:

1. P700 Ulundi to Hluhluwe-Umfolozi Park is considered key to unlock the tourism and industrial development potential of the region.
2. R66 Ulundi to Nongoma link road will strengthen the status of these towns as the main service centres in the Southern part of the District.
3. Granting of N2 Status to the Belgrade uPhongolo Road will benefit not only the uPhongolo Municipality, but the whole Zululand District Municipality.
4. Nongoma Vryheid link road
5. Nongoma uPhongolo link road.

Map 22: Existing Road Infrastructure

In addition to the strategic roads listed above the ZDM has drafted a Public Transport Plan (PTP). The PTP has as its primary objective to provide an appraisal of the public transport system (based on the results of the CPTR) that should assist decision makers in their efforts to improve the public transport system.

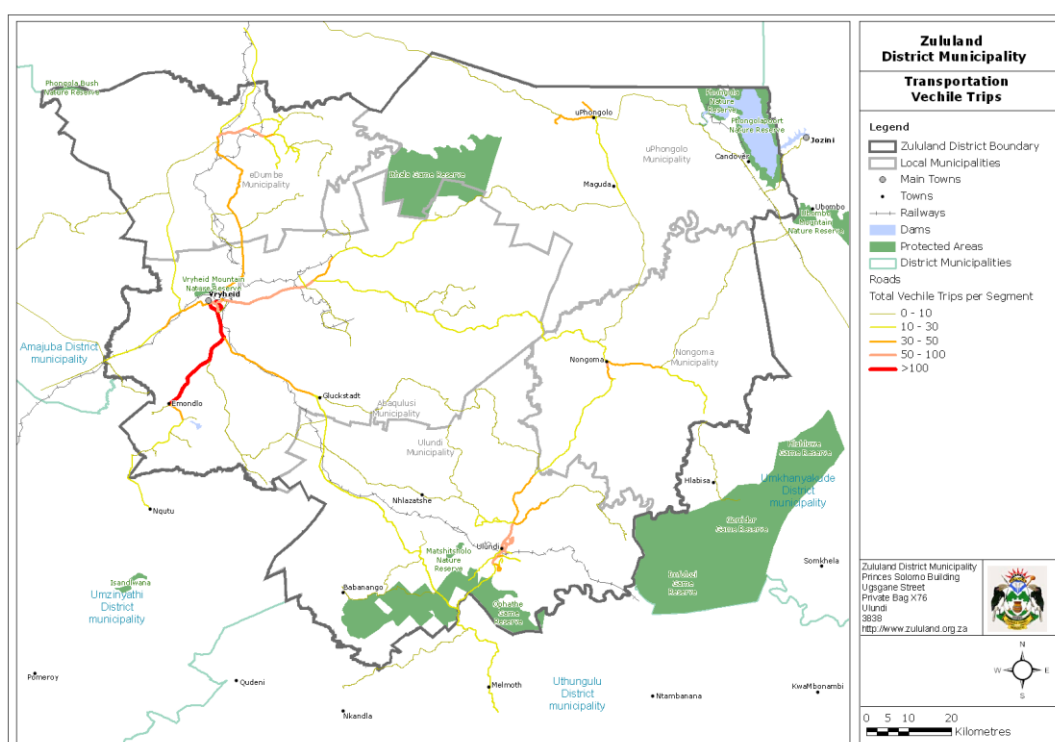
The following 2 maps have been derived from the PTP that depict:

- Vehicle Trips
- Vehicle Volumes

The significance, in terms of vehicle trips and volumes of a number of routes become clear, notably the Vryheid - Emondlo route from the following maps.

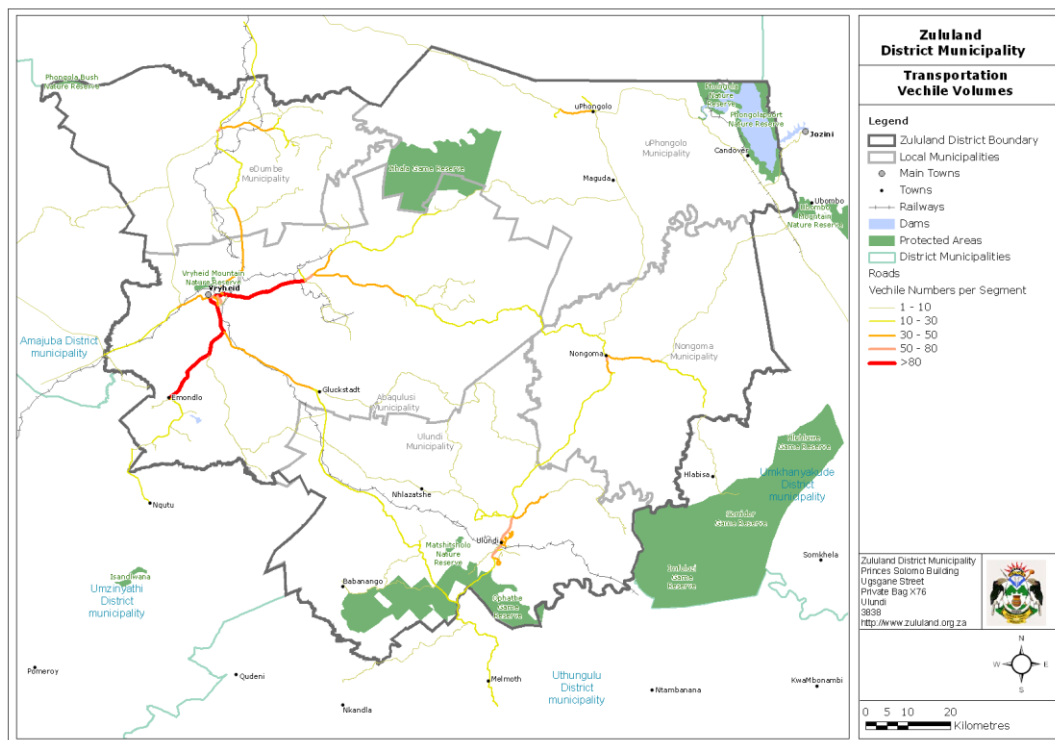
The backlog determination methodology referred at the start of this section has been applied to determine backlogs to roads and outlined in the table hereunder and also mapped at overleaf:

Figure 7: ZDM Public Transport Plan – Vehicle Trips per Road Segment



Source: ZDM Public Transport Plan

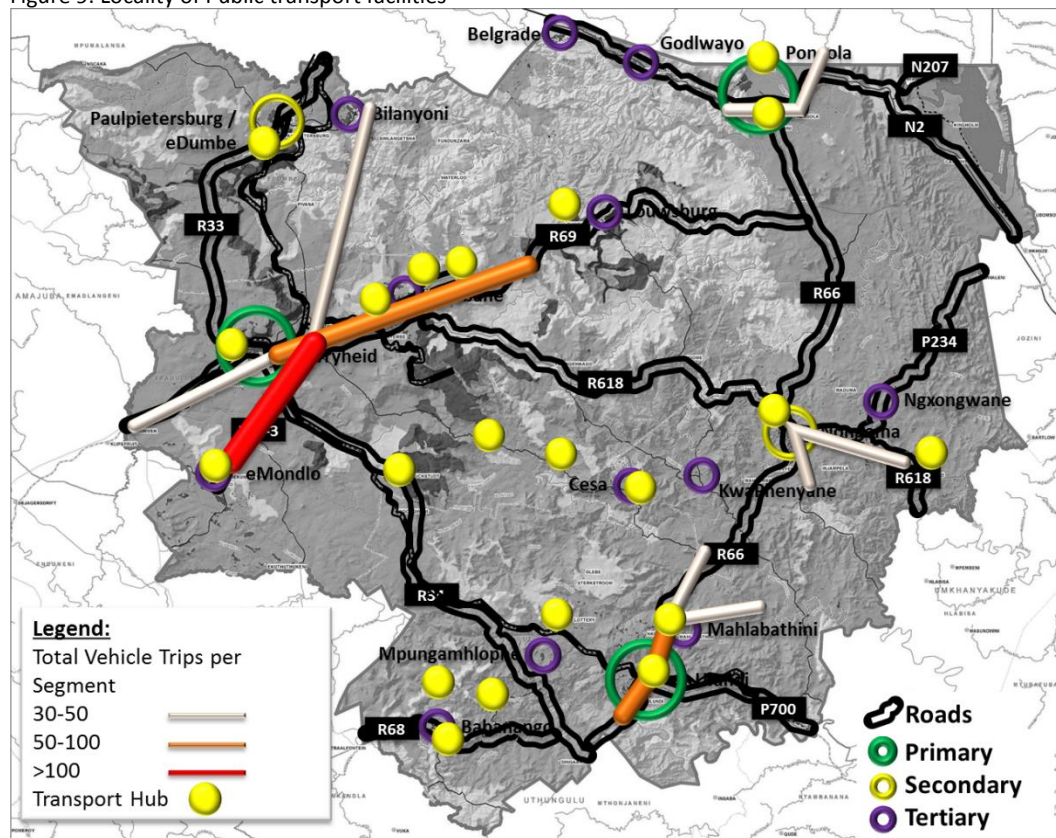
Figure 8 ZDM Public Transport Plan – Vehicle Volumes per Road Segment



Source: ZDM Public Transport Plan

In addition to the above public transportation volumes, the below image depicts the locality of public transport facilities.

Figure 9: Locality of Public transport facilities



Source: ZDM Public Transport Plan

3.4.1.2 Rail Infrastructure

The main rail corridor links the Mpumalanga coal fields to the Richards Bay Port from where coal is exported. From Mpumalanga Province the rail corridor links the following areas:

- Paulpietersburg
- Vryheid East
- Ulundi
- Richards Bay

In addition to the coal train there are approximately 17 general freight trains on the line transporting ferro-chrome, granite, chrome, steel and timber. There are no passenger trains on the rail, and the trains only stop to change crews at designated places.

3.4.1.3 Air Transport

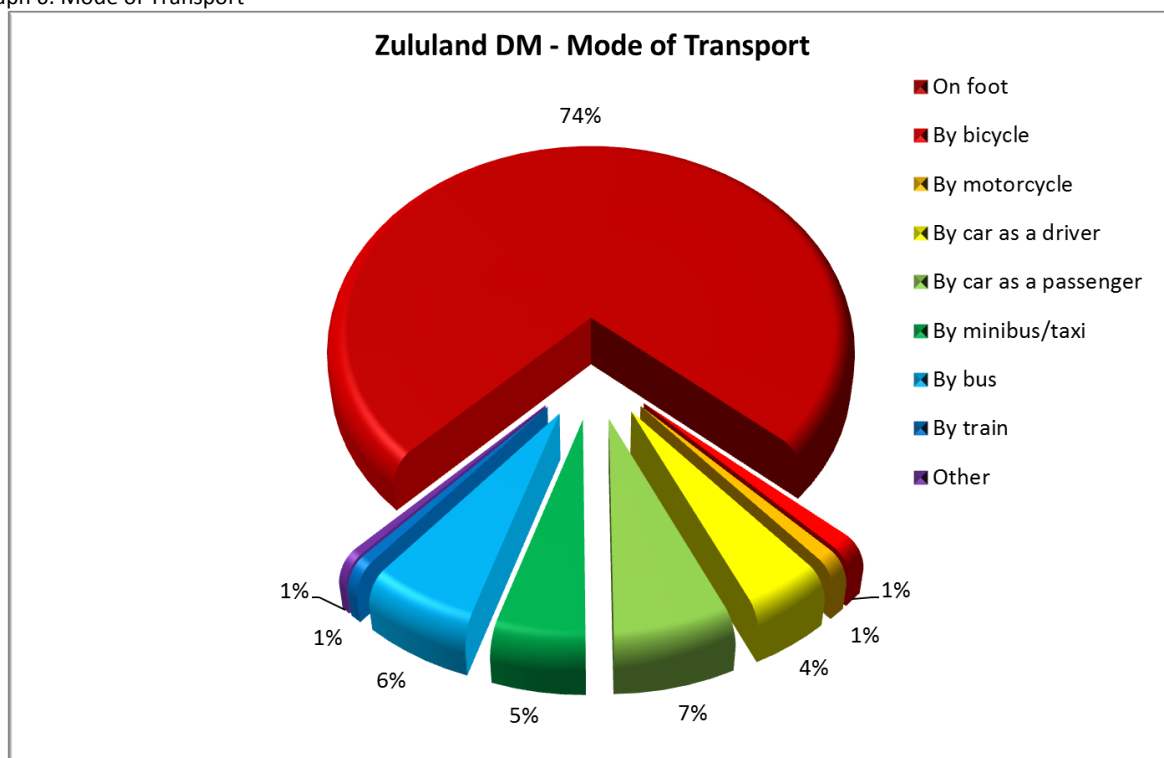
There are two airports in the District Situated in Ulundi and at Vryheid. The Ulundi Airport, which is being transferred to the management of the Zululand District, is to be utilised as a catalytic intervention and key driver to implement the District's IDP and LED programmes.

3.4.2 Mode Of Transportation

From the statistical distribution of modes of transports mainly utilised by residents it is evident that the largest portion of the Zululand population (74%) are pedestrianized. This trend depicts two possible scenarios, namely the lack of funds to utilise public transport, and/or the lack of an adequate public transport system, due to remoteness and inaccessibility of the rural areas. Further to walking, transport by car as a passenger, transport by bus, by minibus taxi and by car as a driver are the next most popular modes of transport.

With the high dependency on the lower order nodes, it is necessary to ensure proper transport infrastructure exist, especially with the view of creating economic growth in the district, which positively affects the population. Should the residents not have proper access to opportunities; economic development initiatives will not be successful.

Graph 6: Mode of Transport



Source: Stats SA Census 2001

The SDF in conjunction with the transport planning of the municipality should aim to address the needs of the communities, by identifying possible transportation and connection routes, as well as inter modal transfer facilities.

3.4.3 Water Services

The accessibility to water infrastructure is illustrated on **Map 20: Water Infrastructure**. This map indicates that the densely populated areas as well as the rural areas of Ulundi, Nongoma and Parts of uPhongolo are well serviced with water infrastructure. The orange dots on the map depict the household points, and limited backlogs can be observed throughout the District, although large backlogs are clearly visible within the Nongoma Local Municipality specifically. There are a total of 10 regional water schemes within the District which are listed in the table below.

Table 20: Regional Water Schemes in ZDM

<ul style="list-style-type: none"> • Coronation • Hlahlindlela • Khambi • Mandlakazi • Nkonjeni 	<ul style="list-style-type: none"> • Simdlangentsha East • Simdlangentsha Central • Simdlangentsha West • Usuthu • Ceza
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Source: ZDM WSDP

The WSDP contains a list of planned upgrading and service installations, over the next 5 years.

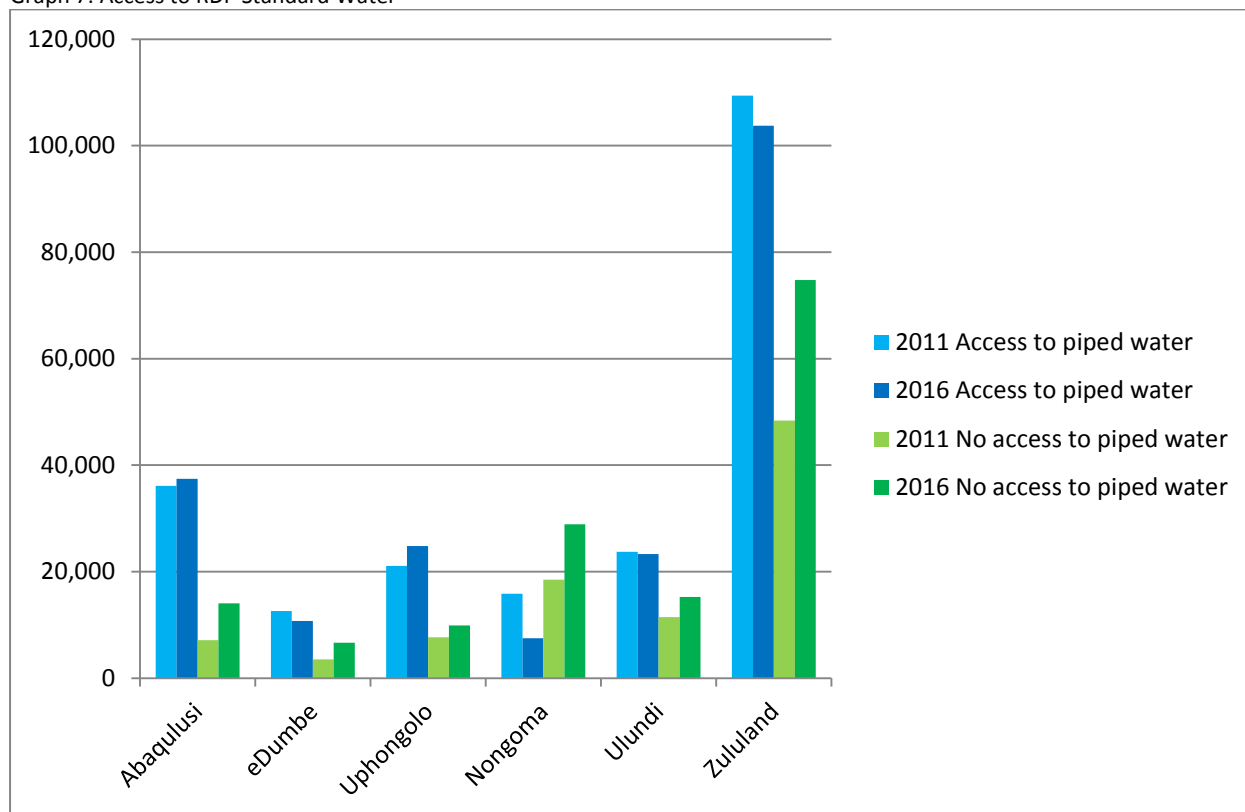
The plan further indicates water sources such as boreholes and springs. The Draft ZDM 2017-2022 IDP contains a summary of the current water services backlogs for the 5 municipalities, and is depicted in the table below.

Table 21: Water Services Backlog per Municipality

Municipality	Water Backlog within Municipalities (%)	Water Backlog Share within the District (%)
aBaqulusi	24.51%	22.12%
eDumbe	20.51%	6.72%
Nongoma	45.90%	41.20%
Ulundi	20.50%	18.71%
uPhongolo	20.10%	11.25%
Totals	27.78%	100.00%

The graph below depicts the percentages of households per ward which have access to RDP standard water according to the 2011 and 2016 statistics. Although it is unclear how the data contained in the ZDM Draft IDP has been derived, the trends depicted are the same, where in 2011 Nongoma LM has the greatest need for water services and uPhongolo LM has the lowest need for water services, therefore provision of services throughout the district was on an equal basis. According to the 2016 census data Nongoma still has the greatest need for water services and aBaqulusi has the lowest need for water services. The access to the minimum RDP standard of water is relatively low throughout the district.

Graph 7: Access to RDP Standard Water



Source: Stats SA Census 20011 & 2016 Community survey

Total backlog for water supply provision across the district is at 28% of the households and is 19% for sanitation supply. This is a marked improvement on the back log estimated by both Census information and the DWAF NIS system.

The Zululand District Municipality Water Services Development Plan (WSDP) categorises the types of water services provided as follows:

Communal supply at the minimum prescribed levels listed	This service level is the 'basic' supply which conforms to RDP standards of provision
Controlled volume supply	This would include yard tanks that are filled daily or low pressure connections either as yard or house connections. The amount of water discharged on a daily basis is therefore known.
Uncontrolled volume supply	These are usually high-pressure connections either as yard taps or house connections, and are uncontrolled but metered. Payment is therefore received for this water service.

Source: Zululand WSDP (2017)

Zululand District Municipality has adopted a Free Basic Water Services policy which is implemented as follows:

- All households will receive six kilolitres of potable water free of charge for domestic use.
- Industrial, commercial and institutional consumers do not qualify for free basic services.
- All water supplied from standpipes and rudimentary systems will be free.

The table below depicts how this policy is made applicable to the water users.

Table 22: Free Basic Water Policy

Service Level Number	Level of Water Service	Definition	Free Basic Water Policy
DW1	Full pressure conventional house connection	Direct unrestricted full pressure (24m) connection to the reticulation system, metered and billed	Stepped block tariff (with first block at zero charge free to all households)
DW2	Yard tank (RDP standard)	Restricted (to 200l per day) individual erf connection with tank in yard	All water at no charge
DW3	Communal street tap (RDP standard)	Unrestricted full pressure standpipe not further than 200m from dwellings (shared by a number of consumers)	All water at no charge
DW4	Rudimentary system	Formalised supply: <ul style="list-style-type: none"> • Borehole equipped with hand pump • Protected spring • Communal standpipe further than 200m from dwellings 	All water at no charge

Source: Zululand WSDP (2018)

Map 23: Water Infrastructure

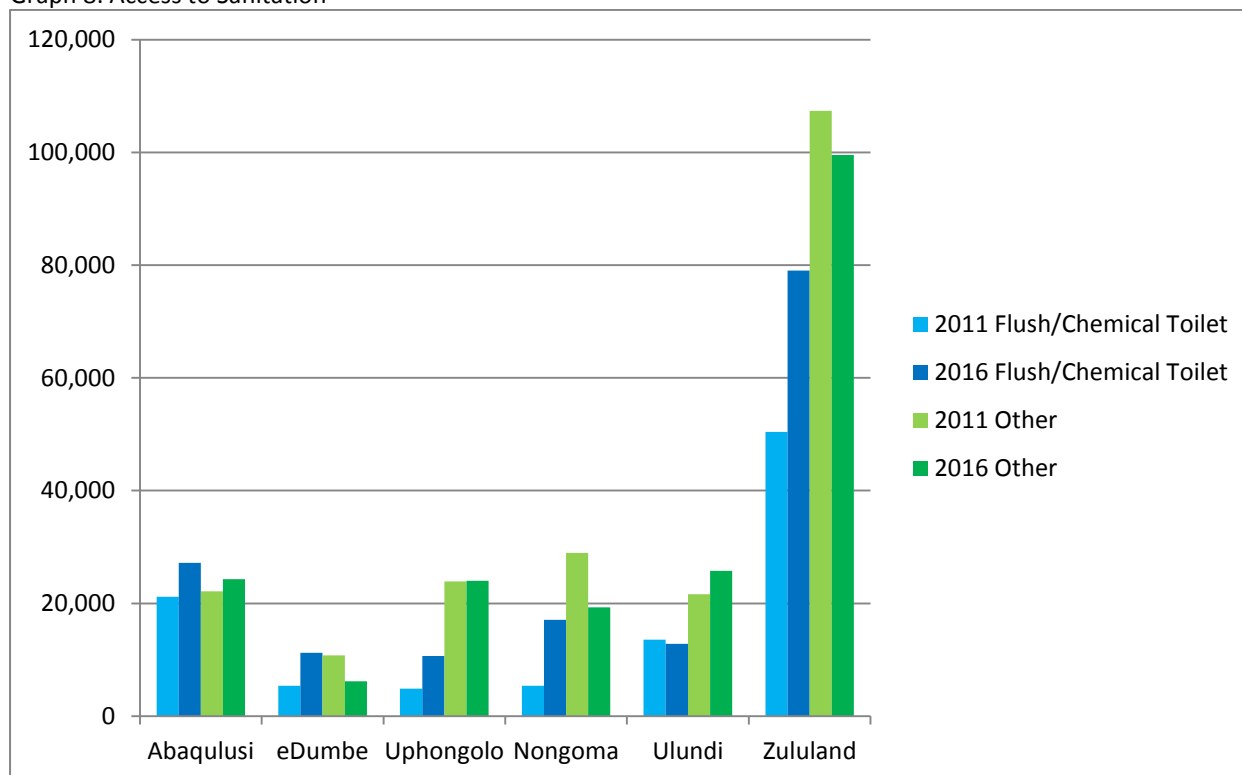
3.4.4 Sanitation Services

The statistical Data from Stats SA distinguishes between all types of sanitation services provided to the communities.

- Flush toilet with sewer
- Flush toilet with septic Tank
- Chemical Toilet
- Pit Latrine with Ventilation
- Pit Latrine without Ventilation

The obvious long term target is to provide all residents with waterborne sanitation and sewer but households with one of the above listed forms of sanitation are considered as serviced. The graph below clearly depicts that less than 50% of the population has access to acceptable sanitation services. According to the 2011 census data ABaqulusi LM has the highest service level and Nongoma the lowest, in comparison to 2016 Ulundi LM has the highest service level and eDumbe the lowest. The ZDM also depicted access to sanitation in the Draft 2017-2022 IDP, which is depicted in the table below the figure.

Graph 8: Access to Sanitation



Source: Stats SA Census 2011 & 2016 Household survey data

The backlogs as depicted by the Zululand District Municipality are depicted in the table below with eDumbe being the highest serviced Municipality, and Nongoma the municipality with the lowest level of services.

Table 23: Sanitation Services Backlog per Municipality

Municipality	Sanitation Backlog
aBaqulusi	21.61
eDumbe	26.6
Nongoma	24.5
Ulundi	7.78
uPhongolo	21.5

Source: ZDM IDP 2017-2022

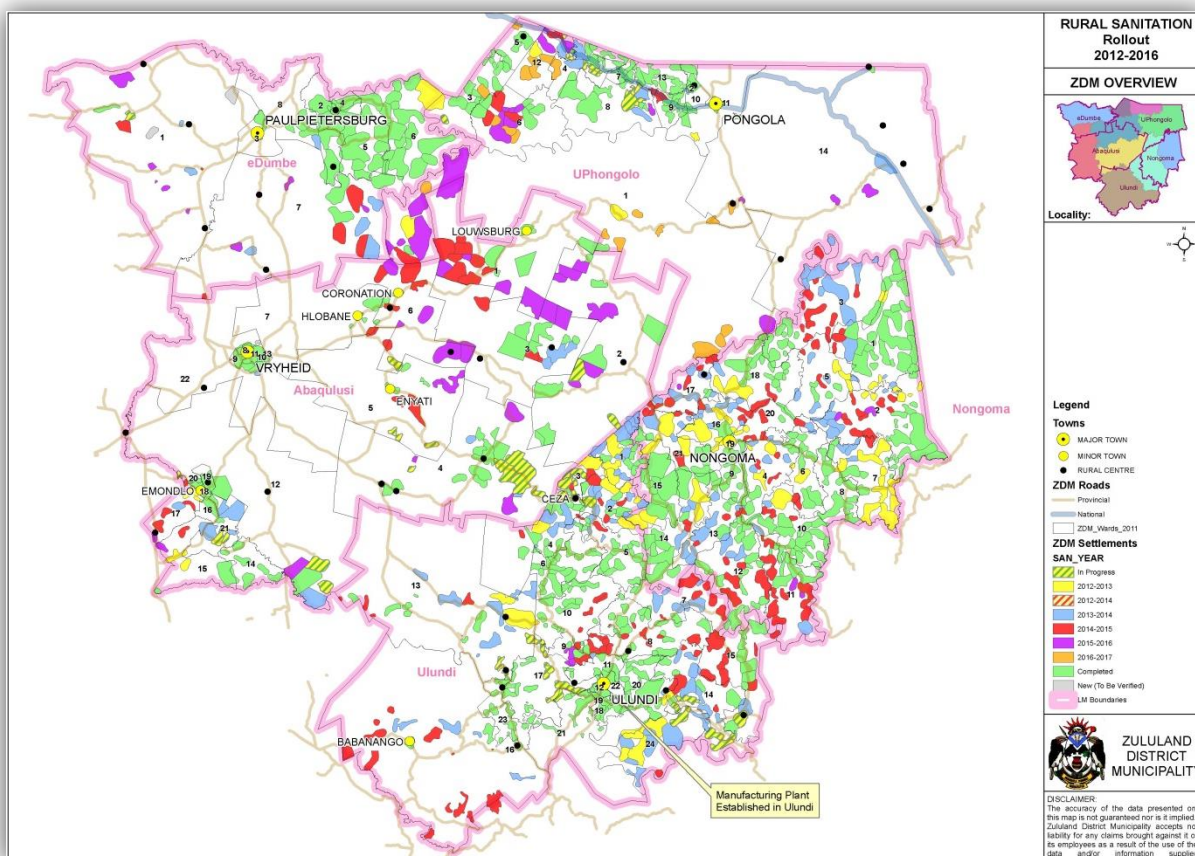
Map 21: Sanitation Network depicts the following aspects:

- Sewer Pipelines;
- Pump Stations;
- Treatment Works;
- VIP Toilets;

When considering that the map depicts the household points in orange, it can be seen that there are a large number of households that does not have access to proper sanitation facilities throughout the District with the highest concentrations of non-serviced households residing in the Nongoma, Ulundi and uPhongolo Local Municipalities.

The WSDP does however contain a roll-out plan, for basic sanitation services, of which the timeframes and localities are depicted on the image below.

Figure 10: Rural Sanitation Roll-out Programme



Source: ZDM WSDP

Table 24: Free Basic Sanitation Policy

Service Level Number	Level of Sanitation Service	Definition	Free Basic Sanitation Policy
DS1	Water borne sewage	Unrestricted connection to municipal sewerage system	Included in free basic water allocation
DS2	Septic tank or similar facility	On-site disposal (self-treatment)	No charge
DS3	Conservancy tank	Localised sewage temporary storage facility	No charge to selected households in specific areas as determined by the municipality, aligned to free basic water policy for service level DW4
DS4	Ventilated improved pit	Dry pit with sufficient	No charge

	(VIP) latrine	capacity on-site disposal based on set standards	
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Source: Zululand WSDP (2018)

Unfortunately very little information is available regarding water requirements for industrial activities within the municipality, and the ZDM does not differentiate between provisions of volumes of water for residential or for industrial/commercial uses.

The Data from Stats SA identifies the following types of sanitation services levels"

1. Flush toilet (connected to sewerage system)	Acceptable service levels – dependant on budgetary constraints.
2. Flush toilet (with septic tank)	
3. Chemical toilet	
4. Pit latrine with ventilation (VIP)	
5. Pit latrine without ventilation	
6. Bucket latrine	Unacceptable service level.
7. None	

Source: Stats SA – Census 2011

Map 24: Sanitation Infrastructure

3.4.5 Electricity Network

Map 22: Electrical Infrastructure depicts the electrical infrastructure within the District, which includes Eskom Stations, as well as Eskom Lines. When comparing the locality of the lines to the household points it is clear that the district is very well serviced with regards to electricity infrastructure.

The table below depicts the level of services for the various municipalities. Nongoma has the highest rate of services, whilst the uPhongolo Lm has the lowest level of electrification.

Table 25: Level of Electrification per Municipality

Municipality	Access to Electricity
aBaqulusi	45
eDumbe	57
Nongoma	70
Ulundi	56
uPhongolo	24

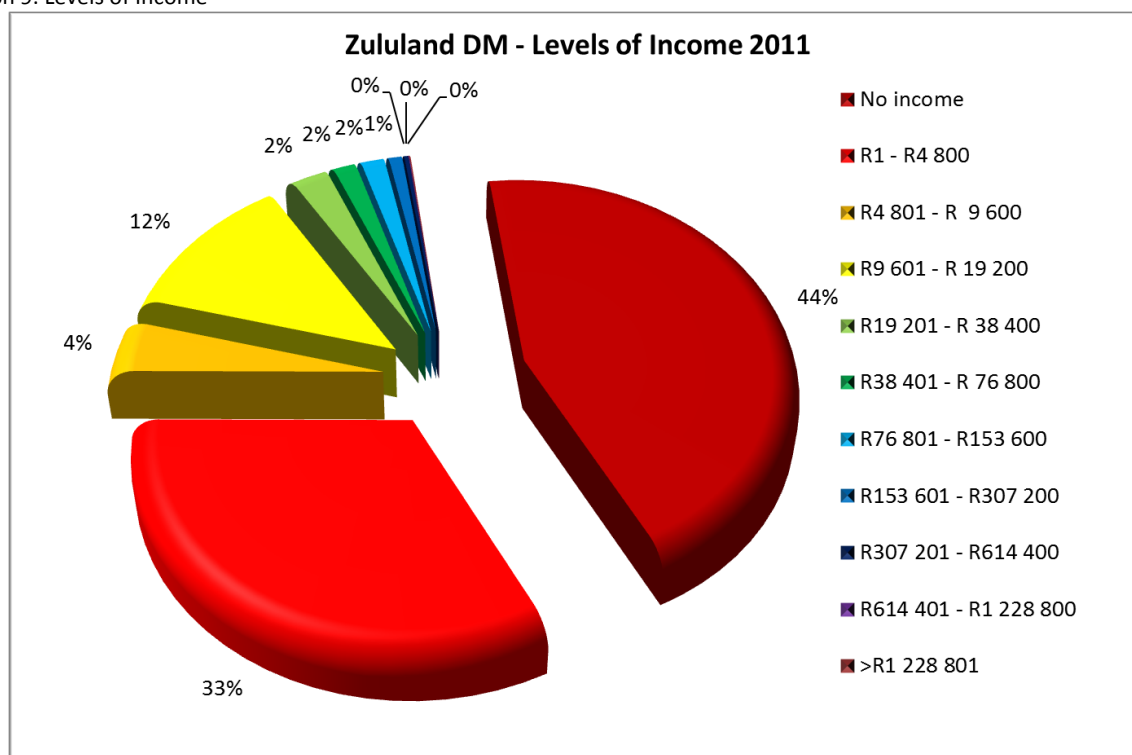
Statistically, access to electricity was measured according to the energy used for lighting purposes.

3.5 Financial Resources

3.5.1 Income Distribution

The graph below depicts the income distribution within Zululand District Municipality. With an overall low income level as is the case in Zululand, it is very difficult for the various municipalities to build a proper tax base, which can be utilised for provision & Maintenance of services. The graph depicts that 44% of the Households have no income at all, and that only 19% of the households earn above R9,600-00 per month. There is a subsequent high social grant dependency. Only a small portion of the population qualifies for payment of taxes which leaves a huge burden on the current tax payers to fund the grants as well as the maintenance of services.

Graph 9: Levels of Income



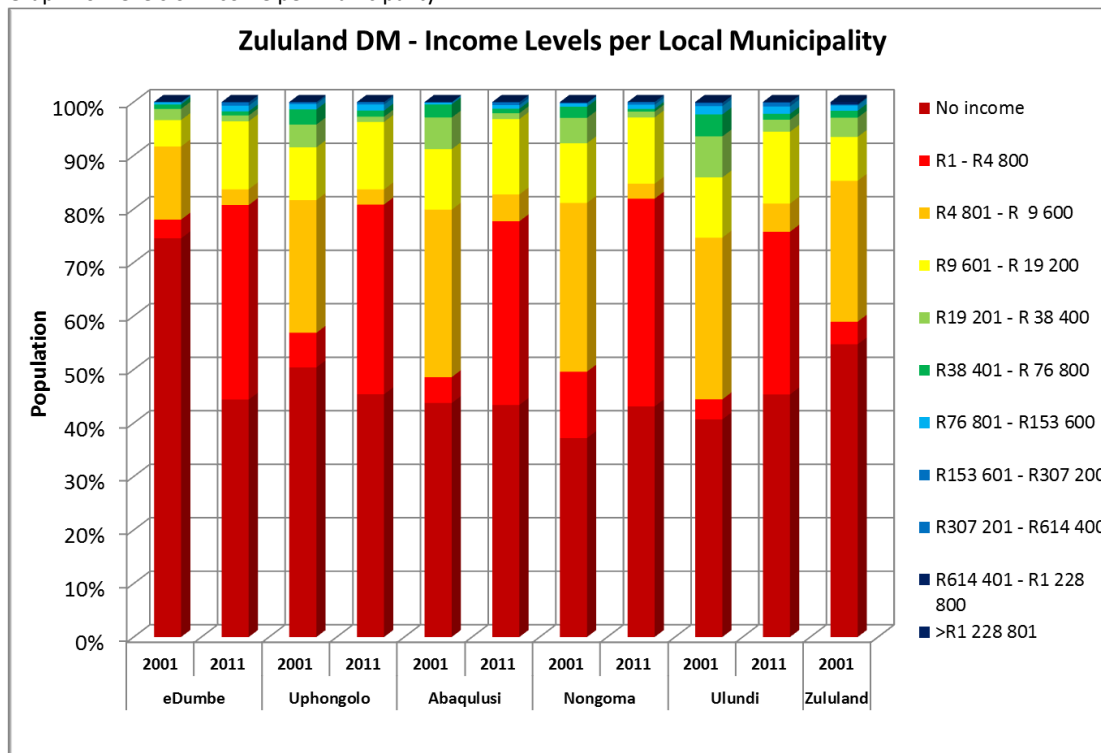
Source: Stats SA Census 2011

Map 25: Electrical Infrastructure

Without external funding, the municipality will not be able to implement nor maintain any new services. It is therefore essential that the municipality implement initiatives to grow its tax base through successful implementation of economic development initiatives.

The graph below provides a comparison of the income levels between the various municipalities. The uPhongolo, Ulundi and eDumbe Municipalities have the highest number of households with no income at over 40%. uPhongolo LM is the strongest financial entity with just over 20% of the households having no income. This depicts that Ulundi LM has a 20% stronger tax base in 2011 in comparison to the other municipalities.

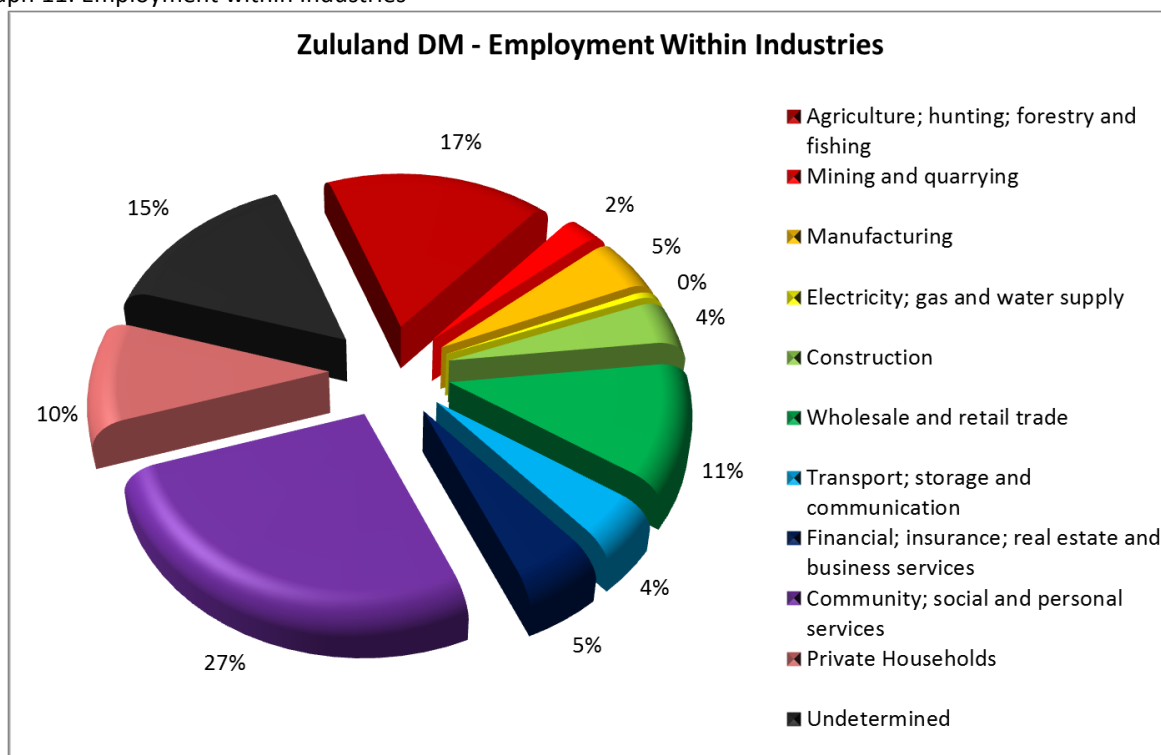
Graph 10: Levels of Income per Municipality



Source: Stats SA Census 2001 & 2011

The biggest employment sector in the district municipality is the Community, Social and Personal sector which relates to the high dependency on government services provided to the communities. Thereafter it is the Agriculture; Hunting, Forestry and Fishing Sector (17%) depicting the highly rural nature of the district. Following that is the Wholesale and Retail Trade Industries (11%) followed by Private Households (10%) which also depicts the dependency of the rural areas for work in the domestic environment. The remaining sectors are aimed at the smaller urban areas.

Graph 11: Employment within Industries



Source: Stats SA Census 2011

3.5.2 Business Sector Analysis

The Zululand District Municipality is unfortunately isolated from the national economy due to its location in relation to transport routes and its distance from major centres. Further, raw materials required for manufacturing purposes are scarce and includes basically materials related to coal mining and agricultural activities including maize, beef, timber and sugar production. There is further no beneficiation of the products.

The area still has a unique character offering a range of opportunities for economic development. Most importantly the area of the Zululand District Municipality is viewed as the symbolic core, also referred to as the “warm heart”, and of the wider area referred to as Zululand. This represents specific marketing opportunities as the district is home to a rich cultural diversity and numerous sites of historical significance, specifically relating to the Zulu nation. The town of Ulundi, the base of the Zululand District Municipality, historically also served as the capital of KwaZulu and still serves as the capital of KwaZulu-Natal together with Pietermaritzburg. The below Sections depicts the status quo of the various business sectors within the District.

3.5.2.1 Government Sector

It is noted that the government sector has a strong presence in the District and makes a major contribution the Gross Value Added (GVA). This sector is best represented in the Ulundi and Nongoma Municipalities where various regional offices and facilities of provincial government are located. It is assumed that the contribution of this sector would have been negatively impacted on by Ulundi losing its status as Provincial Capital in the last decade.

3.5.2.2 Agricultural Sector

The land cover of the Zululand District Municipality area is almost equally split between communal areas and privately owned commercial farming land. Generally speaking there is not a large quantity of high potential land available for cultivation in the district. However, the area is characterised by a diverse range of habitats which lend themselves to a wide range of agricultural and conservation enterprises.

In general terms good agricultural potential exists in the western highlands including the eDumbe and most of the Abaqulusi municipalities. High potential in the Pongola valley is as a result of irrigation opportunities that have been developed in this area. Current land cover reflects the potentials.

The communal areas of Ulundi and Nongoma are however not as fortunate and the agricultural potential (cultivation) is marginal to poor except for to high lying plateaus in each district, but these make up a small portion of the total area. Selected locations in the two Umfolozi river valleys provide potential for the development of irrigation schemes. Given the high temperatures in these valleys and the moderate winters, these areas are perfectly suited for the production of vegetables in the winter or off-season. In the drier valley bushveld areas livestock and game production are high value enterprises provided this type of activity is accompanied by careful veld management.

Given the medium quality and mixed resources in the district there is however considerable opportunities to expand production, investigate alternative production systems, transform the industry and improve cooperation between farmers.

Features of the agricultural economy include:

- Historically a strong beef sector with a conversion of substantial areas to game farming (specifically in the Louwsburg-Magudu-Pongolapoort Corridor);
- Sugar cane production in the north-eastern parts of the District around Pongola; and
- Timber production in the southern parts of Ulundi and northern areas of eDumbe.

3.5.2.3 Tourism Sector

The Zululand area is home to a wide range of historical, cultural and natural assets being uniquely located in the “heart of the Zulu Kingdom”. These assets provide the District with good tourism potential.

In certain areas of the District substantial work has been done to develop the tourism sector and its assets, however, much still remains to be done for the benefits of the sector to impact significantly on the socio-economic conditions of the communities of Zululand. The area faces major challenges in achieving this. Some of the key challenges include the distance of Zululand from major centres, the ceasing of regular flights to the Ulundi airport, the quality of road infrastructure in the District, the lack of coordination in tourism marketing and others.

It has long been contended that the development of key anchor projects and access routes will open up opportunities in an underdeveloped tourism sector. This includes finalising the construction of the Nongoma – Pongola link road and the large scale development of the Pongola Poort Dam area and the eMakhosini Heritage Park.

The Local Economic Development Strategy (revised 2015) proposed some development strategies which are outlined below:

- The development and upgrading of game reserves, dams and nature reserves
- The establishment and marketing of arts and craft centres
- The need for tourism information tools, e.g. brochures, information offices and signage
- Development of festivals and events
- A travellers’ centre at Ulundi
- The development of the Emakhosini Valley
- The upgrade of roads
- The uQweqwe area, approximately 25km from Babanango attracts substantial French interest every year understood to be the site where Prince Glenn Flanagan was captured, and does not provide any basic facilities to tourists.
- Every year the Zulu Reed Dance is celebrated at Nsibaya/Enyokeni. There are a number of tourism development options that could be pursued with the annual celebration. Providing tourists with a better understanding of the Zulu Royal Family is only one of the opportunities presented.

- The road between Nongoma and Pongola (R66) has to be tarred (only about 27 km) to open up the district to tourism. It is understood that more than 30 tour buses enter the district at Golela every day that do not spend time and money in the district.
- The linkage between Nongoma and Ulundi via the R66 (Tangami Spa, Swart Umfolozi and Vryheid) should be improved.
- Access road to Ithala Game Reserve, via the Klipwal Mine. The Klipwal Mine (the only Gold Mine in KZN) is only about 3 km from the northern boundary of the Ithala Reserve.
- The R69 (Rooirante Road) between Magudu and the Pongolapoort dam is another very important link road.
- The P700 link to Empangeni/Richards Bay.
- An important link between Paulpietersburg, Wakkerstroom and Luneburg.
- About 20km of un-tarred road between Nongoma and Vryheid to be upgraded.

3.5.2.4 Commercial Sector

Established urban centres exist within the Zululand District Municipality. The municipalities and the urban centres relating to them include:

Note: The commercial sector in this context is used as a generic term for most businesses included the following sectors (as defined by the Standard Industrial Classification): (1) financial intermediation, insurance, real estate, and business services, (2) wholesale and retail trade (excl. Hotels and restaurants), (3) community, social and personal services.

- Ulundi Municipality – Ulundi town: Ulundi as a town fulfils a major administrative function in the Provincial and District context and is also home to a large urban based population.
- Nongoma Municipality – Nongoma town: Nongoma town is the only urban centre within the Nongoma Municipality which has a population of approximately 230 000 people. Nongoma town is home to a range of public sector and formal and informal commercial sector activities.
- uPhongolo Municipality – Pongola: The town has a well-developed commercial sector and CBD which straddles the N2. A comprehensive range of businesses in the town serves the population of the town, the commercial farming sector and the rural population of the municipality, as well as the wider region and the through traffic on the N2.
- Abaqulusi Municipality – Vryheid: The town of Vryheid operates as a service centre for a large rural population, including areas such as eMondlo, Hlobane, and Coronation and areas further afield such as Ulundi and eDumbe. However, its economic base and reason for existence is as a service centre for the primary sector activities of mining and agriculture. This economic base has, however, been eroded in the past two decades with the closure of major mines in Hlobane and Coronation, as well as elsewhere in the District.
- eDumbe Municipality – Paulpietersburg: The local economy of Paulpietersburg is based on the provision of services to the agricultural sector and the surrounding rural population. The town offers a range of commercial and social services, but retains a strong rural town character.

Each of the towns differs substantially in terms of size, functions and character. A small number of other less developed centres are also located throughout the region, but have no significant impact on the spatial economy.

3.5.3 Mining Sector

The mining sector has traditionally been a key driver of the economy in the Zululand District Municipality, and its current contribution to the District GVA is considered substantially less than the 7% indicated in the Quantec data.

Most of the major coal mines in the Abaqulusi and eDumbe Municipality ceased operations in the 1990s as a result of the economics of extraction processes. Over the past decade there has, however, been interest by international and smaller South African mining companies wanting to extract remaining reserves.

In Ulundi the Zululand Anthracite Colliery continues to operate and in Nongoma the exploitation of the Somkhele seam has been a focus in recent years. This mining activity has implications for future economic and spatial development of the area.

3.5.4 Local Economic Development

The Zululand District Municipality developed in 2004 the “Zululand coordinated Local Economic Development Framework” in an attempt to establish structures that can facilitate the structured economic growth of the District Municipality, through the coordination of activities within the various local municipalities.

The objectives of this strategy are the following:

- To reduce income leakage
- To increase investment (both local and external)
- To promote local business development and business interaction
- To increase entrepreneurial opportunities and employment

The principles to lead the development of the strategy support the basic objectives in informing the strategy development and operational planning for future economic development in Zululand. These principles are the following:

- Process approach
- Sustainability
- Collaborative effort / Coordination
- Market based
- Integration

The Zululand District Municipality developed a Local Economic Development Strategy

DISTRICT STRATEGIES	<ul style="list-style-type: none"> • Establishing LED institutions and processes • Changing attitudes • Addressing the fundamentals • Raising the profile of the region • Improving and Promoting Access • Visible Delivery
BUSINESS STRATEGIES	<ul style="list-style-type: none"> • Institutional structuring for delivery • Capacity building and training • Establishing/building agri-industries • Establishing small scale mining • Municipal business strategies
AGRICULTURE STRATEGIES	<ul style="list-style-type: none"> • Institutional structuring for agricultural delivery • Sustainable land reform • Improved market access for agricultural produce • Visible delivery in agricultural sector • Municipal agricultural strategies
TOURISM STRATEGIES	<ul style="list-style-type: none"> • Institutional structuring for tourism • Tourist information inside the District • Tourist information outside the District • Making tourists feel safe and welcome • Community tourism • Visible tourism delivery • Municipal tourism strategies

Following the development of the LED Strategy the following projects are being implemented in the District:

- Ulundi Tourism Hub
- Construction of New Office Block
- Restaurant

- Kitchen
- Toilet Block, and External works
- P700 Nodal Development
- Servicing twenty nine (29) commercial sites i.e. Sewer reticulation, water and electrification.
- Laundromat Centre
- Mona Market Regularization
- Fencing the entire market

3.5.5 Border Posts – Economic Opportunities

None of the strategies refers to the Border posts as potential economic impetus into the ZDM economy. The Zululand District Municipality, and more specifically the uPhongolo Local Municipality is linked with the Kingdom of Swaziland via two formal border posts, and from aerial photography it is clear that a number of illegal crossings exist. The formal Border Post is the following:

- Golela Border Post: Situated near the Pongolapoort Dam
- Onverwacht Border Post: Situated directly north of Pongola & Ncotshane.

These border posts provides economic opportunity in two aspect, namely tourism opportunities and economic opportunities linked to the sugarcane industry and the fact that Golela is the closest sugar mill, to the sugarcane farmers in the southern parts of the kingdom of Swaziland.

4 Spatial Objectives And Strategies

To enable the development of a Spatial Development Framework, a set of principles needs to be adhered to during development. This will assist with conflict resolution between the importance of different land uses and indicate preferred land uses above another. The following sections deals with the principles set out by the Spatial Planning and Land Use Management Bill, as well as the principles set out by the KwaZulu-Natal Provincial Growth and Development Strategy, and based on the current situation in Zululand District combined them into a Logical Framework for strategy implementation in the development of Zululand.

4.1 Spatial Principles

4.1.1 Principles from SPLUMA

The SDF is guided by the following 5 spatial principles which form the foundation of an appropriate SDF. These principles were formulated as part of the Spatial Planning and Land Use Management Act (Act 16 of 2013)

Table 26: SPLUMA

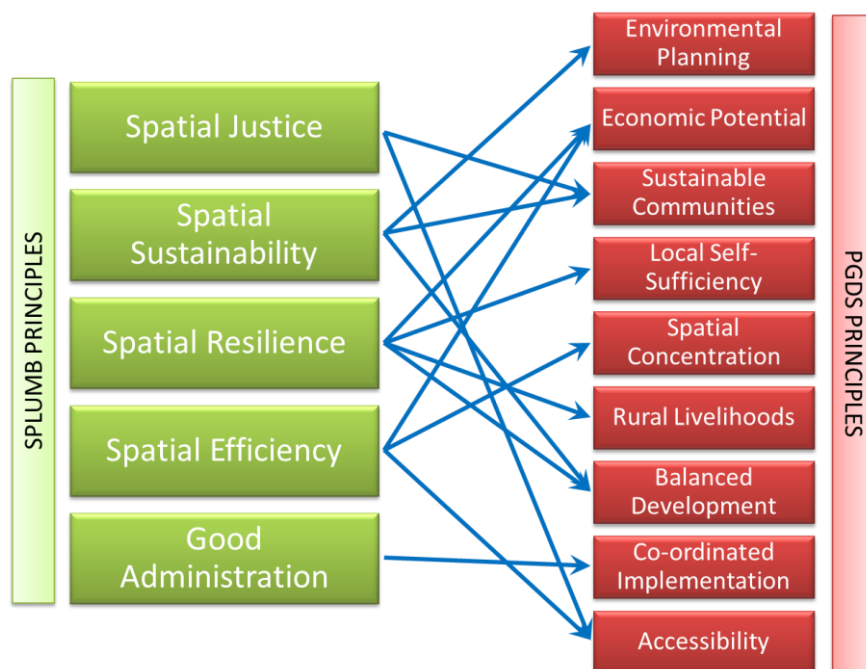
Spatial Justice	<ul style="list-style-type: none"> • Past spatial and other development imbalances are redressed through improved access to and use of land; • Spatial Development Frameworks and policies at all spheres of government address the inclusion of persons and areas that were previously excluded, with an emphasis on informal settlements, former homeland areas and areas characterised by widespread poverty and deprivation; • Spatial planning mechanisms, including land use schemes, include provisions that enable redress in access to land and property by disadvantaged communities and persons; • Land use management systems are inclusive of all areas of a municipality and specifically include provisions that are flexible and appropriate for the management of disadvantaged areas, informal settlements and former homeland areas; • Land development procedures will include provisions that accommodate access to secure tenure and the incremental upgrading of informal areas; and
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	<ul style="list-style-type: none"> • Where a planning tribunal considers an application before it, the planning tribunal's exercise of discretion may not be impeded or restricted on the ground that the value of land or property is affected by the outcome of the application;
Spatial Sustainability	<ul style="list-style-type: none"> • Promote land development that is within the fiscal, institutional and administrative means of the country; • Ensure protection of the prime and unique agricultural land, the environment and other protected lands and the safe utilisation of land; • Promote and stimulate the effective and equitable functioning of land markets; • Consider all the current and future costs to all parties for the provision of infrastructure and social services in land developments; • Promote land development in locations that are sustainable and limit urban sprawl; • Result in communities that are viable;
Spatial Efficiency	<ul style="list-style-type: none"> • Land development optimises the use of existing resources and infrastructure; • Decision-making procedures are designed with a view to minimising negative financial, social, economic or environmental impacts; and • Development application procedures are efficient and streamlined and time frames are adhered to by all parties;
Spatial Resilience	<ul style="list-style-type: none"> • Flexibility in spatial plans, policies and land use management systems is accommodated to ensure sustainable livelihoods in communities most likely to suffer the impacts of economic and environmental shocks;
Good Administration	<ul style="list-style-type: none"> • All spheres of government ensure an integrated approach to land use and land development that is guided by the spatial planning and land use management systems as embodied in this Act; • No government department may withhold their sector input or fail to comply with any other prescribed requirements during the preparation or amendment of Spatial Development Frameworks; • The requirements of any law relating to land development and land use are met timeously; • The preparation and amendment of spatial plans, policies, land use schemes as well as procedures for development applications, to include transparent processes of citizen participation and all parties to have the opportunity to provide inputs on matters affecting them; and • Policies, legislation and procedures must be clearly set out and inform and empower citizens.

Source: Spatial Planning and Land Use Management Act (Act 16 Of 2013)

In order to show alignment between national planning policy and provincial planning policy, the image below highlights how the strategic Goals of the KZN Provincial Growth and Development Strategy aligns with that of the SPLUMA and through addressing one set of principles, the other is also addressed.

Figure 11: SPLUMA Principles - Acknowledging PGDS Principles



Source: Vuka Africa

4.2 Spatial Development objectives and key development strategies

As indicated before, the core spatial challenges of the Spatial Development Framework would be to ensure spatial variety, equity, efficiency and sustainability. However, current practices does not always promote these concepts and it is therefore vital to identify in which manner current trends impact/does not impact on the achievement of these responsibilities and the eventual realization of the Spatial Development Vision.

The table below outlines the logical framework between the Spatial Development Drivers, the principles that needs to be adhered to, and the objectives that needs to be reached and the strategies to achieve these development objectives. The section further aims to provide a framework for conflict resolution between various land uses. Subsequently the Spatial Drivers as well as the Spatial principles are presented in order of Most important to least important, which will guide decision making when conflict in land use principles present itself.

Table 27: Spatial Development Objectives

PGDS Goals	PGDS Strategic Objectives	ZDM IDP Goal	ZDM IDP Objective (5 Years)	SDF - LAND DEVELOPMENT OBJECTIVES
1. Job Creation	1.1. Unleashing the Agricultural Sector	1.9. Investigate the feasibility of Fresh Produce Markets and Abattoirs. (1.9.)	a) Investigate the feasibility of Fresh Produce Markets and Abattoirs. xxx	<ul style="list-style-type: none"> •To promote the agricultural development and use of prime agricultural land. •Capitalise on the presence of the Swaziland Sugarcane Farmers by facilitating relations between Swaziland and the

				TSB Sugarmill.
	1.2. Enhance Industrial Development through Trade, Investment & Exports			<ul style="list-style-type: none"> •To promote the development and key potential industrial areas.
	1.3. Expansion of Government-led job creation programmes	2.1.1.		<ul style="list-style-type: none"> •Development and upgrading of the Border Posts.
	1.4. Promoting SMME, Entrepreneurial and Youth Development	2.2.1 To improve the economy of the district, through the creation of job opportunities and additional economic activities (2.2.1)	a) To effectively contribute & coordinate LED in the District	<ul style="list-style-type: none"> •Promotion of private sector investment in rural areas within diverse economies. •Capitalise on Mining Opportunities •Promote Economic Opportunities around the nodes.
			b) To create LED awareness in the District	<ul style="list-style-type: none"> •To identify key Economic Investment Nodes and Areas.
			c) To apply for funding for LED	
		2.1.2 To Promote Tourism in the District (2.1.2)	a) To create effective Tourism structures and have effective institutional arrangements in place.	<ul style="list-style-type: none"> •To promote and capitalise on tourism potential of the District.
			b) To ensure tourists/potential tourists are aware of our product	
			c) To make Zululand the favourite tourism destination	
			d) Safety and Signage	
			e) Tourism Routes	
	1.5. Enhance the Knowledge Economy			<ul style="list-style-type: none"> •To promote the development of knowledge economy facilities and infrastructure (eg. ICT technology, Research and

				Education Facilities)
2. Human Resource Development	2.2. Early Childhood Development, Primary and Secondary Education			<ul style="list-style-type: none"> •To promote sufficient distribution of and access to educational facilities.
	2.3. Skills alignment to Economic Growth	3.1.1. To transform the organisation to comply with the Employment Equity Act (3.1.1)	a) To comply with Employment Equity Legislation	
	3.2. Youth Skills Development & Life-Long Learning			
3. Human & Community Development	3.3. Poverty Alleviation & Social Welfare	2.5.1. The social upliftment of the communities in ZDM (2.5.1)	a) To reduce poverty by implementing Community Development Projects	<ul style="list-style-type: none"> •To spatially target interventions toward key areas of poverty concentration.
	2.6. Enhancing Health of Communities and Citizens	1.8.1. To deliver an effective and efficient environmental municipal health service (1.8.1)	a) To deliver an effective environmental municipal health service	<ul style="list-style-type: none"> •To promote sufficient spatial distribution of and access to health facilities.
		2.3.1. To reduce the impact of HIV/AIDS (2.3.1)	a) To create HIV/AIDS awareness and education	
	2.4. Enhance Sustainable Household Food Security			<ul style="list-style-type: none"> •To systematically improve access to land and proper land management practices in Traditional Authority areas.
	2.5. Promote Sustainable Human Settlements			<ul style="list-style-type: none"> •To develop and maintain flexibility in spatial plans, policies and land use management systems to accommodate and ensure sustainable livelihoods in communities most

				likely to suffer the impacts of economic and environmental shocks •To identify key human settlement intervention areas.
	2.6. Enhance Safety & Security	1.5.1. To Plan, coordinate and regulate Fire Fighting Services in the district. (1.5.1)	a) To ensure that fire fighting is well planned and executed in the District	
			b) Regulation and coordination of Fire Fighting Services	
		1.6.1. To deal with Disasters efficiently & effectively in the district (1.6.1)	a) To review and facilitate the district Disaster Management plan	
			b) To create awareness of hazards and disasters	
	1.7. Advance Social Capital	2.4.1. To develop and empower Youth, Gender and people living with Disability (2.4.1).	a) To strategically plan development and empowerment initiatives for youth and gender	
4. Strategic Infrastructure	2.5. Development of Harbours			
	2.6. Development of Ports	1.2.1. To viably operate & maintain a Regional Airport that contributes to the growth & development of the district (1.2.1)	a) To implement identified activities in airport implementation plan as aligned to budget	
	1.3. Development of Road & Rail Networks	1.3.1. To facilitate the provision of a well-developed district road network (1.3.1)	a) To establish the status quo of roads within the Municipal Area and to take responsibility of the assigned district roads	

		1.3.2. To facilitate the Regulation of Passenger Transport Services	a) To clarify the DM's role in the Regulation of Passenger Transport Services	
	1.4. Development of ICT Infrastructure			
	1.4.1. Improve Water Resource Management & Supply	1.1.1. To progressively provide a cost effective, reliable water services at a good quality to all potential consumers in the district (1.1.1)	a) To provide cost effective water (including free basic water)	To ensure the optimal use of existing resources and infrastructure.
			b) To provide cost effective sanitation (including free basic sanitation services)	
			c) To reduce Water Loss	Development of additional water storage (dams)
			d) To improve on the quality of water delivered	
			e) To provide effective Customer Care	
			f) To ensure compliance with relevant water legislation	
			g) To effectively utilise grant allocation for water and sanitation	
			h) To deliver and regulate water services in a structured manner	•To promote the establishment of varied service delivery standards and strategies between various settlement typologies.
	1.1.2. Develop Energy Production and Supply			
5. Environmental sustainability	1.2. Increase Productive Use of Land			•To consider environmental, social and economic balance in all land development considerations.
	1.3. Advance Alternative			

	Energy Generation			
	1.4. Manage pressures on Biodiversity			<ul style="list-style-type: none"> •To preserve the municipality's biodiversity and rehabilitate environmentally sensitive areas. •To ensure that the quality of water from rivers, streams and wetlands is suitable for the maintenance of biodiversity and the protection of human well-being.
	1.5. Adaptation to Climate Change			<ul style="list-style-type: none"> •To consider the potential impacts of Climate Change on long term spatial structure.
6. Governance & Policy	1.6. Strengthen Policy and Strategy Co-ordination & IGR			<ul style="list-style-type: none"> •To prepare, maintain and adhere to comprehensive municipal spatial planning policies and strategies. •To ensure sectoral and spatial integration in all land improvement and development. •To ensure full legislative compliance in all aspects of land development. •Facilitate Relations between TSB Sugar and Swaziland Sugarcane Farmers.
	1.7. Building Government Capacity	1.7.1. To develop capacity in the organisation for effective service delivery (3.2.1)	a) To comply with Skills Development Legislation	<ul style="list-style-type: none"> •To develop institutional capacity towards effective land management •To implement streamlined development application and decision making procedures

	1.8. Eradicating Fraud & Corruption			•Fair and transparent Processes
	1.9. Promote Participative, Facilitative & Accountable Governance	5.1.1. To promote good governance, accountability & transparency (5.1.1)	a) Policies & bylaws	
		5.1.2. To manage risk to the Municipality effectively and efficiently(5.1.2)	a) To operate the organisation at a minimum risk level	
7. Spatial Equity	5.2. Actively Promoting Spatial Concentration			•To discourage settlement and development sprawl.
	5.3. Facilitate Integrated Land Management & Spatial Planning	5.2.1. To continuously promote integrated & co-ordinated planning and development within the District (5.2.1)	a) To promote integrated development planning (including the spatial reflection thereof) in an environmentally responsible manner	•To promote and develop residential & employment opportunities in close proximity to each other.
				•To promote diverse combinations of land uses in support of each other. •To ensure that rural and urban development are in support of each other.

Source: Vuka Planning Africa

5 Spatial Development Framework

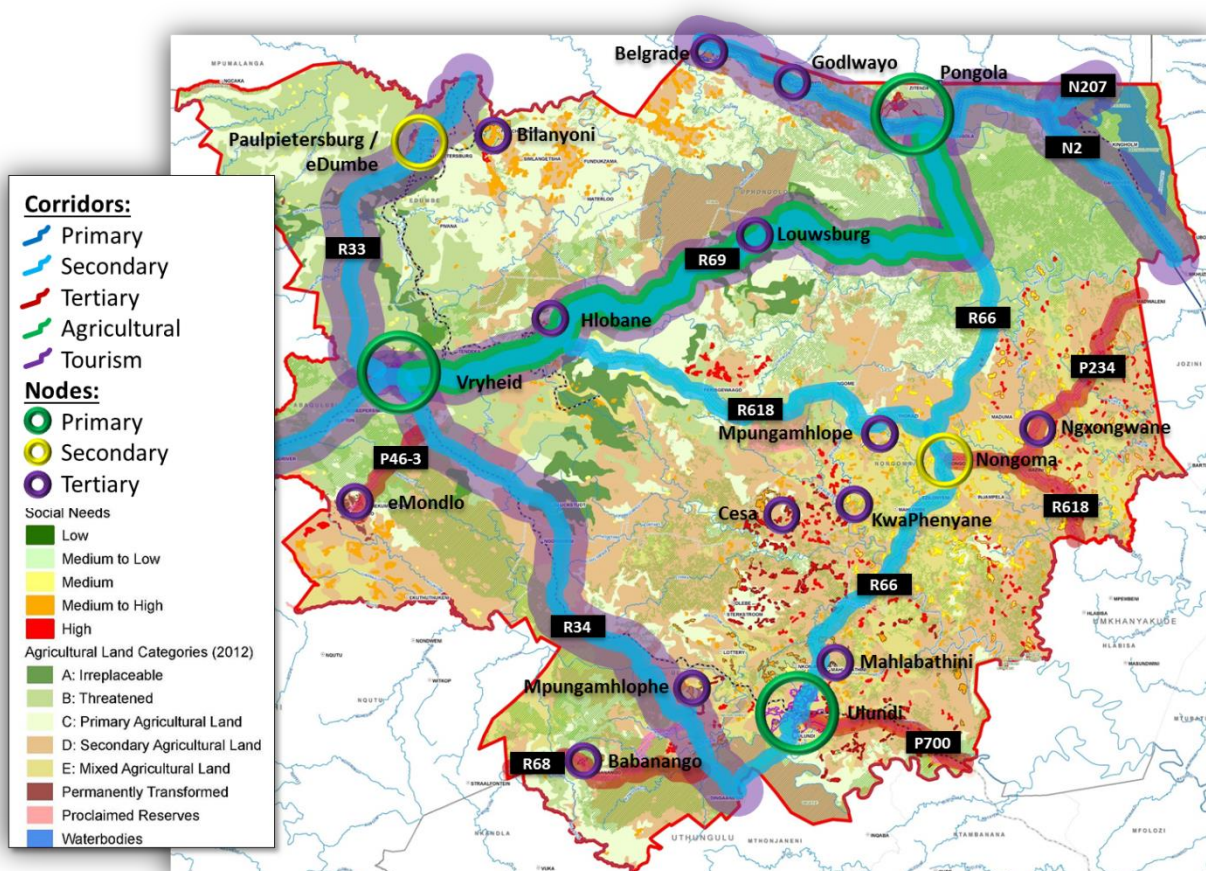
5.1 Spatial Vision of the ZDM

Establishing a spatial structure which promotes the sustainable utilisation of the Districts Infrastructural, Social and Economic resources with the aim of equitable service delivery within the urban as well as rural areas.

5.2 Spatial Development Concept

The Image below depicts the conceptual spatial framework and the relation of the various proposed land uses, nodes, and corridors in relation to each other. These will be discussed in more detail in following sections. The combination of the elements discussed in the sections below results in the draft Spatial Development Framework Plan, as well as the proposed overlays relating to Biodiversity, Land Capability and Settlement Clusters.

Figure 12: Conceptual Spatial Development Framework



Source: Vuka Planning Africa

The Complete Spatial development Framework is attached to the last page of this document.

5.2.1 Informants

The above map and Draft Zululand Spatial Development Framework has been compiled utilising the following informants.

Table 28: Informants

Environmental Management Informants	<ul style="list-style-type: none"> • Biodiversity Priority Areas • Critical Biodiversity Corridors • Protected Areas
Social needs Informants	<ul style="list-style-type: none"> • Population Density • Dependency Ratio • Provincial Index of Multiple Deprivation
Agricultural Potential Informants	<ul style="list-style-type: none"> • Land Capability • Existing Land Use • Agricultural Potential
Nodes and Corridor Informants	<ul style="list-style-type: none"> • District Economic Advantages • PSEDS Development Corridors • PSEDS Hierarchy of Nodes

Source: Vuka Planning Africa

The following sections provide an overview of the influence of the above informants on the various municipalities.

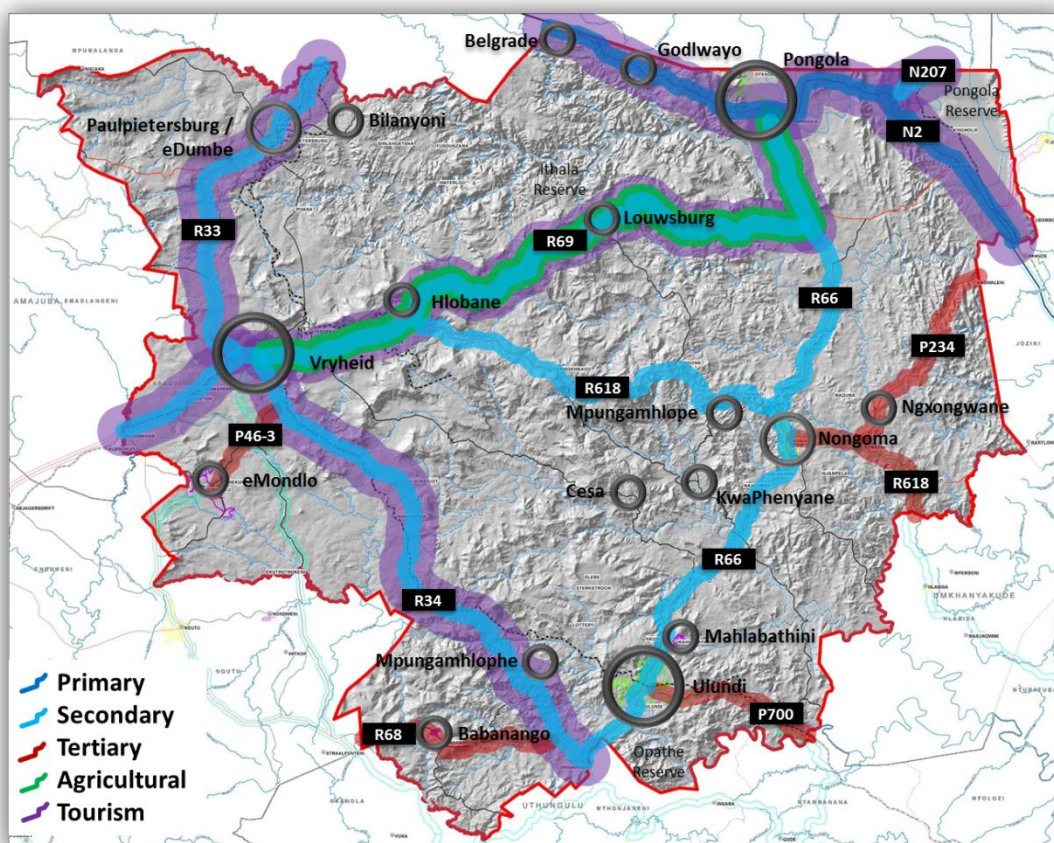
5.3 Corridor Development

One of the major structuring elements determining the existing and future concentration of development, activity and investment in a municipality are the corridors. A mixture and a hierarchy of the mentioned corridors should be provided to facilitate different levels of developmental and movement functions.

In the Status Quo a number of corridors and movement routes have been highlighted from previous strategic documents. It is proposed that in addition to these routes, a number of additional routes be targeted for inclusion in the Spatial Development Framework.

The following sections highlight the proposed routes and corridors as well as the interventions to be implemented on the various routes. The image below depicts the locality of the routes to be discussed.

Figure 13: Movement Corridors



Source: Vuka Planning Africa

5.3.1 RIFSA Classification

Within the rural municipalities, access to communities are more often than not, provided by non-proclaimed, community established gravel roads which does not have a designation or legal status.

The fact that they are informal does not detract from the fact that they provide an essential service with which the communities cannot do without. As a result of this the National Department of Transport embarked on an exercise to classify roads based on their functionality. This will also impact on the maintenance responsibilities which will be shared with the Province by Local and District Municipalities.

The revised approach to the classification of roads in South Africa is predicated on the following principles:

- Work from the bottom end of the road hierarchy upwards.
- Base the classification on:
 - The primary function of the road – recognizing the different roles of the road i.e. provision of mobility and/or accessibility or a combination of these factors.
 - Whether the specific road is "intra" or "inter" the administrative area of a specific authority.
- The approach should foster local participation and the delivery mechanism should be at as low a level as practical, i.e. responsibility should be assigned to the lowest level most intimately affected.
- The classification should be attuned to the current realities and needs in the country.

Table 29 : RIFSA Classification

Functional Class	Description
Class 1	Roads, which form the principal avenue of communication: - i. Between and through major regions of South Africa ii. Between provincial capitals and key towns which have significant national economic/social interaction iii. Between South Africa and adjoining countries, and iv. Whose main function is to provide access to major freight terminals, including ports.
Class 2	Roads not being class 1 whose main function is to form an avenue of communication: i. Between important centers and between class 1 roads and key towns within a specific province, on a province -wide basis. ii. Between important centers, within a specific province which have a significant economic, social tourist or recreation role (e.g., tourism and resource development).
Class 3	Roads other than class 1 or 2 roads, whose main function is to provide the principle arteries for intra-metropolitan traffic and freight movements.
Class 4	Roads, which are not class 1,2 or 3, are roads whose main function is to carry inter-municipality social, commercial and industrial traffic within specific metropolitan and district municipality areas.
Class 5	Roads whose primary function is to collect and distribute all traffic within local municipality areas including developing townships and to provide access to the wider road network, as well as the abutting properties.
Class 6	Roads, often undesignated, whose function is to provide the only access to scattered rural settlements and communities of up to 500 persons and which primarily serve local social services as well as access to markets and generally form the first phase of the journey for commuters and migrant workers. These roads will often form part of a rural infrastructure development framework.
Class 7	This category comprises special purpose public roads which cannot be assigned to any other class above and which are provided almost exclusively for one specific activity or function such as recreational, forestry, mining, national parks or dam access, for example.

Source: Road Infrastructure Strategic Framework for South Africa, 2002

As indicated the above classifications will have an impact on the maintenance responsibilities and activities associated with a road. These classifications have not yet been made applicable to the roads within the ZDM. The current “Classification” of roads is discussed in the sections below.

It is further necessary to distinguish between a movement corridor and a development corridor, as different functions and development approaches are applied to these roads. The term “activity corridor” or “Development Corridor” is used for short sections of road that:

- exhibit intensity of activity along them;
- are supported by nodes and residential land usage thus providing thresholds of activity to sustain economic and social development;
- are short and compact since a long section of road cannot sustain high order economic and social activity particularly in rural areas.

A movement corridor on the other hand provides for high accessibility and flow constant flow of movement between nodes and areas situated some distance from each other.

5.3.2 Movement Corridors

The main movement corridors within the Zululand District Municipality include the routes as displayed below. To identify these routes, the SDFs of the Individual Municipal SDF's were identified and then evaluated in terms of its contribution towards the accessibility and movement of the District. Corridors that provided access to only individual areas and did not contribute to the overall movement structure, were excluded.

The table and image below identifies the proposed Hierarchy of movement routes within the District.

Table 30: Description of Corridor Developments

Municipality	Primary Corridor	Secondary Corridor	
Nongoma	R66	P234 & R618	P735
aBaqulusi	P34-3 & P46 (R69) P47 (R34) P404 (R33)	P463 P258 P253 P34-4 D1303 D1309 P199	P523 P274 P220 P49-1 P49-2 P293
uPhongolo	N2 & N720	P52-3 (R66)	P46-4 (R69)
Ulundi	R34 & R66	R68	P700
eDumbe	P34-5 (R33) P404 (R33)	P271 P229	P34-4 P221

Source: Individual SDF documents of Municipalities

The combination of the above corridors ensures connectivity between all Municipalities within the District.

Public interventions envisaged in this area relate to:

- Constant Inter Governmental communication and co-ordination relating to the development of the Major Economic Corridors and its impact on the Zululand District Municipality.
- Tarring of roads which will provide transport services access to the remote regions, and open up additional economic opportunity in opening the areas. Accessibility is of key importance.
- Developing a localized Corridor Development Strategies, this will focus on spatial structure, infrastructure provision and attracting both public and private sector investment.
- Ensure multimodal transport integration occur along these roads at key points.

This route provides development opportunities that must be explored, and development should be encouraged along these primary routes.

5.3.3 Agricultural Corridors

The PSEDs identifies an agricultural corridor traversing the District in a North South Direction along the R66 from Pongola through Nongoma, to Ulundi and further south, and might refer to a corridor for distribution of agricultural produce.

Agricultural activities are actually intensifying along the R69 towards Vryheid, where high potential agricultural land is situated. It is therefore proposed that this route be earmarked as an agricultural corridor to allow for economies of scale to develop in the agricultural sector.

This area consists of high potential agricultural land and displays rapid growth within the agricultural sector. The following public interventions are envisaged in this area:

- a) Establishing / Expanding Agro-Processing facilities:
Additional income generating opportunities are needed within areas of economic need. Agro processing, especially within an area situated on an agricultural corridor provides the potential for additional income. Agro Processing entails the turning of primary agricultural products into other commodities for market – in other words, beneficiation of primary agricultural commodities.
- b) To involve communities in agro-processing the following option can be considered:
Establishing small-scale, appropriate and sustainable processing businesses that are flexible require little capital investment and can be carried out in the home without the need for sophisticated or expensive equipment.
- c) Expansion of trade opportunities related to agricultural activities – formal and informal.

5.4 Nodal Development

The following Nodes have been identified within the District. For ease of reference the nodes are listed in the table below per Local Municipality.

More detail on the functions and economic base of these nodes are provided in separate section following the table.

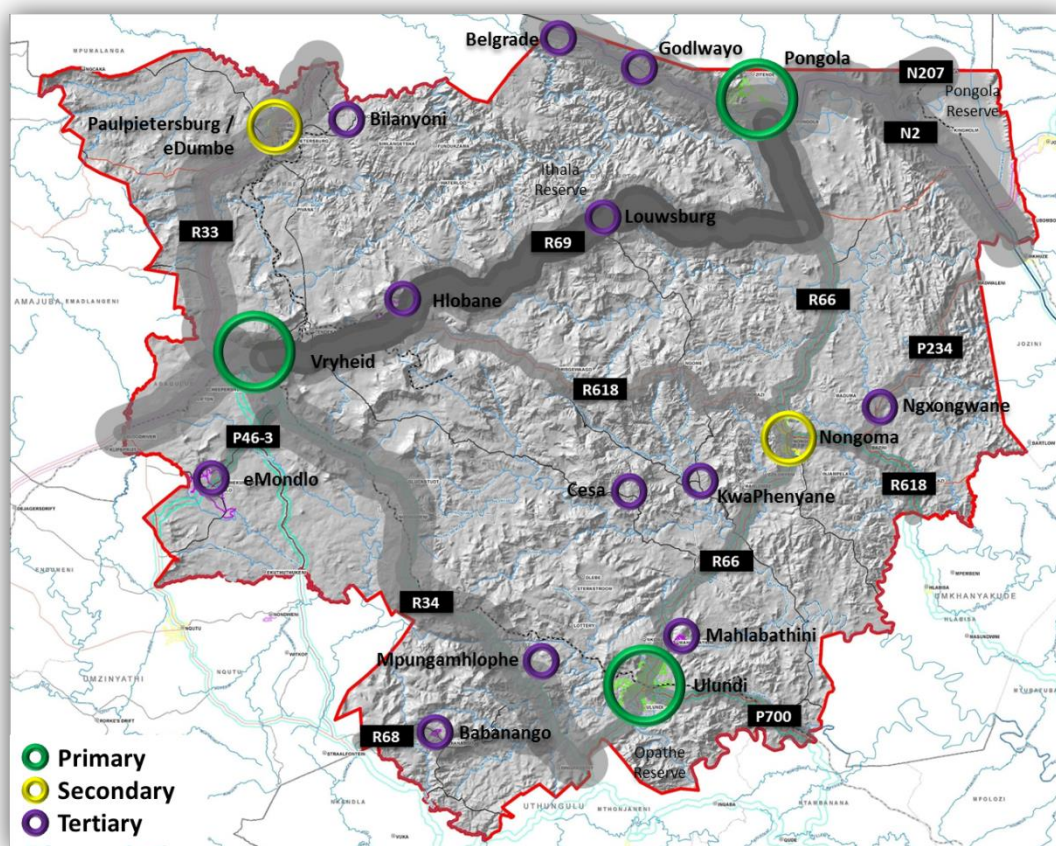
Table 31: Proposed Nodes

Municipality	Primary Development Nodes	Secondary Development Node	Tertiary Development Nodes
aBaqulusi Local Municipality	<ul style="list-style-type: none"> Vryheid 		<ul style="list-style-type: none"> eMondlo Hlobane Louwsburg
Ulundi Local Municipality	<ul style="list-style-type: none"> Ulundi 		<ul style="list-style-type: none"> Babanango Ceza Mpungamhlophe Nqulwane
uPhongolo Local Municipality	<ul style="list-style-type: none"> Pongola 		<ul style="list-style-type: none"> Belgrade Godlwayo
Nongoma Local Municipality		<ul style="list-style-type: none"> Nongoma 	<ul style="list-style-type: none"> Kwaphenyane Maphophoma Mahashini Ngxongwane
eDumbe Local Municipality		<ul style="list-style-type: none"> Paulpietersburg/eDumbe 	<ul style="list-style-type: none"> Bilanyoni / Mangosothu

Source: Vuka Planning Africa Inc.

The locality of these Nodes is depicted in the Image below:

Figure 14: Locality of Nodes



Source: Vuka Planning Africa

5.4.1 Primary Nodes

The following Primary nodes have been identified in the District Area.

Although fulfilling similar roles within the municipal context, in terms of scale of economic activities, the basis of the economies of the three nodal areas are very different.

Pongola – the economy of Pongola is based on large scale commercial production of Sugarcane. The uPhongolo natural features further allow for eco-tourism opportunities in the highly sensitive areas adjacent the Pongola Poort Dam, and the areas between the R69 and the N2.

Ulundi – Ulundi, as the current seat of the Zululand District Municipality, and the former seat of KZN, has a strong public service oriented economy. This allows for other supporting commercial and residential activities to be present within the Municipality.

Vryheid – In comparison to Pongola and Ulundi, Vryheid has a much larger commercial and services sector, although the economy is also dependant on agriculture, and mining.

These nodes are mainly centres which should provide service to the sub-regional economy and community needs. These centres were identified as Third Order Development nodes within the PSEDS. The following functions are envisaged for these centres.

- Secondary Economic Growth Areas
- Promote as Secondary Node in support of Corridor Development
- Promote Compact Urban Development & Combat Urban Sprawl
- Promote Focused Investment & Managed Growth
- Promote Densification (Brown Agenda) & Infill Development
- Provide Economies of Scale for Effective & Affordable Service Delivery
- Infill where High Levels of Services are Available (Restructuring Nodes)
- Increased Residential Density (number of dwellings)
- Promote Socio-Economic Upliftment
- Promote provision of sufficient Bulk Infrastructure Services (Demand & Supply)
- Priority spending on Infrastructural Upgrading Needs (New & Maintain)
- Promote Effective & Efficient Public Transportation Systems linked to Multi Modal Facilities

5.4.2 Secondary Development Nodes

The following 2nd order nodes have been identified in the District Area.

- Paulpietersburg
- Nongoma

These nodal areas do not provide services or economic advantages significant on Provincial Level, but fulfil very important service delivery functions within the local economies of the municipalities and are the only areas providing commercial choice to the residents of the respective municipalities.

These nodes were identified as fourth order nodes within the KZN PSEDs. Key strategic interventions specifically targeted at these nodes and their directly surrounding areas might include:

- Focused investment in areas of Poverty Concentrations
- Promote Integration (Green Agenda)
- Integration in terms of Mixed Densities & Uses
- Improve Transportation linkages to Nodes
- Promote Social-economic Integration
- Eradicate Backlogs & Promote Basic Service Infrastructure & Delivery
- Promote Socio-Economic Upliftment
- Promote provision of sufficient Bulk Infrastructure Services (Demand & Supply)
- Priority spending on Infrastructural Upgrading Needs (New & Maintain)
- Rural Service Delivery Point
- Promote & Establish PPP's
- Promote Cultural & Community Based Tourism

5.4.3 Tertiary Development Nodes

The following third order nodes have been identified within the various local municipalities

A total of 14 third order nodes have been identified throughout the district. The functions of these nodes consist of basic government service delivery to the surrounding communities with very limited commercial opportunities. The services sector within these areas is basically non-existent.

5.5 Intended Future Land Uses

5.5.1 Urban Areas

5.5.1.1 Residential

Residential neighbourhoods are to be strengthened within the Primary and Secondary Nodes. Where the need for rural housing is identified outside urban areas, it needs to be designed and constructed in such a way as to create densities and in line with the WSDP to ensure that sustainable communities are created and that services are provided cost effectively.

5.5.1.2 Industrial

The aBaqulusi Local municipality is best situated on main distribution routes and equipped with Industrial Land and Infrastructure to be developed as an industrial hub. A large Industrial Area is situated on the north eastern side of the town of Vryheid. Industrial Activities can also be linked to the proposed reviving of the Mining Sector.

Although limited, Pongola also has industrial infrastructure which can be aimed at developing and growing the agro processing industry.

5.5.1.3 Urban Edges

The purpose of indicating urban edges are to facilitate the densification of nodal areas, in order to promote the optimal and cost effective use of the bulk infrastructure and services. Not all towns have Urban Edges Identified, although it is imperative that urban edges for all nodal areas be identified as a tool to control densities. The following towns have urban edges identified within its Spatial Development Frameworks, and was depicted on the ZDM SDF.

Local Municipality	Areas With Urban Edge
aBaqulusi Local Municipality	<ul style="list-style-type: none"> None Identified in Local SDF
Nongoma Local Municipality	<ul style="list-style-type: none"> An urban edge was identified for Nongoma Town. Due to scattered nature of the settlements, various densification areas have been identified.
Ulundi Local Municipality	<ul style="list-style-type: none"> Ulundi
uPhongolo Local Municipality	<ul style="list-style-type: none"> Pongola & Ncotshane Godlwayo Belgrade
eDumbe Local Municipality	<ul style="list-style-type: none"> Paul Pietersburg and eDumbe Bilanyoni

It is proposed that when the individual SDF's of the Local Municipalities are revised, that the urban edges be reviewed utilising guidelines developed by the erstwhile KZN Planning Commission.

5.5.2 Environmental Management Areas (Environmental Informants Map)

The environmental management areas were identified utilising the following criteria:

- Formally Protected Areas (Ithala Reserve, Pongola Reserve, Opathe Reserve)
- Environmental Corridors (Provided by Ezemvelo KZN Wildlife and included in the KZN SDF)
- Bush land (<70cc)
- Dense Bush (70-100cc)
- Forest
- Woodland

The locality of the above environmentally sensitive areas is discussed in the sections below.

5.5.2.1 *Abaqulusi*

The municipality has two distinct areas of environmental significance. It is acknowledged that development cannot be prevented within these areas, but that very strict land use controls should be developed to ensure the protection of the environmental features within these areas.

Firstly the Environmental Corridor identified by the KZN SDF is situated on the northern and western boundaries of the municipality.

Other environmental resources include the sensitive areas on the eastern boundary of the Municipality.

5.5.2.2 *EDumbe*

This municipality has the least environmental sensitive areas, and only a small portion of the municipality is affected by the environmental service corridors as identified by the KZN SDF. With the high level of agricultural potential, this allows for the expansion of the agricultural sector within the municipality.

5.5.2.3 *Nongoma*

The largest grouping of environmental sensitive areas in Nongoma is situated on the southern boundary of the municipality, although small pockets of environmental sensitive bush and woodlands are scattered throughout the municipal area.

5.5.2.4 *Ulundi*

The largest part of the Ulundi Municipal Land Scape contains environmentally sensitive areas. These areas include the following:

- The Environmental Corridor running along the R34 connecting.
- The Opathe Game Reserve.
- A grouping of dense bush land and woodlands situated in the northern parts of the municipal area north of Dlebe and Mahlabathini.

The largest population densities are situated away from the environmental Sensitive area. The presence and influence of the homesteads might also be the reason for the lack of sensitive eco-systems within the populated areas.

5.5.2.5 *UPhongolo*

The uPhongolo Municipality has percentage wise the largest area of environmental sensitive areas.

The Environmental Corridor, identified by the Provincial SDF is traversing the municipality in an east west direction, connecting the Ithala Game Reserve to the Pongola Poort Dam, and basically divides the municipality into a northern and southern part which has two distinctly different situations as far as environmental capability is concerned.

The Southern part is characterised by highly sensitive environment of bush lands and woodlands. Currently these areas are largely utilised for eco-tourism activities which includes game farming, and lodges. This is reconcilable with the sensitive areas, and subsequently similar developments will be encouraged throughout this area.

The area north of the Environmental Corridor contains the main residential activities within the municipality and contains Pongola Town, Ncotshane and the rural settlements situated on Ingonyama Trust Land, west of Pongola Town. The two nodal areas in the Trust land areas, identified as secondary nodes in the Municipal SDF, are Belgrade and Godlwayo.

5.5.3 Rural Communities (Social Informants Map)

Rural settlements are identified on the Social Informants Map where large communities developed outside nodal and urban areas. The base data from the Department of Rural Development and Land Reform combined with the Eskom Household Study were utilised to plot households, which were then also classified in terms of social needs. These needs were based on the Minimum Level of Living data from the Kwazulu-Natal Provincial Spatial Development Framework.

The sections below depict the locality of the large groupings of households and the level of social needs. These will guide the implementation of interventions aimed at Social Needs.

5.5.3.1 Abaqulusi

Although small rural settlements are scattered around the municipal area, two significant areas are identifiable in the areas around Emondlo and Frischgewaagd. The Frischgewaagd area is to some extent owned by the Ingonyama trust board, but large numbers of households are residing outside areas owned by the Trust.

5.5.3.2 EDumbe

Large Settlement Clusters are situated around Bilanyoni and stretches towards the east. Although ownership details are not known, these settlements are either situated on private or government owned land as it is not registered to the Ingonyama Trust Board.

5.5.3.3 Nongoma

The Nongoma Rural Landscape is characterised by dispersed rural settlements situated along movement routes. All land within the municipality is further registered with the Ingonyama Trust. This is also where the largest concentration of households living below the minimum level of living is residing. It is obvious that the largest amounts of social upliftment investments will be spent within this municipality.

5.5.3.4 Ulundi

The Ulundi Municipal area can basically be divided into two portions with the eastern part of the municipality containing most of the rural settlement clusters. Most of the land is registered in the name of the Ingonyama Trust Board.

5.5.3.5 UPhongolo LM

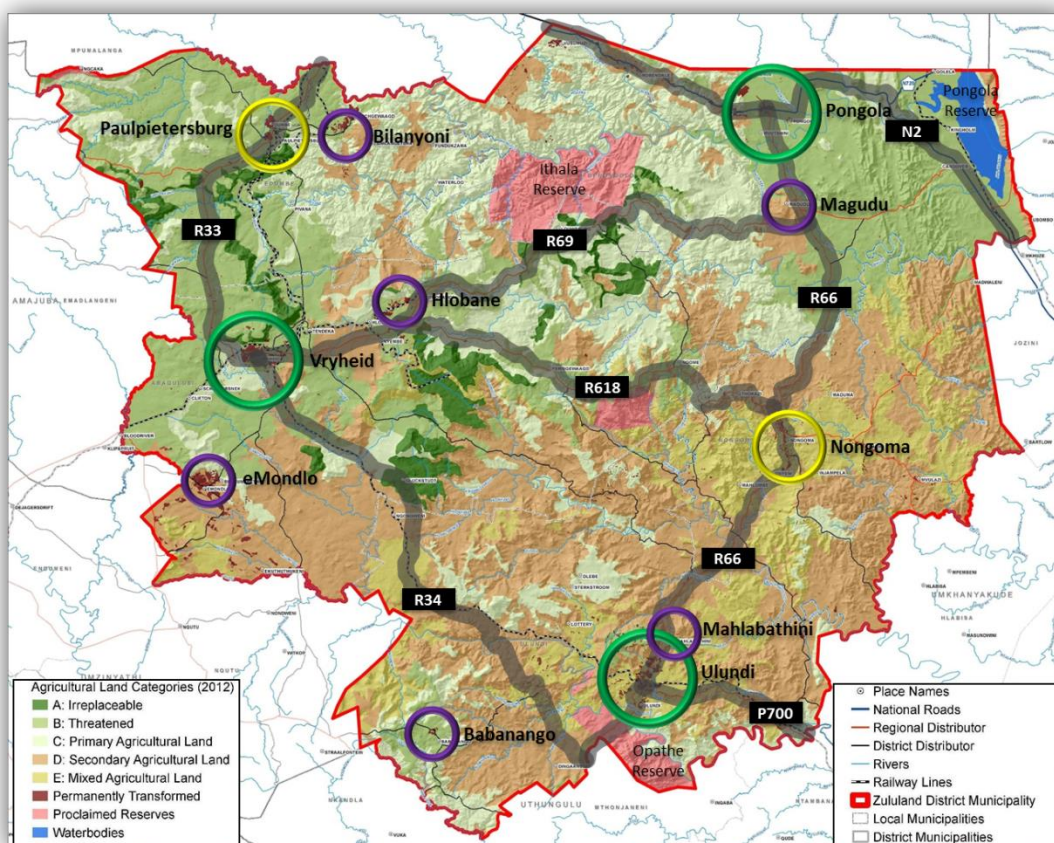
The largest rural settlements are situated on the northern and western boundary of the municipality, near the towns of Belgrade and Godlwayo. All of the lands on which these settlements reside are registered in the name of the Ingonyama Trust Board.

5.5.4 Agriculture (Agricultural Potential Map)

5.5.4.1 Agricultural Only

The intention is to identify areas with agricultural potential in order to expand the agricultural Sector. This will also address the protection of vulnerable agricultural land. The locality of the different levels of agricultural potential is depicted on the image below.

Figure 15: Agricultural Potential



Source: DAFF

The agricultural activities within the Zululand District can be grouped into four distinct areas which deal with arable agriculture, Forestry, Grazing Activities, and Subsistence Agriculture.

The highest potential agricultural land is situated in the northern half of the district and more specifically in the more evenly sloped areas of uPhongolo, Abaqulusi, and eDumbe Local Municipalities.

In general, the subdivision of prime agricultural land will be discouraged. The development of this land for non-agricultural purposes should only be allowed if:

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

The Department of Agriculture Forestry and Fisheries, does not consider anything less than 20 ha as a viable unit, and subsequently subdivision of less than 20ha will not be allowed.

The arable land identified is under severe pressure from settlement expansion and land uses such as mining. Mining activities specifically threatens the areas south of the Hlobane Coronation area where the highest agricultural potential for the district is situated.

As agriculture is one of the main employment sectors in the District and forms a large part of the economic base of three of the five municipalities, it is essential that sound land management approaches be developed and implemented.

The southern parts of the Municipality is characterised by secondary Agricultural Land which coincides with the subsistence agricultural activities. There is still a lot of potential to develop the agricultural sector within these areas, although projects need to be implemented to ensure expansion of the large scale agricultural activities.

It will be necessary to, through a participatory process with traditional authorities and communities undertake a detailed assessment of arable land within the district and more specifically the rural municipalities of Ulundi and Nongoma. It will be necessary to agree on measures to be implemented to on the one hand protect/reserve land, but also on the other, to make it available for intensive agricultural production activities.

Such an investigation should also identify opportunities for irrigation, the development of farming infrastructure (e.g. dams, pipelines, fences and the like). The development of these should be prioritised. With regards to cropping there is a range of options to be considered, which is beyond the scope of this spatial framework to identify. The Bio-Resource Unit information of the National Department of Agriculture Forestry and Fisheries, provides guidelines in this regard. Important opportunities relating to agricultural development to be pursued in the arable areas and areas in close proximity include:

- Implementation of the massification programme of the Department of Agriculture;
- ensuring easy access to relevant extension services;
- input supply opportunities;
- specialist agricultural support opportunities, e.g. ploughing, harvesting etc; and
- Agri-processing opportunities.

Whatever the focus of production activities in the Municipality there should be emphasis on:

- producing firstly for the local market;
- identifying and developing appropriate markets locally; and
- where external markets are to be supplied, established marketing channels must be utilised.

The following sections summarises the agricultural activities per municipality that needs to be supported, and strengthened.

5.5.4.1.1 *Abaqulusi*

Abaqulusi has the highest potential agricultural land with large portions to the south of Hlobane categorised as Irreplaceable Agricultural Land. This also divides the main agricultural potential categories of the municipality in two, with the higher potential agricultural land situated on the western boundary of the Municipality, and the agricultural potential declining to the east.

Agricultural potential on the southern boundary of the Municipality is categorised as secondary agricultural land which has limited capabilities in terms of arability.

The southern parts of the municipality is categorised as Secondary Agricultural Land. Agricultural Production still takes place on these portions, but can be mixed with different land uses.

5.5.4.1.2 *eDumbe*

Agricultural Activities in eDumbe Local Municipality consist of arable agriculture as well as forestry activities. The western side of the municipality has the highest potential agricultural land and subsequently agricultural production should be increased and supported within these areas. The eastern side of the municipality (Bilanyoni eastwards) has a mixture of primary and secondary agricultural land, which can be ascribed to the steep terrain features within this area. This also coincides largely with the occurrence of rural settlements.

5.5.4.1.3 *Nongoma*

The whole municipality of Nongoma has a mixture of Secondary and Mixed Agricultural Land. This can be ascribed to the extreme topographical features, as well as the presence of rural settlements on the more evenly sloped areas. Interventions in these areas should support subsistence farming which will support the war against hunger.

5.5.4.1.4 Ulundi

In similar fashion to the terrain of the southern parts of aBaqulusi and of Nongoma Municipality, Ulundi has extreme topographical features. Combined with the presence of the numerous rural settlements, the largest part of the municipality is categorised as a mixture of secondary and mixed agricultural land. The areas around Babanango are categorised as Threatened Agricultural land and therefore have high agricultural potential. This area is characterised by forestry activities.

5.5.4.1.5 uPhongolo

Although commercial sugarcane production is present in uPhongolo Local Municipality it is due to the presence of the Impala Water board Irrigation Scheme. The eastern, and more evenly sloped areas east of the R66 up to the Pongola Poort dam is classified as threatened, which further relates to the environmental sensitive character of the land. The dryer climate within this area makes it more suitable for grazing and game farming, than for arable agriculture. The proposed game ranching activities area can further be linked to Eco-tourism developments.

The western parts of the municipality is characterised by extreme topographical features, is difficult to farm commercially, and is subsequently characterised as a mixture of Primary and Secondary Agricultural Land.

5.5.4.2 Agricultural Eco Tourism

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

The following distinct areas are included in this land use class:

5.5.4.2.1 uPhongolo Local Municipality:

The area situated east of the R66 and west of the Pongola Poort Dam. These areas are classified as “Threatened Agricultural Land”. This is also sensitive environmental areas. This presents an opportunity to facilitate the merging of the two issues by using the land for game farming, thus leaving it in its natural state. Agricultural and conservation activities can therefore coexist in the same space and time.

5.5.4.3 Protection of Agricultural Land

5.6 Strategic Intervention Areas

The proposed interventions are aligned with the provisions of the KwaZulu-Natal Growth and Development Strategy, where the Strategic Goals have spatial manifestations. The sections below depict the intervention areas for the following Strategic Goals:

- Goal 1: Job Creation;
- Goal 2: Human Resource Management;
- Goal 3: Human & Community Development;
- Goal 4: Strategic Infrastructure;
- Goal 5: Response to Climate Change;
- Goal 6: Governance & Policy;
- Goal 7: Promote Spatial Concentrations

5.6.1 PGDS Strategic Goal 1 – Job Creation

The image below depicts the areas where the strategic objectives from the KwaZulu-Natal Provincial Growth and Development Strategy need to be addressed urgently to allow for overall economic growth of the District.

The following objectives from the PGDS are addressed:

- 1.1 - Unleashing Agricultural Potential
- 1.2 - Enhance Industrial Development through Trade, Investment & Exports
- 1.3 - Improve efficiency of Government-led Job Creation Programmes

The above strategic goals have the collective aim of investing in areas with the potential of obtaining a high “rate of return”. Resources are therefore identified which hasn’t yet reached its full potential and can be developed in order to do so.

Agricultural potential that can be developed is situated within the municipalities of uPhongolo, aBaqulusi and eDumbe LM, where conditions are favourable for agricultural production.

Industrial Expansion is proposed within the aBaqulusi Local municipality where the best developed infrastructure for Industrial Development exists. This can be linked to agro-processing facilities as well and does not have to be purely Industrial Developments.

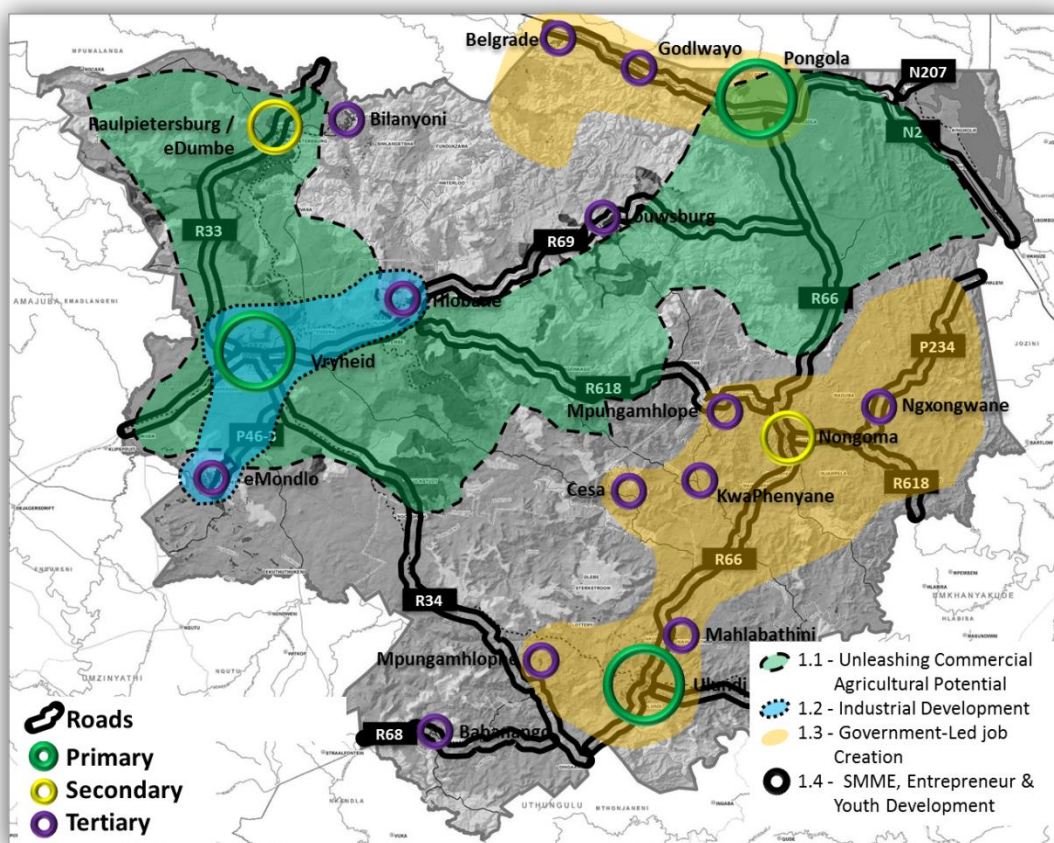
The nodal areas of Ulundi and Nongoma are situated within rural areas with extreme topographical Features. Commercial Agriculture is therefore not viable for this area, and it is proposed that government led jobs through labour intensive infrastructure development be utilised in these areas for job creation.

In addition to the above PGDS objectives mentioned, the following has also been addressed as economic drivers and possible job creators within the district.

- Mining
- Tourism
- Commercial Activities

The below images depicts the locality of these job creators and intervention areas to be exploited.

Figure 16: Spatial strategy to address PGDS Goal 1: Job Creation



Source: Vuka Planning Africa Inc.

Mining

The ZDM Integrated Development Plan, 2013/14 Review indicates that mining decreased within the district since the mid 1990's. The IDP indicates that opportunities do still exist, and includes the following:

- Mine rehabilitation
- Engineering support
- Equipment maintenance and support
- Preparing Environmental Management Plans

Opportunities still exist for small scale mining. Possible minerals to be mined in the District include the following:

- Coal
- Gold
- Quarrying and Sand Winning

The coal-line corridor, which runs from Richards Bay, through Ulundi, Vryheid and Paulpietersburg and on to the mining areas of Mpumalanga, is an important route in the national rail and road network.

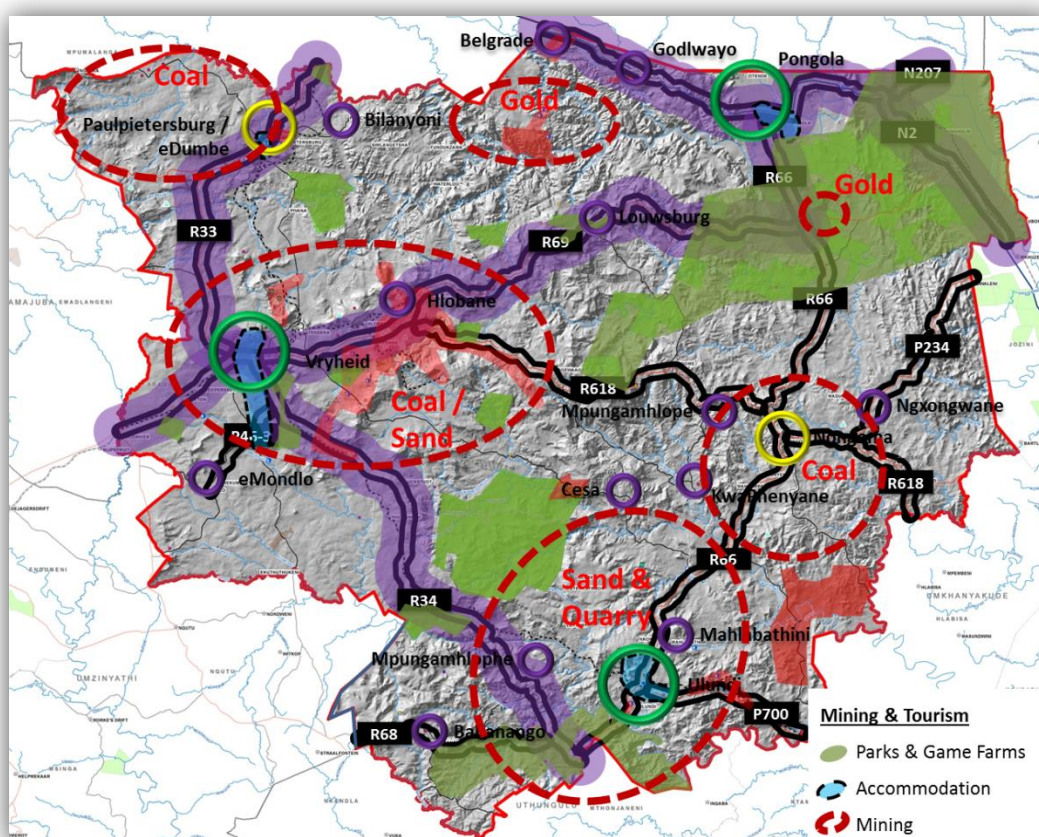
This rail network and the proposed increased capacities for transportation of coal to the Richards Bay Port present opportunities for additional coal mining activities.

Tourism:

The tourism opportunities are placed strategically along the main tourism routes as depicted on the image below. The tourism industry in ZDM is largely linked to eco-tourism activities. Apart from the famous Ithala game Reserve, a large number of game farms & Lodges, as well as hunting farms are operating in the District. Most of the eco-tourism facilities are situated within the eastern part of the District and more specifically the uPhongolo Local Municipality, the remainder of the municipality also lends itself to the development of eco-tourism opportunities. The where these existing facilities are operational should however be strengthened to allow these areas to be marketed as an eco-tourism destination.

There are further a number of hotels, guest houses, and bed and breakfast facilities situated in the nodal areas of Vryheid, Ulundi and Pongola, with limited facilities in Paulpietersburg. Although the tourism facilities in the nodal Areas do not necessarily relate to the Eco-Tourism Industry, the creation of a tourism brand for the District will benefit existing facilities, and increase tourism opportunities. The image below depicts the eco-tourism activities in green, whilst the areas marked in blue indicates large groupings of tourism accommodation. It is clear that all the facilities are highly accessible and in close proximity to the proposed tourism corridor.

Figure 17: Spatial strategy to address PGDS Goal 1: Job Creation – Mining and Tourism



Source: Vuka Planning Africa

Commercial Activities:

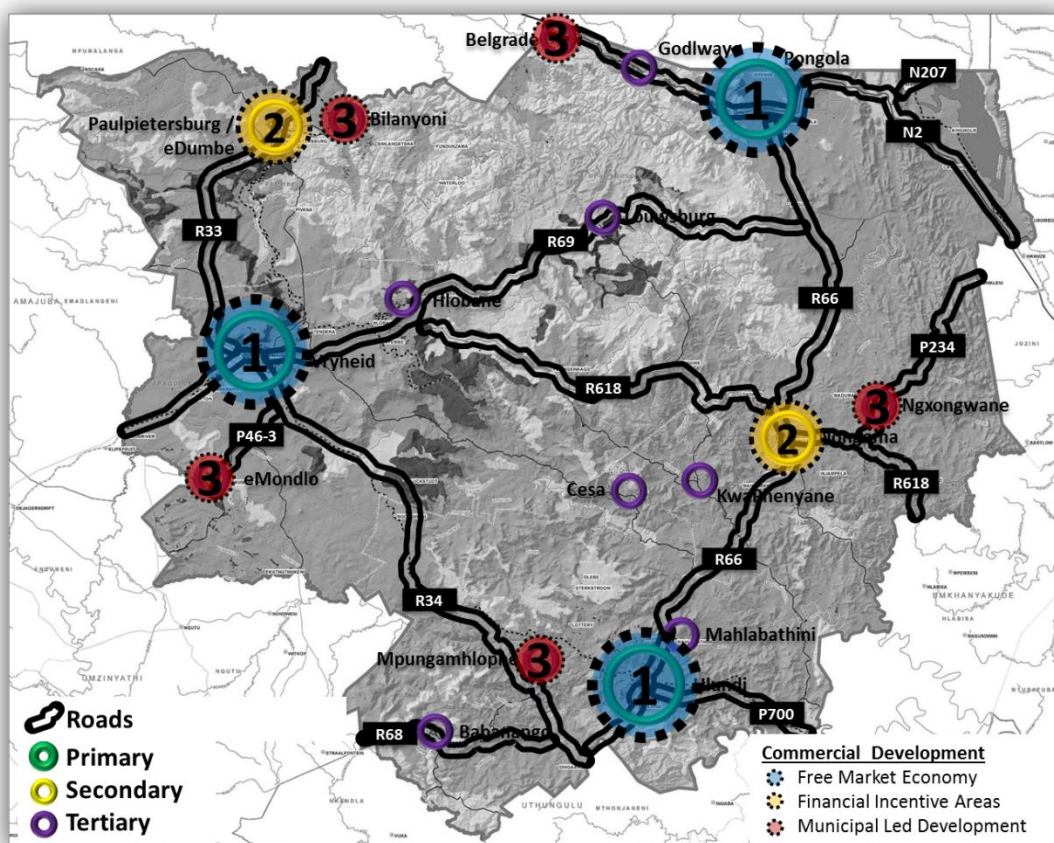
The existing Commercial Activities within the district is directly linked to the function and nodal hierarchy of the nodes on a District Level. In terms of interventions to promote economic growth within these nodal areas the following classification of economic nodes are proposed which is directly linked to proposals for economic interventions.

These categories, and proposals are the following:

Category	Description
Free Market Economy	The economies within these centres are functioning naturally, and needs very little intervention to ensure growth within these areas.
Financial Incentives	These areas have a limited functioning economy. In order to attract investors, it is necessary to incentivise the relocation of businesses to these areas. The strategy would be to develop a vision for investment areas, develop a framework plan for such areas, and ensure the necessary services are available. This may also include conducting of EIA's and ensuring that sites with the necessary land use rights are available.
Government Led Development	These areas are largely situated in rural areas where land is registered in the name of the Ingonyama Trust. Since individual ownership will not be granted, it is necessary to develop these areas in terms of services, and accessibility, and to register "Lease Diagram Plans". This also needs to be linked to Development Framework Plans directing the development of the areas concerned. The serviced sites, which are linked to an existing lease diagram, will make the areas promotable to outside investors.

The image below depicts the areas to be associated with the above mentioned commercial development strategies.

Figure 18: Spatial strategy to address PGDS Goal 1: Job Creation – Commercial Investment Areas



Source: Vuka Planning Africa

The images above depict the Spatial Locality where strategic Interventions are required. The table below highlights the strategies that the PGDS requires to be addressed within these areas. These areas have been identified as there is a dire need to address the areas as highlighted by the Strategic Goals below.

Table 32: Strategies to address PGDS Strategic Goal 1: Job Creation

Objectives	Strategy
1.1 - Unleashing Agricultural Potential	1.1.1 Diversification of agricultural production & markets (including niche markets and agri-processing).
	1.1.2 Expansion of irrigation schemes and water use efficiency.
	1.1.3 Strategy for the development of emerging commercial farmers.
	1.1.4 Protection and rehabilitation of agricultural resources.
1.2 - Enhance Industrial Development through Trade, Investment & Exports	1.2.1 Establish District- level agencies to provide effective business and investor facilitation and support to reduce regulatory burden.
	1.2.2 Mandate appropriate institution or 'body' to act as a broker for special projects.
	1.2.3 Targeted identification and release of affordable zoned & serviced land including sector-specific industrial parks
	1.2.4 Establish a coordinated provincial funding mechanism for LED.
	1.2.5 Support implementation of the SMME, strategies
1.3 - Improve efficiency of Government-led Job Creation Programmes	1.3.1 Support enhanced implementation of the expanded EPWP.
	1.3.2 Expedite the roll-out of the Community Work Programme (CWP).

Source: KZN PGDS 2011

5.6.2 PGDS Strategic Goal 2 – Human Resource Development

This section and the image below discuss and depict the spatial strategies to address Strategic Objective 2: Human Resource Development. The following objectives are addressed:

- 2.1 - Improve Early Childhood Development, Primary and Secondary Education
- 2.2 - Support Skills Alignment to Economic Growth

The image below depicts the areas of intervention for early Childhood Development, and skills development which should be improved to assist with economic growth within areas. In general, early childhood development should occur throughout the municipality, but to identify the areas where there is a more visible need for interventions linked to early childhood development, the ratio of children below the age of 5 was measured against ward populations. This identified areas where efforts should be focused, and is highlighted in red on the below image. To link early childhood development to facilities, all known crèches were spatially located. It is clear that a shortage of facilities exist in the eastern parts of Nongoma LM, as well as Ulundi LM, and the central parts of the District in aBaqulusi LM. A total of 25 crèches have been recorded for the District, in comparison to the vast number of Primary and Secondary Schools in the District.

In similar fashion to the identification of the areas for early childhood development, areas with a high ratio of school going children have been identified. These areas are marked in blue on the below image, but also includes the areas marked in red (early childhood development areas).

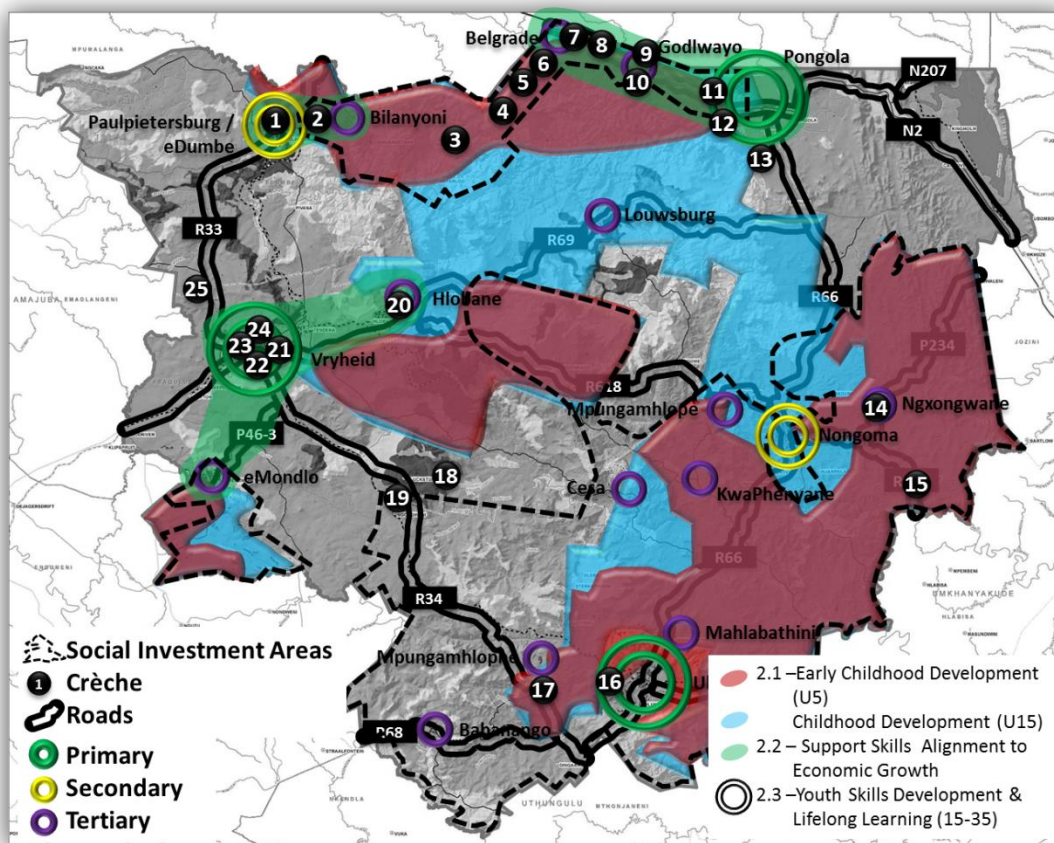
As was demonstrated in the Status quo section of this document, there is no shortage of schools, and the Department of Education should give attention to quality of education within these areas.

Coincidental, both of the above areas discussed are situated within the areas identified by the KwaZulu-Natal Spatial Development Framework, as Social Investment Areas, identifying the poorest of the poor areas, where social infrastructure and community development is required.

The nodal areas were identified within Local Spatial Development Frameworks as distribution points for service provision. Subsequently qualified personnel and the necessary resources should be deployed to areas from where childhood development can be facilitated. These nodal areas should also serve as the areas for youth skills development, through the provision of tertiary education facilities such as FET colleges.

Areas within the aBaqulusi LM (Vryheid Hlobane and Emondlo), eDumbe LM (Paulpietersburg, eDumbe & Bilanyoni) and uPhongolo LM (Pongola, Godlwayo & Belgrade) has economic potential that can only be tapped if the skills of the communities are developed to allow for them to participate in the economy. The economic base within these municipalities is largely private sector driven, and therefore skills development to allow for active participation in this economy is required and could be achieved through tertiary training facilities.

Figure 19: Spatial strategy to address PGDS Goal 4: Human Resource Development



Source: Vuka Planning Africa Inc.

The images above depict the Spatial Locality where strategic interventions are required. The table below highlights the strategies that the PGDS requires to be addressed within these areas. These areas have been identified as there is a dire need to address the areas as highlighted by the Strategic Goals below.

Table 33: Strategies to address PGDS Strategic Goal 2: Human Resource Development

Goal	Strategy
2.1 - Improve Early Childhood Development, Primary and Secondary Education	2.1.1 Review and resource teacher education and capacity development programmes with focus on improving the competence levels of teachers.
	2.1.2 Support effective governance at schools with focus on Principals and management structures.
	2.1.3 Develop and implement schools water, sanitation and electricity programme.
	2.1.4 Develop and implement programme to enhance logistical support to facilities.
	2.1.5 Promote use of new technology to encourage distance learning opportunities.

	2.1.6	Focus on girl child challenges to reduce dropout level of girls.
2.2 - Support Skills Alignment to Economic Growth	2.2.1	Develop skills plans for lead economic sectors per district municipality based on skills demand and implement in partnership with tertiary institutions.
	2.2.2	Assess functionality of technical training institutions.
	2.2.3	Expand school counselling & vocational guidance services.

Source: KZN PGDS 2011

5.6.3 PGDS Strategic Goal 3 – Human & Community Development

This section and the image below discuss and depict the spatial strategies to address Strategic Objective 2: Human Resource Development. The following objectives are addressed:

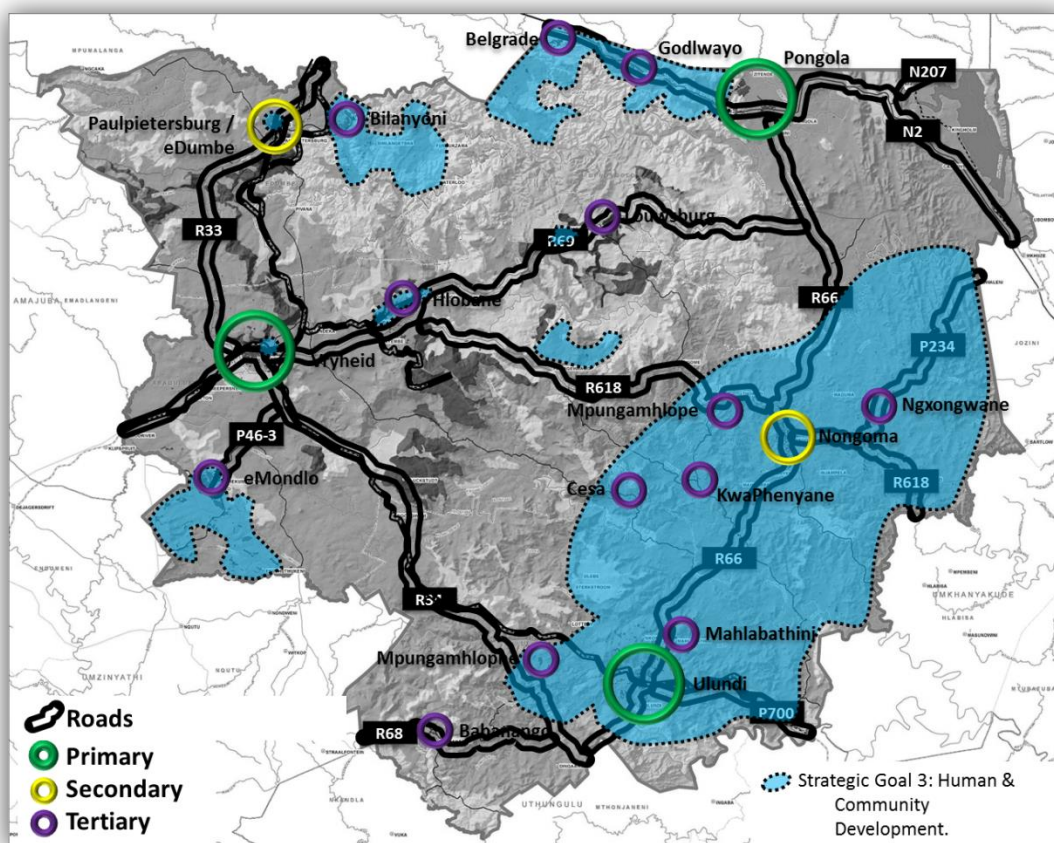
- 3.1 - Poverty Alleviation & Social Welfare
- 3.2 - Enhancing Health of Communities and Citizens
- 3.3 - Safeguard Sustainable Livelihoods & Food Security
- 3.4 - Sustainable Human Settlements
- 3.5 - Enhancing Safety & Security
- 3.6 - Advance Social Cohesion

The above strategic goals are to a large extent applicable to the same geographic area, as these are aimed at developing and improving the lives of communities with the highest levels of deprivation. The areas in need of these interventions are largely situated on Ingonyama Trust Land. Subsequently Large portions of the Ulundi and Nongoma Local Municipalities are earmarked for interventions under this Strategic Goal.

In addition to the identified areas hatched in blue, the nodal areas as well as all new housing projects should be targeted for initiatives related to Human and Community Development. Within achieving this goal, economic development is not possible as the population who participates in the economy needs to be healthy to do so.

The image below identifies the most vulnerable and most deprived areas within the District, but it needs to be noted that all these principles are evenly applicable to urban areas as well. It is therefore necessary that new urban or rural developments should address the strategies outlined in the table below.

Figure 20: Spatial strategy to address PGDS Goal 3: Human & Community Development



Source: Vuka Planning Africa Inc.

Table 34: Strategies to address PGDS Strategic Goal 3: Human & Community Development

Goal	Strategy
3.1 Poverty Alleviation & Social Welfare	<p>3.1.1 Promote & Accelerate roll-out of Sukuma Sakhe Programme.</p> <p>3.1.2 Rationalization & alignment of the Community Development Approach.</p> <p>3.1.3 Eliminate corruption and fraud in the Social Grant System.</p> <p>3.1.4 Investigate negative impacts of social grant system.</p> <p>3.1.5 Develop a comprehensive social data-base to facilitate integrated management of grants, education and other support programmes.</p>
3.2 Enhancing Health of Communities and Citizens	<p>3.2.1 Development and implementation of Comprehensive Primary Health Care (includes nutrition programmes, technology, equity, address disease burden, address child and maternal mortality).</p> <p>3.2.2 Accelerate HIV/AIDS intervention programmes with specific focus on knowing your status programme.</p> <p>3.2.3 Design equitable access to Health & Special Facilities ... roads and facilities.</p> <p>3.2.4 Promote physical and mental health programmes.</p> <p>3.2.5 Promote awareness programmes against substance abuse, linked to resistance education with focus on preventative and promotion of health service.</p>

3.3 Sustainable Livelihoods & Food Security (Physical capital, human capital, financial capital, social capital & natural capital.)	3.3.1	Developing infrastructure for local production.
	3.3.2	Support to informal economy - support to local enterprises.
	3.3.3	Skills development to support local production.
	3.3.4	One-Home One-Garden.
	3.3.5	Parma-Culture Concept Practices.
	3.3.6	Roll-Out of School & Community Gardens.
	3.3.7	100ha Programme by TC's.
	3.3.8	Establish early warning systems
3.4 Sustainable Human Settlements	3.4.1	The establishment of a joint provincial forum addressing Outcome 8 (human settlements) and Outcome 9 (Responsive, accountable governance) to ensure co-ordinated and integrated development planning i.e. provision of facilities and to reduce household cost (transport, energy, support facilities, communal buying).
	3.4.2	Implement polycentric nodal development in line with the PSEDS to achieve sustainable livelihoods.
	3.4.3	Sustainable Human Settlement Strategy and slums clearance programme
3.5 Enhancing Safety & Security	3.5.1	Promote Designing for Community Protection through Environmental Design – to ensure safety.
	3.5.2	Strengthen programmes to curb violence against the vulnerable with focus on women, children and the elderly.
	3.5.3	Strengthen partnership between civil society, business and criminal justice system at local level (Business Against Crime and the Community Policing Forums).
	3.5.4	Establish Educational programmes on Safety for Children.
3.6 Advance Social Cohesion	3.6.1	Develop a social cohesion strategy for the province (to cover responsible citizenry, moral regeneration, ethics at work etc).
	3.6.2	Develop Industry-orientated arts & culture programmes.
	3.6.3	Develop programme on embracing foreign residents
3.7 Promote Youth, Gender and Disability Advocacy & The Advancement of Women	3.7.1	Develop programme for Economic Empowerment.
	3.7.2	Develop programme for Gender Advocacy (youth).
	3.7.3	Develop programme for Profiling Youth Challenges (Municipal Level).
	3.7.4	Expand Youth Ambassador Programme.
	3.7.5	Develop programme to Promote Extramural Activities (sport & cultural).

Source: KZN PGDS 2011

5.6.4 PGDS Strategic Goal 4 – Strategic Infrastructure

This section and the image below discuss and depict the spatial strategies to address Strategic Objective 4: Strategic Infrastructure. The following objectives are addressed:

- 4.2 - Develop Road & Rail Networks
- 4.3 - Develop ICT Infrastructure
- 4.4 - Improve Water Resource Management

The image below identifies the strategic intervention areas that will facilitate the economic growth of the municipality, and assist with other strategic goals such as Human Development which cannot occur without the necessary infrastructure.

The **transportation network** is the only manner for transporting economic goods and subsequently an integrated system is required to allow for a fully functional district.

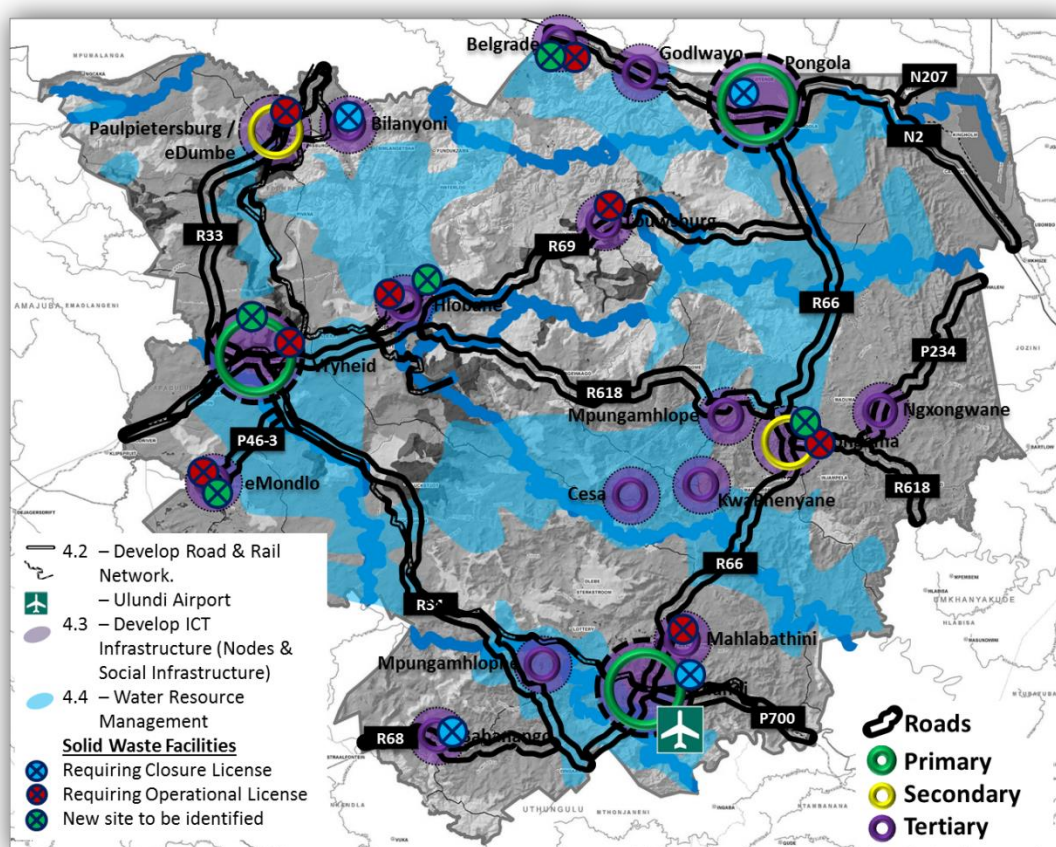
Water Management Areas depicts the areas where aquatic ecological support areas provides environmental services to the district, and is also the water production areas of the District and the Province.

Information & Communications Technology is critical to ensure competitiveness with economic competitors, and ensuring accessibility to the global markets. It is therefore important that ICT is highly accessible within the Nodal Areas. It further provides means to the municipality and government departments to fulfil its functions more efficiently. ICT further allows for distance learning from e-centres. This is also important for primary education, as this will allow for research to be conducted. This therefore forms an integral part of community development, as well as economic development.

Solid Waste facilities are critical not only as an infrastructural resource, but as a resource to prevent environmental degradation. The ZDM Solid Waste Facilities Backlog Study considered conditions of existing facilities and proposed new facilities in strategic localities according to the need and operational requirements and capabilities of the municipalities.

The figure below depicts the above-mentioned infrastructure.

Figure 21: Spatial strategy to address PGDS Goal 4: Strategic Infrastructure



Source: Vuka Planning Africa Inc.

The image above depicts the Spatial Locality where strategic interventions are required. The table below highlights the strategies that the PGDS requires is addressed within these areas. These areas have been identified as there is a dire need to address the areas as highlighted by the Strategic Goals below.

Table 35: Strategies to address PGDS Strategic Goal 4: Strategic Infrastructure

Goal	Strategy
4.2 - Develop Road & Rail networks	4.2.1 Establish a dedicated freight link: Durban Port to Inland Hub.
	4.2.2 Expansion of Coal Rail Link.
	4.2.3 Extend rural road access & maintain secondary roads.
	4.2.4 Implement the Integrated Passenger Strategy (PRASA) - High Speed Airport Rail Link
	4.2.5 Expand and maintain the timber Branch Lines.
4.3 - Develop ICT Infrastructure	4.3.1 Expand community access to broadband services.
	4.3.2 Increase bandwidth (speed) for economic competitiveness
4.4 - Improve Water Resource Management	4.4.1 Finalise and implement the Provincial Water Strategy.
	4.4.2 Rationalise and extend Water Board jurisdictions to cover the full Province.
	4.4.3 Policy and guidelines on the inclusion of Catchment and River Management in all land use management schemes.
	4.4.4 Research and promote skills development for more localised Water Harvesting (linked to Sustainable Human Settlements)

Source: KZN PGDS 2011

5.6.4.1 Ulundi Airport

The Ulundi Airport will play an important role in the marketing of Zululand District as a tourism, as well as business destination. Although the airport is currently operated by the KwaZulu-Natal Provincial government, a feasibility study has been drawn up, proposing that the airport be transferred to the Zululand District Municipality. The District is expected to benefit from the airport on the following activities:

Sector	Activity
Tourism Development	Market Air Connectivity to Travel Agencies
	Establish Destination Resort at P700 Entrance to Hluhluwe/Umfolozi
Business and Services Sector	Draw Freight Services Company to Airport
	Establish Post Office Depot at Airport
	Flight Training School For Emerging Pilots
	Agriculture Opportunities Related to Airport - link to Dube Trade Port

Source: Ulundi Airport - Draft 1 - Implementation Plan - 12 June

5.6.4.2 National Strategic Integrated Project 1 (SIP1)

This project relates to investment in rail, water pipelines, energy generation and transmission infrastructure to catalyse unlocking of rich mineral resources in Limpopo. Mining includes coal, platinum and other minerals for local use and export, hence the rail capacity is being extended to Mpumalanga power stations and for export principally via Richards Bay and in future Maputo (via Swaziland link). The additional rail capacity will shift coal from road to rail with positive environmental and social benefits. Supportive logistics corridors will help to strengthen Mpumalanga's economic development.

With the railway line mentioned running through ZDM, there is opportunity to provide in additional needs associated with the logistics corridors, and possibly establish new contracts for coal delivery, linked to the ZDM mining activities, which needs to be linked to the coal exports associated with SIP1.

It is further proposed that a "Logistics Corridor Study" be conducted to determine how the ZDM can address, and tap into the opportunities related to the SIP1 project traversing the municipality.

5.6.4.3 Additional Water Storage Facilities (Dams)

To address the current and future water shortages, the ZDM, and association with the Department of Water Affairs are planning a number of additional dams to be constructed. Although information was requested, it was not available for perusal during compilation of this report, and the implementation strategy, and specific locality of these dams will be included in the final report.

5.6.4.4 Green Economy Informants Related to Electricity Production

The PGDS indicated that KwaZulu-Natal has some of the highest hydro-electrical potential within South Africa due to the velocity of the water flow in its rivers. Both macro and micro hydro-electricity production has significant potential in the Province and the District. Other forms of alternative energy production such as wind, solar and biomass generation have also shown potential within the Province and should further be analysed and planned for.

Additional strategies should be developed for the implementation of alternative energy sources.

5.6.5 PGDS Strategic Goal 5 – Response to Climate Change

This section and the image below discuss and depict the spatial strategies to address Strategic Objective 4: Strategic Infrastructure. The following objectives are addressed:

- 5.3 – Manage Pressures on Biodiversity

The need for a response to climate change stems from the change in natural occurrences, and the possible impacts the change in climate can have on the population of the KwaZulu-Natal Population.

Subsequently, this section does not only deal with pressures on bio-diversity, but also depicts possible disaster areas, with the aim of highlighting areas where special precautions are necessary to prevent disasters, or to prepare for possible disasters. The possible disaster areas were sourced from the **Level 1 Disaster Management Plan** prepared by SRK Consulting for the Zululand District Municipality.

In addition to “Pressures on Biodiversity” the following aspects were depicted to assist with disaster management:

- Areas of High Vulnerability
- Levels of Resilience to cope with disasters
- Air Pollution
- Drought
- Fire

5.6.5.1 Eco System Services

The Biodiversity Sector Plan for the Zululand District identified areas where the natural environment provides ecological services to the district.

Ecological Support areas are areas that are not essential for meeting biodiversity targets but which nevertheless play an important role in supporting the ecological functioning of Critical Biodiversity Areas and/or in delivering ecosystem services that support socio-economic development, such as water provision, flood mitigation or carbon sequestration. Area selection was aimed to achieve all the biodiversity targets in the most efficient spatial configuration.

The services provided by the Terrestrial, as well as aquatic Ecological support areas are depicted in the table below.

Table 36: Terrestrial and Aquatic Ecosystem Services

Terrestrial Ecosystem Services	<ul style="list-style-type: none"> • Buffers against natural hazards such as fire and floods; • Regulation of water supply; • Forage for grazing livestock and wild animals; • Provision of food, fibre, medicinal and cosmetic plants; • Provision of cleaner air; • Improved resilience against climate change by storage (above- and below-ground) of excess carbon released as carbon dioxide through
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	burning fossil fuels; <ul style="list-style-type: none"> • Support of the horticultural and wildflower industries; • Provision of natural spaces for recreation and tourism; and • Contribution to natural and cultural heritage
Aquatic Ecosystem Services	<ul style="list-style-type: none"> • Improve water quality through filtering and purifying water, trapping sediment, controlling erosion (thereby minimising excessive sedimentation) and recharging aquifers; • Increase water quantity through storing flood waters and supporting stream base flow during the dry season; • Provide a wildlife habitat for amphibians, birds, fish and mammals for all or portions of their life cycles; • Provide water for agricultural, industrial and domestic use; • Attenuate and regulate floods; • Provide food and medicinal plants; • Transport and / or purify biodegradable wastes; • Support tourism, recreational and cultural use; and • Enhance property values

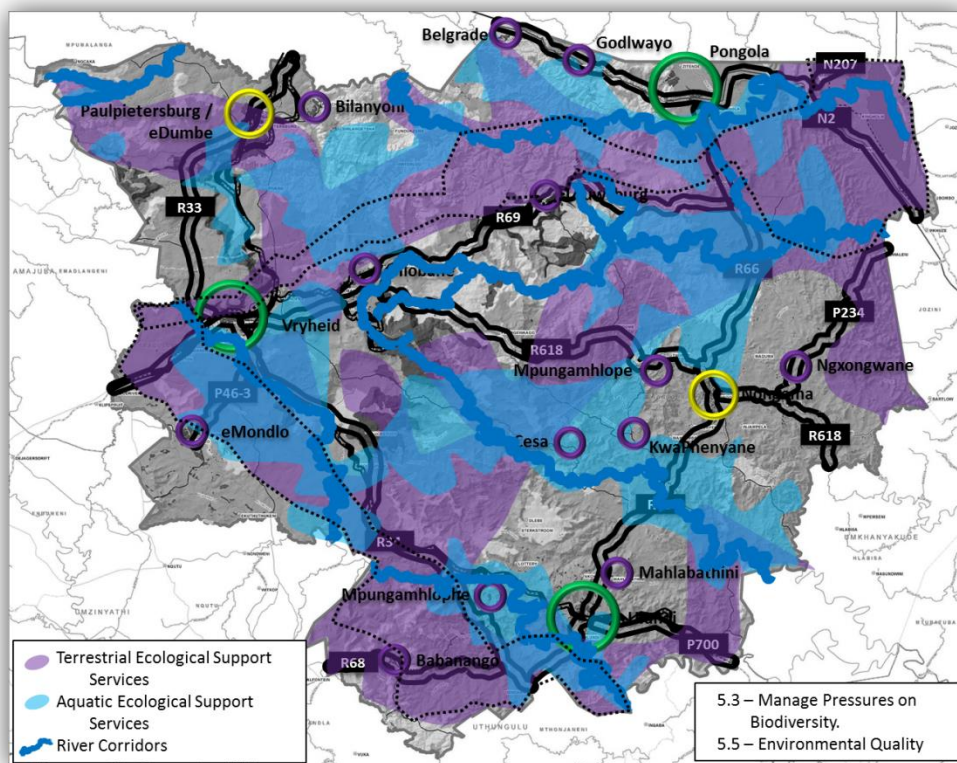
Source: ZDM Biodiversity Sector Plan 2010

The above environmental services are provided within the areas highlighted on the image below. The image below is linked to, and should be read in conjunction with the Zululand District Municipality Biodiversity Sector Plan, which provide for specific land use guidelines linked to the terrestrial and aquatic ecological support areas. The Biodiversity Sector Plan provides for a set of intricate land use proposals which seems like it is preventing development from happening in specific areas. This is not the case, as the document tries to highlight certain areas of high sensitivity, which needs to be investigated further before developments continue.

Climate change further influences the impact of weather patterns on the natural environment, and subsequently the population that interacts with the environment. Subsequently disaster management aspects are also addressed within this section.

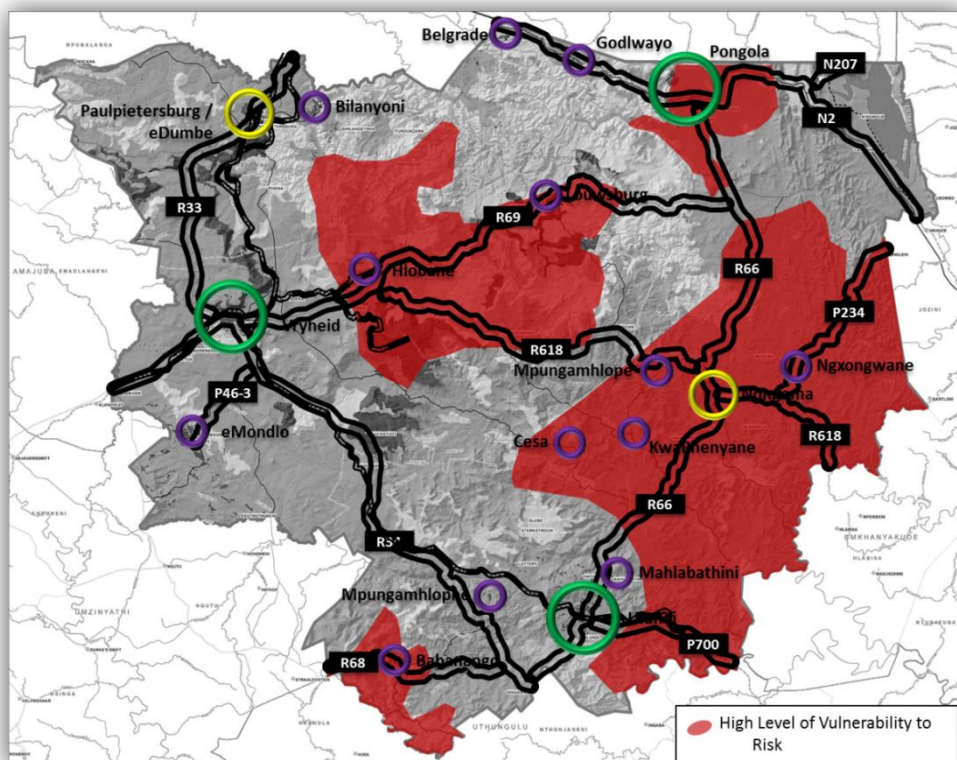
The image below depicts the areas identified earlier as environmentally sensitive, and which is important for maintenance of ecological and biodiversity integrity.

Figure 22: Spatial strategy to address PGDS Goal 5: Pressures on Biodiversity



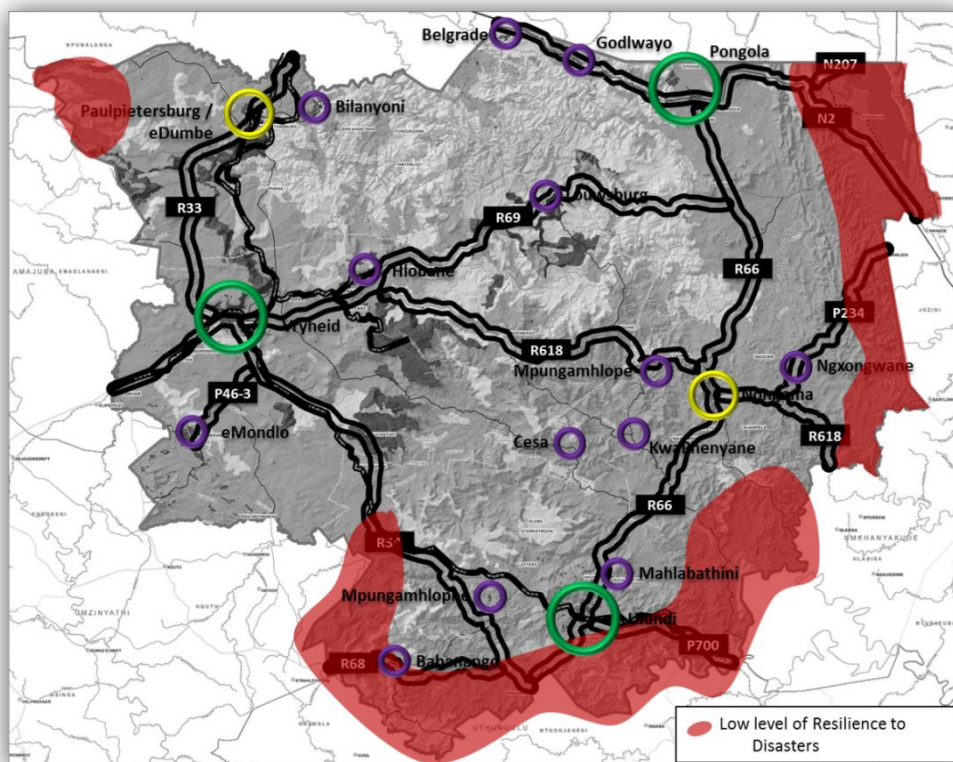
Source: Vuka Planning Africa Inc.

Figure 23: Spatial strategy to address PGDS Goal 5: Vulnerability to Disaster



Source: ZDM Disaster Management Plan

Figure 24: Spatial strategy to address PGDS Goal 5: Resilience towards disasters



Source: ZDM Disaster Management Plan

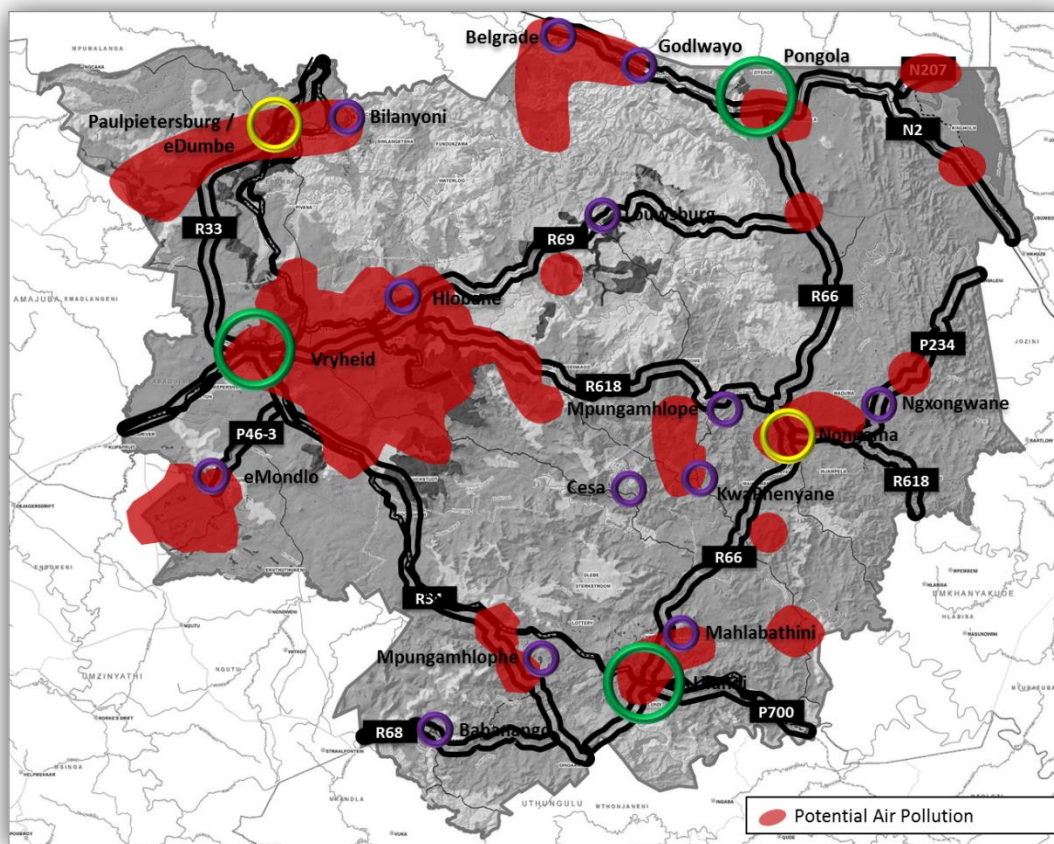
Air Pollution

Air pollution is observed in industrial areas, as well as areas where fuel is used for everyday use instead of electricity. This is clear when considering the “Scattered Pattern” as depicted on the below map, with industrial air pollution originating from the nodal areas. The large area to the east of Vryheid contains a number of mines, thus explaining the high possibility of air pollution in this region.

The following strategies are proposed by the Disaster Management Plan to deal and monitor with possible air pollution.

- **Industrial Pollution**
 - Monitor industrial related air pollution, in areas where applicable.
 - Quarterly/yearly reports;
 - Bylaws;
 - License Requirements;
 - Possible Polluter pays measures
 - Industries providing proof of prevention/mitigation measures
- **Informal settlements**
 - Awareness and subsequent minimisation of air pollution in communities that utilise fuel for heat and cooking, instead of electricity.
 - Awareness programmes in informal settlements
 - Pamphlets and public meetings where community leaders urge community to utilise electricity rather than fires, where possible

Figure 25: Spatial strategy to address PGDS Goal 5: Potential Air Pollution



Source: ZDM Disaster Management Plan

The eastern part of the District is known to be a very dry area, with sugarcane flourishing only because of the irrigation scheme that was established. The larger part of especially the uPhongolo Local Municipality is utilised for game farming due to the dry nature of the environment.

Drought will impact on the following:

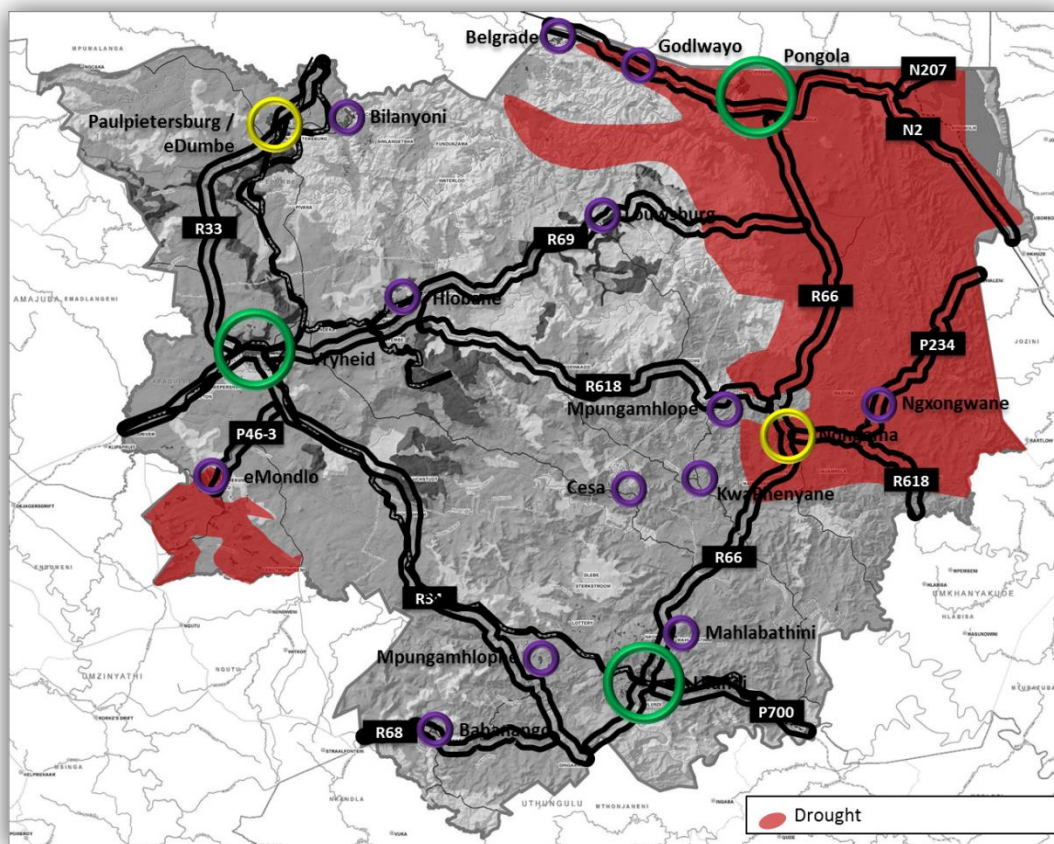
- Quantity of water available for consumption. This will impact on service delivery and the need to make alternative arrangements with regards to water
- Profitability of the game farming activities, thus impacting on the economic base of the District.

The following strategies were highlighted as interventions to address drought:

- Implement Early-Warning System
- Training / Awareness Raising related to Drought resistant agriculture
- Alternative dams and/or cross-border water supply negotiations
- Installation of water collection and storage containers in strategic locations
- Installation of collection and storage containers at industries and organisations
- Installation of collection and storage containers at private homes
- Ground water resources. Ground water resources usability known

Although the whole of the municipality will be impacted upon negatively by a drought, the areas with the highest negative impact, is being depicted on the image below.

Figure 26: Spatial strategy to address PGDS Goal 5: Drought



Source: ZDM Disaster Management Plan

According to the ZDM Disaster Management Plan, risks associated with fires are considered a high risk in the ZDM. This is ascribed to the dry nature and characteristics of the natural environment, and the role of agriculture in the district. Further there are large undeveloped and rural areas within the Zululand District. With the change in climate and the changing weather patterns, the dry periods within KZN might increase, which will increase the risk of fire. It is therefore necessary to implement strategies to prevent fire as far as possible, and make sure that such a threat can be responded to.

It is necessary to prevent, and be able to respond to fire hazards in the following areas:

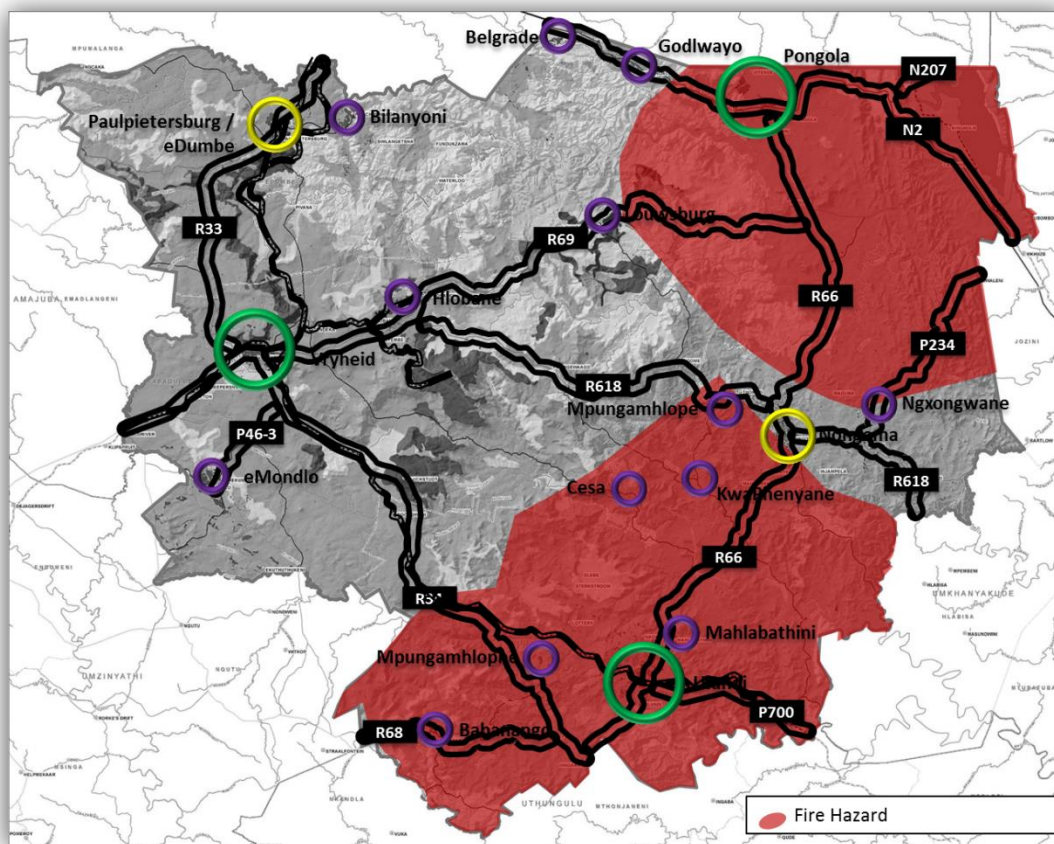
- Formal & Informal Settlements / Urban Area
- Rural Settlements
- Veld/Forest

The following strategies are proposed by the ZDM Disaster Management Plan;

- Increase Capacity to Respond to Fires
- Implement program to upgrade sub-standard housing / buildings
- Implement Awareness Program

Although all urban areas have an inherent risk to fire, the below image depicts the areas most vulnerable to fires due to the nature of settlements, as well as the nature of the environment.

Figure 27: Spatial strategy to address PGDS Goal 5: Fire Hazard



Source: ZDM Disaster Management Plan

Although only a single strategy have spatial manifestations the table below depicts all strategies related to Climate Change as contained in the Provincial Growth and Development Strategy (2011).

Table 37: Strategies to address PGDS Strategic Goal 5: Response to Climate Change

Goal	Strategy
5.1 - Increase Productive Use of Land	5.1.1 Promote Sustainable agricultural land-use practices. 5.1.2 Establish a Policy and Regulatory Framework for the Reduction of Land Degradation and enhance Land Care programme. 5.1.3 Develop a Provincial Strategic Environmental Framework for the province towards Strategic Planning for Biodiversity Conservation.
5.2 - Advance Alternative Energy Generation	5.2.1 Development of Provincial Alternative Energy Strategy with specific focus on Hydro Electricity potential. 5.2.2 Programme of Alternative Energy demonstration projects. 5.2.3 Establish a provincial Carbon Credit Programme.
5.3 - Manage pressures on Biodiversity	5.3.1 Formulate regular provincial State of the Environment Reports in order to monitor progressive change in biodiversity. 5.3.2 Integrate Coastal Zone Management within the Province. 5.3.3 Establish a management agency for the uKhahlamba- Maluti TFCA.
5.4 - Disaster Management	5.4.1 Continuous Research and Monitoring of Climate Change and Variability. (Agricultural Response to Rainfall Variability, Database of environmental change factors creating hotspots due to climate change) 5.4.2 Formulation of Provincial Climate Change Disaster Response Plans.

	5.4.3	Strengthen Provincial and District Disaster management capacity.
5.5 - Environmental Quality	5.5.1	Monitoring of Air Quality at a provincial level.
	5.5.2	Co-ordination of the Systematic reduction in Carbon Emissions and other drivers of Stratospheric Ozone Depletion.
	5.5.3	Establishment of localised waste management programmes (including Reduction, Reusing, Recycling and Rehabilitation projects).

Source: KZN PGDS 2011

5.6.6 PGDS Strategic Goal 6 – Governance & Policy

Although the strategies as outlined in the PGDS does not have specific Spatial Manifestations, Inter Governmental Relations are critical in managing land use, and directing growth within a municipal area.

Subsequently this section highlights and visually depicts the institutional arrangements required to facilitate growth and the implementation of the Spatial Development Framework.

The table below depicts the intergovernmental relations required to implement and manage the SDF.

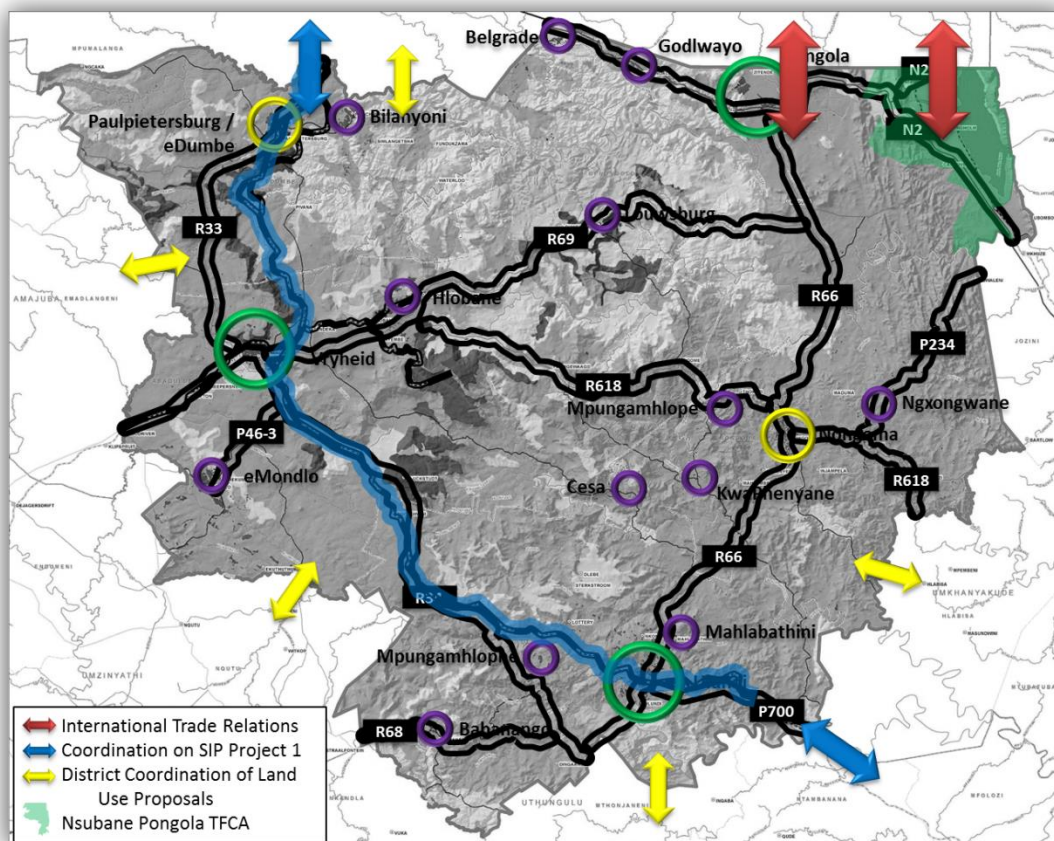
Table 38: Inter Governmental Relations required to coordinate alignment between development efforts

International Relations	<p>The two Border Posts connecting ZDM and the Kingdom of Swaziland, have the following opportunities:</p> <ul style="list-style-type: none"> Golles Border Post – Economic opportunities related to tourism development. The proposed operation of the Post on a 24 hour basis needs to be negotiated and managed. This will allow for ease of movement and an increased volume of tourism and freight traffic through the region. Onverwacht Border Post – Economic opportunities related to Sugarcane farming. The TSB Sugar mill is highly accessible for sugarcane farmers operating on the south of Swaziland. Special arrangements for ease of cross border movement should be made with these farmers, to increase economic opportunity for South Africa. Nsubane Pongola Transfrontier Conservation Area – Coordination needs to address aspects such as people crossing border, management of the park on the two sides of the international border, prevention of animal diseases crossing over the international border etc.
Coordination on Strategic Integrated Project 1 (SIP1)	<p>This project relates to investment in rail, water pipelines, energy generation and transmission infrastructure to catalyse unlocking of rich mineral resources in Limpopo. Mining includes coal, platinum and other minerals for local use and export, hence the rail capacity is being extended to Mpumalanga power stations and for export principally via Richards Bay and in future Maputo (via Swaziland link). The additional rail capacity will shift coal from road to rail with positive environmental and social benefits. Supportive logistics corridors will help to strengthen Mpumalanga's economic development.</p> <p>With the railway line mentioned running through ZDM, there is opportunity to provide in additional needs associated with the logistics corridors, and possibly established new contracts for coal, linked to the ZDM mining activities, which can be linked to the coal exports associated with SIP1.</p>
Provincial Coordination	<p>Coordination on provincial level relates to the fact that the SIP1 project is aimed at economic development of Mpumalanga Province, although KZN and more specifically ZDM can also benefit from the project.</p> <p>Further, alignment between SDF provisions and implementation is required between ZDM and Gert Sibande Districts.</p>
District Coordination	<p>The implementation and provisions contained in SDF's of adjacent districts needs to be coordinated. Alignment of development efforts between ZDM and the following district municipalities needs to be facilitated:</p> <ul style="list-style-type: none"> Amajuba DM

- uMzinyathi DM
- uThungulu DM
- uMkhanyakude DM

Source: Vuka Planning Africa

Figure 28: Spatial strategy to address PGDS Goal 6: Governance & Policy



Source: Vuka Planning Africa

Table 39: Strategies to address PGDS Strategic Goal 6: Governance & Policy.

Objectives	Strategy
6.1 – Building Policy and Strategy Coordination	6.1.1 Develop Inventory of Policy Instruments and a strategy alignment framework
	6.1.2 Strengthen the effectiveness of the Provincial Cabinet Cluster System
	6.1.3 Develop a stronger provincial coordinating structure for collaboration between Provincial Government and municipalities.
6.2 - Strengthen Inter-Governmental Relations (IGR) System	6.2.1 Strengthen linkages between National & Provincial Planning Commissions
	6.2.2 Strengthen the IDP Improvement Programme (focused at District level)
	6.2.3 Improve relationship between Traditional Councils, Municipalities and Departments
	6.2.4 Develop an Integrated Funding and Implementation Management Framework
6.3 - Build Government Capacity	6.3.1 The rationalisation of municipal boundaries and disestablishment of non-functioning and unviable local municipalities
	6.3.2 Develop an integrated HRD and professional support programme for the public sector in KZN
	6.3.3 Promote shared services amongst municipalities
	6.3.4 Strengthen the capacity of the Provincial Nerve Centre and Provincial

		Planning Commission to monitor and evaluate Government performance.
6.4 - Eradicate Fraud and Corruption	6.4.1	Provincial Operation Clean Audit, and
	6.4.2	Fast track disciplinary processes and effective criminal prosecution.
6.5 - Promote Participative, Facilitative and Accountable Governance	6.5.1	Support an effective KZN Economic Council
	6.5.2	Promote the establishment and coordination of local development agencies at District level.
	6.5.3	Strengthen functionality of Ward Committees

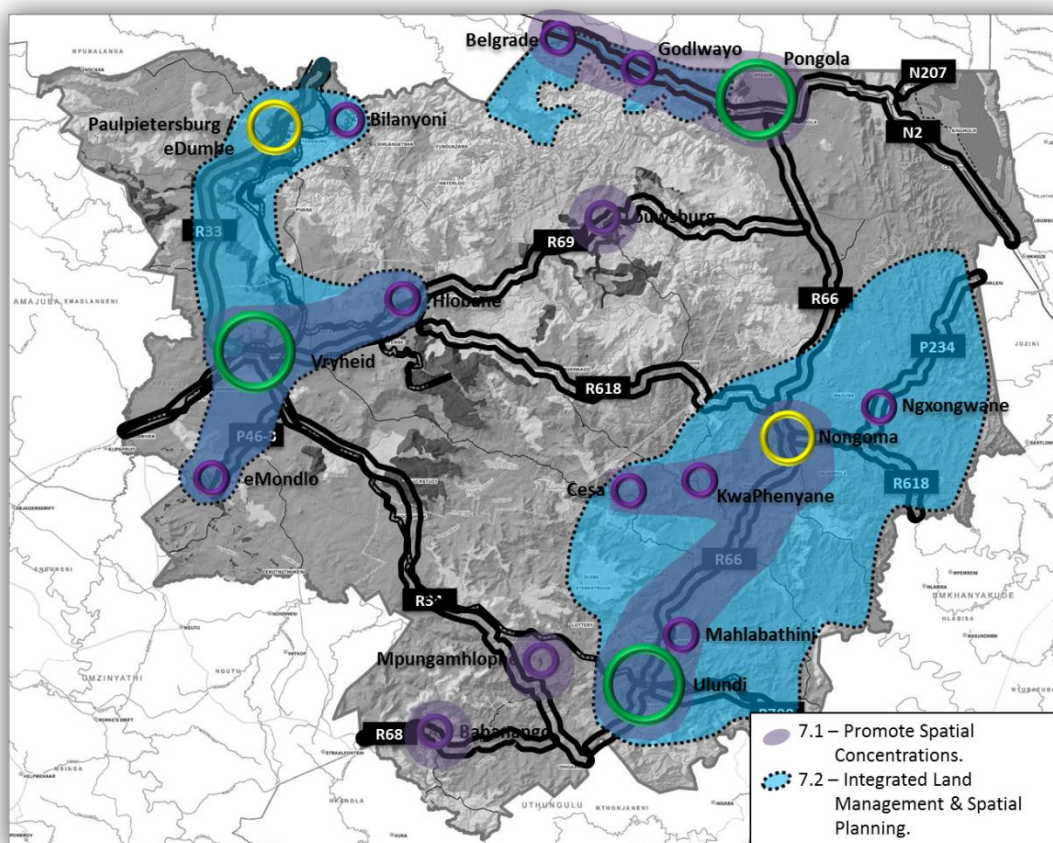
5.6.7 PGDS Strategic Goal 7 – Spatial Equity

This section and the image below discuss and depict the spatial strategies to address Strategic Objective 7: Spatial Equity.

The following objectives are addressed:

- 7.1 – Promote Spatial Concentration
- 7.2 – Facilitate Integrated Land Management and Spatial Planning

Figure 29: Spatial strategy to address PGDS Goal 7: Spatial Equity



Source: Vuka Planning Africa Inc.

Spatial planning underpins economic, environmental and social development in order to:

- Achieve sustainability
- Address climate change
- Ensure place-making
- Ensure environmental protection and enhancement

- Achieve economic development
- Address service delivery – infrastructure, transport, energy, utilities and flood management.

In addressing the objective of Spatial Equity, it is the intention to ensure that all citizens of the District have equal access to social infrastructure, commercial economic and employment opportunities. The intention is to address the objectives as follows:

- **Promote Spatial Concentrations:**
In order to provide social infrastructure and civil infrastructure to the population in a cost effective manner, it is necessary to create thresholds where such facilities can be provided. The most obvious areas for densification are the nodal areas which were identified due to the existing densities which exist there. Communities have settled away from nodal areas, and where the culture of settling away from nodes cannot be altered, it needs to be ensured that further sprawl does not occur. Even though densities might develop in other areas, which will later be identified as nodal areas for service delivery. The District should take proactive action, by implementing policies to develop nodal areas first where the highest “Social Rate of Return” or where the largest number of people can be reached to be serviced/developed first.
- **Integrated Land Management and Spatial Planning:**
The areas targeted for this goal is strategic in the following ways. It consists of areas where the economic potential of the District can be realised by ensuring integrated planning and development of the economic and industrial base around Vryheid. On the other hand it relates to the rural areas where direction is required to guide development of this area and relates to the implementation of Area Based Plans as referred to in the strategies outlined in the PGDS. Proper planning will assist in service delivery, and might also facilitate the development of concentrations where social infrastructure can be provided cost effectively.

The image above depicts the Spatial Locality where strategic interventions are required. The table below highlights the strategies that the PGDS requires is addressed within these areas. These areas have been identified as there is a dire need to address the areas as highlighted by the Strategic Goals below.

Table 40: Strategies to address PGDS Strategic Goal 7: Spatial Equity

Goal	Strategy
7.1 – Promote Spatial Concentration	7.1.1 Establish a hierarchy of Provincial Nodes with clearly defined functions and interventions per node.
	7.1.2 Development of specific sub-regional plans to co-ordinate interventions around priority corridors.
	7.1.3 Continuation of the Small Town Regeneration and Rehabilitation Programme.
	7.1.4 Formalisation of Strategic Rural Nodes.
7.2 – Facilitate Integrated Land Management and Spatial Planning	7.2.1 Alignment of District and Local Municipal Spatial Development Frameworks with the Provincial Spatial Development Framework.
	7.2.2 Formulation of Provincial Planning Norms, Standards and Guidelines.
	7.2.3 Promote development of Ward Based Plans

Source: KZN PGDS 2011

6 Guidelines for formulation of Local Municipality SDF's and LUMS

To ensure vertical alignment between planning initiatives in the District, it is necessary to provide a Guiding Framework for the formulation of the Local Spatial Development Frameworks. The purpose is to assist Local municipalities with the compilation of their SDF's, as well as to facilitate integration between the two spheres of

Municipalities in the planning process. A number of concepts is utilised for the Spatial Restructuring of municipal area, and includes inter alia the utilisation of Nodes and Corridors as focused development areas for investment.

The guidelines consider the following aspects:

- Development Nodes
- Development Corridors
- Agriculture and Land Reform
- Environmental Considerations
- Water Management
- Land Use Designations and the Linkage to Schemes
- Infrastructure Provision

It is further important that a SDF be a spatial reflection of the municipality's general development objectives as contained in the IDP. In addition to this, the desired future spatial pattern in a municipality should be based on general planning and development principles as influenced by the local contexts.

In order to achieve this, identification of development informants should be derived through a process of overlay analysis utilising a GIS System. In addition to its obvious technological superiority this system will also assist in the development of consistent databases that can be shared by various role-players.

6.1 Development Nodes

The relative importance of development nodes is a reflection of an area's economic development potential and the range of service that should be provided. The nodal hierarchy in the District SDF should therefore be interpreted in a district context. At the local SDF level, the identification and classification of nodes should follow a similar methodology as that of the district but it must be influenced by the various centres in the local economy.

Notwithstanding the broad level of indication of nodes at a district level, it is of the utmost importance at the local level that any identified nodes be clearly demarcated on a cadastral basis. Such demarcation is important in order to:

- Optimise the use of existing bulk infrastructure and social facilities
- Discourage urban sprawl
- Ensure compact and efficient urban areas
- Protect agricultural land with high production potential
- Provide guidance to both public and private sectors investors
- Promote economic, social and environmental sustainability
- Accommodate reasonable future demand for development

6.2 Development Corridors

In addition to the need to promote compact and efficient urban areas it is also essential that spatial planning at a local level addresses the imbalances created by apartheid planning.

A development corridor is an efficient planning tool to address the above. This allows for previously segregated and areas that developed separately to be connected and to create opportunities for economic development in previously disadvantaged communities. In addition to this, it can also achieve the correction of spatial imbalances through the identification of alternative development axis. An example would be the road between Pongola and Ncotshane, where there is a need for the two areas to grow towards each other.

Although the main objectives of corridors are to achieve integration, improve access and provide investment opportunities, it should allow for controlled development through the development of local area plans, corridor development plans etc.

6.3 Agriculture and Land Reform

The correct management of agricultural land is a critical element of local SDF's; due to the scarce high potential agricultural land available.

The dataset utilised was provided by the KwaZulu-Natal Department of Agriculture and Environmental Affairs which provides enough detail and guidance on land use to allowance for different types of agriculture to be accommodated in the municipal areas. This should also allow for the accommodation of land reform programmes within the municipal areas.

It is suggested that a system of land designations be employed to guide development of the agricultural activities in the municipal areas.

Further useful information is contained in the erstwhile Provincial Planning and Development Commission's Research document entitled "Guidelines to assist in the Management of Development Pressure in Agricultural Areas or Areas with Agricultural Potential."

6.3.1 Agri Parks and guidelines for identification and establishment

The Department of Rural Development and Land Reform (DRDLR), has developed the Agri park concept as an anchor for agrarian reform by targeting specific sectors that will revitalise rural economies.

As per the Zululand Rural Development Plan (2016), an Agri-Park is defined as a networked innovation system of agro-production, processing, logistics, marketing, training and extension services located at district level. As a network it enables a market-driven combination and integration of various agricultural activities and rural transformation services. The AP comprises of three basic units:

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

The objectives of Agri-Parks are as follows:

- Promote growth of the smallholder sector by contributing to the 300 000 new small-scale producers, as well as to the 145 000 new jobs in agro-processing by the year 2020 (as set out in the NGP);
- Promote the skills of and support to small-holder farmers through the provision of capacity building, mentorship, farm infrastructure, extension services, production inputs and mechanization inputs;
- Enable producer ownership of the majority of Agri-Parks equity (70%), with the state and commercial interests holding minority shares (30%);

- Bring under-utilized land (especially in Communal Areas Land and land reform farms) into full production over the next three years, and expand irrigated agriculture; and
- Contribute to achievement of the NDP's objective of fostering an inclusive rural economy and target of 1 million jobs created in agriculture sector through creating higher demand for raw agricultural produce, primary and ancillary inputs, as well as generating increased downstream economic activities in the sector.

In Zululand, Vryheid has been identified as an Agri-Hub site. This hub will be supported by the FPSUs located in Nongoma, uLundi and other parts of the district.

6.4 Environmental Considerations and Water Management

The District has a large number of environmentally sensitive areas, inclusive of Biodiversity Corridors identified in the KZN Spatial Development framework. The analysis to identify these areas is unfortunately very broad based analysis and it will be necessary to refine this data within the Strategic Environmental Assessment (SEA), Environmental Management Plans, and the Environmental Management framework processes of the various Local Municipalities and then to feed into the Local SDF and Schemes. Guidelines are available from the National Department of Agriculture and Environmental Affairs for the compilation of the abovementioned documents.

Although the district is not the main water producing district within the Province, it has a number of large rivers and dams important to water provision in the District.

The consideration of impact on water resources, the quantity and quality thereof is critical for local SDF's. In this regard, Water Resource Management Plans should be compiled as one of the sector plans in the IDP and the outcomes integrated into the SDF's.

6.5 Land Designations and the Linkage to Local LUMS

A Spatial Development Framework should provide a visual representation of the desired spatial form in the municipality. It should be noted that the SDF does not confer zoning and legal development rights on land, but should be sufficiently specific to guide investment and land use decisions, and provision be made for the accommodations of the economic activities identified in the District Wide LED Strategy.

Local SDF's are the primary informant to the preparation of the Local LUMS.

6.5.1 Urban Edge Guidelines for Local Municipal LUMS

Guideline 5 from COGTA's Provincial Planning Guidelines dated July 2009 is titled "Defining Limits on Settlement Expansion: The issue of the Urban Edge". This Guideline will be applied to the Zululand District Municipal area to define the three fundamental landscapes of the study area and to underpin the spatial development of the municipality. The three fundamental landscapes of society can be defined as:

1. Urban
2. Rural
3. Wilderness

There is considerable confusion about the concept of 'the urban edge'. In large part, this stems from the fact that, in the rhetoric surrounding the concept in policy and planning arenas, different reasons for its application are confused and conflated.

There are two main concerns around which use of the concept is advocated:

- increasing intensification within urban cores in order to gain the benefits of densification and urban agglomeration; and

- The need to maintain a dynamic balance between the three fundamental landscapes of society: wilderness, rural and urban.

These different concerns require two different kinds of spatial definition:

- the first involves the definition of a containment edge to define the limits of the urban core;
- The second involves determining where, and what forms, development should not be allowed beyond the containment edge.

It defines three zones (peri-urban, rural and wilderness) and suggests appropriate responses to these. It then outlines a methodology by which 'no go' development areas should be defined.

This section of the document is concerned with issues relating to the 'urban edge'. It should be noted from the outset that the term 'urban' is not particularly useful in this context, as it is used loosely in everyday language and is not easy to define.

Urban refers to function. It refers to settlements, the economic base of which is not primarily based on the primary sector, particularly agriculture. Even here, there is blurring. Parts of the economy of almost all settlements are directed towards providing some goods and services for their agricultural hinterlands. Conversely, relatively few are entirely based on this function.

The term 'urban' is issued as a short-hand to refer to all agglomerated settlements which are not directly based on working the land. The issue of the urban edge is applicable to almost all of these.

One important reason why urban edge policies have been relatively ineffective has been that the one instrument (the definition of an urban edge) has been applied to attempt to resolve a number of different problems, all valid and important in their own right, but which collectively cannot be resolved through the use of a single policy instrument. The result has been confusion about how the edge should be delineated. Without a convincing conceptual basis for delimitation, authorities have frequently been unable to withstand the pressure from developers for increased rights and change.

It is undeniable that the concerns underpinning the need for urban edge definition are valid and that the definition of an urban edge is important. This document seeks to provide guidelines to strengthen the definition and use of the policy instrument. It does not seek to replace judgment and thought by absolute rules, for judgment will always be required. Land owners have the right to apply for increased land-use rights on any land parcel. It is a legal requirement that their applications be treated with administrative fairness.

This, in turn, requires that each application be treated on its merits and that rational reason underpins decisions. This document seeks to provide a basis for arguing a logical position, and to outline a method through which local and provincial authorities can engage in a process of edge definition.

6.5.2 Guidelines for determining the urban containment edge

There is no 'scientific' way of defining these containment edges: they require strong administrative actions to defend them. A number of factors contribute to the delineation of the line.

1. The delineation needs to be informed by important characteristics of the natural environment. A useful tool is to compile a map identifying composite natural resources and character - contributing elements in the settlement region. Wherever possible, the edge definition should co-inside with natural barriers (water courses, steep slopes, vegetation of significance and so on).
2. Since the central purpose of these edges is to compact urban development in order to achieve greater urban efficiencies, to be effective the line should be drawn as close to the edge of the existing built-up area as possible.

The line should be defensible in terms of the logic of the internal structure of the existing settlement. As a rule of thumb, the line should not be more than 1.5 kilometers – a reasonable walking distance – from the closest point or line of more intensive urban activities (places of work, retailing and community facilities.)

A number of points need to be made about the process of delimitation.

- Firstly, the defining edge should not be continuous. By omission, it should define paths of future lateral spread which, in turn, allow for a rational pattern of future government spending on utility and social infrastructure. As a general principle new urban development should occur on the worst land in terms of agricultural productivity and amenity: urban development should be used to improve the total landscape.
- Secondly, within these paths of future lateral expansion, sprawl should be strongly discouraged. Development should not be suburban but should take more urban, higher density forms. Further, 'leap-frog' sprawl should be discouraged. As far as is possible, new development should be contiguous with the existing built edge.
- Thirdly, the definition of edges should not follow existing cadastral boundaries. It should form a strong geometric edge. Straight, not wavy, lines should be encouraged.
- Fourthly, the edge should be made physically, not just administratively determined. Buildings should occur hard against the edge and open-ended street networks, which encourage further lateral spread, should be disallowed.
- Fifthly, wherever appropriate, the edge should be reinforced through the creation of fire-breaks and more intensive forms of agriculture which should be encouraged to occur hard against the edge.

6.5.3 Guidelines for defining where development should not take place

Four central principles should guide this determination:

- Avoid locating new built development on land of medium to high agricultural and amenity value;
- Avoid fragmentation of rural and wilderness landscapes;
- Avoid fragmentation, or a scatter of 'pockets', of development: ensure that new development responds to, and reinforces, the logic of regional and sub-regional infrastructure (the principle of 'structural reinforcement');
- Maintain the dominance of agricultural and wilderness landscapes outside of the urban cores.

All four of these are central to the important landscape and heritage principle of authenticity, which, in turn, underpins all landscapes of quality. International precedent shows that in all landscapes of quality, there is an identifiable logic to the locational pattern of settlements. Settlement does not take the form of random pockets: it follows a structural logic which is strongly informed by the nature of (particularly) movement (the pattern of access) and other forms of sub-regional infrastructure which logically follow movement.

The methodology which is necessary to define these zones where development should not go involves a number of steps.

- The collation of relevant information by appropriate information category;
- The overlay of the different layers, to produce, a map of composite informants and constraints;
- The translation of this product into a map showing 'no-go', 'tread lightly' and 'possible development' parcels;
- Super-imposition of the settlement and movement structural logic to determine which of the 'possible' development areas should be allowed.

A number of different settlement forms occur within Kwa-Zulu Natal including:

- Mixed-use towns and cities, both large and small;
- Rural hamlets;
- Spontaneous (frequently informal) settlements, both urban and rural;
- Historical apartheid settlements with little or no economic function;
- Settlements developed through customary systems.

The way of thinking, and the approach, outlined here are applicable in some form to all these settlement forms.

6.5.4 Implimentation of LUMS in the District

Zululand District Municipality and the 5 local municipalities thereunder, has opted for a model where 2 Municipal Planning Tribunals exists.

AbaQulusi has opted to form their own Municipal Planning tribunal, and has succeeded in doing so.

The joint Tribunal between uphongo, Ulundi, Nongoma and eDumbe has been formalised with the signing of an agreement between the repective Munikcipalities, including Zululand District Municipality, who will play a coordination and administrative role in the establishment and operational issues of the joint municipal planning tribunal.

6.6 Bulk Infrastructure

The infrastructure investment programmes as contained in the local municipalities IDP should be reflected in the SDF. It should also take cognisance of infrastructure to be provided by the District and Captured in the Water Services Development Plan. The local SDF should further inform the planning of the municipalities capital investment programme.

7 Alignment

The following aspects require alignment to ensure coordinated development efforts between the districts.

- Alignment with Adjacent District
- Alignment of Sector Plans
- Alignment between local municipalities within the district

7.1 Alignment With Surrounding Districts, Provinces and Countries

Zululand District Municipality is surrounded by 5 District Municipalities, and shares a provincial as well as international boundary. The Administrative entities are the following:

- Umkhanyakude DM
- Uthungulu DM
- Umzinyathi DM
- Amajuba DM
- Gert Sibande DM (Mpumalanga Province)
- The Kingdom of Swaziland

The sharing of boundaries requires extensive alignment to ensure that conflicting land use matters don't arise. In this instance the main alignment issues were around development corridors which straddle the boundaries of these districts.

The main corridors linking the district to the adjacent areas as well as their functions are the following:

	Main Function	Connection Adjacent Districts
N2	Movement Corridor Freight Route	East– uMkhanyakude DM North – Gert Sibande DM (Mpumalanga Province)
R66	Movement Corridor	South – Uthungulu DM
R34	Movement Corridor Freight Route	South – Uthungulu DM

R33	Movement Corridor Freight Route	North – Gert Sibande DM (Mpumalanga Province)
R618	Movement Corridor	East - uMkhanyakude DM
N207	Movement Corridor Freight Route	North – Kingdom of Swaziland.
P700	Movement Corridor	East – uMkhanyakude DM

The Spatial Development Framework Maps for the Individual Municipalities are depicted below.

UMkhanyakude DM

Figure 30: UMkhanyakude Spatial Development Framework

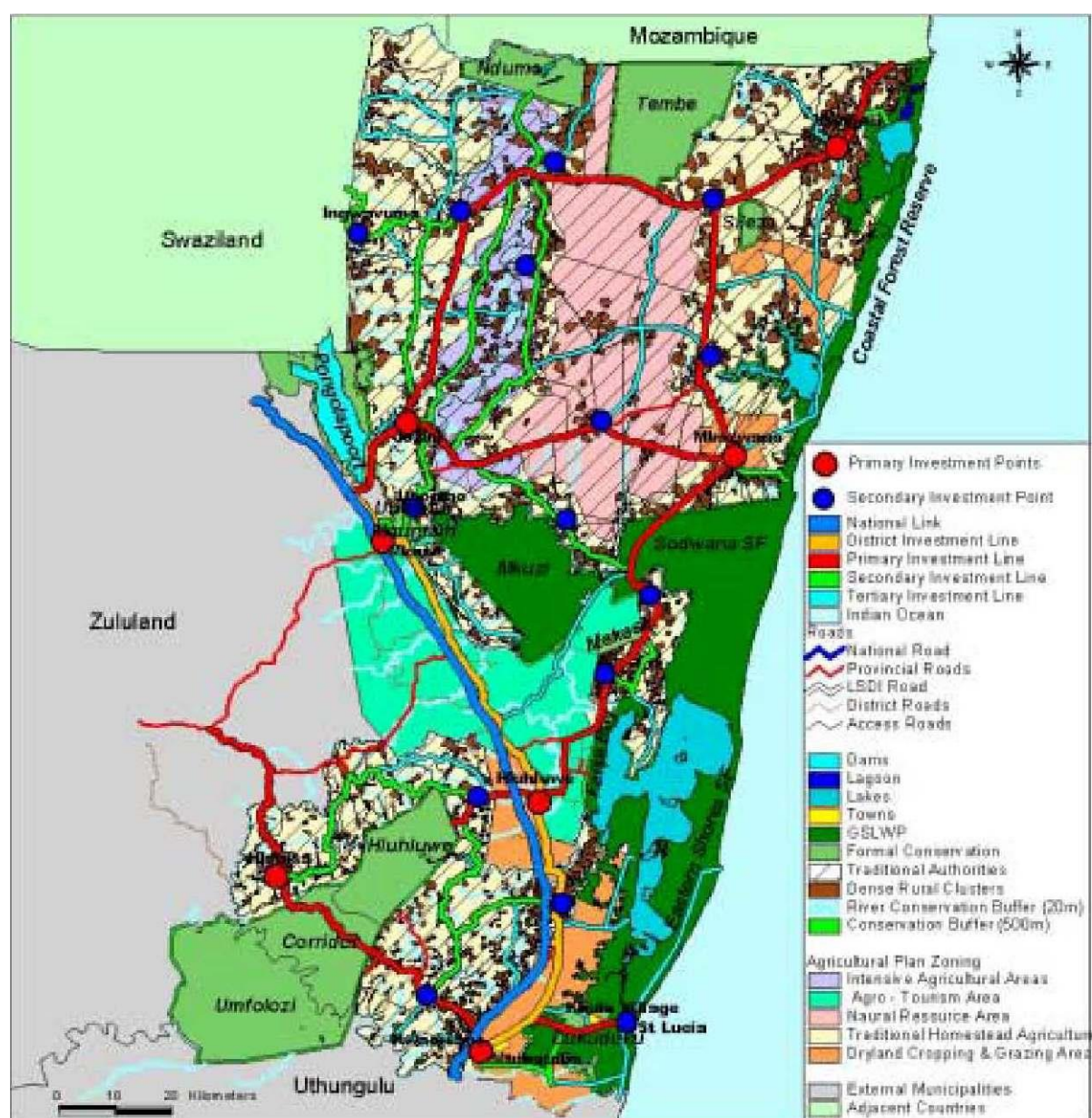


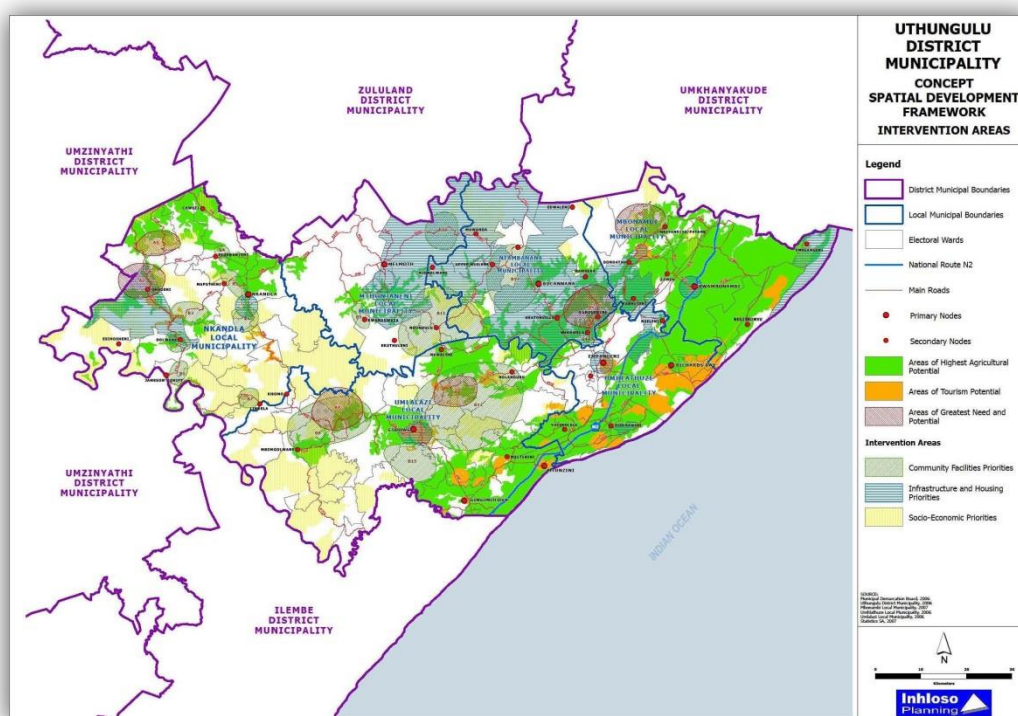
Table 41: Alignment Table - uMkhanyakude DM

Corridor Alignment	N2 and the P700
Adjacent Land use Considerations	Formal Conservation Area Agro-Tourism Area Traditional homestead Agriculture
Cross Border Management / Cooperation	Hluhluwe-Umfolozi Park, Pongola Poort Dam
Potential Contradictions & Conflicts	None Apparent and that are not already mitigated.
Dependencies	Services and Economic Opportunities provided in Mkuze, which is closer than other Nodes in ZDM to rural communities.
Corridor Connections	P700 from Ulundi LM to Mfolozi LM N2 from uPhongolo LM to Jozini LM

Source: Vuka Planning Africa Inc.

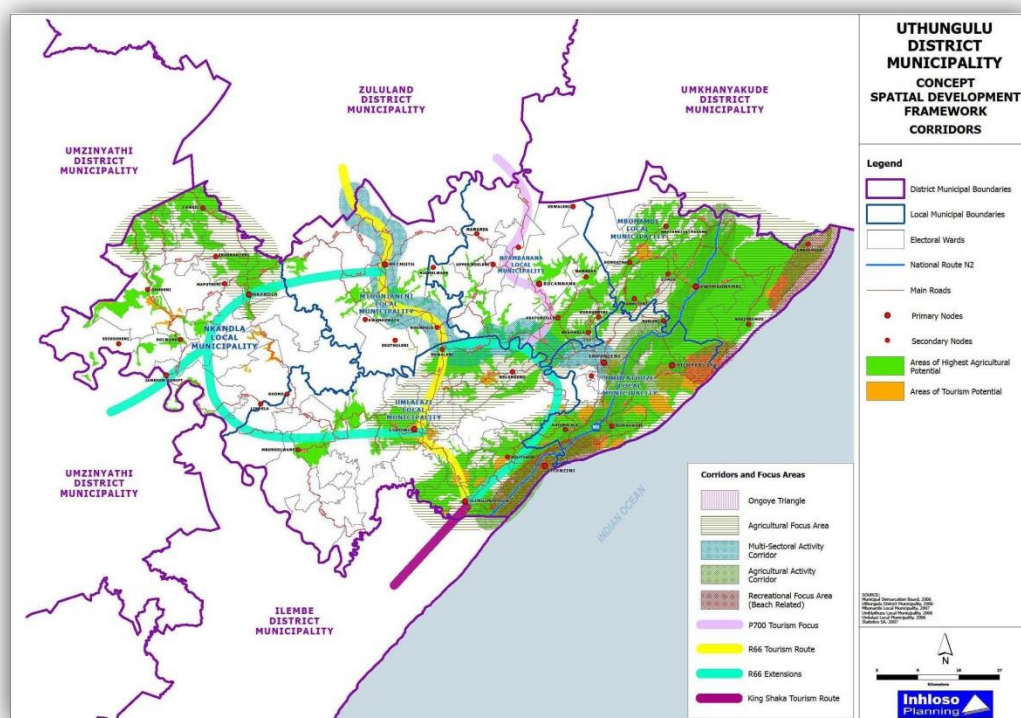
7.1.1 UThungulu DM

Figure 31: UThungulu Intervention Areas



Source: uThungulu SDF Review 2009

Figure 32: uThungulu SDF Corridors



Source: uThungulu SDF Review 2009

Table 42: Alignment Table – uThungulu DM

Corridor Alignment	N2 and the P700
Adjacent Land use Considerations	Housing & Infrastructure Priority Development areas.
Cross Border Management / Cooperation	None
Potential Contradictions & Conflicts	Priority Development Areas Adjacent to Opathe Game Reserve & Sensitive Environmental Areas
Dependencies	None Apparent
Corridor Connections	R66 from Ulundi LM to Mthonjaneni LM P700 Route from Ulundi LM to Ntambanana LM

Source: Vuka Planning Africa Inc.

7.1.2 Umzinyathi DM

Figure 33: UMzinyathi Spatial Development Framework

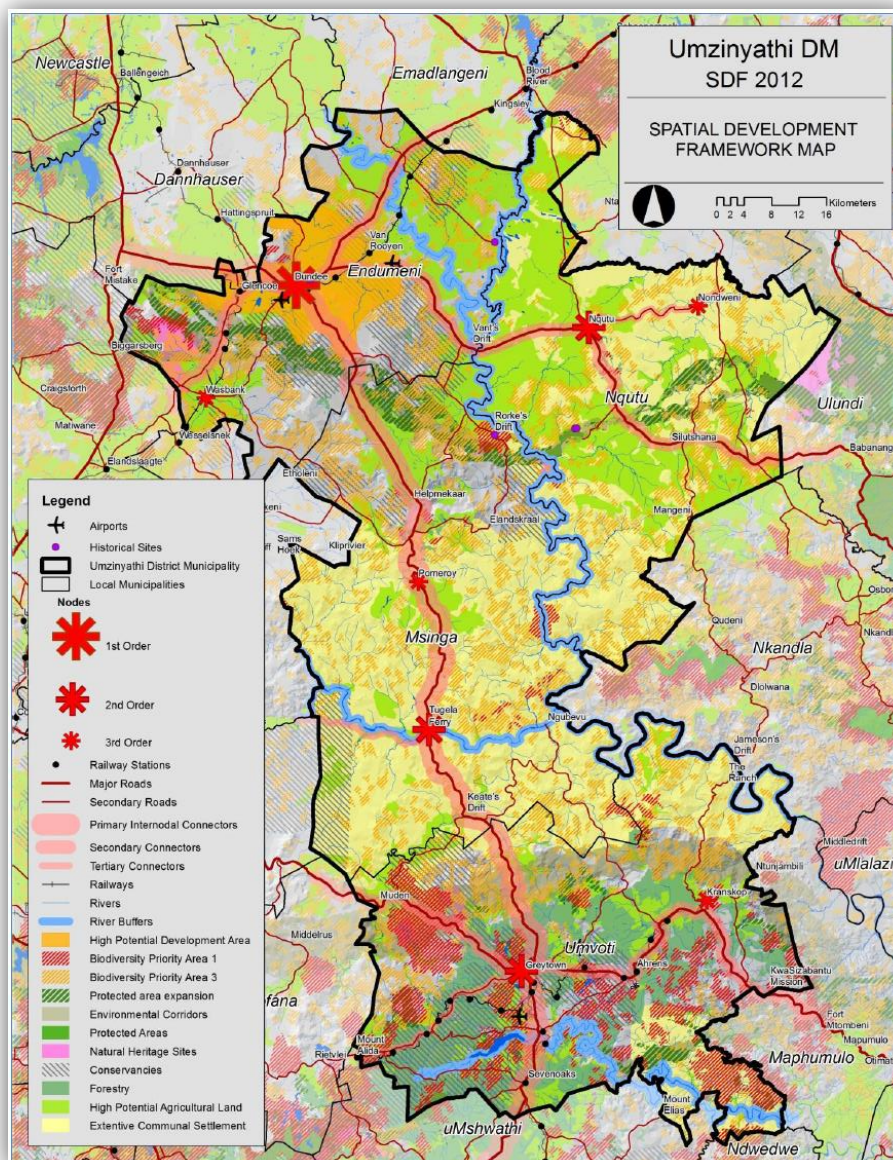
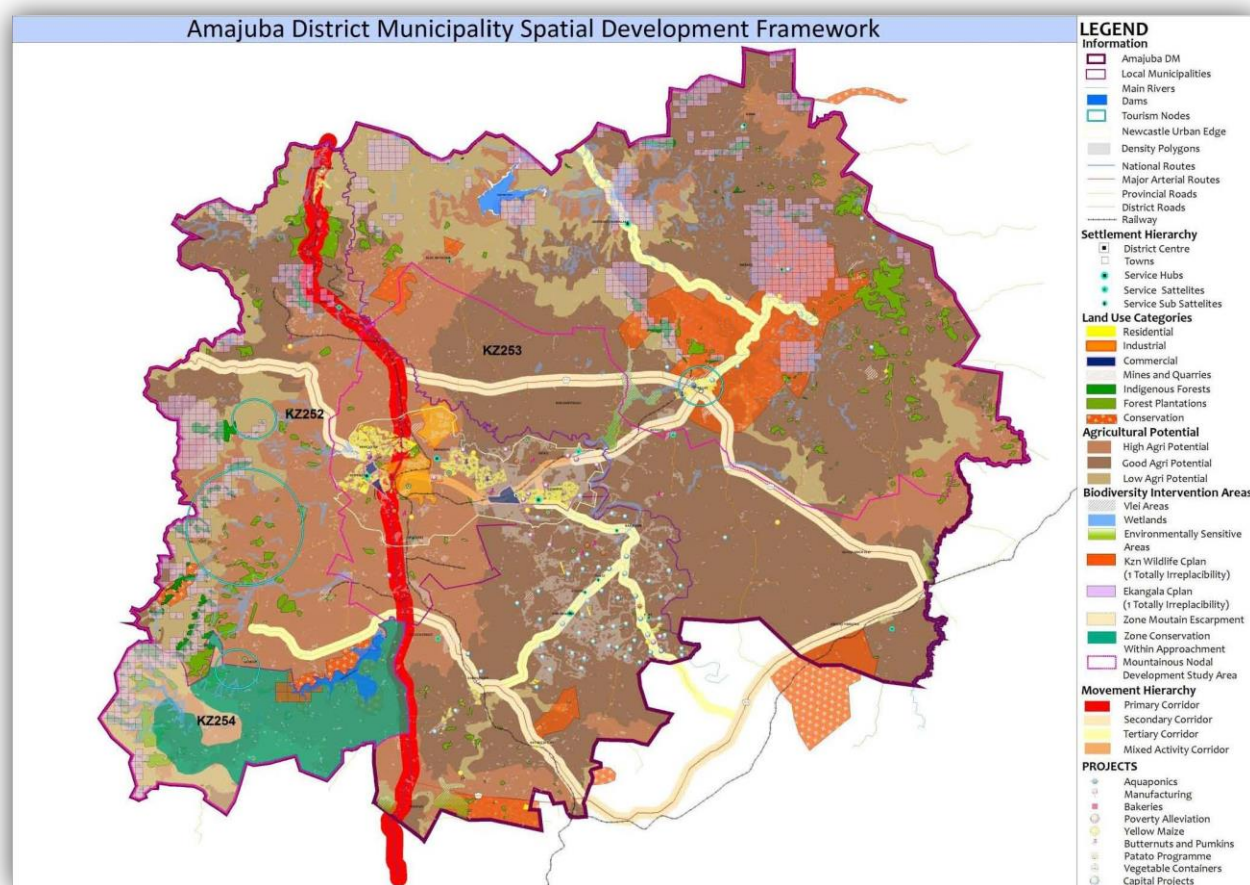


Table 43: Alignment Table – uMzinyathi DM

Corridor Alignment	N2 and the P700
Adjacent Land use Considerations	Largely, High Potential Agricultural Land and Extensive Communal Settlements are situated opposite side of the boundary, between aBaqulusi & Nquthu. Environmental Corridor link between Ulundi LM and Nquthu.
Cross Border Management / Cooperation	Environmental Corridor Identified by the KZN SDF.
Potential Contradictions & Conflicts	Settlement pressures on High Potential Agricultural Land.
Dependencies	None Apparent
Corridor Connections	R69 From Vryheid to Dundee

7.1.3 Amajuba DM

Figure 34: Amajuba Spatial Development Framework



Source: uThungulu SDF Review 2009

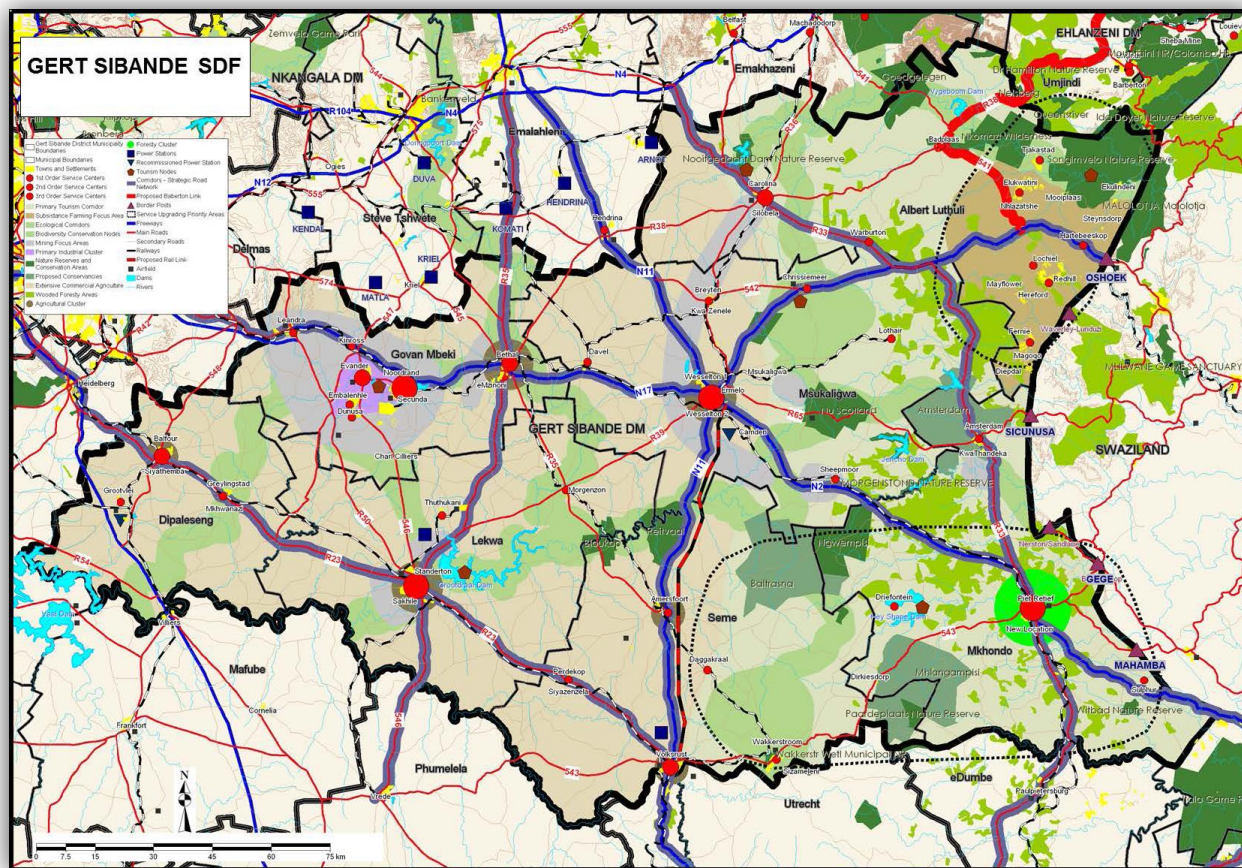
Table 44: Alignment Table - Amajuba DM

Corridor Alignment	N2 and the P700
Adjacent Land use Considerations	Formal Conservation Area Agro-Tourism Area Traditional homestead Agriculture
Cross Border Management / Cooperation	Hluhluwe-Umfolozi Park, Pongola Poort Dam
Potential Contradictions & Conflicts	None that is not already mitigated.
Dependencies	Services and Economic Opportunities provided in Mkuze, which is closer than other Nodes in ZDM to rural communities.
Corridor Connections	R69 from Vryheid to Emadlangeni

Source: Vuka Planning Africa Inc.

7.1.4 Gert Sibande DM (Mpumalanga Province)

Figure 35: Gert Sibande DM Spatial Development Framework



Source: Gert Sibande DM SDF (2009)

Table 45: Alignment Table – Gert Sibande DM

Corridor Alignment	N2 and the P700
Adjacent Land use Considerations	Biodiversity Sensitive Areas
Cross Border Management / Cooperation	None
Potential Contradictions & Conflicts	Rural Residential Areas in close proximity to Environmentally Sensitive Areas
Dependencies	Possible services provided to population from Mkhondo Municipality due to Locality of Paulpietersburg / eDumbe to Boundary.
Corridor Connections	R33 from eDumbe to Mkhondo LM

Source: Vuka Planning Africa Inc.

7.1.5 The Kingdom of Swaziland

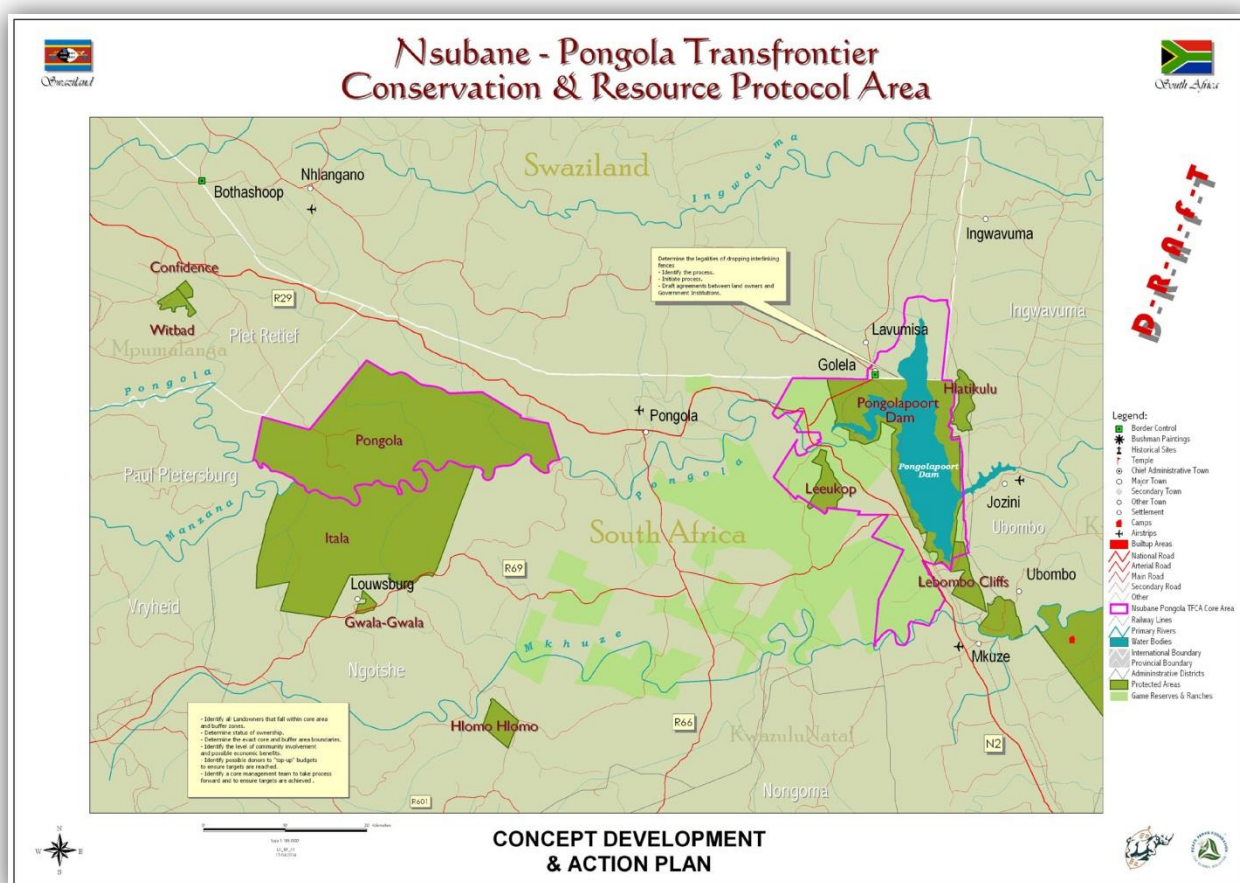
Interaction between The Kingdom of Swaziland and South Africa is limited due to the Closed International Border separating the two. There is however interaction that needs to be managed. The current interactions include the following:

- Golela Border Post;
- Nsubane – Pongola Transfrontier Conservation & Resource Protocol Areas

The Golela Border Post is being upgraded by the Department of Public Works. In addition to the upgrading of the Border post, which will be operating on a 24 hour basis, a large number of medium density residential units are being developed. From this, small economic and tourism opportunities will arise, as the 24 hour border post, and the envisaged additional residents to the area will increase the need for services and basic goods in the area.

Limited information is available regarding the Nsubane – Pongola Transfrontier Conservation & Resource Protocol Area. Although this initiative has been developed and planned for a number of years, finalisation of management areas to be included and management structures to coordinate international implementation has been delayed drastically. The image below depicts the proposed boundaries of the Transfrontier Park. Additional information has been requested from the Piece Parks Foundation and will be made available as soon as information is received.

Figure 36: Nsubane-Pongola Transfrontier Conservation & Rescue Protocol Area.



Source: Piece Parks Foundation

7.2 Alignment with other District Sector Plans

The following district sector plans were analysed and the relevant components incorporated into the SDF:

- Water Services Development Plan
- Indigent Policy
- Integrated Waste Management Plan
- Disaster Management Plan
- Public Transport Plan
- Solid Waste Facility Backlog Study
- Solid Waste Management Master Plan
- ZDM Environmental Management Plan

The following studies were not available and it is recommended that these studies be commissioned.

- Cemeteries and Crematoria Plan
- Integrated Electrification Plan
- Integrated Environmental Management Plan

The analysis of the above reports are critical as these plans are sector plans in the IDP and as such needs to be spatially referenced and considered when considering the SDF.

7.3 Alignment with Local Municipalities

During compilation of the Spatial Development Framework, representatives from the Local Municipalities formed part of the Project Steering Committee. Subsequently, all relevant local issues have been identified and incorporated into the SDF. The nodal areas and corridors were further considered and evaluated in terms of its contribution to overall mobility and accessibility within the district.

7.4 Alignment with Spheres of Government

During compilation of the Spatial Development Framework, representatives from the various Spheres of Government formed part of the Project Steering Committee. Where members were not available to attend PSC meetings, they were engaged on individual basis to obtain information relevant to the SDF compilation.

8 Implementation:

This section deals with the implementation of the SDF by identifying investment areas where implementation of projects needs to address the needs of the District. The two areas where the District has influence and a mandate are with Social Development, as well as the provision of Water and Sanitation Services.

8.1 Mechanisms for Protection of Sensitive Environmental Areas and High Potential Agricultural Land

There are a number of legislative and policy oriented mechanism that can assist in protecting the natural environment and high potential agricultural land. These mechanisms are aimed at providing guidelines for the local municipalities to be implemented in their development policies and Schemes. These mechanisms include the following:

Table 46: Mechanisms for Protection of Agricultural Land and Sensitive Environments.

Agricultural Space Zoning	Land/Open	Zonings can be used to protect sensitive environmental areas, and/or agricultural land. This identifies minimum property sizes, or excluding certain types of land uses.
Building Moratorium		Prevent development until the Scheme has been updated accordingly to allow for

	adequate protection of sensitive areas and agricultural land.
Inter-departmental and Intergovernmental Agreements	This relates to agreements between various departments and the municipality to facilitate and promote the furtherance of specific activities. This can refer to the Transfrontier Conservation Area, or an agreement with the Department of Agriculture to facilitate the development of agricultural projects on high potential agricultural land, whether in tribal areas or privately owned rural areas.
Land and Mitigation Banking	Where the expansion of a town is necessary, the municipality can buy another portion of land adjacent to conservation areas, and donate this land to the conservancy as a means to offset the negative, but necessary impacts on the natural environment.
Sensitive Lands Overlays	Areas with steep slopes, floodplains, high scenic quality or special habitat may be mapped and overlaid upon standard zoning regulations to identify areas with more restrictive regulation. The sensitive environmental informant maps needs to be utilised to develop an overlay map when the wall to wall schemes, as required by the KZN PDA is developed.
Urban Growth Boundaries	Municipalities should demarcate Urban Growth boundaries around existing urban areas to demarcate areas to be densified. This will prevent urban sprawl and reduce the impact on the natural environment. This is also applicable to rural nodes, where densification should be promoted.

Source: Vuka Planning Africa

8.2 Social Development

The Zululand District Municipality has a total of R69,741,142-00 for social development purposes and identified a total of 33 projects aimed at Social Development. Specific localities were not identified for each of these projects, as most does not have a spatial component. It is however imperative that these projects are aligned with the investment areas identified under Strategic Intervention Areas.

The projects are the following:

Table 47: Community & Social Expenditure Projects

PROJECT	BUDGET
1. Disaster Portfolio Projects	1,336,896
2. Unallocated Projects	8,000,000
3. Poverty Alleviation	2,000,000
4. Local Economic Development (LED)	3,000,000
5. Community Development	2,500,000
6. Community Participation	2,000,000
7. Emergency Water	20,000,000
8. Budget and IDP Community Participation	6,000,000
9. Women's Day Celebration	633,000
10. Annual report back/State of the District Address	700,000
11. Elderly Function	2,000,000
12. Kids Christmas Party	650,000
13. Marathon	600,000
14. SALGA Games	3,000,000
15. Mayoral Cup	600,000
16. LED Ward Projects (R60000 per ward):	
a. Abaqulusi	1,320,000
b. EDumbe	480,000
c. Pongola	840,000
d. Nongoma	1,260,000
	1,440,000

e. Ulundi	
17. Widows & Orphans	1,780,000
18. Tourism Portfolio Project	356,506
19. Youth Day Celebration	550,000
20. Youth Summit	280,000
21. Women Summit	300,000
22. Ingoma Dance Competition	316,500
23. Music Festival	1,000,000
24. Water Loss Reduction	3,342,240
25. External Bursaries	625,000
26. Sports Development	600,000
27. Indigenous Games	300,000
28. Gender Conference	211,000
29. Disability Programmes	450,000
30. Princess Mandisi Health Care Centre	450,000
31. Youth Affairs (Drivers licenses)	70,000
32. School Uniforms	250,000
33. Widows and Orphans Event	500,000
Total Community and Social Expenditure	69,741,142

Source: Zululand District Municipality

8.3 Water Services Development Plan

The Project list from the Zululand Water Services Development Plan, as updated by the Zululand District Municipality has Sanitation Projects, Rudimentary Water Schemes, and Rural Water Service Schemes to be implemented over the following 5 years from 2017 to 2022. A Number of these projects are being implemented currently. A list of the projects and budgets, as well as a plan depicting the systematic implementation plan of these services is attached overleaf. The table below provides a summary of the projects and budgets tentatively allocated for the following financial years. Please refer to Map 23: WSDP Sanitation Roll-Out and Map 24: Rudimentary Water Schemes.

Map 26: WSDP Roll-Out – Sanitation

Map 27: WSDP Roll-Out – Rudimentary Water Schemes

Table 48: WSDP Capital Expenditure

Implementation Year	Local Municipality	Sanitation (VIP's)		Rudimentary Water Supply		Rural Water Service Schemes (Regional & Intermediate Stand-alone)	
		Cost (Sanitation)	Households Served	Cost (Bulk & Reticulation)	Households Served	Cost (Bulk & Retic)	Households Served
2018/2019	Abaqulusi (KZ263)	10 477 670	776	6 710 000	52 1	64 221 202	Stand-alone Schemes: 971 Khambi Project 1 in progress
	eDumbe (KZ261)	3 058 125	226	4 040 000	37 4	18 000 000	0 (Sim West Bulks only)
	Nongoma (KZ265)	23 007 774	1 704	18 300 000	15 30	237 932 577	152
	Ulundi (KZ266)	9 646 435	714	2 400 000	70	54 603 335	9 714
	UPhongolo (KZ262)	5 120 820	379	2 200 000	87	7 889 935	Sim Central Bulks Sim East: 236
2019/2020 (Projected based on 2018 funding allocations)	Abaqulusi (KZ263)	14 781 590	1 095	7 760 000	50 6	21 221 202	TBA
	eDumbe (KZ261)	6 365 987	472	1 050 000	63	9 386 301	0 (Sim West Bulks only)
	Nongoma (KZ265)	16 264 884	1 205	25 450 000	20 65	83 932 577	1 953
	Ulundi (KZ266)	5 017 671	372	1 750 000	11 0	13 603 335	2 000
	UPhongolo (KZ262)	8 880 691	658	2 020 000	14 2	7 889 935	Sim Central: 426 Sim East: 1 490
2020/2021 (Projected based on 2018 funding allocations)	Abaqulusi (KZ263)	14 781 590	1 095	8 550 000	43 5	21 221 202	138 .
	eDumbe (KZ261)	6 365 987	472	1 140 000	54	9 386 301	0 (Sim West Bulks only)
	Nongoma (KZ265)	16 264 884	1 205	19 000 000	15 40	9 386 301	1 831
	Ulundi (KZ266)	5 017 671	372	5 500 000	32 5	83 932 577	2 036

	UPhongolo (KZ262)	8 880 691	658	1 350 000	11 4	7 889 935	Sim Central: 351 Sim East: 1 279
2021/2022 (Projected based on 2018 funding allocations)	Abaqulusi (KZ263)	14 781 590	1 095	7 710 000	50 1	21 221 202	272 Khambi Project 2
	eDumbe (KZ261)	6 365 987	472	590 000	29	9 386 301	0 (Sim West Bulks only)
	Nongoma (KZ265)	16 264 884	1 205	18 190 000	13 69	9 386 301	Bulks
	Ulundi (KZ266)	5 017 671	372	2 720 000	18 2	83 932 577	785
	UPhongolo (KZ262)	8 880 691	658	710 000	41	7 889 935	Sim Central: 176 Sim East: 1 961
>2022 (Projected based on 2018 funding allocations)	Abaqulusi (KZ263)	62 104 549	4 600	69 550 000	42 55		TBA Khambi Project 3&4
	eDumbe (KZ261)	26 746 564	1 981	29 830 000	19 63	94 538 028	0 (Sim West Bulks only)
	Nongoma (KZ265)	68 336 579	5 062	55 740 000	39 84	867 508 498	8 661
	Ulundi (KZ266)	21 081 643	1 562	22 080 000	16 68	921 660 215	10 153
	UPhongolo (KZ262)	37 312 043	2 764	9 390 000	60 9	7 987 794	Sim Central Completed Sim East: Remaining 3 833 households to be upgraded in central Sim East.

Source: Zululand District Municipality WSDP 2017-2022

8.4 Housing

The following housing Projects are being planned for implementation within the Zululand District Municipality. All of these projects are still at the planning phase. As the correct amount for housing implementation was not known, an estimated amount of R86,000-00 per unit was utilised for budgeting purposes. These projects were mapped and are depicted on Map 25: Housing Projects Attached Overleaf.

Table 49: Housing Projects

Local Municipality	Project Name	Total Units	Budget (@R86,000-00)	Latitude	Longitude
Abaqulusi KZ263	Mondlo A, B & Bhekuzulu 3B	1 000	86 000 000	30.71613	-27.978982
	Enyathi	593	50 998 000	31.05527	-27.824645
	Vumani	1 000	86 000 000	31.08663	-27.83614

	Gluckstaad	1 015	87 290 000	31.03832	-27.989323
eDumbe KZ261	Ekhombela	200	17 200 000	30.57667	-27.342537
	Mangosuthu Village	1 500	129 000 000	30.93820	-27.39260
	Ophuzane	1 000	86 000 000	30.94331	-27.478721
	Tholakele	1 000	86 000 000	30.9732	-27.443985
Nongoma KZ265	Matheni A	2 000	172 000 000	31.65840	-28.07810
	Matheni B	2 000	172 000 000	31.61725	-28.05096
	Mandlakazi A	2 000	172 000 000	31.85507	-27.80552
	Mandlakazi B	2 000	172 000 000	31.75352	-27.9449
	Osuthu A	2 000	172 000 000	31.54027	-27.92694
	Osuthu B	2 000	172 000 000	31.62507	-27.82141
	Babanango Phase 3	200	17 200 000	31.08894	-28.376357
Ulundi KZ266	Zungu	3 500	301 000 000	31.5469	-28.1638
uPhongolo	Mahlangosi Housing Project	1 000	86 000 000	31.5616	-27.535
	TOTAL ZULULAND	24 008	2 064 688 000		

Source: KwaZulu-Natal Department of human Settlement

8.5 Capital Investment Framework

Below is a complete Capital Investment Framework:

REGIONAL SCHEME ROLLOUTS								
LM	Reg. Scheme	FIN. YEAR	Ward 2016	Infrastructure Type	Size or Number of households	Description or Settlement Name	Cost (Bulks)	Cost (Retics)
AbaQulusi	Coronation	2018/2019	All	Planning		Coronation Regional Scheme Masterplan - Stand-alone Schemes		10 000 000
AbaQulusi	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	57	Kwantebe		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	2	Kwanogalaja		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	23	Madanyini		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	49	Gushede		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	93	Xamu		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	21	Mphumelelo		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	65	Emnyameni		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	28	Ezinkanjini		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	6	Bedrog 217		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	50	Kwabanakile		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	19	Kwamalinga		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	53	Dwaalhoek		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	20	Kwa'Ceba		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	73	Belvue Farm		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	109	Ebhodweni		TBA

AbaQulusi	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	79	Parys Trust		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	206	Kwafuduka		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	29	Mbizo		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	62	Enhlangweni		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	25	Ezakhiweni 1		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	25	Retseb		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	39	Thembalihle (Welverdiend)		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	2	Settlement Reticulation	55	Kwanmnunse		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	2	Settlement Reticulation	74	Makhwela		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	2	Settlement Reticulation	28	Kwabudula		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	2	Settlement Reticulation	74	Kwasithole		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	2	Settlement Reticulation	60	Kwamsezane		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	2	Settlement Reticulation	12	Emarondweni		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	2	Settlement Reticulation	15	Empumazi		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	2	Settlement Reticulation	90	Kwamadamu		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	2	Settlement Reticulation	17	Mkuze		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	2	Settlement Reticulation	109	Ntshangase		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	2	Settlement Reticulation	79	Emthebeni		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	2	Settlement Reticulation	30	Kwabhele		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	2	Settlement Reticulation	68	Esgangeni		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	2	Settlement Reticulation	84	Ezibayeyikhulu		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	2	Settlement Reticulation	50	Endinsi		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	2	Settlement Reticulation	83	Kwafakazi		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	2	Settlement Reticulation	64	Emandleni		TBA

AbaQulusi	Coronation	Pending Master Plan Outcome	3	Settlement Reticulation	22	Mfabantu		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	3	Settlement Reticulation	177	Sgubudu		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	5	Settlement Reticulation	257	Triangle store		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	5	Settlement Reticulation	68	Malangweni		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	5	Settlement Reticulation	256	Shikila		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	5	Settlement Reticulation	158	Kwamadovjan		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	6	Settlement Reticulation	36	Mciyo		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	6	Settlement Reticulation	16	Gobeni		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	6	Settlement Reticulation	50	Kwa'Boy 3		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	6	Settlement Reticulation	45	Uitzicht		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	6	Settlement Reticulation	19	Enkweleni		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	6	Settlement Reticulation	113	Kwamciyo		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	6	Settlement Reticulation	216	Kwavilakazi 1		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	6	Settlement Reticulation	48	Bogudaga		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	6	Settlement Reticulation	103	Kwa'John 1		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	6	Settlement Reticulation	103	Nkongolwane 1		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	6	Settlement Reticulation	70	Mkhuze 2		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	7	Settlement Reticulation	44	Mtenteka		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	7	Settlement Reticulation	59	Entabeni 2		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	7	Settlement Reticulation	115	Rietvlei		TBA
AbaQulusi	Coronation	Pending Master Plan Outcome	7	Settlement Reticulation	38	Boomlaer		TBA
AbaQulusi	Hlahlindlela	2018/2019	15	Settlement Reticulation	253	Bhobozani, Mhlangeni & Mphezulu stand-alone scheme		36 000 000
AbaQulusi	Hlahlindlela	2018/2019	21	Bulk Supply Connection	718	Ezidulini & Engilandi scheme augmentation		5 000 000
AbaQulusi	Hlahlindlela	On hold	12	Storage	5MI	New bulk Reservoir 1 between Vryheid WTW and eMondlo	7 239 939	

AbaQulusi	Hlahlindlela	On hold	12	Bulks	315	Regional bulk pipelines between Reservoir 4 and eMondlo WTW	2 461 428	
AbaQulusi	Hlahlindlela	On hold	12	Bulks	200	Regional bulk pipelines between Reservoir 4 and eMondlo WTW	1 495 001	
AbaQulusi	Hlahlindlela	On hold	12	Bulks	350	Regional bulk pipelines between Reservoir 4 and eMondlo WTW	2 132 083	
AbaQulusi	Hlahlindlela	On hold	12	Storage	5ML	New regional Reservoir 3 at Driekwart	7 239 939	
AbaQulusi	Hlahlindlela	On hold	12	Storage	5ML	New regional Reservoir 2 at Driekwart	7 239 939	
AbaQulusi	Hlahlindlela	On hold	12	Pump Station		New regional Pump Station 2 at Driekwart	6 497 266	
AbaQulusi	Hlahlindlela	On hold	12	Storage	2MI	New regional bulk Reservoir 4 near Maytshotshomba	6 173 004	
AbaQulusi	Hlahlindlela	On hold	14	Secondary Bulks	75	Regional pipelines from Elosi reservoir to reservoir at Sofaya	15 804	
AbaQulusi	Hlahlindlela	On hold	14	Secondary Bulks	75	Regional pipelines from Elosi reservoir to reservoir at Sofaya	28 261	
AbaQulusi	Hlahlindlela	On hold	14	Secondary Bulks	75	Regional pipelines from Elosi reservoir to reservoir at Sofaya	1 146 495	
AbaQulusi	Hlahlindlela	On hold	14	Secondary Bulks	90	Regional pipelines from Ezibomvu reservoir to reservoir at Elosi	2 079 438	
AbaQulusi	Hlahlindlela	On hold	14	Secondary Bulks	90	Regional pipelines from Ezibomvu to reservoir at Qweqwe1	1 102 059	
AbaQulusi	Hlahlindlela	On hold	14	Secondary Bulks	90	Regional pipelines from Ezibomvu reservoir to reservoir at Elosi	46 347	
AbaQulusi	Hlahlindlela	On hold	14	Secondary Bulks	90	Regional pipelines from Ezibomvu reservoir to reservoir at Elosi	57 390	
AbaQulusi	Hlahlindlela	On hold	14	Secondary Bulks	90	Regional pipelines from Ezibomvu reservoir to reservoir at Elosi	48 824	
AbaQulusi	Hlahlindlela	On hold	14	Secondary Bulks	90	Regional pipelines from Ezibomvu reservoir to reservoir at Elosi	17 127	
AbaQulusi	Hlahlindlela	On hold	14	Secondary Bulks	110	Regional pipelines from Amahlathi reservoir to elevated tank at Ezibomvu	188 220	
AbaQulusi	Hlahlindlela	On hold	14	Secondary Bulks	110	Regional pipelines from Ezibomvu to reservoir at Qweqwe1	1 324 253	
AbaQulusi	Hlahlindlela	On hold	14	Secondary Bulks	160	Regional pipelines from Amahlathi reservoir to elevated tank at Ezibomvu	3 050 648	
AbaQulusi	Hlahlindlela	On hold	14	Secondary Bulks	90	regional pipeline from Amahlathi reservoir to Mvunjane	728 899	
AbaQulusi	Hlahlindlela	On hold	14	Pump		Booster pump on pipeline from Nhloshana to Amahlathi	461 192	
AbaQulusi	Hlahlindlela	On hold	14	Storage	2MI	New reservoir at Amahlathi	6 173 004	
AbaQulusi	Hlahlindlela	On hold	14	Storage	140KI	Regional elevated tank at Ezibomvu	1 001 835	
AbaQulusi	Hlahlindlela	On hold	14	Storage	600KI	New regional reservoir at Qweqwe	2 520 426	

AbaQulusi	Hlahlindlela	On hold	14	Storage	50KI	New elevated tank at Qweqwe	684 075	
AbaQulusi	Hlahlindlela	On hold	14	Storage	1MI	New regional reservoir at Elosi	2 824 439	
AbaQulusi	Hlahlindlela	On hold	14	Storage	80KI	New elevated tank at Elosi	775 214	
AbaQulusi	Hlahlindlela	On hold	14	Storage	30KI	New elevated tank at Sofaya	509 520	
AbaQulusi	Hlahlindlela	On hold	14	Bulk Supply Connection	63	Amahlathi		-
AbaQulusi	Hlahlindlela	On hold	14	Bulk Supply Connection	483	Mvunjane Simashwini		-
AbaQulusi	Hlahlindlela	On hold	14	Bulk Supply Connection	385	Ezibomvu		-
AbaQulusi	Hlahlindlela	On hold	14	Bulk Supply Connection	237	Qweqwe 1		-
AbaQulusi	Hlahlindlela	On hold	14	Bulk Supply Connection	247	Elosi		-
AbaQulusi	Hlahlindlela	On hold	14	Bulk Supply Connection	201	Sofaya		-
AbaQulusi	Hlahlindlela	On hold	15	Secondary Bulks	160	Regional bulk pipeline from Emadwaleni to Mhlangeni reservoir	18 151	
AbaQulusi	Hlahlindlela	On hold	15	Secondary Bulks	160	Regional bulk pipeline from Emadwaleni to Mhlangeni reservoir	3 090 161	
AbaQulusi	Hlahlindlela	On hold	15	Secondary Bulks	160	Regional bulk pipeline from Emadwaleni to Mhlangeni reservoir	17 303	
AbaQulusi	Hlahlindlela	On hold	15	Secondary Bulks	160	Regional pipeline from Mhlangeni to Mpehzu reservoir	36 190	
AbaQulusi	Hlahlindlela	On hold	15	Secondary Bulks	160	Regional pipeline from Mhlangeni to Mpehzu reservoir	1 805 793	
AbaQulusi	Hlahlindlela	On hold	15	Secondary Bulks	160	Regional pipeline from Mhlangeni to Mpehzu reservoir	35 994	
AbaQulusi	Hlahlindlela	On hold	15	Secondary Bulks	160	Regional pipeline from Mhlangeni to Mpehzu reservoir	1 719 240	
AbaQulusi	Hlahlindlela	On hold	15	Secondary Bulks	75	Regional bulk pipeline from Emadwaleni to Mhlangeni reservoir	411 110	
AbaQulusi	Hlahlindlela	On hold	15	Secondary Bulks	63	Regional pipeline from Mpehzu to existing Bhobozani reservoir	918 170	
AbaQulusi	Hlahlindlela	On hold	15	Secondary Bulks	63	Regional pipeline from Mpehzu to existing Bhobozani reservoir	4 494	
AbaQulusi	Hlahlindlela	On hold	15	Secondary Bulks	63	Regional pipeline from Mpehzu to existing Bhobozani reservoir	1 065 066	
AbaQulusi	Hlahlindlela	On hold	15	Secondary Bulks	63	Regional pipeline from Mpehzu to existing Bhobozani reservoir	48 164	
AbaQulusi	Hlahlindlela	On hold	15	Secondary Bulks	110	Regional pipeline to Esigodini	2 564 280	
AbaQulusi	Hlahlindlela	On hold	15	Storage	250KI	Regional reservoir at Mhlangeni	1 358 720	

AbaQulusi	Hlahlindlela	On hold	15	Storage	1MI	Regional reservoir at Mphezulu	2 824 439	
AbaQulusi	Hlahlindlela	On hold	15	Bulk Supply Connection	417	Mphezulu		-
AbaQulusi	Hlahlindlela	On hold	15	Bulk Supply Connection	298	St Paul		-
AbaQulusi	Hlahlindlela	On hold	15	Settlement Reticulation	39	Jojosini		1 055 232
AbaQulusi	Hlahlindlela	On hold	15	Bulk Supply Connection	523	Esigodini		-
AbaQulusi	Hlahlindlela	On hold	16	Secondary Bulks	200	Regional bulk pipelines connecting Reservoir 2 with existing bulk pipeline at Zwelisha	1 824 528	
AbaQulusi	Hlahlindlela	On hold	16	Secondary Bulks	250	Regional bulk pipelines connecting Reservoir 2 with existing bulk pipeline at Zwelisha	5 048 362	
AbaQulusi	Hlahlindlela	On hold	17	Secondary Bulks	160	Regional bulk pipeline from Nceneni to Emadwaleni reservoir	382 890	
AbaQulusi	Hlahlindlela	On hold	17	Secondary Bulks	160	Regional bulk pipeline from Nceneni to Emadwaleni reservoir	380 810	
AbaQulusi	Hlahlindlela	On hold	17	Secondary Bulks	160	Regional bulk pipeline from Nceneni to Emadwaleni reservoir	117 200	
AbaQulusi	Hlahlindlela	On hold	17	Secondary Bulks	160	Regional bulk pipeline from Nceneni to Emadwaleni reservoir	3 739 549	
AbaQulusi	Hlahlindlela	On hold	17	Secondary Bulks	160	Regional bulk pipeline from Nceneni to Emadwaleni reservoir	36 220	
AbaQulusi	Hlahlindlela	On hold	17	Secondary Bulks	160	Regional bulk pipeline from Emadwaleni to Mhlangeni reservoir	1 298 950	
AbaQulusi	Hlahlindlela	On hold	17	Settlement Reticulation	109	Emadwaleni 1		2 539 152
AbaQulusi	Hlahlindlela	On hold	19	Bulks	350	Bulk pipeline connecting Bulk Reservoir 3 with eMondlo WTW (Wards 19,18 & 17)	16 372 517	
AbaQulusi	Hlahlindlela	On hold	21	Secondary Bulks	90	Regional pipelines to new reservoir at Nhloshana	124 913	
AbaQulusi	Hlahlindlela	On hold	21	Secondary Bulks	200	Regional pipelines from Nhloshana to new reservoir at Amahlathi	6 522	
AbaQulusi	Hlahlindlela	On hold	21	Secondary Bulks	200	Regional pipelines to new reservoir at Ezidulini	1 313 741	
AbaQulusi	Hlahlindlela	On hold	21	Secondary Bulks	110	Regional pipelines to new reservoir at Ezidulini	4 812 839	
AbaQulusi	Hlahlindlela	On hold	21	Secondary Bulks	110	Regional pipelines to new reservoir at Ezidulini	10 706	
AbaQulusi	Hlahlindlela	On hold	21	Secondary Bulks	75	Regional pipelines to new reservoir at Ezidulini	158 357	
AbaQulusi	Hlahlindlela	On hold	21	Secondary Bulks	200	Regional pipelines to new reservoir at Nhloshana	1 351 261	
AbaQulusi	Hlahlindlela	On hold	21	Secondary Bulks	200	Regional pipelines to new reservoir at Nhloshana	4 599 598	
AbaQulusi	Hlahlindlela	On hold	21	Secondary Bulks	200	Regional pipelines from Nhloshana to new reservoir at Amahlathi	427 075	

AbaQulusi	Hlahlindlela	On hold	21	Secondary Bulks	200	Regional pipelines from Nhloshana to new reservoir at Amahlathi	6 956 244	
AbaQulusi	Hlahlindlela	On hold	21	Secondary Bulks	200	Regional pipelines from Nhloshana to new reservoir at Amahlathi	71 387	
AbaQulusi	Hlahlindlela	On hold	21	Secondary Bulks	110	Regional pipeline to new reservoir at Enhahlheleni	1 467 681	
AbaQulusi	Hlahlindlela	On hold	21	Storage	100Kl	New regional Reservoir at Enhahlheleni	796 138	
AbaQulusi	Hlahlindlela	On hold	21	Storage	650Kl	New reservoir at Ezidulini	2 564 584	
AbaQulusi	Hlahlindlela	On hold	21	Storage	200Kl	New regional reservoir at Mdundubenzi	1 188 880	
AbaQulusi	Hlahlindlela	On hold	21	Storage	200Kl	New regional reservoir at Nhloshana	1 188 880	
AbaQulusi	Hlahlindlela	On hold	21	Bulk Supply Connection	59	Mdundubenzi		-
AbaQulusi	Hlahlindlela	On hold	21	Bulk Supply Connection	105	Nhloshana		-
AbaQulusi	Hlahlindlela	On hold	21	Bulk Supply Connection	39	Ngonini		-
AbaQulusi	Hlahlindlela	On hold	21	Bulk Supply Connection	92	Khuthuza		-
AbaQulusi	Hlahlindlela	On hold	22	Bulks	450	Bulk pipeline from Reservoir 1 to Reservoir 2 at Driekwart	17 649 242	
AbaQulusi	Hlahlindlela	On hold	22	Bulks	450	Bulk pipeline from Reservoir 1 to Reservoir 2 at Driekwart	38 916 107	
AbaQulusi	Hlahlindlela	On hold	22	Bulks	450	Rising Main from WTW to 5ML Res	12 811 819	
AbaQulusi	Khambi	2020/2021	4	Settlement Reticulation	50	eMkhweleni		800 000
AbaQulusi	Khambi	2021/2022	4	Settlement Reticulation	24	Weltevreden 2		1 100 000
eDumbe	Coronation	Pending Masterplan Outcome	7	Settlement Reticulation	27	Palmietfontein (Rondspring 137, Kwambhedleni)		TBA
eDumbe	Coronation	Pending Masterplan Outcome	7	Settlement Reticulation	9	Palmietfontein (Rondspring 137, Gezehlala)		TBA
eDumbe	Coronation	Pending Masterplan Outcome	7	Settlement Reticulation	46	Baqulusini 4		TBA
eDumbe	Coronation	Pending Masterplan Outcome	7	Settlement Reticulation	22	Palmietfontein 5841(Mbhambazo)		TBA
eDumbe	Coronation	Pending Masterplan Outcome	7	Settlement Reticulation	97	Helpmekaar		TBA
eDumbe	Coronation	Pending Masterplan Outcome	7	Settlement Reticulation	65	Palmietfontein (Kwambilimbhaga)		TBA
eDumbe	Coronation	Pending Masterplan Outcome	7	Settlement Reticulation	18	Baqulusini 5		TBA
eDumbe	Simdlangentsha West	2018/2019	4	Treatment	10ml	Phase2 10ML to Sim West	28 600 000	

eDumbe	Simdlangentsha West	2019/2020	4	Pump Station		Upgrade existing PS	1 161 600	
eDumbe	Simdlangentsha West	2019/2020	4	Bulks	600	New Rising Main from WTW to Regional Bulk Reservoir	4 948 078	
eDumbe	Simdlangentsha West	2020/2021	4	Bulks	300	Phase1 upgrade to existing Rising Main	1 791 705	
eDumbe	Simdlangentsha West	2020/2021	2	Bulks	125	New regional bulk pipeline connecting Embizeni and Ezibomvu schemes	4 609 251	
eDumbe	Simdlangentsha West	2021/2022	2	Bulks	400	New Bulk Feed from Res to Frischgewaagd	2 678 148	
eDumbe	Simdlangentsha West	2021/2022	2	Bulks	200	New regional bulk pumpline to bulk reservoir at Embizeni	4 247 932	
eDumbe	Simdlangentsha West	>2022	2	Bulks	400	New regional bulk pumpline to bulk reservoir at Embizeni	60 587	
eDumbe	Simdlangentsha West	>2022	2	Bulks	350	New Revised TOR 15Feb10	10 549 612	
eDumbe	Simdlangentsha West	>2022	2	Storage	30KI	New secondary reservoir at Embizeni	509 520	
eDumbe	Simdlangentsha West	>2022	2	Storage	200kl	New regional reservoir	1 188 880	
eDumbe	Simdlangentsha West	>2022	2	Storage	5ML	New Frischgewaagd Reservoir	7 239 939	
eDumbe	Simdlangentsha West	>2022	2	Storage	5ML	New Bulk Regional Reservoir	7 239 939	
eDumbe	Simdlangentsha West	>2022	2	Storage	5ML	New Storage Res	7 239 939	
eDumbe	Simdlangentsha West	>2022	2	Storage	1ML	New Bulk Regional reservoir at Embizeni	2 824 439	
eDumbe	Simdlangentsha West	>2022	2	Pump Station		New Bulk pump station at Embizeni	3 327 500	
eDumbe	Simdlangentsha West	>2022	4	Bulks	600	New Rising Main from WTW to Regional Bulk Reservoir	10 038 641	
eDumbe	Simdlangentsha West	>2022	4	Bulks	600	New Rising Main from WTW to Regional Bulk Reservoir	4 491 051	
eDumbe	Simdlangentsha West	>2022	4	Pump Station		New PS as part of upgrade	4 891 425	
eDumbe	Simdlangentsha West	>2022	4	Storage	500kl	New Balancing Res from WTW to new Regional Bulk Reservoir	2 347 189	
eDumbe	Simdlangentsha West	>2022	5	Bulk Supply Connection	982	Tholakela		-
eDumbe	Simdlangentsha West	>2022	5	Bulk Supply Connection	170	Mpundu		-
eDumbe	Simdlangentsha West	>2022	5	Bulk Supply Connection	47	Pivaanspoort		-
eDumbe	Simdlangentsha West	>2022	5	Bulk Supply Connection	52	Ko Dlomo		-
eDumbe	Simdlangentsha West	>2022	5	Bulk Supply Connection	197	Kwa Vova		-

eDumbe	Simdlangentsha West	>2022	5	Bulks	125	New regional bulk pipeline to connect Balmoral and Mpundu scheme	2 448 310	
eDumbe	Simdlangentsha West	>2022	5	Bulks	75	Regional bulk to connect Tholakela and Balmoral schemes	1 731 188	
eDumbe	Simdlangentsha West	>2022	5	Bulks	110	New regional bulk pipeline connecting Embizeni and Ezibomvu schemes	197 627	
eDumbe	Simdlangentsha West	>2022	5	Bulks	125	Bulk mains from Ezibomvu to Tholakela	961 901	
eDumbe	Simdlangentsha West	>2022	5	Storage	30KI	New regional reservoir at Mpundu	509 520	
eDumbe	Simdlangentsha West	>2022	5	Storage	80KI	New regional reservoir at Kwa Vova	775 214	
eDumbe	Simdlangentsha West	>2022	5	Storage	10kl	New res at Balmoral	341 276	
eDumbe	Simdlangentsha West	>2022	5	BPT		BPT on new pipeline between Tholakela and Balmoral schemes	84 920	
eDumbe	Simdlangentsha West	>2022	5	Storage	100kl	New secondary reservoir for Ezibomvu	796 138	
eDumbe	Simdlangentsha West	>2022	5	Storage	100KI	New regional reservoir at Mpundu	796 138	
eDumbe	Simdlangentsha West	>2022	6	Bulk Supply Connection	14	New		-
eDumbe	Simdlangentsha West	>2022	6	Bulk Supply Connection	71	Enkembeni A		-
eDumbe	Simdlangentsha West	>2022	6	Bulk Supply Connection	24	Enkembeni B		-
eDumbe	Simdlangentsha West	>2022	6	Bulk Supply Connection	117	Enkembeni C		-
eDumbe	Simdlangentsha West	>2022	6	Bulk Supply Connection	72	Obishini		-
eDumbe	Simdlangentsha West	>2022	6	Bulk Supply Connection	112	Emadulini		-
eDumbe	Simdlangentsha West	>2022	6	Bulk Supply Connection	80	Mahlosane		-
eDumbe	Simdlangentsha West	>2022	6	Bulk Supply Connection	88	Mphelanelaba		-
eDumbe	Simdlangentsha West	>2022	6	Bulk Supply Connection	97	Emakholweni 1		-
eDumbe	Simdlangentsha West	>2022	6	Bulk Supply Connection	260	Gedlase		-
eDumbe	Simdlangentsha West	>2022	6	Bulk Supply Connection	108	Gwebu 1		-
eDumbe	Simdlangentsha West	>2022	6	Bulk Supply Connection	115	Lujojwana		-
eDumbe	Simdlangentsha West	>2022	6	Bulk Supply Connection	34	New		-
eDumbe	Simdlangentsha West	>2022	6	Bulks	125	New regional bulk pipeline to connect Balmoral and Mpundu scheme	2 221 776	

eDumbe	Simdlangentsha West	>2022	6	Bulks	63	New regional bulk pipeline connecting Emakholweni1 with Lujojwana	605 058	
eDumbe	Simdlangentsha West	>2022	6	Bulks	63	New regional bulk pipeline connecting Emakholweni1 with Lujojwana	253 711	
eDumbe	Simdlangentsha West	>2022	6	Bulks	50	New regional bulk pipeline connecting Emakholweni1 with Lujojwana	864 152	
eDumbe	Simdlangentsha West	>2022	6	Storage	80Kl	New res at Balmoral	775 214	
eDumbe	Simdlangentsha West	>2022	6	Storage	30kl	New regional reservoir at Gedlase	509 520	
eDumbe	Simdlangentsha West	>2022	6	Storage	30Kl	New regional reservoir at Emadulini	509 520	
eDumbe	Simdlangentsha West	>2022	6	Storage	30Kl	New regional reservoir at Lujojwana	509 520	
eDumbe	Simdlangentsha West	>2022	6	Storage	30Kl	New regional reservoir at Gwebu1	509 520	
eDumbe	Simdlangentsha West	>2022	6	Storage	30kl	New regional reservoir at Gedlase	509 520	
eDumbe	Simdlangentsha West	>2022	6	Pump Station		New regional pump station from Gedlase to Gwebu1	2 096 325	
eDumbe	Simdlangentsha West	>2022	6	BPT		New BPT at Lujojwana	84 920	
eDumbe	Simdlangentsha West	>2022	7	Bulk Supply Connection	135	Obivane 1		-
eDumbe	Simdlangentsha West	>2022	7	Storage	30kl	New regional reservoir at Obivane 1	509 520	
eDumbe	Simdlangentsha West	>2022	8	Bulk Supply Connection	977	Opuzane		-
eDumbe	Simdlangentsha West	>2022	8	Bulk Supply Connection	43	Mthethwa Trust (Haasfontein)		-
eDumbe	Simdlangentsha West	>2022	8	Bulk Supply Connection	24	Amberg (Rekwest 204)		-
eDumbe	Simdlangentsha West	>2022	8	Bulks	125	Regional bulk to new Tholakela reservoir	2 965 219	
eDumbe	Simdlangentsha West	>2022	8	Bulks	160	New regional bulk pipeline connecting Maphayiphini and Leliefontein schemes	4 916 051	
eDumbe	Simdlangentsha West	>2022	8	Bulks	110	Regional bulk to new Maphayiphini reservoir	669 473	
eDumbe	Simdlangentsha West	>2022	8	Bulks	110	Regional bulk to new Ophuzane reservoir	1 389 551	
eDumbe	Simdlangentsha West	>2022	8	Bulks	110	Regional bulk to new Ophuzane reservoir	1 495 154	
eDumbe	Simdlangentsha West	>2022	8	Bulks	50	Regional bulk to new Maphayiphini reservoir	11 296	
eDumbe	Simdlangentsha West	>2022	8	Bulks	110	Regional bulk to new Maphayiphini reservoir	217 417	
eDumbe	Simdlangentsha West	>2022	8	Storage	30kl	New secondary bulk reservoir for Ezibomvu	509 520	

eDumbe	Simdlangentsha West	>2022	8	Storage	100KI	New reservoir at Leliefontein	796 138	
eDumbe	Simdlangentsha West	>2022	8	Storage	30KI	New reservoir at Maphayphini	509 520	
eDumbe	Simdlangentsha West	>2022	8	Storage	30KI	New reservoir for Mthethwa Trust (Haasfontein)	509 520	
eDumbe	Simdlangentsha West	>2022	5,6	Bulk Supply Connection	417	Balmoral		-
eDumbe	Simdlangentsha West	>2022	5,6	Bulk Supply Connection	52	Maqulusini		-
Nongoma	Mandhlakazi South	In Progress	7	Settlement Reticulation	152	Gwebu 2, Mphola & Wela 2 Reticulation (Mandhlakazi South Phase 3)		12 000 000
Nongoma	Mandhlakazi West	2018/2019	1	Bulks	100	GM 1 - Res A (H) to Res B	70 000 000	
Nongoma	Mandhlakazi West	2018/2019	1	Bulks	100	GM 2 - Res B to Res H1		
Nongoma	Mandhlakazi West	2018/2019	1	Storage	300kl	Proposed 300KI Elevated retic tank @ 660m (MSW)		
Nongoma	Mandhlakazi West	2018/2019	1	Storage	1ML	1MI Bulk RC Res B @ 653m		
Nongoma	Mandhlakazi West	2018/2019	1	Pump Station	648m	Pump station @ 648m		
Nongoma	Mandhlakazi West	2018/2019	3	Bulks		Zone Phase 5.1 Bulks	25 000 000	
Nongoma	Mandhlakazi West	2019/2020	3,5	Bulks		Zone Phase 5.2 Bulks	35 000 000	
Nongoma	Mandhlakazi West	2019/2020	3	Bulks		Zone Phase 5.3 Bulks	26 000 000	
Nongoma	Mandhlakazi South	2019/2020	1	Settlement Reticulation	92	Zidwadweni	9 000 000	
Nongoma	Mandhlakazi South	2019/2020	1	Settlement Reticulation	75	Ntweni 1		
Nongoma	Mandhlakazi South	2019/2020	1	Settlement Reticulation	25	Mngamunde		
Nongoma	Mandhlakazi South	2019/2020	1	Settlement Reticulation	52	Gega		
Nongoma	Mandhlakazi	2019/2020	3	Settlement Reticulation	4	Esgelwini		
Nongoma	Mandhlakazi	2019/2020	3	Settlement Reticulation	25	Magendene		
Nongoma	Mandhlakazi	2019/2020	3	Settlement Reticulation	105	Mthonjaneni		
Nongoma	Mandhlakazi	2019/2020	3	Settlement Reticulation	88	Esikuthwaneni		
Nongoma	Mandhlakazi	2019/2020	3	Settlement Reticulation	56	Okhalweni 2		
Nongoma	Mandhlakazi	2019/2020	3	Settlement Reticulation	33	Kolubomvu 2		

Nongoma	Mandhlakazi	2019/2020	3	Settlement Reticulation	113	Kwagongolozane		
Nongoma	Mandhlakazi	2019/2020	3	Settlement Reticulation	108	Hlushwaneni		
Nongoma	Mandhlakazi	2019/2020	3	Settlement Reticulation	96	Mduda		
Nongoma	Mandhlakazi	2019/2020	3	Settlement Reticulation	111	Mgxanyini		
Nongoma	Mandhlakazi	2019/2020	3	Settlement Reticulation	63	Esigodiphola 1		
Nongoma	Mandhlakazi	2019/2020	3	Settlement Reticulation	120	Mapambeni		
Nongoma	Mandhlakazi	2019/2020	3	Settlement Reticulation	57	Dlakuse		
Nongoma	Mandhlakazi	2019/2020	5	Settlement Reticulation	174	Sinqanda		
Nongoma	Mandhlakazi	2019/2020	7	Settlement Reticulation	81	Sinkonkonko 2		
Nongoma	Mandhlakazi	2019/2020	7	Settlement Reticulation	125	Sinkonkonko 1		
Nongoma	Mandhlakazi	2019/2020	7	Settlement Reticulation	80	Vukani 1		
Nongoma	Mandhlakazi	2019/2020	7	Settlement Reticulation	36	Mbembe		
Nongoma	Mandhlakazi	2020/2021	3	Settlement Reticulation	16	Maceneni		
Nongoma	Mandhlakazi	2020/2021	3	Settlement Reticulation	104	Number7		
Nongoma	Mandhlakazi	2020/2021	3	Settlement Reticulation	65	Maqhineni		
Nongoma	Mandhlakazi	2020/2021	3	Settlement Reticulation	50	Gagasini		
Nongoma	Mandhlakazi	2020/2021	3	Settlement Reticulation	164	Qondile 1		
Nongoma	Mandhlakazi	2020/2021	3	Settlement Reticulation	43	Ezinhlabeni		
Nongoma	Mandhlakazi	2020/2021	3	Settlement Reticulation	24	Ezingweni		
Nongoma	Mandhlakazi	2020/2021	3	Settlement Reticulation	79	Emaggebeni (Mlaza)		
Nongoma	Mandhlakazi	2020/2021	3	Settlement Reticulation	66	Shalashala		
Nongoma	Mandhlakazi	2020/2021	3	Settlement Reticulation	42	Emathlomane		
Nongoma	Mandhlakazi	2020/2021	5	Settlement Reticulation	131	Kwajuba		
Nongoma	Mandhlakazi	2020/2021	5	Settlement Reticulation	79	Mahlomane		

Nongoma	Mandhlakazi	2020/2021	5	Settlement Reticulation	22	Kolubomvu 1		
Nongoma	Mandhlakazi	2020/2021	18	Settlement Reticulation	21	Manqanyini		
Nongoma	Mandhlakazi	2020/2021	18	Settlement Reticulation	180	eHlabathini 1		
Nongoma	Mandhlakazi	2020/2021	18	Settlement Reticulation	328	Mememe		
Nongoma	Mandhlakazi	2020/2021	18	Settlement Reticulation	56	Masimba-Ndawonye		
Nongoma	Mandhlakazi	2020/2021	18	Settlement Reticulation	85	Kwadleka		
Nongoma	Mandhlakazi	2020/2021	18	Settlement Reticulation	276	Kwakhangela		
Nongoma	Mandhlakazi West	2020/2021	3	Bulks		Zone Phase 5.4 Bulks	16 000 000	
Nongoma	Mandhlakazi West	>2022	3	Bulks		Zone Phase 5.5 Bulks	138 000 000	
Nongoma	Mandhlakazi	2019/2020	All	Bulks Upgrade to 20ML	10ML	Bulks upgrade from 10ML to 20ML (year 2019)	207 000 000	
Nongoma	Mandhlakazi	2024	All	Bulks Upgrade to 30ML	10ML	Bulks upgrade from 20ML to 30ML (year 2024)	25 000 000	
Nongoma	Mandhlakazi	>2022	2	Settlement Reticulation	10	Mthwandlana 1		
Nongoma	Mandhlakazi	>2022	2	Settlement Reticulation	23	Esixeni		
Nongoma	Mandhlakazi	>2022	2	Settlement Reticulation	79	Vusu Musi		
Nongoma	Mandhlakazi	>2022	2	Settlement Reticulation	41	Ntenjane		
Nongoma	Mandhlakazi	>2022	2	Settlement Reticulation	56	Kwankweme		
Nongoma	Mandhlakazi	>2022	2	Settlement Reticulation	55	Enkanyezini		
Nongoma	Mandhlakazi	>2022	2	Settlement Reticulation	58	Dungamanzi 1		
Nongoma	Mandhlakazi	>2022	2	Settlement Reticulation	134	Ovukneni		
Nongoma	Mandhlakazi	>2022	2	Settlement Reticulation	76	Ngangayiphi		
Nongoma	Mandhlakazi	>2022	2	Settlement Reticulation	117	Msebe		
Nongoma	Mandhlakazi	>2022	2	Settlement Reticulation	41	Maswazini		
Nongoma	Mandhlakazi	>2022	2	Settlement Reticulation	47	Cisho		
Nongoma	Mandhlakazi	>2022	2	Settlement Reticulation	165	Isibonela		

Nongoma	Mandhlakazi	>2022	2	Settlement Reticulation	81	Zikaniphela		
Nongoma	Mandhlakazi	>2022	3	Settlement Reticulation	62	Vumbuka		
Nongoma	Mandhlakazi	>2022	3	Settlement Reticulation	183	Domba		
Nongoma	Mandhlakazi	>2022	3	Settlement Reticulation	94	Sovana		
Nongoma	Mandhlakazi	>2022	3	Settlement Reticulation	78	Njonyomane		
Nongoma	Mandhlakazi	>2022	3	Settlement Reticulation	58	Macijo		
Nongoma	Mandhlakazi	>2022	3	Settlement Reticulation	45	Vesonweni		
Nongoma	Mandhlakazi	>2022	3	Settlement Reticulation	128	Machibini		
Nongoma	Mandhlakazi	>2022	4	Settlement Reticulation	170	Khokhwaneni		
Nongoma	Mandhlakazi	>2022	4	Settlement Reticulation	410	Mangeleni		
Nongoma	Mandhlakazi	>2022	4	Settlement Reticulation	193	Esiphambeneni		
Nongoma	Mandhlakazi	>2022	4	Settlement Reticulation	126	Esiphambanweni		
Nongoma	Mandhlakazi	>2022	5	Settlement Reticulation	137	Mpuphusi		
Nongoma	Mandhlakazi	>2022	5	Settlement Reticulation	262	Bambelentulo		
Nongoma	Mandhlakazi	>2022	5	Settlement Reticulation	127	Nhlebelala		
Nongoma	Mandhlakazi	>2022	5	Settlement Reticulation	164	Ophaphasi		
Nongoma	Mandhlakazi	>2022	5	Settlement Reticulation	108	Fakude		
Nongoma	Mandhlakazi	>2022	5	Settlement Reticulation	138	Ndimhlana		
Nongoma	Mandhlakazi	>2022	5	Settlement Reticulation	157	Toyisa Langalesizwe		
Nongoma	Mandhlakazi	>2022	5	Settlement Reticulation	142	Esheshi		
Nongoma	Mandhlakazi	>2022	5	Settlement Reticulation	92	Emphilweni		
Nongoma	Mandhlakazi	>2022	5	Settlement Reticulation	190	Khethankomo		
Nongoma	Mandhlakazi	>2022	5	Settlement Reticulation	71	New Town		
Nongoma	Mandhlakazi	>2022	5	Settlement Reticulation	191	Mthincongo		

Nongoma	Mandhlakazi	>2022	6	Settlement Reticulation	18	Esigodiphola 2		
Nongoma	Mandhlakazi	>2022	6	Settlement Reticulation	589	Esidinsi		
Nongoma	Mandhlakazi	>2022	6	Settlement Reticulation	234	Khenani		
Nongoma	Mandhlakazi	>2022	6	Settlement Reticulation	214	Dushwini		
Nongoma	Mandhlakazi	>2022	6	Settlement Reticulation	63	Phumanyova		
Nongoma	Mandhlakazi	>2022	6	Settlement Reticulation	74	Cabokwakhe		
Nongoma	Mandhlakazi	>2022	6	Settlement Reticulation	191	Dengeni		
Nongoma	Mandhlakazi	>2022	6	Settlement Reticulation	118	Kwambongi		
Nongoma	Mandhlakazi	>2022	7	Settlement Reticulation	146	Sibanyaneni		
Nongoma	Mandhlakazi	>2022	7	Settlement Reticulation	57	Maganganeni		
Nongoma	Mandhlakazi	>2022	7	Settlement Reticulation	31	Mgolokotho		
Nongoma	Mandhlakazi	>2022	7	Settlement Reticulation	89	Bhidi		
Nongoma	Mandhlakazi	>2022	7	Settlement Reticulation	161	Egudu		
Nongoma	Mandhlakazi	>2022	7	Settlement Reticulation	41	Nzondwane		
Nongoma	Mandhlakazi	>2022	7	Settlement Reticulation	207	Mpuqwini		
Nongoma	Mandhlakazi	>2022	7	Settlement Reticulation	45	Chinamorgan		
Nongoma	Mandhlakazi	>2022	7	Settlement Reticulation	74	Nkungwini		
Nongoma	Mandhlakazi	>2022	8	Settlement Reticulation	114	Ncemaneni		
Nongoma	Mandhlakazi	>2022	8	Settlement Reticulation	301	Bhekumthetho 2		
Nongoma	Mandhlakazi	>2022	8	Settlement Reticulation	189	Nkonjeni		
Nongoma	Mandhlakazi	>2022	18	Settlement Reticulation	141	Zibusele		
Nongoma	Mandhlakazi	>2022	18	Settlement Reticulation	14	Meyame		
Nongoma	Mandhlakazi	>2022	18	Settlement Reticulation	98	Maduma		
Nongoma	Mandhlakazi	>2022	18	Settlement Reticulation	36	Magomba		

Nongoma	Mandhlakazi	>2022	18	Settlement Reticulation	27	Emnzine		
Nongoma	Mandhlakazi	>2022	18	Settlement Reticulation	66	Mzini Enzondwane		
Nongoma	Mandhlakazi	>2022	18	Settlement Reticulation	59	Nanqanyini		
Nongoma	Mandhlakazi	>2022	18	Settlement Reticulation	38	Ezikleleni		
Nongoma	Mandhlakazi	>2022	18	Settlement Reticulation	133	Hlabathini 1		
Nongoma	Mandhlakazi	>2022	18	Settlement Reticulation	68	Umlazi		
Nongoma	Mandhlakazi	>2022	20	Settlement Reticulation	116	Manqashaneni		
Nongoma	Mandhlakazi	>2022	20	Settlement Reticulation	75	Nkabane		
Nongoma	Mandhlakazi	>2022	20	Settlement Reticulation	275	Vilane		
Nongoma	Mandhlakazi	>2022	20	Settlement Reticulation	250	Ekubungazeleni		
uPhongolo	Mandhlakazi	2019/2020	1	Settlement Reticulation	234	Mpakama		-
Nongoma	Usuthu	In Progress	19	Storage		New bulks reservoir and retics within Nongoma town.	6 489 651	
Nongoma	Usuthu	In Progress	9	Pump Station		Holinyoka PS at Ndikandika	996 785	
Nongoma	Usuthu	In Progress	9	Pump Station		Lindizwe PS & Res G02 at Sikhleni		
Nongoma	Usuthu	In progress	15	Upgrade exist WTW	7ML	WPW Upgrade PH1 & 2; Mechanical/Electrical work	54 600 455	
Nongoma	Usuthu	In progress	20	Storage	7ML	Bulk Res G-2 at Nongoma Town	19 335 000	
Nongoma	Usuthu	2018/2019	13	Source / Abstraction		Vuna Dam Dredging	9 800 000	
Nongoma	Usuthu	2018/2019	15	Dam Geotech		Off-storage dam (Geotech)	1 500 000	
Nongoma	Usuthu	2018/2019	19	Bulks		Bulks from Nongoma town to surrounding settlements	16 600 000	
Nongoma	Usuthu	2018/2019	9	Settlement Reticulation	141	Lindizwe Reservoir retics: Ndikandika, Zwelisha, Sikhkeni	32 000 000	
Nongoma	Usuthu	2018/2019	9	Settlement Reticulation		Holinyoka Reservoir retics: Holinyoka, eBhungwe, eMkhondo, Kwasincengile, Kwadenge, Nqumbi, Mahayoyo, Gomondo, Ezilonyeni, Matshempunzi	24 680 000	
Nongoma	Usuthu	2018/2019	4	Settlement Reticulation	97	Mahlezane		1 270 000
Nongoma	Usuthu	2018/2019	9	Settlement Reticulation	377	Kwa'Denge		4 070 000

Nongoma	Usuthu	2018/2019	9	Settlement Reticulation	225	Emkhondo		2 550 000
Nongoma	Usuthu	2018/2019	9	Settlement Reticulation	379	Holinyoka		4 090 000
Nongoma	Usuthu	2018/2019	9	Settlement Reticulation	167	Ndikandika		1 970 000
Nongoma	Usuthu	2018/2019	9	Settlement Reticulation	119	Kwasicengile		1 490 000
Nongoma	Usuthu	2018/2019	9	Settlement Reticulation	87	Sikheleni		1 170 000
Nongoma	Usuthu	2018/2019	9	Settlement Reticulation	127	Sikhleni		1 570 000
Nongoma	Usuthu	2018/2019	9	Settlement Reticulation	115	Ebhunge		-
Nongoma	Usuthu	2018/2019	9	Settlement Reticulation	115	Esikhaleni 1		-
Nongoma	Usuthu	2018/2019	9	Settlement Reticulation	514	Lindizwe		-
Nongoma	Usuthu	2018/2019	13	Settlement Reticulation	113	Nqumbi		1 430 000
Nongoma	Usuthu	2018/2019	13	Settlement Reticulation	220	Mahayoyo		2 500 000
Nongoma	Usuthu	2018/2019	13	Settlement Reticulation	185	Gomondo		-
Nongoma	Usuthu	2018/2019	14	Settlement Reticulation	193	Ezilonyeni		-
Nongoma	Usuthu	2018/2019	16	Settlement Reticulation	403	Ophiyaneni		4 330 000
Nongoma	Usuthu	2018/2019	16	Settlement Reticulation	198	Kwasabela		-
Nongoma	Usuthu	2018/2019	16	Settlement Reticulation	673	Ophalule		-
Nongoma	Usuthu	2018/2019	16	Settlement Reticulation	250	Nhlophenkulu		-
Nongoma	Usuthu	2018/2019	16	Settlement Reticulation	100	Mcwembe		-
Nongoma	Usuthu	2018/2019	20	Settlement Reticulation	147	Sgodiphola 2		-
Nongoma	Usuthu	2018/2019	20	Settlement Reticulation	87	Emvomveni		-
Nongoma	Usuthu	2018/2019	21	Settlement Reticulation	532	Ziphete		5 620 000
Nongoma	Usuthu	2018/2019	21	Settlement Reticulation	122	Matshempunzi		-
Nongoma	Usuthu	2018/2019	21	Settlement Reticulation	27	Eningeni		-
Nongoma	Usuthu	2018/2019	21	Settlement Reticulation	307	Emahashini		-

Nongoma	Usuthu	2018/2019	9	Settlement Reticulation		Nongoma South Retics: Lindizwe, Esikhaleni		28 800 000
Nongoma	Usuthu	2018/2019	13	Source / Abstraction		Vuna Dam Fish Ladder	2 500 000	
Nongoma	Usuthu	2018/2019	4	Bulks	350	Bulk gravity mains from Lindizwe PS to Bulk Res F at Emaqeleni & Sec. Bulks	57 000 000	
Nongoma	Usuthu	2018/2019	9,16	Settlement Reticulation		Nongoma town surrounding retics		55 700 000
Nongoma	Usuthu	2019/2020	16	Settlement Reticulation	1 075	Canaan		25 000 000
Nongoma	Usuthu	2019/2020	9,16	Settlement Reticulation	194	Delene (KwaMinya)		10 600 000
Nongoma	Usuthu	2020/2021	13	Settlement Reticulation	118	Ekubuseni		1 480 000
Nongoma	Usuthu	2020/2021	14	Settlement Reticulation	131	Emahlombe		1 610 000
Nongoma	Usuthu	2020/2021	14	Settlement Reticulation	302	Esigangeni 1		3 320 000
Nongoma	Usuthu	2020/2021	14	Settlement Reticulation	52	Khalweni		820 000
Nongoma	Usuthu	2020/2021	14	Settlement Reticulation	151	Badlaneni		-
Nongoma	Usuthu	2020/2021	14	Settlement Reticulation	117	Newgoli		-
Nongoma	Usuthu	2020/2021	14	Settlement Reticulation	105	Itshodo		-
Nongoma	Usuthu	2020/2021	14	Settlement Reticulation	77	Kwandase		-
Nongoma	Usuthu	2020/2021	14	Settlement Reticulation	296	Ivuna		-
Nongoma	Usuthu	>2022	13	Storage	2ML	Bulk Res F at Emaqeleni	6 173 004	
Nongoma	Usuthu	>2022	1	Secondary Bulks	75	Secondary bulks from Mbengo to Res H7 at Ntshangase Trust	538 044	
Nongoma	Usuthu	>2022	1	Secondary Bulks	75	Secondary bulks from Mbengo to Res H7 at Ntshangase Trust	1 187 266	
Nongoma	Usuthu	>2022	1	Bulks	300	Bulk gravity mains from Res D off-take to Res E off-take at Onyango	10 720 959	
Nongoma	Usuthu	>2022	1	Storage	30KI	Res H7 at Ntshangase Trust	509 520	
Nongoma	Usuthu	>2022	4	Settlement Reticulation	7	Emaqeleni 2		370 000
Nongoma	Usuthu	>2022	4	Settlement Reticulation	30	Emaqeleni 3		600 000
Nongoma	Usuthu	>2022	4	Settlement Reticulation	41	Emanqomfini 2		-
Nongoma	Usuthu	>2022	4	Settlement Reticulation	79	Emanqomfini 1		-

Nongoma	Usuthu	>2022	4	Settlement Reticulation	286	Masundwini		-
Nongoma	Usuthu	>2022	4	Settlement Reticulation	102	Mfankomo		-
Nongoma	Usuthu	>2022	4	Settlement Reticulation	77	Mhlwehlwe		-
Nongoma	Usuthu	>2022	4	Settlement Reticulation	245	Manyoni		-
Nongoma	Usuthu	>2022	4	Settlement Reticulation	71	Makholweni		-
Nongoma	Usuthu	>2022	4	Settlement Reticulation	92	Sindaba		-
Nongoma	Usuthu	>2022	4	Settlement Reticulation	96	Emakhandeni		-
Nongoma	Usuthu	>2022	4	Settlement Reticulation	38	Mbonjeni		-
Nongoma	Usuthu	>2022	4	Settlement Reticulation	295	Henenende		-
Nongoma	Usuthu	>2022	4	Settlement Reticulation	149	Edlabe		-
Nongoma	Usuthu	>2022	4	Settlement Reticulation	90	Ethokoza		-
Nongoma	Usuthu	>2022	4	Settlement Reticulation	135	Nkalaneni		-
Nongoma	Usuthu	>2022	4	Settlement Reticulation	59	Mashenge		-
Nongoma	Usuthu	>2022	6	Settlement Reticulation	201	Ekuvukeni		2 310 000
Nongoma	Usuthu	>2022	6	Settlement Reticulation	80	Ndololwane		-
Nongoma	Usuthu	>2022	7	Bulks	200	Bulk gravity mains off-take to Bulk Res E	10 895 192	
Nongoma	Usuthu	>2022	9	Settlement Reticulation	57	Gomabagagu		-
Nongoma	Usuthu	>2022	9	Settlement Reticulation	59	Ezinhlabeni		-
Nongoma	Usuthu	>2022	10	Bulks	200	Bulk gravity mains from Bulk Res F to Bulk Res J at Kwelibomvu	15 843 221	
Nongoma	Usuthu	>2022	10	Storage	500KL	Bulk Res J at Kwelibomvu	2 347 189	
Nongoma	Usuthu	>2022	10	Settlement Reticulation	16	Kwahelibheshu		460 000
Nongoma	Usuthu	>2022	10	Settlement Reticulation	72	Nombanjana		1 020 000
Nongoma	Usuthu	>2022	10	Settlement Reticulation	26	Engongoma		560 000
Nongoma	Usuthu	>2022	10	Settlement Reticulation	213	Nsawulani		2 430 000

Nongoma	Usuthu	>2022	10	Settlement Reticulation	20	Nokhesheni		500 000
Nongoma	Usuthu	>2022	10	Settlement Reticulation	181	Emakholweni 2		2 110 000
Nongoma	Usuthu	>2022	10	Settlement Reticulation	126	Magutshwa		1 560 000
Nongoma	Usuthu	>2022	10	Settlement Reticulation	26	Qule		-
Nongoma	Usuthu	>2022	10	Settlement Reticulation	43	Egedeni		-
Nongoma	Usuthu	>2022	10	Settlement Reticulation	48	Mangongo		-
Nongoma	Usuthu	>2022	10	Settlement Reticulation	109	Kwamshiki		-
Nongoma	Usuthu	>2022	10	Settlement Reticulation	31	Duma		-
Nongoma	Usuthu	>2022	10	Settlement Reticulation	100	Dindela		-
Nongoma	Usuthu	>2022	10	Settlement Reticulation	76	Mpondo 1		-
Nongoma	Usuthu	>2022	10	Settlement Reticulation	39	Mgiqwane		-
Nongoma	Usuthu	>2022	10	Settlement Reticulation	42	Entshoweni		-
Nongoma	Usuthu	>2022	10	Settlement Reticulation	166	Kwelibomvu		-
Nongoma	Usuthu	>2022	10	Settlement Reticulation	101	Ezombode		-
Nongoma	Usuthu	>2022	10	Settlement Reticulation	154	Hobiyana		-
Nongoma	Usuthu	>2022	10	Settlement Reticulation	209	Klolweni		-
Nongoma	Usuthu	>2022	10	Settlement Reticulation	162	Kwandwandwe		-
Nongoma	Usuthu	>2022	10	Settlement Reticulation	120	Okhalweni 3		-
Nongoma	Usuthu	>2022	10	Settlement Reticulation	103	Esweni		-
Nongoma	Usuthu	>2022	10	Settlement Reticulation	158	Hlathi		-
Nongoma	Usuthu	>2022	10	Settlement Reticulation	159	Mission 1		-
Nongoma	Usuthu	>2022	11	Bulks	50	Gravity pipeline to BPT at Kwavumela	634 366	
Nongoma	Usuthu	>2022	11	Bulks	50	Gravity pipeline from Res D7 to Res D8 at Masokaneni	863 396	
Nongoma	Usuthu	>2022	11	BPT	30KI	BPT at Kwavumela	509 520	

Nongoma	Usuthu	>2022	11	Storage	30KI	Res D8 at Masokaneni	509 520	
Nongoma	Usuthu	>2022	11	Settlement Reticulation	341	Ngolotshe		3 710 000
Nongoma	Usuthu	>2022	11	Settlement Reticulation	65	Doncaneni		950 000
Nongoma	Usuthu	>2022	11	Settlement Reticulation	128	Eziqhumeni		1 580 000
Nongoma	Usuthu	>2022	11	Settlement Reticulation	57	Entwala		870 000
Nongoma	Usuthu	>2022	11	Settlement Reticulation	86	Nqala		1 160 000
Nongoma	Usuthu	>2022	11	Settlement Reticulation	76	Kwavumela		1 060 000
Nongoma	Usuthu	>2022	11	Settlement Reticulation	65	Emhemeni		950 000
Nongoma	Usuthu	>2022	11	Settlement Reticulation	42	Zampilo		720 000
Nongoma	Usuthu	>2022	11	Settlement Reticulation	142	Entuthukweni		-
Nongoma	Usuthu	>2022	11	Settlement Reticulation	182	Elanjeni/Msasanani		-
Nongoma	Usuthu	>2022	11	Settlement Reticulation	29	Sidakeni 2		-
Nongoma	Usuthu	>2022	11	Settlement Reticulation	57	Khanjaneni		-
Nongoma	Usuthu	>2022	11	Settlement Reticulation	128	Ebungwini		-
Nongoma	Usuthu	>2022	11	Settlement Reticulation	188	Kwazungu		-
Nongoma	Usuthu	>2022	11	Settlement Reticulation	51	Mbamba		-
Nongoma	Usuthu	>2022	11	Settlement Reticulation	111	Othinsangu		-
Nongoma	Usuthu	>2022	11	Settlement Reticulation	78	Hlathidumayo		-
Nongoma	Usuthu	>2022	11	Settlement Reticulation	76	Singangeni		-
Nongoma	Usuthu	>2022	11	Settlement Reticulation	49	Mcibilindini		-
Nongoma	Usuthu	>2022	11	Settlement Reticulation	60	Mhlabaneni		-
Nongoma	Usuthu	>2022	11	Settlement Reticulation	160	Masokaneni		-
Nongoma	Usuthu	>2022	12	Bulks	90	Off-take for Res D5 and D6 at Nzama	783 100	
Nongoma	Usuthu	>2022	12	Bulks	90	Off-take for Res D4 at Isizinda B	609 373	

Nongoma	Usuthu	>2022	12	Bulks	63	Off-take for Res D7 at Ngwabe	41 874	
Nongoma	Usuthu	>2022	12	Bulks	63	Gravity pipeline from Res D6 to Res D7 at Ngwabe	1 525 102	
Nongoma	Usuthu	>2022	12	Bulks	63	Gravity pipeline from Res D7 to Res D8 at Masokaneni	1 903 562	
Nongoma	Usuthu	>2022	12	Bulks	160	Gravity pipeline from Res D4 to Res D5 at Nzama	1 758 199	
Nongoma	Usuthu	>2022	12	Bulks	160	Gravity pipeline from Res D4 to Res D5 at Nzama	1 486 859	
Nongoma	Usuthu	>2022	12	Bulks	160	Gravity pipeline from Res D3 to Res D4 at Isizinda B	8 044 616	
Nongoma	Usuthu	>2022	12	Bulks	150	Gravity pipeline from Res D4 to Res D5 at Nzama	5 672 019	
Nongoma	Usuthu	>2022	12	Bulks	75	Off-take for Res D3 at Emgodi 1	207 246	
Nongoma	Usuthu	>2022	12	Storage	30KI	Res D3 at Emgodi1	509 520	
Nongoma	Usuthu	>2022	12	Storage	80KI	Res D4 at Isizinda B	775 214	
Nongoma	Usuthu	>2022	12	Storage	30KI	Res D5 at Nzama	509 520	
Nongoma	Usuthu	>2022	12	Storage	100KI	Res D6 at Esigoqobeni	796 138	
Nongoma	Usuthu	>2022	12	BPT	30KI	BPT at Esigoqobeni	509 520	
Nongoma	Usuthu	>2022	12	Storage	30KI	Res D7 at Ngwabe	509 520	
Nongoma	Usuthu	>2022	12	Settlement Reticulation	38	Dum-Dum		680 000
Nongoma	Usuthu	>2022	12	Settlement Reticulation	100	Nzama		1 300 000
Nongoma	Usuthu	>2022	12	Settlement Reticulation	135	KwaLuphonjwana		1 650 000
Nongoma	Usuthu	>2022	12	Settlement Reticulation	69	Ndlazini		990 000
Nongoma	Usuthu	>2022	12	Settlement Reticulation	132	Isizinda B		1 620 000
Nongoma	Usuthu	>2022	12	Settlement Reticulation	11	Nhloyane		410 000
Nongoma	Usuthu	>2022	12	Settlement Reticulation	11	Isizinda A		410 000
Nongoma	Usuthu	>2022	12	Settlement Reticulation	31	Ezingolaneni		610 000
Nongoma	Usuthu	>2022	12	Settlement Reticulation	48	Nqalu		780 000
Nongoma	Usuthu	>2022	12	Settlement Reticulation	5	Kwa'Ququ		350 000

Nongoma	Usuthu	>2022	12	Settlement Reticulation	61	Nqobuzulu		910 000
Nongoma	Usuthu	>2022	12	Settlement Reticulation	105	Ngalonde		1 350 000
Nongoma	Usuthu	>2022	12	Settlement Reticulation	68	Esigoqobeni		980 000
Nongoma	Usuthu	>2022	12	Settlement Reticulation	81	Ngwabe		1 110 000
Nongoma	Usuthu	>2022	12	Settlement Reticulation	60	Esidakeni 1		900 000
Nongoma	Usuthu	>2022	12	Settlement Reticulation	61	Emayeni 1		910 000
Nongoma	Usuthu	>2022	12	Settlement Reticulation	85	Emayeni 2		1 150 000
Nongoma	Usuthu	>2022	12	Settlement Reticulation	186	Manhlanhla		-
Nongoma	Usuthu	>2022	12	Settlement Reticulation	260	Mashemhlophe		-
Nongoma	Usuthu	>2022	12	Settlement Reticulation	97	Macekaneni		-
Nongoma	Usuthu	>2022	12	Settlement Reticulation	63	Kwelodaka		-
Nongoma	Usuthu	>2022	12	Settlement Reticulation	186	Sigubudu		-
Nongoma	Usuthu	>2022	12	Settlement Reticulation	105	Kwa'Gwaqaza		-
Nongoma	Usuthu	>2022	12	Settlement Reticulation	67	Manzawayo		-
Nongoma	Usuthu	>2022	12	Settlement Reticulation	142	Enkingeni		-
Nongoma	Usuthu	>2022	13	Bulks	160	Gravity mains to reservoir at Emgodi	964 138	
Nongoma	Usuthu	>2022	13	Bulks	160	Gravity mains to reservoir at Emgodi	4 873 002	
Nongoma	Usuthu	>2022	13	Bulks	160	Gravity mains to Res D1 and reservoir at Emgodi	1 881 231	
Nongoma	Usuthu	>2022	13	Bulks	150	Gravity mains off-take to Bulk Res D at Hlambanyathi	3 934 446	
Nongoma	Usuthu	>2022	13	Bulks	160	Off-take to Res D2 at Kwankulu	276 742	
Nongoma	Usuthu	>2022	13	Storage	500Kl	Bulk Res D at Hlambanyathi	2 347 189	
Nongoma	Usuthu	>2022	13	Storage	50Kl	Res D1 at Hlambanyathi	684 075	
Nongoma	Usuthu	>2022	13	Storage	30Kl	Res D2 at Kwankulu	509 520	
Nongoma	Usuthu	>2022	13	Settlement Reticulation	33	Engwelezane		630 000

Nongoma	Usuthu	>2022	13	Settlement Reticulation	82	Embokodweni		1 120 000
Nongoma	Usuthu	>2022	13	Settlement Reticulation	93	Emgodi 2		-
Nongoma	Usuthu	>2022	13	Settlement Reticulation	128	Kwamfemfeni		-
Nongoma	Usuthu	>2022	13	Settlement Reticulation	24	Ingundwane		-
Nongoma	Usuthu	>2022	13	Settlement Reticulation	83	Ezimpisini (Entuthukweni)		-
Nongoma	Usuthu	>2022	13	Settlement Reticulation	37	Eqeleni		-
Nongoma	Usuthu	>2022	13	Settlement Reticulation	99	Kwankulu		-
Nongoma	Usuthu	>2022	13	Settlement Reticulation	101	Hlambanyathi 1		-
Nongoma	Usuthu	>2022	13	Settlement Reticulation	209	Iqonqo		-
Nongoma	Usuthu	>2022	14	Bulks	200	Bulk gravity mains from Res E off-take to Bulk Res C at Qhudebe	14 021 713	
Nongoma	Usuthu	>2022	14	Bulks	300	Bulk gravity mains from Ivuna to Hlambanyathi	13 974 688	
Nongoma	Usuthu	>2022	14	BPT (Sec Bulks)		BPT at Phenyane	84 920	
Nongoma	Usuthu	>2022	14	Storage	30KI	Sec Bulk Res at Onyango	509 520	
Nongoma	Usuthu	>2022	14	Settlement Reticulation	71	Kwazwede		1 010 000
Nongoma	Usuthu	>2022	14	Settlement Reticulation	50	Phenyane 2		800 000
Nongoma	Usuthu	>2022	14	Settlement Reticulation	176	Onyango		-
Nongoma	Usuthu	>2022	14	Settlement Reticulation	333	Kwa'Musi		-
Nongoma	Usuthu	>2022	14	Settlement Reticulation	36	Kwa'Mahashi		-
Nongoma	Usuthu	>2022	14	Settlement Reticulation	21	Kwa'Boy 2		-
Nongoma	Usuthu	>2022	14	Settlement Reticulation	127	Dayeni		-
Nongoma	Usuthu	>2022	14	Settlement Reticulation	143	Mbhukudu		-
Nongoma	Usuthu	>2022	14	Settlement Reticulation	185	Ezimpakaneni		-
Nongoma	Usuthu	>2022	14	Settlement Reticulation	154	Shisuthu		-
Nongoma	Usuthu	>2022	14	Settlement Reticulation	151	Nsimbini		-

Nongoma	Usuthu	>2022	15	Source / Abstraction		Off-storage dam (Pending)	165 000 000	
Nongoma	Usuthu	>2022	15	Upgrade exist WTW	7ML	WTW, Extraction & PS Upgrade Stage 4(4x7ML/day upgrades)	40 000 000	
Nongoma	Usuthu	>2022	15	Upgrade exist WTW	7ML	WTW, Extraction & PS Upgrade Stage 3 (4x7ML/day upgrades)	40 000 000	
Nongoma	Usuthu	>2022	16	Secondary Bulks	75	Secondary bulks from Res H-S4 to Res H-S5 at Mangomhlope	801 192	
Nongoma	Usuthu	>2022	16	Secondary Bulks	75	Secondary bulks from Res H-S4 to Res H-S5 at Mangomhlope	612 382	
Nongoma	Usuthu	>2022	16	Storage	30KI	Res H-S5 at Mangomhlope	509 520	
Nongoma	Usuthu	>2022	16	Storage	100KI	Res H-S4 at Emoyeni	796 138	
Nongoma	Usuthu	>2022	16	BPT-Sec Bulks		BPT at Mangomhlope	84 920	
Nongoma	Usuthu	>2022	16	BPT	30KL	BPT at Emancwangen	84 920	
Nongoma	Usuthu	>2022	16	Settlement Reticulation	54	Mshanelo 2		840 000
Nongoma	Usuthu	>2022	16	Settlement Reticulation	55	Manzimkhulu		850 000
Nongoma	Usuthu	>2022	16	Settlement Reticulation	189	Nqokotho		2 190 000
Nongoma	Usuthu	>2022	16	Settlement Reticulation	230	Mthwathube		-
Nongoma	Usuthu	>2022	16	Settlement Reticulation	45	Mfanele		-
Nongoma	Usuthu	>2022	16	Settlement Reticulation	53	Duma 2		-
Nongoma	Usuthu	>2022	17	Secondary Bulks	90	Secondary bulks from Majomela to Res H6 at Mbengo	1 237 600	
Nongoma	Usuthu	>2022	17	Secondary Bulks	75	Secondary bulks from Mbengo to Res H7 at Ntshangase Trust	2 209 141	
Nongoma	Usuthu	>2022	17	Secondary Bulks	90	Secondary bulks from Majomela to Res H6 at Mbengo	454 994	
Nongoma	Usuthu	>2022	17	Secondary Bulks	110	Secondary bulks from Res H-S3 to Res H-S4 at Emoyeni	6 073 488	
Nongoma	Usuthu	>2022	17	Secondary Bulks	160	Secondary bulks from Res H-S3 to Res H-S4 at Emoyeni	4 666 154	
Nongoma	Usuthu	>2022	17	Storage	300KI	Res H-S3 at Efefe	6 173 004	
Nongoma	Usuthu	>2022	17	BPT	30KL	BPT at Mbengo	84 920	
Nongoma	Usuthu	>2022	17	Storage	100KI	Res H6 at Mbengo	796 138	
Nongoma	Usuthu	>2022	17	Settlement Reticulation	25	Esiweni		550 000

Nongoma	Usuthu	>2022	17	Settlement Reticulation	81	Mbengo		1 110 000
Nongoma	Usuthu	>2022	17	Settlement Reticulation	151	Maqoma		1 810 000
Nongoma	Usuthu	>2022	17	Settlement Reticulation	28	Kwanomehle		580 000
Nongoma	Usuthu	>2022	17	Settlement Reticulation	23	Kwadlovunga		530 000
Nongoma	Usuthu	>2022	17	Settlement Reticulation	94	Makhulu		1 240 000
Nongoma	Usuthu	>2022	17	Settlement Reticulation	31	Ngasela		610 000
Nongoma	Usuthu	>2022	17	Settlement Reticulation	14	Echibini		440 000
Nongoma	Usuthu	>2022	17	Settlement Reticulation	220	Bhethani		2 500 000
Nongoma	Usuthu	>2022	17	Settlement Reticulation	37	Msasaneni		670 000
Nongoma	Usuthu	>2022	17	Settlement Reticulation	147	Thokazi		-
Nongoma	Usuthu	>2022	17	Settlement Reticulation	20	Phoqukhalo		-
Nongoma	Usuthu	>2022	17	Settlement Reticulation	160	Mjiza		-
Nongoma	Usuthu	>2022	17	Settlement Reticulation	392	Majomela		-
Nongoma	Usuthu	>2022	17	Settlement Reticulation	143	Efefe		-
Nongoma	Usuthu	>2022	17	Settlement Reticulation	126	Obhuqwini		-
Nongoma	Usuthu	>2022	18	Settlement Reticulation	55	Magedlana B		850 000
Nongoma	Usuthu	>2022	18	Settlement Reticulation	206	Esiqokolweni		2 360 000
Nongoma	Usuthu	>2022	18	Settlement Reticulation	53	Qoqoda		-
Nongoma	Usuthu	>2022	18	Settlement Reticulation	259	Mshanelo 1		-
Nongoma	Usuthu	>2022	20	Settlement Reticulation	123	Qathaqatheni		-
Nongoma	Usuthu	>2022	20	Settlement Reticulation	54	Ebukhalini		-
Nongoma	Usuthu	>2022	20	Settlement Reticulation	93	Sigangeni		-
Nongoma	Usuthu	>2022	20	Settlement Reticulation	91	Tshonono		-
Nongoma	Usuthu	>2022	21	Secondary Bulks	160	Secondary bulks from Res H-S2 to Res H-S3 at Efefe	7 689 238	

Nongoma	Usuthu	>2022	21	Secondary Bulks	160	Secondary bulks from Res H to Res H-S2 at Mayini	3 905 727	
Nongoma	Usuthu	>2022	21	Secondary Bulks	110	Secondary bulks from Res H-S8 to Res H-S9 at Mphunzana	2 095 554	
Nongoma	Usuthu	>2022	21	Secondary Bulks	110	Secondary bulks from Res H to Res H-S8 at Eningeni	2 542 277	
Nongoma	Usuthu	>2022	21	Secondary Bulks	110	Secondary bulks from Res H to Res H-S8 at Eningeni	473 110	
Nongoma	Usuthu	>2022	21	Storage	30KI	Res H-S8 at Eningeni	509 520	
Nongoma	Usuthu	>2022	21	Storage	100KI	Res H-S9 at Mphunzana	796 138	
Nongoma	Usuthu	>2022	21	Storage	150KI	Res H-S2 at Mayini	1 018 819	
Nongoma	Usuthu	>2022	21	BPT	30KL	BPT at Res H	84 920	
Nongoma	Usuthu	>2022	21	BPT (Sec Bulks)	30KL	BPT at Semangadini	84 920	
Nongoma	Usuthu	>2022	21	Settlement Reticulation	95	Semangadini		1 250 000
Nongoma	Usuthu	>2022	21	Settlement Reticulation	189	Mpunzana		2 190 000
Nongoma	Usuthu	>2022	21	Settlement Reticulation	208	Mayini / Ntonga		2 380 000
Nongoma	Usuthu	>2022	21	Settlement Reticulation	23	Zetheni		530 000
Nongoma	Usuthu	>2022	21	Settlement Reticulation	87	Hlabathini 2		1 170 000
Nongoma	Usuthu	>2022	21	Settlement Reticulation	46	Sevuna		760 000
Nongoma	Usuthu	>2022	21	Settlement Reticulation	211	Emoyeni		2 410 000
Nongoma	Usuthu	>2022	21	Settlement Reticulation	99	Mgiliji		1 290 000
Nongoma	Usuthu	>2022	21	Settlement Reticulation	29	Emancwangen		590 000
Nongoma	Usuthu	>2022	21	Settlement Reticulation	158	Kwamina		-
Nongoma	Usuthu	>2022	21	Settlement Reticulation	297	Mangomhlophe		-
Nongoma	Usuthu	>2022	21	Settlement Reticulation	41	Sefamona		-
Nongoma	Usuthu	>2022	21	Settlement Reticulation	43	Mgogodi		-
Nongoma	Usuthu	>2022	21	Settlement Reticulation	68	Qanda 1		-
Nongoma	Usuthu	>2022	21	Settlement Reticulation	73	Mpiyampi		-

Nongoma	Usuthu	>2022	21	Settlement Reticulation	40	Holoba		-
Nongoma	Usuthu	>2022	21	Settlement Reticulation	29	Ntambakasi		-
Ulundi	Nkonjeni	In progress	RWSS	RWSS Augmentation	Boreholes	Additional BH's to augment water supply to Nkonjeni & Ulundi water schemes.		1 000 000
Ulundi	Nkonjeni	2018-2020	RWSS	Bulks	20ML	Upgrade WTW with 20ML		TBA
Ulundi	Nkonjeni	2018/2019	RWSS	Bulks		Replace Rising Main		41 000 000
Ulundi	Nkonjeni	2020/2021	13	Settlement Reticulation	35	Mbombo		650 000
Ulundi	Nkonjeni	2020/2021	13	Settlement Reticulation	63	Mbekuzeni		930 000
Ulundi	Nkonjeni	2020/2021	13	Settlement Reticulation	25	Kwankakazi		550 000
Ulundi	Nkonjeni	2020/2021	13	Settlement Reticulation	3	Tukelana 2		330 000
Ulundi	Nkonjeni	2020/2021	13	Settlement Reticulation	200	Kwa'Henie		2 300 000
Ulundi	Nkonjeni	2020/2021	13	Settlement Reticulation	16	Thkelana 3		-
Ulundi	Nkonjeni	2020/2021	13	Settlement Reticulation	74	Jordaan 656 (Zulu Rock)		-
Ulundi	Nkonjeni	2021/2022	18	Bulks	200	Bulk gravity pipeline from existing Res 3 to planned Res U at Ezakhiweni	13 966 818	
Ulundi	Nkonjeni	2021/2022	20	Bulks	75	Gravity mains from Res Z1 to Res Y at Enguqe	34 165	
Ulundi	Nkonjeni	2021/2022	20	Bulks	110	Gravity mains from Bulk Res U to Bulk Res X	3 131 469	
Ulundi	Nkonjeni	>2022	20	Storage	4515kl	Bulk Res U at Ezakhiweni	6 900 259	
Ulundi	Nkonjeni	>2022	20	Pump Station		PS U at Ezakhiweni	461 192	
Ulundi	Nkonjeni	>2022	20	Storage	1985Kl	Bulk Res X at Kwavilakazi	6 173 004	
Ulundi	Nkonjeni	>2022	20	Bulks	250	Gravity mains from bulk Res X to bulk res Z	1 608 033	
Ulundi	Nkonjeni	>2022	20	Bulks	110	Bulk pipeline from Res Z to Res Z1 at Mvula	1 144 657	
Ulundi	Nkonjeni	>2022	20	Bulks	110	Gravity mains from Res Z1 to Res Y at Enguqe	4 774 992	
Ulundi	Nkonjeni	>2022	20	Bulks	110	Bulk gravity mains from Res X to Res Z	1 042 191	
Ulundi	Nkonjeni	>2022	20	Storage	97kl	Res Y at Enguqe	796 138	
Ulundi	Nkonjeni	>2022	20	Storage	100Kl	Res Z1 at Mvula	796 138	

Ulundi	Nkonjeni	>2022	20	Storage	150KI	Res Z at Mthonjaneni	1 018 819	
						New PS Z at Mthonjaneni		
Ulundi	Nkonjeni	>2022	20	Pump Station		New PS	768 653	
Ulundi	Nkonjeni	>2022	20	Pump Station		New PS X1 near Mthonjaneni	768 653	
Ulundi	Nkonjeni	>2022	20	Pump Station		New PS Z1 at Mthonjaneni	768 653	
Ulundi	Nkonjeni	>2022	24	Storage	30KI	New res at Ekatini	509 520	
Ulundi	Nkonjeni	>2022	13	Bulks	200	Bulk rising main from PS M2 to Bulk Res M at Maqwata	5 484 823	
Ulundi	Nkonjeni	>2022	13	Pump Station		PS M2 at Esibindini	691 788	
Ulundi	Nkonjeni	>2022	14	Bulks	90	Gravity mains off-take at Dibha to Res ZAI-1 at Ntabankulu	879 112	
Ulundi	Nkonjeni	>2022	14	Bulks	90	Gravity mains off-take at Dibha to Res ZAI-1 at Ntabankulu	28 717	
Ulundi	Nkonjeni	>2022	14	Bulks	90	Gravity mains off-take at Dibha to Res ZAI-1 at Ntabankulu	1 439 676	
Ulundi	Nkonjeni	>2022	14	Bulks	90	Gravity mains off-take at Dibha to Res ZAI-1 at Ntabankulu	1 808 016	
Ulundi	Nkonjeni	>2022	14	Bulks	200	Gravity mains from Dibha to Bulk Res ZAI-2 at Kwathuthu	5 687 149	
Ulundi	Nkonjeni	>2022	14	Bulks	90	Gravity mains off-take at Dibha to Res ZAI-1 at Ntabankulu	1 427 723	
Ulundi	Nkonjeni	>2022	14	Bulks	80	Gravity mains off-take at Dibha to Res ZAI-1 at Ntabankulu	2 292 721	
Ulundi	Nkonjeni	>2022	14	Bulks	80	Gravity mains off-take at Dibha to Res ZAI-1 at Ntabankulu	1 092 893	
Ulundi	Nkonjeni	>2022	14	Bulks	80	Gravity mains off-take at Dibha to Res ZAI-1 at Ntabankulu	17 809	
Ulundi	Nkonjeni	>2022	14	Bulks	200	Gravity mains from Dibha to Bulk Res ZAI-2 at Kwathuthu	2 185 095	
Ulundi	Nkonjeni	>2022	14	Bulks	200	Gravity mains from Res P700 to remaining Res zones	648 133	
Ulundi	Nkonjeni	>2022	14	Bulks	160	Gravity mains from Res P700 to remaining Res zones	1 191 425	
Ulundi	Nkonjeni	>2022	14	Bulks	160	Gravity mains from Res P700 to remaining Res zones	1 278 248	
Ulundi	Nkonjeni	>2022	14	Bulks	160	Gravity mains from Res P700 to remaining Res zones	2 101 239	
Ulundi	Nkonjeni	>2022	14	Bulks	75	Off-take from gravity mains to Res ZAI-4 at Zilulwane	588 031	
Ulundi	Nkonjeni	>2022	14	Bulks	75	Off-take from gravity mains to Res ZAI-4 at Zilulwane	334 467	
Ulundi	Nkonjeni	>2022	14	Bulks	110	Off-take from gravity mains to Bulk Res ZAI-3 at Njomelwane	361 095	

Ulundi	Nkonjeni	>2022	14	Bulks	110	Off-take from gravity mains to Bulk Res ZAI-3 at Njomelwane	1 614 869	
Ulundi	Nkonjeni	>2022	14	Bulks	110	Off-take from gravity mains to Bulk Res ZAI-3 at Njomelwane	504 911	
Ulundi	Nkonjeni	>2022	14	Bulks	110	Off-take from gravity mains to Bulk Res ZAI-3 at Njomelwane	1 300 674	
Ulundi	Nkonjeni	>2022	14	Storage	216Kl	Res ZAI-3 at Njomelwane	1 222 848	
Ulundi	Nkonjeni	>2022	14	Storage	30Kl	Res ZAI-4 at Zilulwane	509 520	
Ulundi	Nkonjeni	>2022	14	Storage	30Kl	Secondary Res Z2.2 at Mhlanini	509 520	
Ulundi	Nkonjeni	>2022	15	Bulks	160	Gravity mains from Res P700 to remaining Res zones	2 781 059	
Ulundi	Nkonjeni	>2022	15	Bulks	90	Gravity mains from Res P700 to remaining Res zones	415 734	
Ulundi	Nkonjeni	>2022	15	Bulks	90	Gravity mains from Res P700 to remaining Res zones	212 246	
Ulundi	Nkonjeni	>2022	15	Bulks	110	Off-take from gravity mains to Res ZAI-5 at Mbangweni2	691 995	
Ulundi	Nkonjeni	>2022	15	Bulks	110	Off-take from gravity mains to Res ZAI-5 at Mbangweni2	1 334 465	
Ulundi	Nkonjeni	>2022	15	Storage	698Kl	Res ZAI-1 at Ntabankulu	2 605 346	
Ulundi	Nkonjeni	>2022	15	Storage	264Kl	Res ZAI-5 at Mbanweni2	1 392 688	
Ulundi	Nkonjeni	>2022	16	Bulks	80	Gravity mains to Res P at Kweyezulu	4 990 292	
Ulundi	Nkonjeni	>2022	16	Storage	47kl	Res P at Kweyezulu	684 075	
Ulundi	Nkonjeni	>2022	20	Bulks	250	Bulk gravity off-take at Mtonjeni to remaining reservoir zones	5 113 636	
Ulundi	Nkonjeni	>2022	20	Bulks	160	Pumpline from existing source to Res Z at Mtonjeni	854 800	
Ulundi	Nkonjeni	>2022	20	Bulks	160	Pumpline from existing source to Res Z at Mtonjeni	811 698	
Ulundi	Nkonjeni	>2022	20	Storage	30Kl	Secondary Res Z2.3 at Langakazi1	509 520	
Ulundi	Nkonjeni	>2022	20	Storage	30Kl	Secondary Res Z2.1 near Mtonjeni	509 520	
Ulundi	Nkonjeni	>2022	20	Storage	30Kl	Infill res at Kwagqikazi1	509 520	
Ulundi	Nkonjeni	>2022	20	Storage	30Kl	Infill res at Manekwane2	509 520	
Ulundi	Nkonjeni	>2022	20	Pump Station		Infill PS at Manekwane2	768 653	
Ulundi	Nkonjeni	>2022	20	Storage	50Kl	Infill res at Manekwane2	684 075	

Ulundi	Nkonjeni	>2022	23	Bulks	160	Gravity mains from Res 2 to Res N	1 145 186	
Ulundi	Nkonjeni	>2022	23	Bulks	250	Gravity mains between Res M and Res 2	6 414 260	
Ulundi	Nkonjeni	>2022	23	Bulks	160	Gravity mains off-take to Res O	4 610 129	
Ulundi	Nkonjeni	>2022	23	Bulks	75	Gravity mains from Res 2 to Res N	273 233	
Ulundi	Nkonjeni	>2022	23	Bulks	150	Gravity mains off-take to Res O	7 614 868	
Ulundi	Nkonjeni	>2022	23	Bulks	80	Gravity mains from Res 2 to Res N	158 301	
Ulundi	Nkonjeni	>2022	23	Bulks	80	Gravity mains from Res 2 to Res N	148 576	
Ulundi	Nkonjeni	>2022	23	Pump Station		PS M3 at Maqwatha	691 788	
Ulundi	Nkonjeni	>2022	23	Storage	2328kl	Bulk Res 2 at Emahlathini	6 682 524	
Ulundi	Nkonjeni	>2022	23	Storage	53kl	Res N at Hlungulwane	697 662	
Ulundi	Nkonjeni	>2022	23	Storage	490kl	Res O at Hlonlweni	2 347 189	
Ulundi	Nkonjeni	>2022	23	Storage	1741kl	Bulk Res M at Maqwatha	5 662 466	
Ulundi	Nkonjeni	>2022	24	Bulks	80	Gravity mains from Dibha to Bulk Res ZAI-2 at Kwathuthu	105 779	
Ulundi	Nkonjeni	>2022	24	Bulks	200	Gravity mains from Res ZAI-2 to P700 Reservoir at Dindi	1 583 574	
Ulundi	Nkonjeni	>2022	24	Bulks	250	Gravity mains from Res ZAI-2 to P700 Reservoir at Dindi	7 267 781	
Ulundi	Nkonjeni	>2022	24	Storage	161kl	Res ZAI-2 at Kwathuthu	1 035 803	
Ulundi	Nkonjeni	>2022	4	Settlement Reticulation	37	Skhume		-
Ulundi	Nkonjeni	>2022	9	Settlement Reticulation	10	Manaba		400 000
Ulundi	Nkonjeni	>2022	11	Settlement Reticulation	9	Kwamhlongo		390 000
Ulundi	Nkonjeni	>2022	13	Settlement Reticulation	16	Maduna		460 000
Ulundi	Nkonjeni	>2022	13	Settlement Reticulation	750	Draaihoek		-
Ulundi	Nkonjeni	>2022	14	Settlement Reticulation	127	Nyoni		1 570 000
Ulundi	Nkonjeni	>2022	14	Settlement Reticulation	80	Tshiyazane		-
Ulundi	Nkonjeni	>2022	14	Settlement Reticulation	35	Bhongisilwane		-

Ulundi	Nkonjeni	>2022	14	Settlement Reticulation	339	Njomelwane		-
Ulundi	Nkonjeni	>2022	14	Settlement Reticulation	106	Zilulwane		-
Ulundi	Nkonjeni	>2022	14	Settlement Reticulation	203	Maqhutha		-
Ulundi	Nkonjeni	>2022	14	Settlement Reticulation	76	Ntilingwe		-
Ulundi	Nkonjeni	>2022	14	Settlement Reticulation	94	Mhlalini		-
Ulundi	Nkonjeni	>2022	14	Settlement Reticulation	202	Dibha		-
Ulundi	Nkonjeni	>2022	14	Settlement Reticulation	144	Ganwini		-
Ulundi	Nkonjeni	>2022	14	Settlement Reticulation	70	Nhluba		-
Ulundi	Nkonjeni	>2022	14	Settlement Reticulation	201	Ezinyosini		-
Ulundi	Nkonjeni	>2022	14	Settlement Reticulation	122	Sqobelo		-
Ulundi	Nkonjeni	>2022	14	Settlement Reticulation	140	Bhekimbazo		-
Ulundi	Nkonjeni	>2022	15	Settlement Reticulation	12	Nsingizane		420 000
Ulundi	Nkonjeni	>2022	15	Settlement Reticulation	13	Ntabankulu		430 000
Ulundi	Nkonjeni	>2022	15	Settlement Reticulation	195	Mbangweni		-
Ulundi	Nkonjeni	>2022	15	Settlement Reticulation	441	Nqulwane		-
Ulundi	Nkonjeni	>2022	15	Settlement Reticulation	148	Mgababa 2		-
Ulundi	Nkonjeni	>2022	15	Settlement Reticulation	55	Onteku		-
Ulundi	Nkonjeni	>2022	15	Settlement Reticulation	93	Zenzele		-
Ulundi	Nkonjeni	>2022	15	Settlement Reticulation	203	Ngqolothi		-
Ulundi	Nkonjeni	>2022	16	Settlement Reticulation	334	Emakhosini		-
Ulundi	Nkonjeni	>2022	16	Settlement Reticulation	257	Kweyezulu		-
Ulundi	Nkonjeni	>2022	16	Settlement Reticulation	10	Ndumeni		-
Ulundi	Nkonjeni	>2022	16	Settlement Reticulation	12	Ncele		-
Ulundi	Nkonjeni	>2022	17	Settlement Reticulation	97	Kwangono		-

Ulundi	Nkonjeni	>2022	17	Settlement Reticulation	37	Maqwatha 2	-
Ulundi	Nkonjeni	>2022	17	Settlement Reticulation	167	Cengeni	-
Ulundi	Nkonjeni	>2022	17	Settlement Reticulation	67	Ntabamhlophe	-
Ulundi	Nkonjeni	>2022	17	Settlement Reticulation	113	Maqwatha 1	-
Ulundi	Nkonjeni	>2022	17	Settlement Reticulation	143	Tshilugwanenei	-
Ulundi	Nkonjeni	>2022	17	Settlement Reticulation	103	Esibindini	-
Ulundi	Nkonjeni	>2022	17	Settlement Reticulation	132	Maduna Ezibomvu	-
Ulundi	Nkonjeni	>2022	17	Settlement Reticulation	256	Qwasha	-
Ulundi	Nkonjeni	>2022	17	Settlement Reticulation	79	Nkaphani	-
Ulundi	Nkonjeni	>2022	20	Settlement Reticulation	95	Isangoyana 1	-
Ulundi	Nkonjeni	>2022	20	Settlement Reticulation	326	Kwagqikazi	-
Ulundi	Nkonjeni	>2022	20	Settlement Reticulation	33	Manekwane 2	-
Ulundi	Nkonjeni	>2022	20	Settlement Reticulation	110	Vukuza	-
Ulundi	Nkonjeni	>2022	20	Settlement Reticulation	146	Kwa'Mvula	-
Ulundi	Nkonjeni	>2022	20	Settlement Reticulation	65	Mthonjeni	-
Ulundi	Nkonjeni	>2022	20	Settlement Reticulation	135	Kwafolese	-
Ulundi	Nkonjeni	>2022	20	Settlement Reticulation	48	Nzimbi	-
Ulundi	Nkonjeni	>2022	20	Settlement Reticulation	120	Kwavilakazi 2	-
Ulundi	Nkonjeni	>2022	20	Settlement Reticulation	35	Langakazi 1	-
Ulundi	Nkonjeni	>2022	21	Settlement Reticulation	26	Newland	-
Ulundi	Nkonjeni	>2022	21	Settlement Reticulation	23	Mjibha	-
Ulundi	Nkonjeni	>2022	23	Settlement Reticulation	29	Nobamba	-
Ulundi	Nkonjeni	>2022	23	Settlement Reticulation	181	Senzangakhona	-
Ulundi	Nkonjeni	>2022	23	Settlement Reticulation	154	Hodlwani	-

Ulundi	Nkonjeni	>2022	23	Settlement Reticulation	71	Vezunyawo 1		-
Ulundi	Nkonjeni	>2022	23	Settlement Reticulation	211	Sgodiphola 1		-
Ulundi	Nkonjeni	>2022	23	Settlement Reticulation	166	Mgababa 3		-
Ulundi	Nkonjeni	>2022	23	Settlement Reticulation	47	Mehlomane		-
Ulundi	Nkonjeni	>2022	23	Settlement Reticulation	109	Hlungulwane		-
Ulundi	Nkonjeni	>2022	23	Settlement Reticulation	83	Mpayini		-
Ulundi	Nkonjeni	>2022	23	Settlement Reticulation	46	Denny Dalton		-
Ulundi	Nkonjeni	>2022	23	Settlement Reticulation	212	Goje		-
Ulundi	Nkonjeni	>2022	23	Settlement Reticulation	86	Nkiliji		-
Ulundi	Nkonjeni	>2022	23	Settlement Reticulation	200	Emahlathini		-
Ulundi	Nkonjeni	>2022	24	Settlement Reticulation	14	Eskhaleni Kwankosi		440 000
Ulundi	Nkonjeni	>2022	24	Settlement Reticulation	84	England		1 140 000
Ulundi	Nkonjeni	>2022	24	Settlement Reticulation	30	Ezisasaneni		-
Ulundi	Nkonjeni	>2022	24	Settlement Reticulation	66	Basamlilo		-
Ulundi	Nkonjeni	>2022	24	Settlement Reticulation	266	Ekujulukeni		-
Ulundi	Nkonjeni	>2022	24	Settlement Reticulation	72	Ezimfeneni		-
Ulundi	Nkonjeni	>2022	24	Settlement Reticulation	194	Enguqe		-
Ulundi	Nkonjeni	>2022	24	Settlement Reticulation	64	Sibanisakhe		-
Ulundi	Nkonjeni	>2022	24	Settlement Reticulation	58	Ekatini		-
Ulundi	Nkonjeni	>2022	24	Settlement Reticulation	97	Hlophekhulu		-
Ulundi	Nkonjeni	>2022	24	Settlement Reticulation	92	Gijima		-
Ulundi	Nkonjeni	>2022	24	Settlement Reticulation	136	Ezikhumbeni		-
Ulundi	Nkonjeni	>2022	24	Settlement Reticulation	225	Nkonjane		-
Ulundi	Nkonjeni	>2022	24	Settlement Reticulation	21	Kwathuthu		-

Ulundi	Nkonjeni	>2022	24	Settlement Reticulation	249	Dindi		-
Ulundi	Usuthu	2018/2019	3	Settlement Reticulation	86	Nomdidwa		
Ulundi	Usuthu	2018/2019	3	Settlement Reticulation	88	Mkhulwana		
Ulundi	Usuthu	2018/2019	3	Settlement Reticulation	95	Ngobodo		
Ulundi	Usuthu	2018/2019	3	Settlement Reticulation	193	Dayingubu		
Ulundi	Usuthu	2018/2019	3	Settlement Reticulation	27	Nhlatwini		
Ulundi	Usuthu	2018/2019	3	Settlement Reticulation	61	Magayiseni		
Ulundi	Usuthu	2018/2019	3	Settlement Reticulation	108	Dakaneni		
Ulundi	Usuthu	2018/2019	3	Settlement Reticulation	61	Eziqhwageni		
Ulundi	Usuthu	2018/2019	3	Settlement Reticulation	159	Isihululu		
Ulundi	Usuthu	2018/2019	3	Settlement Reticulation	64	Mguluze		
Ulundi	Usuthu	2018/2019	3	Settlement Reticulation	183	Nsukahlale		
Ulundi	Usuthu	2018/2019	4	Settlement Reticulation	232	Chibini		
Ulundi	Usuthu	2018/2019	4	Settlement Reticulation	298	Ezembeni 1		-
Ulundi	Usuthu	2018/2019	5	Settlement Reticulation	20	Magagodolo		500 000
Ulundi	Usuthu	2018/2019	5	Settlement Reticulation	82	Ntambonde		-
Ulundi	Usuthu	2018/2019	5	Settlement Reticulation	124	Egqumeni		-
Ulundi	Usuthu	2018/2019	5	Settlement Reticulation	46	Ndwaleni		-
Ulundi	Usuthu	2018/2019	5	Settlement Reticulation	18	Nende		-
Ulundi	Usuthu	2018/2019	5	Settlement Reticulation	94	Ezembeni 2		-
Ulundi	Usuthu	2018/2019	5	Settlement Reticulation	33	KwaFini		-
Ulundi	Usuthu	2018/2019	6	Settlement Reticulation	169	Mashiyane		-
Ulundi	Usuthu	2018/2019	6	Settlement Reticulation	103	Dlabane		-
Ulundi	Usuthu	2019/2020	4	Settlement Reticulation	613	Esidakeni 2		-

Ulundi	Usuthu	2019/2020	4	Settlement Reticulation	118	Ngubaneni		-
Ulundi	Usuthu	2020/2021	2	Settlement Reticulation	31	Kwamasane		-
Ulundi	Usuthu	2020/2021	2	Settlement Reticulation	81	Mndaweni		-
Ulundi	Usuthu	2020/2021	2	Settlement Reticulation	131	Nsimbi		-
Ulundi	Usuthu	2020/2021	2	Settlement Reticulation	79	Phethu		-
Ulundi	Usuthu	2020/2021	2	Settlement Reticulation	14	Mgxotshwa		-
Ulundi	Usuthu	2020/2021	2	Settlement Reticulation	351	Brush/Nsukangihlale		-
Ulundi	Usuthu	2021/2022	1	Settlement Reticulation	33	Obhedeni		-
Ulundi	Usuthu	2021/2022	2	Settlement Reticulation	61	Nomponjwana		-
Ulundi	Usuthu	2021/2022	2	Settlement Reticulation	52	Ezinxagwini		-
Ulundi	Usuthu	2021/2022	2	Settlement Reticulation	102	Siyekela		-
Ulundi	Usuthu	2021/2022	2	Settlement Reticulation	54	Ezimqaqeni		-
Ulundi	Usuthu	2021/2022	2	Settlement Reticulation	49	Ezihlaqeni		-
Ulundi	Usuthu	2021/2022	2	Settlement Reticulation	127	Nhlohlala		-
Ulundi	Usuthu	2021/2022	2	Settlement Reticulation	79	Sikhalampama		-
Ulundi	Usuthu	2021/2022	2	Settlement Reticulation	92	Edlakude		-
Ulundi	Usuthu	2021/2022	2	Settlement Reticulation	136	Nhlonga		-
Ulundi	Usuthu	>2022	2	Bulks	110	Sec bulks to sec bulk reservoirs	973 785	
Ulundi	Usuthu	>2022	2	Bulks	90	Sec bulks to sec bulk reservoirs	789 819	
Ulundi	Usuthu	>2022	2	Bulks	63	Sec bulks to sec bulk reservoirs	849 322	
Ulundi	Usuthu	>2022	2	Bulks	50	Sec bulks to sec bulk reservoirs	94 978	
Ulundi	Usuthu	>2022	2	Bulks	90	Sec bulks to sec bulk reservoirs	2 542 031	
Ulundi	Usuthu	>2022	2	Bulks	90	Off-take to Res13 at Nsukangihlale	521 247	
Ulundi	Usuthu	>2022	2	Bulks	63	Sec bulks to sec bulk reservoirs	276 817	

Ulundi	Usuthu	>2022	2	Storage	300Kl	Res13 at Nsukangihlale	6 173 004	
Ulundi	Usuthu	>2022	2	Storage	100Kl	Res16 at Nsimbi	796 138	
Ulundi	Usuthu	>2022	2	Storage	60Kl	Res17 at Nhlonga	697 662	
Ulundi	Usuthu	>2022	2	Storage	100Kl	Res14 at Nhlohlela	796 138	
Ulundi	Usuthu	>2022	2	Storage	200Kl	Res15 at Ezihlageni	1 188 880	
Ulundi	Usuthu	>2022	3	Bulks	63	Off-take from mains to Res12 at Godlankomo	885 532	
Ulundi	Usuthu	>2022	3	Bulks	160	Bulk mains from Res4 to Res1 at Isihulu	8 918 230	
Ulundi	Usuthu	>2022	3	Bulks	160	Bulk mains from Res1 to remaining reservoirs	7 478 258	
Ulundi	Usuthu	>2022	3	Bulks	75	Off-take to REs2 at Dakaneni	107 587	
Ulundi	Usuthu	>2022	3	Pump Station	28l/s	PS3 at Ngobodo	768 653	
Ulundi	Usuthu	>2022	3	Storage	60Kl	Res3 Ngobodo	697 662	
Ulundi	Usuthu	>2022	3	Storage	200Kl	Res2 at Dakaneni	1 188 880	
Ulundi	Usuthu	>2022	3	Storage	200Kl	Res1 at Isihulu	1 188 880	
Ulundi	Usuthu	>2022	3	Storage	100Kl	Res12 at Godlankomo	796 138	
Ulundi	Usuthu	>2022	4	Bulks	250	Bulk mains from PS1 to off-take at Res4 (Thandamali)	5 073 336	
Ulundi	Usuthu	>2022	4	Bulks	50		875 746	
Ulundi	Usuthu	>2022	4	Bulks	63		85 538	
Ulundi	Usuthu	>2022	4	Bulks	110	Sec bulks to Res7	2 904 996	
Ulundi	Usuthu	>2022	4	Bulks	75	Sec bulks to Res7	219 775	
Ulundi	Usuthu	>2022	4	Pump Station	1.2l/s	PS4 north of Basamlilo1	768 653	
Ulundi	Usuthu	>2022	4	Storage	200Kl	Res4 at Chibini3	1 188 880	
Ulundi	Usuthu	>2022	4	Storage	100Kl	Res5 north of Basamlilo	796 138	
Ulundi	Usuthu	>2022	4	Storage	60Kl	Res6 at Ngubaneni	697 662	
Ulundi	Usuthu	>2022	4	Storage	200Kl	Res7 at Esidakeni2	1 188 880	
Ulundi	Usuthu	>2022	4	Storage	100Kl	Res 11 at Kwantabaneni	796 138	

Ulundi	Usuthu	>2022	4	Storage	60KI	Res 8 at Mhlope	697 662	
Ulundi	Usuthu	>2022	5	Bulks	300	Bulk gravity mains from Res C to PS1 at Ndwaleni	1 804 161	
Ulundi	Usuthu	>2022	5	Bulks	300	Bulk gravity mains from Res C to PS1 at Ndwaleni	26 380 916	
Ulundi	Usuthu	>2022	5	Bulks	250	Bulk mains from PS1 to off-take at Res4 (Thandamali)	5 124 638	
Ulundi	Usuthu	>2022	5	Bulks	75	Off-take from mains to Res 10 at Mashiyane	129 388	
Ulundi	Usuthu	>2022	5	Storage	1ML	Bulk Res C at Qhudebe	2 824 439	
Ulundi	Usuthu	>2022	5	Pump Station	62l/s	PS1 at Ndwaleni	768 653	
Ulundi	Usuthu	>2022	5	Pump Station	55l/s	PS2 at Nende	768 653	
Ulundi	Usuthu	>2022	5	Storage	100KI	Res 10 at Mashiyane	796 138	
Ulundi	Usuthu	>2022	5	Storage	100KI	Res 9 at Mhlope	796 138	
Ulundi	Usuthu	>2022	6	Bulks	75	Bulk gravity mains off-take from PS1 to Res11 at Kwantabaneni	1 659 141	
Ulundi	Usuthu	>2022	7	Bulks	110	Sec bulks feeding sec bulk reservoirs	1 559 133	
Ulundi	Usuthu	>2022	7	Bulks	110	Sec bulks feeding sec bulk reservoirs	615 174	
Ulundi	Usuthu	>2022	7	Bulks	75	Sec bulks feeding sec bulk reservoirs	1 624 235	
Ulundi	Usuthu	>2022	7	Bulks	63	Sec bulks feeding sec bulk reservoirs	473 088	
Ulundi	Usuthu	>2022	7	Bulks	63	Sec bulks feeding sec bulk reservoirs	335 049	
Ulundi	Usuthu	>2022	7	Bulks	63	Sec bulks in Esphiva	422 743	
Ulundi	Usuthu	>2022	7	Bulks	75	Sec bulks in Bhungwane	985 206	
Ulundi	Usuthu	>2022	7	Bulks	50	Sec bulks in Bhungwane	272 330	
Ulundi	Usuthu	>2022	7	Bulks	75	Off-take to res at Xasane	1 757 944	
Ulundi	Usuthu	>2022	7	Bulks	75	Off-take to res at Mpangeleni	591 883	
Ulundi	Usuthu	>2022	7	Bulks	75	Off-take to res at Qubeni	37 015	
Ulundi	Usuthu	>2022	7	Bulks	75	Sec bulks feeding sec bulk reservoirs	711 998	
Ulundi	Usuthu	>2022	7	Bulks	110	Off-take to Res at Bhokweni2	840 431	
Ulundi	Usuthu	>2022	7	Bulks	110	Off-take to Res at Bhokweni2	218 132	

Ulundi	Usuthu	>2022	7	Bulks	110	Sec bulks feeding sec bulk reservoirs	43 352	
Ulundi	Usuthu	>2022	7	Bulks	160	Sec bulks feeding sec bulk reservoirs	1 325 783	
Ulundi	Usuthu	>2022	7	Bulks	160	Sec bulks feeding sec bulk reservoirs	2 189 490	
Ulundi	Usuthu	>2022	7	Bulks	160	Sec bulks feeding sec bulk reservoirs	664 453	
Ulundi	Usuthu	>2022	7	Bulks	160	Sec bulks feeding sec bulk reservoirs	2 951 654	
Ulundi	Usuthu	>2022	7	Bulks	110	Sec bulks feeding sec bulk reservoirs	1 120 697	
Ulundi	Usuthu	>2022	7	Bulks	110	Sec bulks feeding sec bulk reservoirs	1 459 984	
Ulundi	Usuthu	>2022	7	Bulks	75	Sec bulks feeding sec bulk reservoirs	1 176 049	
Ulundi	Usuthu	>2022	7	Bulks	63	Off-take to res at Thusini	19 843	
Ulundi	Usuthu	>2022	7	Bulks	110	Off-take to res at Thusini	42 163	
Ulundi	Usuthu	>2022	7	Bulks	110	Off-take to res at Thusini	39 868	
Ulundi	Usuthu	>2022	7	Storage	30KI	Sec Bulk Res at Xasane1	509 520	
Ulundi	Usuthu	>2022	7	Storage	30KI	Sec Bulk Res at Amaphiva	509 520	
Ulundi	Usuthu	>2022	7	Storage	30KI	Sec Bulk Res at Ngabeni	509 520	
Ulundi	Usuthu	>2022	7	Storage	30KI	Sec Bulk Res at Bhokweni2	509 520	
Ulundi	Usuthu	>2022	7	Storage	30KI	Sec Bulk Res at Mpangeleni	509 520	
Ulundi	Usuthu	>2022	7	Storage	30KI	Sec Bulk Res at Qubeni	509 520	
Ulundi	Usuthu	>2022	7	Storage	100KI	Bulk Res E at Thusini	796 138	
Ulundi	Usuthu	>2022	7	Storage	30KI	Sec Bulk Res at Thusini	509 520	
Ulundi	Usuthu	>2022	7	Storage	30KI	Sec Bulk Res at Sofanweni	509 520	
Ulundi	Usuthu	>2022	7	BPT	30KI	BPT at Xasane2	509 520	
Ulundi	Usuthu	>2022	7	BPT	30KI	BPT at Bhungwane	509 520	
Ulundi	Usuthu	>2022	7	BPT	30KI	BPT at Sofanweni	509 520	
Ulundi	Usuthu	>2022	7	BPT	30KI	BPT at Sofanweni	509 520	
Ulundi	Usuthu	>2022	7	Storage	30KI	Sec Bulk Res at Sofanweni	509 520	

Ulundi	Usuthu	>2022	7	Storage	30KI	Sec Bulk Res near Mngakwe	509 520	
Ulundi	Usuthu	>2022	7	Storage	30KI	Sec Bulk Res at Esphiva	509 520	
Ulundi	Usuthu	>2022	7	BPT	30KI	BPT at Esphiva	509 520	
Ulundi	Usuthu	>2022	7	Storage	30KI	Sec Bulk Res at Bhungwane	509 520	
Ulundi	Usuthu	>2022	8	Bulks	110	Sec bulks feeding sec bulk reservoirs	1 439 800	
Ulundi	Usuthu	>2022	8	Bulks	75	Off-take to res at Chibini1	461 047	
Ulundi	Usuthu	>2022	8	Bulks	110	Sec bulks feeding sec bulk reservoirs	566 917	
Ulundi	Usuthu	>2022	8	Bulks	110	Sec bulks feeding sec bulk reservoirs	6 394 366	
Ulundi	Usuthu	>2022	8	Bulks	63	Sec bulks feeding sec bulk reservoirs	1 163 506	
Ulundi	Usuthu	>2022	8	Bulks	75	Off-take to res at Chibini2	279 492	
Ulundi	Usuthu	>2022	8	Bulks	75	Off-take to res at Chibini2	278 331	
Ulundi	Usuthu	>2022	8	Bulks	110	Off-take to Res at Nogulwane	502 538	
Ulundi	Usuthu	>2022	8	Bulks	110	Off-take to Res at Nogulwane	1 518 341	
Ulundi	Usuthu	>2022	8	Storage	30KI	Sec res at Mganimbobo	509 520	
Ulundi	Usuthu	>2022	8	Storage	30KI	Sec res at Nogulwane	509 520	
Ulundi	Usuthu	>2022	8	Storage	30KI	Sec res at Chibini2	509 520	
Ulundi	Usuthu	>2022	8	Storage	30KI	Sec res at Chibini1	509 520	
Ulundi	Usuthu	>2022	12	Bulks	160	Gravity pipeline from Res D5 to Res D9	1 177 343	
Ulundi	Usuthu	>2022	14	Bulks	75	Sec bulks feeding sec bulk reservoirs	887 945	
Ulundi	Usuthu	>2022	14	Bulks	75	Sec bulks feeding sec bulk reservoirs	110 447	
Ulundi	Usuthu	>2022	14	Bulks	75	Sec bulks feeding sec bulk reservoirs	284 886	
Ulundi	Usuthu	>2022	14	Bulks	63	Sec bulks feeding sec bulk reservoirs	632 678	
Ulundi	Usuthu	>2022	14	Bulks	63	Sec bulks feeding sec bulk reservoirs	337 066	
Ulundi	Usuthu	>2022	14	Bulks	63	Off-take to res at Wela1	22 200	
Ulundi	Usuthu	>2022	14	Bulks	63	Sec bulks feeding sec bulk reservoirs	1 240 753	

Ulundi	Usuthu	>2022	14	Bulks	75	Off-take to Res at Mabululwane	213 382	
Ulundi	Usuthu	>2022	14	Bulks	75	Off-take to Res at Mabululwane	361 728	
Ulundi	Usuthu	>2022	14	Bulks	110	Proposed supplementary pipeline from existing borehole at Mbanda1	787 791	
Ulundi	Usuthu	>2022	14	Bulks	110	Proposed supplementary pipeline from existing borehole at Mbanda1	1 490 162	
Ulundi	Usuthu	>2022	14	Bulks	110	Proposed supplementary pipeline from existing borehole at Mbanda1	310 155	
Ulundi	Usuthu	>2022	14	Bulks	75	Sec bulks feeding sec bulk reservoirs	80 970	
Ulundi	Usuthu	>2022	14	Bulks	50	Sec bulks at Bhodludaka	252 822	
Ulundi	Usuthu	>2022	14	Storage	30KI	Sec res at Wela1	509 520	
Ulundi	Usuthu	>2022	14	BPT	30KI	BPT at Bhodludaka	509 520	
Ulundi	Usuthu	>2022	14	Storage	30KI	Sec res at Mbanda1	509 520	
Ulundi	Usuthu	>2022	14	Storage	30KI	Sec res at Njojwanana	509 520	
Ulundi	Usuthu	>2022	14	Storage	30KI	Sec res at Mabululwane	509 520	
Ulundi	Usuthu	>2022	15	Bulks	160	Gravity pipeline from Res D5 to Res D9	704 567	
Ulundi	Usuthu	>2022	15	Bulks	160	Gravity pipeline from Res D5 to Res D9	1 453 337	
Ulundi	Usuthu	>2022	15	Bulks	160	Gravity pipeline from Res D5 to Res D9	1 180 181	
Ulundi	Usuthu	>2022	15	Bulks	160	Gravity pipeline from Res D5 to Res D9	1 434 252	
Ulundi	Usuthu	>2022	15	Bulks	150	Gravity pipeline from Res D5 to Res D9	4 941 020	
Ulundi	Usuthu	>2022	15	Bulks	75	Off-take to BPT at Mvalo	1 198 339	
Ulundi	Usuthu	>2022	15	Bulks	75	Pipeline from Res D10 to Res D11 Khulwane	84 084	
Ulundi	Usuthu	>2022	15	Bulks	75	Pipeline from Res D10 to Res D11 Khulwane	420 198	
Ulundi	Usuthu	>2022	15	Bulks	75	Pipeline from Res D10 to Res D11 Khulwane	606 519	
Ulundi	Usuthu	>2022	15	Bulks	75	Gravity pipeline from Res D10 to Res D12 at Lomo	130 605	
Ulundi	Usuthu	>2022	15	Bulks	75	Gravity pipeline from Res D10 to Res D12 at Lomo	1 072 564	
Ulundi	Usuthu	>2022	15	Bulks	75	Gravity pipeline from Res D10 to Res D12 at Lomo	317 935	
Ulundi	Usuthu	>2022	15	Bulks	75	Pipeline from Res D10 to Res D11 at Khulwane	204 479	

Ulundi	Usuthu	>2022	15	Bulks	75	Bulk gravity pipeline from Res D9 to Res D10	42 592	
Ulundi	Usuthu	>2022	15	Bulks	75	Pipeline from Res D10 to Res D11 at Khulwane	496 233	
Ulundi	Usuthu	>2022	15	Bulks	110	Bulk gravity pipeline from Res D9 to Res D10 at Lomo	2 394 622	
Ulundi	Usuthu	>2022	15	Bulks	75	Off-take to Res D10 at Lomo	23 425	
Ulundi	Usuthu	>2022	15	BPT	30KI	BPT at Mvalo	509 520	
Ulundi	Usuthu	>2022	15	BPT	30KI	BPT at Nduvu	509 520	
Ulundi	Usuthu	>2022	15	Storage	100KI	Res D9.1 at Nduvu	796 138	
Ulundi	Usuthu	>2022	15	Storage	100KI	Res D9.2 at Nduvu	796 138	
Ulundi	Usuthu	>2022	15	Storage	100KI	Res D9.3 at Nduvu	796 138	
Ulundi	Usuthu	>2022	15	Storage	30KI	Res D10 at Lomo	509 520	
Ulundi	Usuthu	>2022	15	Storage	30KI	Res D11 at Khulwane	509 520	
Ulundi	Usuthu	>2022	15	Storage	30KI	Res D12 at Lomo	509 520	
Ulundi	Usuthu	>2022	15	BPT	30KI	BPT at Lomo	509 520	
Ulundi	Usuthu	>2022	15	BPT	30KI	BPT at Ntabayezulu	509 520	
Ulundi	Usuthu	>2022	15	BPT	30KI	BPT at Ntabayezulu	509 520	
Ulundi	Usuthu	>2022	3	Settlement Reticulation	327	Godlankomo		-
Ulundi	Usuthu	>2022	5	Settlement Reticulation	81	Kwameke		-
Ulundi	Usuthu	>2022	5	Settlement Reticulation	53	Phangole		-
Ulundi	Usuthu	>2022	5	Settlement Reticulation	145	Qhudebe		-
Ulundi	Usuthu	>2022	5	Settlement Reticulation	63	Kwadayeni		-
Ulundi	Usuthu	>2022	5	Settlement Reticulation	40	Kwasaku		-
Ulundi	Usuthu	>2022	5	Settlement Reticulation	66	Odizima		-
Ulundi	Usuthu	>2022	5	Settlement Reticulation	109	Okhalweni 1		-
Ulundi	Usuthu	>2022	5	Settlement Reticulation	168	Kwampanza		-
Ulundi	Usuthu	>2022	5	Settlement	133	Esibomvu		-

				Reticulation				
Ulundi	Usuthu	>2022	5	Settlement Reticulation	3	Okhwathe		-
Ulundi	Usuthu	>2022	5	Settlement Reticulation	175	Ezimfabeni		-
Ulundi	Usuthu	>2022	5	Settlement Reticulation	139	Nsabekkuluma 1		-
Ulundi	Usuthu	>2022	5	Settlement Reticulation	81	Emfenyane		-
Ulundi	Usuthu	>2022	5	Settlement Reticulation	301	Esembeni		-
Ulundi	Usuthu	>2022	5	Settlement Reticulation	112	Sikhumbeni		-
Ulundi	Usuthu	>2022	6	Settlement Reticulation	69	Emabeka		-
Ulundi	Usuthu	>2022	6	Settlement Reticulation	32	Qwasha (Nongoma)		-
Ulundi	Usuthu	>2022	6	Settlement Reticulation	181	Nzukasi		-
Ulundi	Usuthu	>2022	6	Settlement Reticulation	96	Shkulile		-
Ulundi	Usuthu	>2022	7	Settlement Reticulation	80	Mpangeleni		-
Ulundi	Usuthu	>2022	7	Settlement Reticulation	53	Thusini		-
Ulundi	Usuthu	>2022	7	Settlement Reticulation	199	Xasane		-
Ulundi	Usuthu	>2022	7	Settlement Reticulation	125	Bhungwane		-
Ulundi	Usuthu	>2022	7	Settlement Reticulation	139	Esphiva		-
Ulundi	Usuthu	>2022	7	Settlement Reticulation	231	Enqunyaneni		-
Ulundi	Usuthu	>2022	7	Settlement Reticulation	98	Nqabeni		-
Ulundi	Usuthu	>2022	7	Settlement Reticulation	252	Kwamame		-
Ulundi	Usuthu	>2022	7	Settlement Reticulation	28	Qubeni		-
Ulundi	Usuthu	>2022	7	Settlement Reticulation	218	Xolo		-
Ulundi	Usuthu	>2022	7	Settlement Reticulation	238	Bhokweni		-
Ulundi	Usuthu	>2022	8	Settlement Reticulation	10	Qubenz		400 000
Ulundi	Usuthu	>2022	8	Settlement Reticulation	51	Gezizandla		-

Ulundi	Usuthu	>2022	8	Settlement Reticulation	103	Ewela 2	-
Ulundi	Usuthu	>2022	8	Settlement Reticulation	118	Mganimbobo	-
Ulundi	Usuthu	>2022	8	Settlement Reticulation	103	Mnqakwe	-
Ulundi	Usuthu	>2022	8	Settlement Reticulation	91	Isiphethu	-
Ulundi	Usuthu	>2022	8	Settlement Reticulation	33	Isiguqa 1	-
Ulundi	Usuthu	>2022	8	Settlement Reticulation	46	Chibini 2	-
Ulundi	Usuthu	>2022	8	Settlement Reticulation	90	Chibini 1	-
Ulundi	Usuthu	>2022	8	Settlement Reticulation	121	Donsamahoho	-
Ulundi	Usuthu	>2022	14	Settlement Reticulation	20	Mshayazafe	500 000
Ulundi	Usuthu	>2022	14	Settlement Reticulation	29	Kwamswane	590 000
Ulundi	Usuthu	>2022	14	Settlement Reticulation	39	Mbanda	690 000
Ulundi	Usuthu	>2022	14	Settlement Reticulation	33	Ewela 1	-
Ulundi	Usuthu	>2022	14	Settlement Reticulation	73	Mabululwane	-
Ulundi	Usuthu	>2022	14	Settlement Reticulation	108	Njojo	-
Ulundi	Usuthu	>2022	14	Settlement Reticulation	50	Bhodludaka	-
Ulundi	Usuthu	>2022	14	Settlement Reticulation	68	Glula	-
Ulundi	Usuthu	>2022	15	Settlement Reticulation	22	Mgubameni	520 000
Ulundi	Usuthu	>2022	15	Settlement Reticulation	128	Pholela	1 580 000
Ulundi	Usuthu	>2022	15	Settlement Reticulation	65	Thembalihle	950 000
Ulundi	Usuthu	>2022	15	Settlement Reticulation	218	Makhalathini	2 480 000
Ulundi	Usuthu	>2022	15	Settlement Reticulation	29	Obinda	590 000
Ulundi	Usuthu	>2022	15	Settlement Reticulation	70	Okhukhu Phansikwentaba	-
Ulundi	Usuthu	>2022	15	Settlement Reticulation	303	Okhukhu	-
Ulundi	Usuthu	>2022	15	Settlement Reticulation	254	Okhukhu Esikoleni	-

Ulundi	Usuthu	>2022	15	Settlement Reticulation	207	Makhukwane		-
Ulundi	Usuthu	>2022	15	Settlement Reticulation	186	Lomo		-
uPhongolo	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	32	Kwamshikashika		TBA
uPhongolo	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	30	Kwaphatha		TBA
uPhongolo	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	41	Kwaslevu		TBA
uPhongolo	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	37	Mthaniya		TBA
uPhongolo	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	25	Emthunzini		TBA
uPhongolo	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	101	Manzamlhlophe		TBA
uPhongolo	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	111	Dwarsrand		TBA
uPhongolo	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	44	Sithole		TBA
uPhongolo	Coronation	Pending Master Plan Outcome	1	Settlement Reticulation	62	Ongane		TBA
uPhongolo	Sim Central	In progress	3	Bulks		Regional bulk pipeline from Luphisso reservoir to new regional bulk reservoir at Ombimbini1	12 000 000	
uPhongolo	Sim East	In progress	9	Settlement Reticulation	236	Msuzwane		2 913 729
uPhongolo	Sim East	2018/2019	9	Settlement Reticulation	73	Nsinjana		TBA
uPhongolo	Sim East	2018/2019	9	Settlement Reticulation	49	Qwaqwa		TBA
uPhongolo	Sim East	2018/2019	9	Settlement Reticulation	112	Tshilibi		TBA
uPhongolo	Sim East	2018/2019	9	Settlement Reticulation	182	Ozweni		TBA
uPhongolo	Sim East	2018/2019	9	Settlement Reticulation	361	Emphafeni		TBA
uPhongolo	Sim East	2018/2019	9	Settlement Reticulation	432	Muyane		TBA
uPhongolo	Sim East	2018/2019	9	Settlement Reticulation	31	Masonsonso		TBA
uPhongolo	Sim East	2018/2019	9	Settlement Reticulation	634	Sphandhule		TBA
uPhongolo	Sim East	2018/2019	10	Settlement Reticulation	231	Mboloba		TBA
uPhongolo	Sim East	2018/2019	10	Settlement Reticulation	396	Mhushulu		TBA
uPhongolo	Sim East	2018/2019	10	Settlement Reticulation	94	Ngedle		TBA

uPhongolo	Sim East	2018/2019	11	Settlement Reticulation	322	Mgomane		TBA
uPhongolo	Sim East	2018/2019	11	Settlement Reticulation	1035	Esigungwini		TBA
uPhongolo	Sim East	2018/2019	13	Settlement Reticulation	432	Magengeni		TBA
uPhongolo	Sim East	2018/2019	13	Settlement Reticulation	58	Kwa'Nkomfe		TBA
uPhongolo	Sim East	2018/2019	13	Settlement Reticulation	59	Mbekakanye		TBA
uPhongolo	Sim East	2018/2019	15	Settlement Reticulation	208	Dekville		TBA
uPhongolo	Sim East	2018/2019	9	Bulks		Upgrade pipeline from Reservoir P1 to new reservoir at Mhushulu	1 595 023	
uPhongolo	Sim East	2018/2019	13	Bulks		Upgrade existing pipeline from Reservoir P1 to new reservoir at Kwa Nkomfe	3 494 077	
uPhongolo	Sim East	2018/2019	13	Storage	0.6ML	New reservoir for retics	2 520 426	
uPhongolo	Sim East	2019/2020	8	Bulks		Upgrade rising main from Reservoir P1 to new reservoir at Elangeni	2 471 538	
uPhongolo	Sim East	2019/2020	8	Storage	1.25ML	New reservoir for retics	3 142 040	
uPhongolo	Sim East	2019/2020	13	Bulks		Upgrade pipeline from new reservoir at Elangeni to new reservoir at Dumakungweni	1 576 034	
uPhongolo	Sim East	2019/2020	13	Storage	0.75ML	New reservoir for retics	2 732 726	
uPhongolo	Sim East	2019/2020	7	Storage	0.8ML	New reservoir for retics	2 742 916	
uPhongolo	Sim East	2020/2021	13	Settlement Reticulation	120	Nhlidliza		-
uPhongolo	Sim East	2020/2021	13	Settlement Reticulation	78	Dumagkunweni 2		-
uPhongolo	Sim East	2020/2021	13	Settlement Reticulation	242	Dumagkunweni 1		-
uPhongolo	Sim East	2020/2021	13	Settlement Reticulation	140	Dumagkunweni 3		-
uPhongolo	Sim East	2020/2021	15	Settlement Reticulation	103	Elangeni		-
uPhongolo	Sim East	2020/2021	15	Settlement Reticulation	57	Okhahlamba		-
uPhongolo	Sim East	2020/2021	15	Settlement Reticulation	286	Endabeni		-
uPhongolo	Sim East	2020/2021	15	Settlement Reticulation	176	Ezinketheni 2		-
uPhongolo	Sim East	2020/2021	15	Settlement Reticulation	155	Hhohho		-
uPhongolo	Sim East	2020/2021	15	Settlement Reticulation	68	Ezibomvu 3		-

uPhongolo	Sim East	2020/2021	15	Settlement Reticulation	91	Embangweni 2		-
uPhongolo	Sim East	2020/2021	15	Settlement Reticulation	76	Engwabi		-
uPhongolo	Sim East	2021/2022	8	Bulks		Upgrade rising main from new reservoir at Elangeni to new reservoir at Magombe	947 332	
uPhongolo	Sim East	2021/2022	8	Bulks		Upgrade pipeline from new reservoir at Mahlombe to new reservoir at Phondwane	4 358 296	
uPhongolo	Sim East	2021/2022	8	Storage	0.2ML	New reservoir for retics	1 188 880	
uPhongolo	Sim East	2021/2022	13	Storage	0.55ML	New reservoir for retics	2 432 109	
uPhongolo	Sim East	>2022	4	Settlement Reticulation	49	Kwanximfi		-
uPhongolo	Sim East	>2022	4	Settlement Reticulation	111	Manzana		-
uPhongolo	Sim East	>2022	4	Settlement Reticulation	244	Masombe		-
uPhongolo	Sim East	>2022	7	Settlement Reticulation	149	Sidakeni 1		-
uPhongolo	Sim East	>2022	7	Settlement Reticulation	159	Lubisi North		-
uPhongolo	Sim East	>2022	7	Settlement Reticulation	138	Lubisi South		-
uPhongolo	Sim East	>2022	7	Settlement Reticulation	249	Thandukukhama		-
uPhongolo	Sim East	>2022	8	Settlement Reticulation	421	Mvelazitha		-
uPhongolo	Sim East	>2022	8	Settlement Reticulation	90	Mafela		-
uPhongolo	Sim East	>2022	8	Settlement Reticulation	221	Phondwane		-
uPhongolo	Sim East	>2022	8	Settlement Reticulation	152	Mzinsangu		-
uPhongolo	Sim East	>2022	8	Settlement Reticulation	311	Bhembe		-
uPhongolo	Sim Central	2018/2019	3	Bulks	TBA	New WTW at Weir	TBA	
uPhongolo	Sim Central	2018/2019	3	Bulks	160	Regional bulk pipelines from Ombimbini to BPT at Bongaspoort	10 976 197	
uPhongolo	Sim Central	2019/2020	3	Storage	2.29ml	New bulk regional reservoir at Ombimbini	6 682 524	
uPhongolo	Sim Central	2019/2020	5	Storage	640kl	Proposed Clear-water reservoir at Belgrade	2 554 394	
uPhongolo	Sim Central	2021/2022	5	Storage	640kl	Proposed Raw water reservoir at Belgrade	2 554 394	
uPhongolo	Sim Central	2021/2022	6	Bulks	110	Regional bulk pipelines from Ombimbini to BPT at Bongaspoort	1 405 844	

uPhongolo	Sim Central	2021/2022	6	Bulks	110	Regional bulk pipelines from Ombimbini to BPT at Bongaspoort	6 993	
uPhongolo	Sim Central	2021/2022	6	Bulks	110	Regional bulk pipelines from Ombimbini to BPT at Bongaspoort	166 525	
uPhongolo	Sim Central	2021/2022	6	Bulks	110	Regional bulk pipelines from Ombimbini to BPT at Bongaspoort	35 976	
uPhongolo	Sim Central	2021/2022	6	Bulks	90	Regional bulk pipeline from Bongaspoort to Klipwal	2 546 763	
uPhongolo	Sim Central	>2022	6	Bulks	110	Regional bulk pipeline from Bongaspoort to Emabomvu	5 733 140	
uPhongolo	Sim Central	>2022	6	Bulks	110	Regional bulk pipeline from Bongaspoort to Emabomvu	24 814	
uPhongolo	Sim Central	>2022	6	Bulks	110	Regional bulk pipeline from Bongaspoort to Emabomvu	5 158	
uPhongolo	Sim Central	>2022	6	Storage	160kl	New regional bulk reservoir at Klipwal	1 035 803	
uPhongolo	Sim Central	>2022	6	Storage	180kl	New regional bulk reservoir at Emabomvu	1 103 960	
uPhongolo	Sim Central	>2022	6	BPT		BPT at Bongaspoort	84 920	
uPhongolo	Sim Central	>2022	3	Settlement Reticulation	125	Dungamanzi 2		
uPhongolo	Sim Central	>2022	3	Settlement Reticulation	153	Gesi		
uPhongolo	Sim Central	>2022	3	Settlement Reticulation	143	Mdiyane		
uPhongolo	Sim Central	>2022	3	Settlement Reticulation	196	Ncithini		
uPhongolo	Sim Central	>2022	3	Settlement Reticulation	130	Ombimbini 1		
uPhongolo	Sim Central	>2022	3	Settlement Reticulation	147	Vimbemshini		
uPhongolo	Sim Central	>2022	6	Settlement Reticulation	106	Dlomodlomo		
uPhongolo	Sim Central	>2022	6	Settlement Reticulation	52	Mgwadlu		
uPhongolo	Sim Central	>2022	6	Settlement Reticulation	32	Kortnek		
uPhongolo	Sim Central	>2022	6	Settlement Reticulation	58	Emabomvu		
uPhongolo	Sim Central	>2022	6	Settlement Reticulation	92	Maqanda		
uPhongolo	Sim Central	>2022	6	Settlement Reticulation	63	Ezibayeni 3		
uPhongolo	Sim Central	>2022	6	Settlement Reticulation	42	Thusazane		
uPhongolo	Sim Central	>2022	6	Settlement Reticulation	71	Mfaluvalo		

uPhongolo	Sim Central	>2022	6	Settlement Reticulation	130	Nkosentsha		
uPhongolo	Sim Central	>2022	6	Settlement Reticulation	89	Ezinketheni 1		
uPhongolo	Sim Central	>2022	6	Settlement Reticulation	60	Bongaspoort		
uPhongolo	Sim Central	>2022	6	Settlement Reticulation	100	Kwambhucu		
uPhongolo	Sim Central	>2022	6	Settlement Reticulation	182	Ntabakayishi		
uPhongolo	Sim Central	>2022	6	Settlement Reticulation	198	Altona		
uPhongolo	Sim Central	>2022	6	Settlement Reticulation	182	Manzabomvu 1		
uPhongolo	Sim Central	>2022	6	Settlement Reticulation	108	Newstand		
uPhongolo	Sim Central	>2022	6	Settlement Reticulation	53	Magiqweni		
uPhongolo	Sim Central	>2022	6	Settlement Reticulation	65	Mfenyane		
uPhongolo	Sim Central	>2022	6	Settlement Reticulation	180	Klipwal		
uPhongolo	Sim Central	>2022	6	Settlement Reticulation	47	Mafindose		

INTERMEDIATE STAND-ALONE SCHEMES

Implementation Year	Local Municipality	Regional Scheme	Stand-alone Scheme Name	Ward 2011	Settlement Name	Cost	Households Served
2017-2019	Ulundi	Usuthu	Esphiva Phase 1,2&3	7	Esphiva	R8.5m (Phase3 under construction)	106
				7	Bhokweni 1		16
				7	Kwamane 1		118
				7	kwamane 2		45
				7	Bhungwane		104
				7	Xasane 1		38
				7	Xasane 2		18
				7	Nqabeni		45
				7	Bhokweni 2		172
				7	Mpangeleni		55
				7	Thusini		37
				7	Sofanweni		97
				7	Qubeni		24
				7	Nqabeni		39
				7	Xolo		159
				7	Amaphiva		164
				7	Pelepele		29
				8	Chibini 1		63
Planned	Nongoma	Usuthu	Kwankulu	12,13	Emgodi 2	R25.5m	64
					Kwamfemfeni		87
					Kwankulu		22
					Hlambanyathi 1		135
					Ingundwane		26
					Manhlanhle		48
					Emgodi 1		108
Planned	Ulundi	Nkonjeni	Hlophenkulu	20	Kwa Mvula	R25.5m	12
				24	Ezikhumbeni		96
					Ekatini		58
					Hlophekhulu		196
					Enguqe		98
					Kwanguqe		82
					Ezimfeneni		66
					Basamlilo 2		60
					Ezisasameni		32
					Ekujulukeni 1		75
					Ekujulukeni 2		94
					Kwanguqe		72
2017-2020	Ulundi	Usuthu	Ceza	2,3,4,5,6	Brush/Nsukangihlale	R45m (Under construction)	314
					Nsimbi		108
					Phethu		53

					Mndaweni	63
					Nhlonga	114
					Nomponjwana	48
					Edlakude	69
					Siyekela	82
					Obhedeni	32
					Nende	13
					Ezembeni	77
					Eggumeni	96
					Ndwaleni	40
					Dlabane	90
					Mashiyane	131
					Ntambonde	61
					Isihulu	112
					Bhoholo	184
					Nhlatwini	263
					Dakaneni	31
					Magayiseni	41
					Mkhulwana	75
					Ngubaneni	97
					Nomdidwa	81
					Thandamali	36
					Mlamlankuzi	56
					Esidakeni 2	355
					Basamlilo 1	178
					Nende	79
					Kwantabaneni	132
					Kwantabe	21
					Mgxotshwa	11
					Mhlophe	31
					Sikhalampama	58
					Nhlohlela	108
					Ezinxagwini	66
					Chibini 3	106
					Ngobodo	68
					Ezihlaqeni	36
					Ezimqaqeni	35
2017-2020	Ulundi / Nongoma	Nkonjeni / Usuthu	Esikhumbeni (Phase 1&2)	Ulundi Ward 5 & 6, Nongoma Ward 14	Onyango	128
					Kwa Musi	294
					Nsimbini	119
					Dayeni	137
					Shisuthu	114
					Mbhukudu	103
					Ezimpakaneni	134
					Qhudebe	113
					Phangole	45
					Odizima	46
					Kwameke	64
					Sikhumbeni	78
					Kwadayeni	45

					Kwasaku		29
					Okhalweni 1		80
					Esibomvu		108
					Kwampanza		129
					Ezimfabeni		138
					Nsabekhuluma 1		112
					Mbabazi		221
					Emfenyane		63
					Shkulile		81
					Qwasha (Nongoma)		29
					Nzukasi		152
					Emabeka		56
					Kwamane 1		118
					kwamane 2		45
					Okhwathe		5
2018-2019	AbaQulusi	Hlahlindlela	Bhobozani	15	Esigodini		230
				15	Gingqa	R43m	245
				17	Emadwaleni 1		121
2017-2019	Nongoma	Mandhlakazi	Mpuphusi	5	Mpuphusi	uMhlatuze Water	137
2017-2019	Nongoma	Mandhlakazi	Kwajuba	5	Kwajuba		131
				5	Mahlomane	uMhlatuze Water	79
				5	Kolubomvu 1		22
2017-2019	Nongoma	Mandhlakazi	Nhlebeli	5	Nhlebeli		127
				5	Fakude		108
				5	Ndimhlana		138
				5	Khethankomo		190
				5	New Town		71
				5	Mthincongo		191
				5	Sinqanda	uMhlatuze Water	174
				2	Ovukneni		134
2017-2019	Nongoma	Usuthu	Kwahelibheshu	10	Kwahelibheshu	uMhlatuze Water	16
					Nombanjana		72
					Engongoma		26
2017-2019	Nongoma	Usuthu	Ndolowaneni	10	Nsawulani		213
				10	Nokhesheni		20
				10	Emakholweni 2		181
				10	Magutshwa		126
				6	Ekuvukeni	uMhlatuze Water	201
				10	Klolweni		209
				10	Kwandwandwe		162
				10	Okhalweni 3		120
				10	Esweni		103
				10	Hlathi		158
				6	Ndololwane		80
2017-2019	Nongoma	Usuthu	Enzobo	11	Zampilo	uMhlatuze Water	42
					Kwavumela		76
					Ebungwini		128
					Kwazungu		188
					Mbamba		51
					Othinsangu		111

					Hlathidumayo		78
					Singangeni		76
					Mcibilindini		49
					Masokaneni		160
2017-2019	Nongoma	Usuthu	Zombhode	11	Eziqhumeni	uMhlatuze Water	128
				11	Entwala		57
				11	Nqala		86
				11	Entuthukweni		142
				11	Elanjani/Msasanani		182
				11	Sidakeni 2		29
				11	Khanjaneni		57
				10	Qule		26
				10	Ezombode		101
2017-2019	Nongoma	Usuthu	Nongoma Ward 14	14	Kwazwede	uMhlatuze Water	71
					Khalweni		52
					Esigangeni 1		302
					Emahlombe		131
					Phenyane 2		50
					Badlaneni		151
					Newgoli		117
					Itshodo		105
					Kwandase		77
					Ivuna		296
2017-2019	Nongoma	Usuthu	Nongoma Ward 17	17	Esiweni	uMhlatuze Water	25
					Msasaneni		37
					Mbengo		81
					Echibini		14
					Magedlana B		55
					Thokazi		147
					Phoqukhalo		20
					Mjiza		160

RUDIMENTARY ROLLOUTS									
Rudimentary Implementation Year	Local Municipality	Regional Scheme	Ward 2016	Z-Nr	Settlement Name	Cost Estimate (Retics)	Cost Estimate (BH or Spring Protection for average 30 HH per source)	Households	Progress
In progress	AbaQulusi	Coronation	1	ZPM17	Enhlangweni		620 000	62	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	AbaQulusi	Coronation	1	ZPM11	Ezakhiweni 1		250 000	25	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	AbaQulusi	Coronation	2	ZNew47	Kwamadamu		900 000	90	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	AbaQulusi	Coronation	3	ZHR26	Sgubudu		1 770 000	177	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	AbaQulusi	Coronation	5	ZNew86	Triangle store	14	2 570 000	257	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	AbaQulusi	Coronation	6	ZNew104	Enkwaleni		190 000	19	Hydrocensus, assess existing water sources, drilling & equipping

									of new boreholes with handpump or spring protection where possible.
In progress	AbaQulusi	Coronation	6	ZPM8	Kwavilakazi 1		2 160 000	216	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	AbaQulusi	Coronation	1	ZPM11	Ezakhiweni	96 500		26	
In progress	AbaQulusi	Coronation	1	ZPM17	Enhlangweni	227 740		73	Drilling completed, testing in progress. Equip 2 handpumps and 1 submersible. 2 BH's to be tested.
In progress	AbaQulusi	Coronation	2	ZBUK60	Kwafakazi	146 680		46	2 new Drought Relief BH's to be tested
In progress	AbaQulusi	Coronation	2	ZBUK61	Endinsi	131 240		33	Existing handpump. New BH to be tested and equipped
In progress	AbaQulusi	Coronation	3	ZPM6	Mkhuze 2	123 520		37	Existing BH to be equipped with submersible and equipped for production. New Drought relief BH to be equipped. 20% of HH not covered.
In progress	AbaQulusi	Coronation	7	ZHC5	Boomlaer	96 500		26	EGN BH 170 to be equipped with HP and resampled; EGN BH 218 to be tested. 2 BH's dry.
In progress	AbaQulusi	Coronation	7	ZPM12	Rietvlei	189 140		71	5 BH's equipped with HP - 3 BH's to test pump (No progress since 2013) and 2 BH's to be treated in 7 years
In progress	AbaQulusi	Hlahlindlela	12	ZNew166	Jimane		690 000	69	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	AbaQulusi	Hlahlindlela	14	Z809	Mdundubenzi		700 000	70	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.

In progress	AbaQulusi	Hlahlindlela	14	Z133	Mvunjane Simashwini		4 660 000	466	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	AbaQulusi	Hlahlindlela	14	Z133	Mvunjane Simashwini		4 660 000	466	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	AbaQulusi	Hlahlindlela	15	Z121	St Paul		3 220 000	322	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	AbaQulusi	Hlahlindlela	17	Z941	Emadwaleni 1		1 210 000	121	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	AbaQulusi	Hlahlindlela	21	Z810	Engilandi		3 450 000	345	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	AbaQulusi	Hlahlindlela	21	Z137	Ezidulini		7 400 000	740	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	AbaQulusi	Khambi	5	ZMAP75a	New	293 360		28	1 Drought relief BH, not equipped. EGN BH 125 equipped with HP. Another BH to be tested. Some HH not served
In progress	AbaQulusi	Khambi	5	ZMAP75b	Boschoek (Mgobhozi)	293 360		38	1 Drought relief BH, not equipped. EGN BH 125 equipped with HP. Another BH to be tested. Some HH not served

In progress	AbaQulusi	Khambi	5	Z929	Mount Gwibi	84 920		24	BH equipped - to test pump.
In progress	AbaQulusi	Khambi	3	Z849	Cibilili		2 820 000	282	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	AbaQulusi	Khambi	3	Z893	Hlanzeni		940 000	94	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	AbaQulusi	Khambi	3	ZNew30	Kewulane		770 000	77	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	AbaQulusi	Khambi	3	Z896	Kwamaqweshe		3 410 000	341	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	AbaQulusi	Khambi	3	ZNew29	Mabova		320 000	32	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	AbaQulusi	Khambi	3	ZNew31	Ndulinde		220 000	22	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	AbaQulusi	Khambi	4	Z897a	Bethel (Mission)		910 000	91	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	AbaQulusi	Khambi	4	Z897b	Bethel (Salema)		2 070 000	207	Hydrocensus, assess existing water sources, drilling & equipping

									of new boreholes with handpump or spring protection where possible.
In progress	AbaQulusi	Khambi	4	ZNN10	Makukula		2 040 000	204	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	AbaQulusi	Khambi	4	ZNN11	Mandunduwe		810 000	81	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Coronation	7	ZNew145	Matshekazi		1 280 000	128	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Coronation	7	ZNew145	Matshekazi		1 280 000	128	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Coronation	7	ZTAS53	Palmietfontein (Rondspring 137, Gezehlala)		180 000	18	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Coronation	7	ZTAS56	Palmietfontein (Rondspring 137, Kwambhedleni)		250 000	25	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Coronation	7	Z786	Helpmekaar			97	EGN BH55 to equip for production with submersible. EGN BH56 dry. 2 BH to be equipped with submersible and 1 BH to be equipped with HP. 1 dry BH and 3 unprotected springs
In progress	eDumbe	Coronation	7	ZPM35	Baqulusini 5			18	

In progress	eDumbe	Coronation	7	ZTAS53	Palmietfontein (Rondspring 137, Gezahlala)			9	EGN BH 71 to be equipped for production with submersible.
In progress	eDumbe	Coronation	7	ZTAS55	Palmietfontein (Kwambilimbhaga)			65	EGN BH 58 to be equipped with submersible. EGN BH 54 equipped with HP. ZDM740 equipped pump unknown. TAS691 equipped but runs dry in winter. Some HH not served
In progress	eDumbe	Coronation	7	ZTAS56	Palmietfontein (Rondspring 137, Kwambhedleni)			27	TAS693 Spring is seasonal and needs protection. BH is equipped but not working. Most HH not served
In progress	eDumbe	Hlahlindlela	1	ZNew4	Bivanyana		410 000	41	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Hlahlindlela	1	ZNN5	Obivane 2		240 000	24	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Hlahlindlela	1	ZNew133	Penvaan		1 000 000	100	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Hlahlindlela	7	ZNew6	KwaManzi		250 000	25	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Hlahlindlela	7	ZMAP4	New	138 960		30	Drought relief BH - To be equipped
In progress	eDumbe	Sim West	1	ZNew141	Bazangoma		1 050 000	105	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.

In progress	eDumbe	Sim West	1	ZNN4	Ekhombela		1 340 000	134	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Sim West	1	ZNN4	Ekhombela		1 340 000	134	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Sim West	1	ZNew139	Hloko		800 000	80	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Sim West	1	ZNew140	KwaBhema		550 000	55	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Sim West	1	ZNew134	Kwalembe		600 000	60	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Sim West	1	ZNew2	Lukhakhayi		990 000	99	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Sim West	1	ZNew137	Ntshakwe		250 000	25	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Sim West	1	ZNew138	Ntshakwe (Mhlamone)		1 410 000	141	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.

In progress	eDumbe	Sim West	1	ZNew144	Titane		390 000	39	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Sim West	2	Z793	KwaMpunz		620 000	62	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Sim West	2	Z793	Mdwadlaza		510 000	51	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Sim West	2	Z942	Ngwanya		3 700 000	370	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Sim West	3	ZNew3	Mandakane		3 740 000	374	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Sim West	4	ZNEW182	Bilanyoni New Stands		40 000	4	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Sim West	6	Z792	Embizeni		400 000	40	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Sim West	6	Z98	Gedlase		2 330 000	233	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.

In progress	eDumbe	Sim West	6	Z433	Gwebu 1		900 000	90	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Sim West	6	Z100	Mphelanelaba		720 000	72	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Sim West	7	Z432	Obivane 1		1 300 000	130	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Sim West	8	ZNew8	Nhlungwane		1 150 000	115	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	eDumbe	Sim West	1	ZNN4	Ekhombela	258 620		77	Equipping of BH
In progress	Nongoma	Mandhlakazi	2	Z202	Bombolo		2 040 000	204	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Nongoma	Mandhlakazi	2	Z202	Bombolo		2 040 000	204	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Nongoma	Mandhlakazi	4	Z211	Khokhwaneni		1 700 000	170	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump

									or spring protection where possible.
In progress	Nongoma	Mandhlakazi	4	Z211	Khokhwaneni		1 700 000	170	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Nongoma	Mandhlakazi	8	Z196	Bhekumthetho 2		3 010 000	301	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Nongoma	Mandhlakazi	8	Z196	Bhekumthetho 2		3 010 000	301	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Nongoma	Mandhlakazi	1	Z290	Zidwadweni	304 940		86	4 BH's. 1 BH is not working. 2 BH's rejected, poor WQ. 1 BH to be equipped.
In progress	Nongoma	Mandhlakazi	2	ZMAP37	Kati	138 960		37	4 BH's, 3 equipped with HP. KZDM61 BH Re-test and Re-sample & analyse for nitrates
In progress	Nongoma	Mandhlakazi	2	Z204	Sibanyaneni	428 460		123	B204A equipped, pump unknown, BH not working. BUK111 equipped with HP, BH not working. BH's KZDM461 and KZDM462 to be tested and equipped.
In progress	Nongoma	Mandhlakazi	2	ZBUK11	Vusu Musi	165 980		51	KZDM463 BH to be tested and equipped.
In progress	Nongoma	Mandhlakazi	3	ZBUK25	Magendene	57 900		17	2 BH's to be drilled and tested. 1 BH capped.
In progress	Nongoma	Mandhlakazi	5	Z247	Mpuphusi	428 460		117	ZDM307 BH reject, awaiting WQ results. ZDM308 BH sited, to be drilled and tested. ZDM 309 rejected. ZDM307 BH sited, to be drilled and tested. BA272 sample to be taken. No progress since 2009. KZDM393 no data

In progress	Nongoma	Mandhlakazi	5	Z239	Banbelentulo	814 460		228	BUK210 Equipped, pump unknown. Equip ZDM304 with Afridev to 50m. BUK211 only water source, needs urgent replacement. KZDM465 to be equipped. 20% of HH not served
In progress	Nongoma	Mandhlakazi	5	Z292	Kwajuba	443 900		120	BMA088 to be equipped with HP. BUK276, BUK278 and BUK277 equipped. ZDM321 and KZDM100 rejected
In progress	Nongoma	Mandhlakazi	6	Z172	Dengeni	544 260		176	4 BH's dry. BA246 to be drilled, tested and equipped with HP. BA248 to be treated with HTH and equipped. BA249 equipped
In progress	Nongoma	Mandhlakazi	6	Z222	Esigodiphola 2	50 180		17	Both BH's equipped. KZDM to be treated
In progress	Nongoma	Mandhlakazi	7	Z954	Bhidi	266 340		73	BUK113 equipped, not working. KZDM464 to be equipped for production
In progress	Nongoma	Usuthu	12	Z348	Sigubudu		1 860 000	186	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Nongoma	Usuthu	13	Z359	Embokodweni		820 000	82	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Nongoma	Usuthu	15	Z556	Kohlokolo		1 380 000	138	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Nongoma	Usuthu	9	Z365	Kwa-Denge	880 080		299	KAY31 equipped, not working. KZDM388 and KZDM389 to be equipped with HP. 2 BH's not equipped
In progress	Nongoma	Usuthu	9	Z367	Kwasicengile	301 080		95	KZDM390 dry - replacement required

In progress	Nongoma	Usuthu	9	Z368	Ebhunge	335 820	103	KZDM143 equipped with HP. KZDM394 to be equipped
In progress	Nongoma	Usuthu	9	Z369	Emkhondo	551 980	200	KZDM140 not drilled, vandalised and abandoned. 2 BH's to be equipped
In progress	Nongoma	Usuthu	9	Z370	Holinyoka	926 400	287	KZDM395 to be equipped for production with HP. KZDM 411 to be equipped with HP. No ID BH needs desktop study, siting and drilling.
In progress	Nongoma	Usuthu	9	Z371	Ndikandika	474 780	141	KZDM412 to be equipped with HP
In progress	Nongoma	Usuthu	9	ZMAP28	Mahayoyo	524 960	181	KZDM450 to be equipped with Mono T7 to 42m. 2 BH's with poor WQ. RO unit for KZDM404 capable of providing 3000l/h using solar system, motorised pump = 110m. RO unit for KZDM413 capable of providing 3000l/h using solar system, motorised pump = 100m.
In progress	Nongoma	Usuthu	11	Z152	Masokaneni	351 260	111	B152C to be equipped for production - Drill another 30m and set pump inlet at 90m. B152A not working. KZDM256; KZDM257 and KZDM292 to be equipped
In progress	Nongoma	Usuthu	11	ZMAP9	Doncaneni	177 560	50	ZDM002 sited and abandoned. B147D equipped with HP. KZDM172 and KZDM174 requires access roads, good site with potential good yield. KZDM183 to be equipped with HP. 2 BH's not working.
In progress	Nongoma	Usuthu	12	Z342	Emayeni	247 040	72	KZDM454 dry - replacement site required. ZDM572 dry - not working. ZDM576 not equipped.
In progress	Nongoma	Usuthu	12	ZMAP14	Ndlazini	196 860	58	ZDM072 equipped with HP. KZDM455 dry - replacement site required

In progress	Nongoma	Usuthu	13	Z579	Ekubuseni	347 400		102	ZDM126 not working. ZDM533 equipped - pump unknown; WQ retested.
In progress	Nongoma	Usuthu	13	ZMAP27	Nqumbi	270 200		85	ZDM534 equipped - pump unknown; WQ retested. KZDM449 to be drilled. KZDM451 tested - not equipped. TAS407 and ZDM535 not equipped.
In progress	Nongoma	Usuthu	14	Z550	Onyango	443 900		128	ZDM085 and ZDM086 needs retesting. ZDM085 and KZDM387 to be equipped for production. 3 BH's not equipped.
In progress	Nongoma	Usuthu	14	Z561	Esigangeni 1 - Rising main & borehole	806 740		217	JM215 and JM216 working. JM217 broken for 3 years. 1 BH and 1 spring not equipped.
In progress	Ulundi	Nkonjeni	4	Z452c	Kwamshayazafe 3		2 110 000	211	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Nkonjeni	13	ZNew115	Kwa'Henie		2 000 000	200	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Nkonjeni	14	Z413	Njomelwane		3 390 000	339	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Nkonjeni	16	Z940	Babanango		5 750 000	575	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Nkonjeni	16	Z940	Babanango		5 750 000	575	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.

In progress	Ulundi	Nkonjeni	20	Z814	Ezakhiweni 2		3 370 000	337	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Nkonjeni	20	Z814	Ezakhiweni 2		3 370 000	337	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Nkonjeni	20	Z745	Kwagqikazi		3 260 000	326	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Nkonjeni	20	Z745	Kwagqikazi		3 260 000	326	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Nkonjeni	20	Z795	Kwa'Mvula		1 460 000	146	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Nkonjeni	20	Z795	Kwa'Mvula		1 460 000	146	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Nkonjeni	20	Z402	Kwavilakazi 2		1 200 000	120	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Nkonjeni	20	Z402	Kwavilakazi 2		1 200 000	120	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.

In progress	Ulundi	Nkonjeni	23	Z480	Mgababa 3		1 660 000	166	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Nkonjeni	23	Z480	Mgababa 3		1 660 000	166	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Nkonjeni	24	Z813	Enguqe		1 940 000	194	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Nkonjeni	24	ZTAS18	Ezimfeneni		720 000	72	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Nkonjeni	24	ZTAS18	Ezimfeneni		720 000	72	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Nkonjeni	13	ZHC3	Witpoort	42 460		12	KZDM401 BH equipped. 75% of HH not served
In progress	Ulundi	Nkonjeni	14	Z782	Sqobelo	370 560		96	TAS317 and TAS320 equipped with HP. TAS577 capped. BMA185 equipped. KZDM220 equipped for production puposes. TAS319 unchanged
In progress	Ulundi	Nkonjeni	24	ZTAS18	Ezimfeneni	254 760		66	2 Springs with low yield. KZDM168 to be equipped with HP. 2 BH's not equipped
In progress	Ulundi	Nkonjeni	24	ZMAP108	Basamlilo 2	220 020		60	Unknown BH equipped with HP - broken. KZDM400 to be equipped with India Mac 2 to 90m

In progress	Ulundi	Nkonjeni	24	ZMAP109	Ezisasameni	119 660		32	KZDM399 to be equipped with India Mac 2 to 80m. BH with no ID
In progress	Ulundi	Usuthu	1	Z1	Ezibomvu 2		710 000	71	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Usuthu	1	ZRN10	Ezikwebezani		1 510 000	151	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Usuthu	1	Z7	Mayidwebu		360 000	36	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Usuthu	1	Z91	Ngogelana		300 000	30	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Usuthu	1	Z91	Ngogelana		1 740 000	174	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Usuthu	1	Z91	Ngogelana		300 000	30	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Usuthu	1	Z91	Ngogelana		1 740 000	174	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Usuthu	4	Z448	Ezembeni 1		2 980 000	298	Hydrocensus, assess existing water sources, drilling & equipping

									of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Usuthu	4	Z448	Ezembeni 1		2 980 000	298	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Usuthu	5	Z46	Qhudebe		1 450 000	145	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Usuthu	5	Z46	Qhudebe		1 450 000	145	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Usuthu	6	Z31	Dlabane		1 030 000	103	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Usuthu	6	Z38	Emabeka		690 000	69	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Usuthu	6	Z39	Qwasha (Nongoma)		320 000	32	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Usuthu	7	Z666	Enqunyaneni		2 310 000	231	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.

In progress	Ulundi	Usuthu	8	Z684	Mnqakwe		1 030 000	103	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Usuthu	8	Z684	Mnqakwe		1 030 000	103	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	Ulundi	Usuthu	7	Z667	Pelepele	100 360		29	TAS220 rejected - poor WQ. TAS219 equipped with HP - reject due to poor WQ. TAS218 equip for low/medium production purposes. KZDM165 artesian BH.
In progress	Ulundi	Usuthu	7	Z673	Bhokweni 1 - extension	54 040		16	KZDM396 dry - replacement site required
In progress	Ulundi	Usuthu	7	Z675	Mpangeleni	212 300		55	TAS237 equipped with HP. KZDM225 not to be equipped - poor WQ. KZDM397 to be equipped with India Mac 2
In progress	Ulundi	Usuthu	7	Z680	Xolo	559 700		159	KZDM228 to be equipped with HP. KZDM to be equipped with India Mac 2 to 60m. KZDM227 to be equipped for low level production purposes. TAS234 - broken base; pump loose. TAS235 equipped. BMA214 not equipped.
In progress	Ulundi	Usuthu	7	ZMAP93	Qubeni	81 060		24	KZDM459 to be tested. BMA215 dry. TAS236 equipped
In progress	Ulundi	Usuthu	8	Z682b	Chibini 1	165 980		63	TAS232 not working. ZDM599 equipped - pump unknown. BMA228 equip turbidity and bact only. ZDM060 not equipped
In progress	Ulundi	Usuthu	14	Z705	Kwanodwengu	69 480		18	2 BH's not equipped
In progress	Ulundi	Usuthu	14	Z706	Mbanda 2	127 380		34	KZDM417 drilled - dry. TAS264 needs protection. 35% HH not served

In progress	uPhongolo	Coronation	1	ZHR3	Dwarsrand		1 110 000	111	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	uPhongolo	Coronation	1	Z902	Kwabanakile	494 080		112	ZDM703 equipped with HP - to test pump and site new BH. 5 unprotected springs. MC144 equipped - 3x5000lt plastic tanks. MC145 not equipped - 2x5000lt tanks. 50% of HH not served
In progress	uPhongolo	Mkhuze	1	ZNew43	Morreson		890 000	89	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	uPhongolo	Sim Central	3	Z772	Khiphunyawo		670 000	67	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	uPhongolo	Sim Central	5	ZMAP41	Gaqa (Inqabayamantungwa)		4 050 000	405	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	uPhongolo	Sim Central	6	Z767	Mfenyane	220 020		65	3 Drought relief project BH's. EGN BH 213 to be equipped with submersible. NN39 is protected. BUK496 is protected - Reservoir has tap.
In progress	uPhongolo	Sim Central	6	Z769	Mafindose	177 560		49	EGN BH 193 to be equipped with submersible. VM64 not working. Klipwal 7 requiring maintenance
In progress	uPhongolo	Sim East	4	Z495	Godlwayo		7 330 000	733	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.

In progress	uPhongolo	Sim East	7	Z496	Sivule		1 890 000	189	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	uPhongolo	Sim East	10	Z756	Mboloba		2 310 000	231	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	uPhongolo	Usuthu	1	ZHC25	Mpalaza		880 000	88	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	uPhongolo	Usuthu	1	ZHC25	Mpalaza		880 000	88	Hydrocensus, assess existing water sources, drilling & equipping of new boreholes with handpump or spring protection where possible.
In progress	uPhongolo	Usuthu	1	ZHC25	Ntshangase Trust (Meriba 619)	250 900		83	ZDM208 dry. Drought relief project EGN BH 319 to be equipped. 80% HH not served.
In progress	uPhongolo	Usuthu	1	ZMAP32	KwaMqanga	119 660		38	Drought relief BH - To be equipped. 20% HH not served
In progress	uPhongolo	Usuthu	1	ZMAP33	Mpalaza (Ntshangase Trust)	77 200		24	HC446 dry. EGN BH 204 to be equipped with submersible. 20% HH not served
In progress	Nongoma	Usuthu	11	Z151	Mhlabaneni	185 280		51	KZDM213 equipped with HP to 60m. KZDM214 to be equipped with HP to 60m
In progress	Nongoma	Mandhlakazi	20	Z226	Ekubungazeleni	725 680		201	BUK207 equipped - pump unknown; needs chem test. KZDM434 to be equipped.
In progress	Nongoma	Mandhlakazi	20	Z227	Manqushaneni	413 020		108	KZDM83 water level too deep - reject. KZDM468 waiting for contractor to be appointed. 3 BH's not working.

In progress	Nongoma	Usuthu	4	Z215b	Zwelisha (Mfankomo)	548 120	169	ZDM579 to be equipped with HP. 2 Spings not equipped - verify and protect; if no water: Desktop, site and drill.
In progress	Nongoma	Usuthu	4	ZMAP25	Mahlezane	54 040	17	KZDM179 monitor water quality - alternative source for production purposes required
In progress	Nongoma	Usuthu	9	Z592	Sikhleni	362 840	109	KZDM13 to be equipped. KZDM15 not drilled.
In progress	Nongoma	Usuthu	10	ZBUK56	Mcwabeyana	181 420	53	ZDM512 Poor WQ - Reject. ZDM 577 - drill, pump, test WQ.
In progress	Nongoma	Usuthu	13	Z360	Engwelezane	115 800	33	KZDM210 spring protected. KAY2 protection being installed. KAY1 spring far from village and weak.
In progress	Nongoma	Usuthu	17	Z640	Bhethani	663 920	179	KZDM04 equipped with HP. KZDM05 to be equipped for production purposes. 2 Springs not equipped.
In progress	Ulundi	Nkonjeni	14	ZMAP91	Themalihle	88 780	23	KZDM146 to be treated and equipped with HP. KZDM200 RO recommended - National drilling. KZDM201 not drilled.
In progress	Ulundi	Usuthu	5	Z47	Ezimfabeni	455 480	138	KZDM62 dry. KZDM562b not to be drilled - further investigation required. 2 BH's equipped with HP
In progress	Ulundi	Nkonjeni	14	Z407	Ezinyoshini	436 180	117	TAS25 equipped with diesel pump. KZDM419 to be equipped with India Mac 2 to 60m. KZDM420 to be equipped for production purposes with India Mac 2 to 60m. TAS578 dry in winter.
In progress	Ulundi	Nkonjeni	14	Z408	Nyoni	285 640	79	KZDM421 to be equipped with India Mac 2 to 90m. 2 BH's to be equipped for low and medium production purposes. ZDM536 to be equipped for production purposes. TAS315 equipped. ZDM536 not equipped.

In progress	Ulundi	Nkonjeni	14	Z410	Ganwini	328 100	92	KZDM219 Nitrates too high - reject. KZDM456 dry - replacement site required. KZDM436 and KZDM437 to be equipped with India Mac 2 to 80m. TAS298 pump needs servicing.
In progress	Ulundi	Nkonjeni	14	Z412	Zilulwane	165 980	43	KZDM199 to be equipped with HP
In progress	Ulundi	Nkonjeni	15	Z709	Ntabayezulu	146 680	41	KZDM273 dry. KZDM275 and KZDM274 to be equipped for production purposes. ZDM535 retest and re-equip
In progress	Ulundi	Nkonjeni	20	Z813	Enguqe	378 280	98	KZDM260 dry. MD20 dries up in winter. ZDM226 site for playpump?
In progress	Ulundi	Nkonjeni	21	ZMAP106	Jems	50 180	13	KZDM79 motorised pump, possible collapse - contractor to use other means to drill
In progress	Ulundi	Usuthu	2	Z10	Brush/Nsukangihlale	1 088 520	314	KZDM01 and KZDM03 equipped - pump unknown. KZDM362 protection recommended. KZDM 150 alternative source required. KZDM263 can be protected as alternative source. RN25 impossible to protect. RN20 and RN23 needs protection.
In progress	Ulundi	Usuthu	2	Z9	Mgxotshwa	42 460	11	KZDM360 to be protected. RN37 needs protection - not equipped
In progress	Ulundi	Usuthu	3	ZRN4	Godlankomo	910 960	260	KZDM248 to be protected and equipped for production purposes. RN173 spring not equipped. RN175 equipped.
In progress	Ulundi	Usuthu	4	Z442	Ngubaneni	362 840	97	KZDM160 to be equipped with HP and treated. KZDM64 spring to be protected.
In progress	Ulundi	Usuthu	4	ZMAP113	Mhlophe	111 940	31	KZDM236 to be equipped with HP. RN91 and KZDM212 to be protected.
In progress	Ulundi	Usuthu	5	Z28	Ezembeni	285 640	77	RN96 to be protected. RN6 equipped with HP - to be fenced

									off. KZDM238 to be equipped
In progress	Ulundi	Usuthu	15	Z686	Khulwane	551 980		172	BMA119 and BMA127 equipped - poor WQ, reject. TAS206 equipped with HP. KZDM398 to be equipped with India Mac 2. TAS208 capped.
In progress	Ulundi	Usuthu	15	Z708	Lomo/Mhluwanini	119 660		31	KZDM276 failed WQ. KZDM277 to be equipped with HP. KZDM278 to be equipped.
2018/2019	AbaQulusi	Hlahlindlela	14	Z126	Qweqwe		300 000	1 237	Refurbishment & equipping of production BH
2018/2019	AbaQulusi	Hlahlindlela	14	Z128	Sofaya		300 000	201	Refurbishment & equipping of production BH
2018/2019	AbaQulusi	Hlahlindlela	15	Z137	Ezidulini		300 000	718	Refurbishment & equipping of production BH
2018/2019	AbaQulusi	Hlahlindlela	21		Enkwadini		300 000		Refurbishment & equipping of production BH
2018/2019	AbaQulusi	Khambi	3	Z896	Kwamakweshe		300 000	261	Refurbishment & equipping of production BH
2018/2019	AbaQulusi	Khambi	4	Z897a	Bethel (Mission)		300 000	69	Refurbishment & equipping of production BH
2018/2019	AbaQulusi	Khambi	4	Z897b	Bethel (Salema)		300 000	150	Refurbishment & equipping of production BH
2018/2019	AbaQulusi	Khambi	5		Eziyambe		300 000		Refurbishment & equipping of production BH
2018/2019	AbaQulusi	Khambi	5		Ezinkukhwini		300 000		Refurbishment & equipping of production BH
2018/2019	AbaQulusi	Khambi	6	Z892	Kwakwavlei (Kwabhokhi)		300 000	300	Refurbishment & equipping of production BH
2018/2019	AbaQulusi	Khambi	6	Z894	Kwandeni (East Mine)		300 000	238	Refurbishment & equipping of production BH
2018/2019	eDumbe	Sim West	2	Z942	Mqwanya		300 000	378	Equipping of BH's
2018/2019	eDumbe	Sim West	5	Z793	Ezibomvu		300 000	439	Equipping of BH's
2018/2019	eDumbe	Sim West	7	Z432	Obivane		300 000	1 135	Equipping of BH's
2018/2019	Nongoma	Mandhlakazi	3	Z317	Hlushwaneni	328 100	900 000	89	BH equipped with Mono T7 HP. 40% HH still to be served
2018/2019	Nongoma	Mandhlakazi	3	Z333	Esqelwini	19 300	300 000	5	

2018/2019	Nongoma	Usuthu	9	Z600	Ziphethe	274 060	900 000	83	
2018/2019	Nongoma	Usuthu	9	Z601	Delene (KwaMinya)	613 740	2 100 000	194	
2018/2019	Nongoma	Usuthu	10	ZBUK57	Hobiyana	138 960	600 000	41	
2018/2019	Nongoma	Usuthu	10	ZNN26	Engongoma	92 640	300 000	26	
2018/2019	Nongoma	Usuthu	11	Z155b	Eziqhumeni 2	73 340	300 000	21	
2018/2019	Nongoma	Usuthu	11	Z156	Entwala	358 980	1 200 000	99	
2018/2019	Nongoma	Usuthu	11	Z157	Nqala	247 040	900 000	67	
2018/2019	Nongoma	Usuthu	11	Z572	Ezomboda	84 920	300 000	27	
2018/2019	Nongoma	Usuthu	11	ZBA1	Kwavumela	177 560	900 000	62	
2018/2019	Nongoma	Usuthu	11	ZNN23	Emhemeni	169 840	600 000	49	
2018/2019	Ulundi	Nkonjeni	13	Z927	Kwabombo	11 580	300 000	3	
2018/2019	Ulundi	Nkonjeni	13	ZAM9a	Tukelana 1	30 880	300 000	12	Spring dammed up - 2 HH's are using spring; not equipped.
2018/2019	Ulundi	Nkonjeni	13	ZAM5	Ensileni	38 600	300 000	10	
2018/2019	Ulundi	Nkonjeni	15	Z707	Ntabankulu	104 220	300 000	27	
2018/2019	Ulundi	Nkonjeni	24	Z818	Kwanguqe	254 760	900 000	82	
2018/2019	Ulundi	Nkonjeni	24	ZTAS19	Ezikhumbeni	339 680	1 200 000	96	
2018/2019	Ulundi	Usuthu	5	Z43	Kwasaku	111 940	300 000	29	
2018/2019	Ulundi	Usuthu	5	Z44	Kwadayeni	165 980	600 000	45	
2018/2019	Ulundi	Usuthu	5	Z45	Odizima	173 700	600 000	46	
2019/2020	AbaQulusi	Coronation	5	ZNew25	Malangweni	68	980 000	68	
2019/2020	AbaQulusi	Hlahlindlela	8	ZMAP122	Vryheid Dump Site	95	1 250 000	95	
2019/2020	AbaQulusi	Hlahlindlela	13	ZMAP123	Ema'300	278	3 080 000	278	
2019/2020	AbaQulusi	Hlahlindlela	13	ZNew96	Banga	27	570 000	27	
2019/2020	AbaQulusi	Hlahlindlela	13	ZNew109	Hluma	53	830 000	53	
2019/2020	eDumbe	Sim West	3	ZNew3	Urban Fringe - Informal Settlement	374	4 040 000	374	
2019/2020	Nongoma	Mandhlakazi	6	Z222	Esigodiphola 2	18	480 000	18	
2019/2020	Nongoma	Usuthu	9	Z365	Kwa'Denge	377	4 070 000	377	
2019/2020	Nongoma	Usuthu	9	Z369	Emkhondo	225	2 550 000	225	
2019/2020	Nongoma	Usuthu	9	Z370	Holinyoka	379	4 090 000	379	
2019/2020	Nongoma	Usuthu	9	Z371	Ndikandika	167	1 970 000	167	
2019/2020	Nongoma	Usuthu	11	ZNN23	Emhemeni	65	950 000	65	
2019/2020	Nongoma	Usuthu	13	Z360	Engwelezane	33	630 000	33	

2019/2020	Nongoma	Usuthu	17	Z644	Maqoma	151	1 810 000	151	
2019/2020	Nongoma	Usuthu	17	Z644	Kwanomehle	28	580 000	28	
2019/2020	Nongoma	Usuthu	21	Z615	Hlabathini 2	87	1 170 000	87	
2019/2020	Ulundi	Nkonjeni	9	ZNew79	Manaba	10	400 000	10	
2020/2021	AbaQulusi	Coronation	1	ZNew45	Madanyini	23	530 000	23	
2020/2021	AbaQulusi	Coronation	1	ZPM11	Ezakhiweni 1	25	550 000	25	
2020/2021	AbaQulusi	Coronation	6	Z901	Nkongolwane 1	103	1 330 000	103	
2020/2021	AbaQulusi	Hlahlindlela	8	ZNew128	Kwa'Ngethe	44	740 000	44	
2020/2021	AbaQulusi	Hlahlindlela	8	ZNew153	Kwatwo	29	590 000	29	
2020/2021	AbaQulusi	Hlahlindlela	12	ZNew180	Kandaspunt	143	1 730 000	143	
2020/2021	AbaQulusi	Hlahlindlela	13	ZNew93	Eskame	71	1 010 000	71	
2020/2021	AbaQulusi	Khambi	4	ZMAP55	Weltevreden 2	48	780 000	48	
2020/2021	AbaQulusi	Khambi	5	ZNew82	Kwa'John 2	20	500 000	20	
2020/2021	Nongoma	Usuthu	9	Z367	Kwasicengile	119	1 490 000	119	
2020/2021	Nongoma	Usuthu	9	ZNew159	Sikheleni	87	1 170 000	87	
2020/2021	Nongoma	Usuthu	9	Z592	Sikhleni	127	1 570 000	127	
2020/2021	Nongoma	Usuthu	11	Z154	Zampilo	42	720 000	42	
2020/2021	Nongoma	Usuthu	12	Z338	Esigoqobeni	68	980 000	68	
2020/2021	Nongoma	Usuthu	13	Z359	Embokodweni	82	1 120 000	82	
2020/2021	Nongoma	Usuthu	14	Z564	Emahlombe	131	1 610 000	131	
2020/2021	Nongoma	Usuthu	16	Z606	Ophiyaneni	403	4 330 000	403	
2020/2021	Nongoma	Usuthu	16	Z626	Manzimkhulu	55	850 000	55	
2020/2021	Nongoma	Usuthu	17	Z646	Kwadlovunga	23	530 000	23	
2020/2021	Nongoma	Usuthu	17	Z647	Makhulu	94	1 240 000	94	
2020/2021	Nongoma	Usuthu	17	Z648	Ngasela	31	610 000	31	
2020/2021	Nongoma	Usuthu	17	ZKAY8	Echibini	14	440 000	14	
2020/2021	Nongoma	Usuthu	21	Z617	Sevuna	46	760 000	46	
2020/2021	Nongoma	Usuthu	21	Z600	Ziphete	532	5 620 000	532	
2020/2021	Nongoma	Usuthu	21	Z639	Emoyeni	211	2 410 000	211	
2020/2021	uPhongolo	Sim Central	6	ZBUK63	Dlomodlomo	106	1 360 000	106	
2020/2021	uPhongolo	Usuthu	1	ZNew118	Eskhaleni	36	660 000	36	
2021/2022	AbaQulusi	Coronation	1	ZPM15	Retseb	25	550 000	25	
2021/2022	AbaQulusi	Coronation	1	ZMC6	Thembalihle (Welverdiend)	39	690 000	39	

2021/2022	AbaQulusi	Coronation	2	ZNew46	Emarondweni	12	420 000	12	
2021/2022	AbaQulusi	Coronation	2	ZNew48	Empumazi	15	450 000	15	
2021/2022	AbaQulusi	Coronation	7	ZHC5	Boomlaer	38	680 000	38	
2021/2022	AbaQulusi	Hlahlindlela	7	ZNew91	Kwabozuzu	18	480 000	18	
2021/2022	AbaQulusi	Hlahlindlela	12	ZNew169	Tintas Drift	53	830 000	53	
2021/2022	AbaQulusi	Hlahlindlela	13	ZNew76	Mpofini	59	890 000	59	
2021/2022	AbaQulusi	Khambi	2	ZNew18	Kwazondo	21	510 000	21	
2021/2022	AbaQulusi	Khambi	3	ZMAP127	Bhukubhu	33	630 000	33	
2021/2022	AbaQulusi	Khambi	3	ZNew29	Mabova	32	620 000	32	
2021/2022	AbaQulusi	Khambi	4	ZNew58	Enkaleni	53	830 000	53	
2021/2022	AbaQulusi	Khambi	4	ZNew66	Kwa'Paul	6	360 000	6	
2021/2022	AbaQulusi	Khambi	4	ZNew67	Thabankulu	31	610 000	31	
2021/2022	eDumbe	Hlahlindlela	7	ZNew147	Mazezeni	29	590 000	29	
2021/2022	eDumbe	Hlahlindlela	7	ZNew6	Mlindaziko	25	550 000	25	
2021/2022	Nongoma	Mandhlakazi	2	ZBUK21	Enkanyezini	55	850 000	55	
2021/2022	Nongoma	Mandhlakazi	5	Z292	Kwajuba	131	1 610 000	131	
2021/2022	Nongoma	Usuthu	4	Z362	Emaqeleni 3	30	600 000	30	
2021/2022	Nongoma	Usuthu	4	ZMAP25	Mahlezane	97	1 270 000	97	
2021/2022	Nongoma	Usuthu	10	Z168	Magutshwa	126	1 560 000	126	
2021/2022	Nongoma	Usuthu	13	Z579	Ekubuseni	118	1 480 000	118	
2021/2022	Nongoma	Usuthu	13	ZMAP28	Mahayoyo	220	2 500 000	220	
2021/2022	Nongoma	Usuthu	13	ZMAP27	Nqumbi	113	1 430 000	113	
2021/2022	Nongoma	Usuthu	14	Z561	Esigangeni 1	302	3 320 000	302	
2021/2022	Nongoma	Usuthu	17	Z640	Bhethani	220	2 500 000	220	
2021/2022	Nongoma	Usuthu	21	Z638	Emancwangeneni	29	590 000	29	
2021/2022	Nongoma	Usuthu	21	Z643	Mgiliji	99	1 290 000	99	
2021/2022	Ulundi	Usuthu	5	ZNew117	Magagodolo	20	500 000	20	
>2022	AbaQulusi	Coronation	1	Z902	Gushede	49	790 000	49	
>2022	AbaQulusi	Coronation	1	ZNew63	Kwanogalaja	2	320 000	2	
>2022	AbaQulusi	Coronation	1	ZNew50	Kwantebe	57	870 000	57	
>2022	AbaQulusi	Coronation	2	ZNew22	Kwabudula	28	580 000	28	
>2022	AbaQulusi	Coronation	2	ZNew49	Kwamsezane	60	900 000	60	
>2022	AbaQulusi	Coronation	2	ZNew20	Kwanmnunse	55	850 000	55	
>2022	AbaQulusi	Coronation	2	ZNew40	Kwasithole	74	1 040 000	74	

>2022	AbaQulusi	Coronation	2	ZNew21	Makhwela	74	1 040 000	74	
>2022	AbaQulusi	Coronation	3	ZNew32	Mfabantu	22	520 000	22	
>2022	AbaQulusi	Coronation	5	ZNew86	Triangle store	257	2 870 000	257	
>2022	AbaQulusi	Coronation	6	ZNew104	Enkwaleni	19	490 000	19	
>2022	AbaQulusi	Coronation	6	ZNew34	Gobeni	16	460 000	16	
>2022	AbaQulusi	Coronation	6	ZNew97	Kwa'Boy 3	50	800 000	50	
>2022	AbaQulusi	Coronation	6	ZNew33	Mciyo	36	660 000	36	
>2022	AbaQulusi	Coronation	6	ZNew103	Uitzicht	45	750 000	45	
>2022	AbaQulusi	Hlahlindlela	7	ZNew89	Bozuzu	23	530 000	23	
>2022	AbaQulusi	Hlahlindlela	7	ZNew111	Emakwateni	64	940 000	64	
>2022	AbaQulusi	Hlahlindlela	7	ZNew112	Geluk 1	9	390 000	9	
>2022	AbaQulusi	Hlahlindlela	7	ZNew113	Kwalancast	18	480 000	18	
>2022	AbaQulusi	Hlahlindlela	7	ZNew90	Ntendeka 2	84	1 140 000	84	
>2022	AbaQulusi	Hlahlindlela	7	ZNew107	Shoba 1	103	1 330 000	103	
>2022	AbaQulusi	Hlahlindlela	7	ZNew108	Shoba 2	249	2 790 000	249	
>2022	AbaQulusi	Hlahlindlela	7	ZNew95	Voorkeur	60	900 000	60	
>2022	AbaQulusi	Hlahlindlela	7	ZNew94	Zungweni	51	810 000	51	
>2022	AbaQulusi	Hlahlindlela	8	ZNew130	Hellberg farms	65	950 000	65	
>2022	AbaQulusi	Hlahlindlela	8	ZNew127	Kwa'Beshu	37	670 000	37	
>2022	AbaQulusi	Hlahlindlela	8	ZNew129	Kwa'Bevu	19	490 000	19	
>2022	AbaQulusi	Hlahlindlela	8	ZNew126	Magot	38	680 000	38	
>2022	AbaQulusi	Hlahlindlela	9	ZNew154	Kwa'Matiela	21	510 000	21	
>2022	AbaQulusi	Hlahlindlela	9	ZNew125	Kwa'Savells	23	530 000	23	
>2022	AbaQulusi	Hlahlindlela	9	ZNew119	Stillwater	83	1 130 000	83	
>2022	AbaQulusi	Hlahlindlela	12	ZNew175	Aardappel	24	540 000	24	
>2022	AbaQulusi	Hlahlindlela	12	ZNew163	Brakfontein	22	520 000	22	
>2022	AbaQulusi	Hlahlindlela	12	ZNew177	Brakfontein 2	12	420 000	12	
>2022	AbaQulusi	Hlahlindlela	12	ZNew176	Dubbelrecht	14	440 000	14	
>2022	AbaQulusi	Hlahlindlela	12	ZNew161	Emooi	74	1 040 000	74	
>2022	AbaQulusi	Hlahlindlela	12	ZNew160	Enyanyeni	21	510 000	21	
>2022	AbaQulusi	Hlahlindlela	12	ZNew178	Fairplay	17	470 000	17	
>2022	AbaQulusi	Hlahlindlela	12	ZNew173	Geluk 3	11	410 000	11	
>2022	AbaQulusi	Hlahlindlela	12	ZNew171	Grootfontein	36	660 000	36	
>2022	AbaQulusi	Hlahlindlela	12	ZNew166	Jimane	69	990 000	69	

>2022	AbaQulusi	Hlahlindlela	12	ZNew170	KwaMshomoloza	28	580 000	28	
>2022	AbaQulusi	Hlahlindlela	12	ZNew164	Langverwacht	36	660 000	36	
>2022	AbaQulusi	Hlahlindlela	12	ZNew168	Mabunya	12	420 000	12	
>2022	AbaQulusi	Hlahlindlela	12	ZNew165	Mawelawela	28	580 000	28	
>2022	AbaQulusi	Hlahlindlela	12	ZNew179	Mdlenevini	32	620 000	32	
>2022	AbaQulusi	Hlahlindlela	12	ZNew172	Middelpunt	8	380 000	8	
>2022	AbaQulusi	Hlahlindlela	12	ZNew167	Nsengeni	17	470 000	17	
>2022	AbaQulusi	Hlahlindlela	12	ZNew162	Vamba	30	600 000	30	
>2022	AbaQulusi	Hlahlindlela	13	ZNew75	Beafort	59	890 000	59	
>2022	AbaQulusi	Hlahlindlela	13	ZNew74	Golden Valley	57	870 000	57	
>2022	AbaQulusi	Hlahlindlela	13	ZNew77	Klipfontein	27	570 000	27	
>2022	AbaQulusi	Hlahlindlela	13	ZNew110	Kwabanga 1	66	960 000	66	
>2022	AbaQulusi	Hlahlindlela	13	ZNew92	Kwabanga 2	48	780 000	48	
>2022	AbaQulusi	Hlahlindlela	22	ZNew124	Betel	19	490 000	19	
>2022	AbaQulusi	Hlahlindlela	22	ZNew106	Eensgevonden plotte	83	1 130 000	83	
>2022	AbaQulusi	Hlahlindlela	22	ZNew122	Fearmdale	68	980 000	68	
>2022	AbaQulusi	Hlahlindlela	22	ZNew123	Kwa'Lubeck	19	490 000	19	
>2022	AbaQulusi	Hlahlindlela	22	ZNew120	Scheepersnek	34	640 000	34	
>2022	AbaQulusi	Hlahlindlela	22	ZNew121	Zaaifontein	21	510 000	21	
>2022	AbaQulusi	Khambi	2	ZNew15	Dlomodlomo	22	520 000	22	
>2022	AbaQulusi	Khambi	2	ZMAP62	Ketango	14	440 000	14	
>2022	AbaQulusi	Khambi	2	ZNew16	Kwakopie	12	420 000	12	
>2022	AbaQulusi	Khambi	2	ZNew19	Kwathemba	29	590 000	29	
>2022	AbaQulusi	Khambi	2	ZNew12	Mphitiptini	134	1 640 000	134	
>2022	AbaQulusi	Khambi	2	ZNew17	Ndulo	9	390 000	9	
>2022	AbaQulusi	Khambi	2	ZNew14	Ngongomane	184	2 140 000	184	
>2022	AbaQulusi	Khambi	2	ZMC13	Ntabazelanga	36	660 000	36	
>2022	AbaQulusi	Khambi	2	ZNew13	Ongcwezeni	107	1 370 000	107	
>2022	AbaQulusi	Khambi	2	ZNew11	Thuthukani	15	450 000	15	
>2022	AbaQulusi	Khambi	3	ZNew181	Hlanganani CPA	7	370 000	7	
>2022	AbaQulusi	Khambi	3	ZNew30	Kewulane	77	1 070 000	77	
>2022	AbaQulusi	Khambi	3	ZNew28	Mthumeni	8	380 000	8	
>2022	AbaQulusi	Khambi	3	ZNew31	Ndulinde	22	520 000	22	
>2022	AbaQulusi	Khambi	4	ZNew70	Berlin	8	380 000	8	

>2022	AbaQulusi	Khambi	4	ZNew60	Dagane	36	660 000	36	
>2022	AbaQulusi	Khambi	4	ZNew68	Elim	16	460 000	16	
>2022	AbaQulusi	Khambi	4	ZNew64	Emgageni	160	1 900 000	160	
>2022	AbaQulusi	Khambi	4	ZNN21	eMkhweleni	50	800 000	50	
>2022	AbaQulusi	Khambi	4	ZNew62	Engothweni	68	980 000	68	
>2022	AbaQulusi	Khambi	4	ZNew69	Entabeni 1	11	410 000	11	
>2022	AbaQulusi	Khambi	4	ZNew57	Hlongane	31	610 000	31	
>2022	AbaQulusi	Khambi	4	ZNew54	KwaDevan	44	740 000	44	
>2022	AbaQulusi	Khambi	4	ZNew53	Kwamashashi	29	590 000	29	
>2022	AbaQulusi	Khambi	4	ZNew55	Kwa'Ngada	60	900 000	60	
>2022	AbaQulusi	Khambi	4	ZNew65	Kwaschoeman	19	490 000	19	
>2022	AbaQulusi	Khambi	4	ZNew61	Leeunek 1	21	510 000	21	
>2022	AbaQulusi	Khambi	4	ZNew71	Lenjane 1	50	800 000	50	
>2022	AbaQulusi	Khambi	4	ZMAP126	Mangoe	95	1 250 000	95	
>2022	AbaQulusi	Khambi	4	ZNew59	Siyaphambile	35	650 000	35	
>2022	AbaQulusi	Khambi	5	ZNew81	Ekamvu	26	560 000	26	
>2022	AbaQulusi	Khambi	5	ZNew85	Ishoba	15	450 000	15	
>2022	AbaQulusi	Khambi	5	ZNew131	Lenjane 2	43	730 000	43	
>2022	AbaQulusi	Khambi	5	ZNew84	Ma'Romenie	156	1 860 000	156	
>2022	AbaQulusi	Khambi	5	ZMAP75	Mbogozi	138	1 680 000	138	
>2022	AbaQulusi	Khambi	13	ZNew72	Ishoba	101	1 310 000	101	
>2022	AbaQulusi	Khambi	13	ZNew73	Leeunek 2	12	420 000	12	
>2022	AbaQulusi	Nkonjeni	4	ZNew52	Boschoek	19	490 000	19	
>2022	AbaQulusi	Nkonjeni	4	ZMAP59	Masigane	54	840 000	54	
>2022	eDumbe	Coronation	7	ZNew156	Doornkloof	25	550 000	25	
>2022	eDumbe	Coronation	7	ZNew149	Gweje	87	1 170 000	87	
>2022	eDumbe	Coronation	7	ZNew146	Makhwabe	7	370 000	7	
>2022	eDumbe	Coronation	7	ZNew145	Mutshekazi	128	1 580 000	128	
>2022	eDumbe	Coronation	7	ZTAS56	Palmietfontein (Rondsprong 137, Kwambhedleni)	25	550 000	25	
>2022	eDumbe	Hlahlindlela	1	ZNew133	Bivane	100	1 300 000	100	
>2022	eDumbe	Hlahlindlela	1	ZNew4	Bivanyana	41	710 000	41	
>2022	eDumbe	Hlahlindlela	1	ZNew132	Khambula mission	59	890 000	59	

>2022	eDumbe	Hlahlindlela	7	ZNew150	Mqwabe	29	590 000	29	
>2022	eDumbe	Hlahlindlela	7	ZMAP4	Mthashana	45	750 000	45	
>2022	eDumbe	Hlahlindlela	7	ZNew152	Sefamanzi	49	790 000	49	
>2022	eDumbe	Hlahlindlela	7	ZNew148	Zungwini	19	490 000	19	
>2022	eDumbe	Sim West	1	ZMAP71	Bella Vista	53	830 000	53	
>2022	eDumbe	Sim West	1	ZNew139	Bhinika	80	1 100 000	80	
>2022	eDumbe	Sim West	1	ZNew140	Biknyon	55	850 000	55	
>2022	eDumbe	Sim West	1	ZNew143	Brecher	43	730 000	43	
>2022	eDumbe	Sim West	1	ZNew135	Eloyi	49	790 000	49	
>2022	eDumbe	Sim West	1	ZNew155	Ematafuleni	23	530 000	23	
>2022	eDumbe	Sim West	1	ZNew9	Esitikini	26	560 000	26	
>2022	eDumbe	Sim West	1	ZNew10	Knoopaan	138	1 680 000	138	
>2022	eDumbe	Sim West	1	ZNew141	Koto	105	1 350 000	105	
>2022	eDumbe	Sim West	1	ZNew134	Kwalembe	60	900 000	60	
>2022	eDumbe	Sim West	1	ZNew142	Loti	36	660 000	36	
>2022	eDumbe	Sim West	1	ZNew2	Lukhakhayi	99	1 290 000	99	
>2022	eDumbe	Sim West	1	ZNew138	Mhlamone	141	1 710 000	141	
>2022	eDumbe	Sim West	1	ZNew136	Mkhupane	24	540 000	24	
>2022	eDumbe	Sim West	1	ZNew137	Ntshakwe	25	550 000	25	
>2022	eDumbe	Sim West	1	ZMAP1	Rooipoort	55	850 000	55	
>2022	eDumbe	Sim West	1	ZMAP120	Schikhoek (Land Reform)	57	870 000	57	
>2022	eDumbe	Sim West	1	ZMAP121	Tholwethu (Land Reform)	77	1 070 000	77	
>2022	eDumbe	Sim West	1	ZNew144	Titane	39	690 000	39	
>2022	eDumbe	Sim West	7	ZMAP6	Koudbad / Welverdiend	37	670 000	37	
>2022	eDumbe	Sim West	7	ZNew151	Ndabezitha	16	460 000	16	
>2022	eDumbe	Sim West	7	ZNew5	Nzenze	25	550 000	25	
>2022	eDumbe	Sim West	8	ZNew8	Nhlungwane	115	1 450 000	115	
>2022	Nongoma	Mandhlakazi	1	ZMAP20	Mhlanjeni	21	510 000	21	
>2022	Nongoma	Mandhlakazi	1	Z313	Mngamunde	25	550 000	25	
>2022	Nongoma	Mandhlakazi	1	Z304	Ntweni 1	75	1 050 000	75	
>2022	Nongoma	Mandhlakazi	1	Z290	Zidwadweni	92	1 220 000	92	

>2022	Nongoma	Mandhlakazi	2	ZMAP39	Dungamanzi 1	58	880 000	58	
>2022	Nongoma	Mandhlakazi	2	Z236	Esixeni	23	530 000	23	
>2022	Nongoma	Mandhlakazi	2	Z234	Kwankweme	56	860 000	56	
>2022	Nongoma	Mandhlakazi	2	Z951	Mthwandlana 1	10	400 000	10	
>2022	Nongoma	Mandhlakazi	2	ZMAP38	Ntenjane	41	710 000	41	
>2022	Nongoma	Mandhlakazi	2	ZBUK11	Vusu Musi	79	1 090 000	79	
>2022	Nongoma	Mandhlakazi	3	Z333	Esqelwini	4	340 000	4	
>2022	Nongoma	Mandhlakazi	3	ZBUK25	Magendene	25	550 000	25	
>2022	Nongoma	Mandhlakazi	3	ZMAP22	Mkhuze 1	2	320 000	2	
>2022	Nongoma	Mandhlakazi	5	Z247	Mpuphusi	137	1 670 000	137	
>2022	Nongoma	Mandhlakazi	7	Z954	Bhidi	89	1 190 000	89	
>2022	Nongoma	Mandhlakazi	7	Z955	Maganganeni	57	870 000	57	
>2022	Nongoma	Mandhlakazi	7	ZBUK23	Mgolokotho	31	610 000	31	
>2022	Nongoma	Mandhlakazi	7	Z204	Sibanyaneni	146	1 760 000	146	
>2022	Nongoma	Mandhlakazi	7	Z181	Sinkonkonko 2	81	1 110 000	81	
>2022	Nongoma	Mandhlakazi	18	Z240	Maduma	98	1 280 000	98	
>2022	Nongoma	Mandhlakazi	18	ZBUK24	Meyame	14	440 000	14	
>2022	Nongoma	Mandhlakazi	18	Z243	Zibusele	141	1 710 000	141	
>2022	Nongoma	Mandhlakazi	20	Z227	Manqashaneni	116	1 460 000	116	
>2022	Nongoma	Mandhlakazi	20	Z225	Nkabane	75	1 050 000	75	
>2022	Nongoma	Usuthu	4	Z362	Emaqeleni 2	7	370 000	7	
>2022	Nongoma	Usuthu	6	Z170	Ekuvukeni	201	2 310 000	201	
>2022	Nongoma	Usuthu	10	Z163	Emakholweni 2	181	2 110 000	181	
>2022	Nongoma	Usuthu	10	ZNN26	Engongoma	26	560 000	26	
>2022	Nongoma	Usuthu	10	Z575	Kwahelibheshu	16	460 000	16	
>2022	Nongoma	Usuthu	10	ZMAP18	Nokhesheni	20	500 000	20	
>2022	Nongoma	Usuthu	10	ZBUK56	Nombanjana	72	1 020 000	72	
>2022	Nongoma	Usuthu	10	Z160	Nsawulani	213	2 430 000	213	
>2022	Nongoma	Usuthu	11	ZMAP9	Doncaneni	65	950 000	65	
>2022	Nongoma	Usuthu	11	Z156	Entwala	57	870 000	57	
>2022	Nongoma	Usuthu	11	Z155a	Eziqhumeni	128	1 580 000	128	
>2022	Nongoma	Usuthu	11	ZBA1	Kwavumela	76	1 060 000	76	
>2022	Nongoma	Usuthu	11	Z147	Ngolotshe	341	3 710 000	341	
>2022	Nongoma	Usuthu	11	Z157	Nqala	86	1 160 000	86	

>2022	Nongoma	Usuthu	12	ZMAP15	Dum-Dum	38	680 000	38	
>2022	Nongoma	Usuthu	12	ZKAY4	Emayeni 1	61	910 000	61	
>2022	Nongoma	Usuthu	12	Z342	Emayeni 2	85	1 150 000	85	
>2022	Nongoma	Usuthu	12	Z340	Esidakeni 1	60	900 000	60	
>2022	Nongoma	Usuthu	12	ZAM12	Ezingolaneni	31	610 000	31	
>2022	Nongoma	Usuthu	12	Z349	Isizinda A	11	410 000	11	
>2022	Nongoma	Usuthu	12	Z341	Isizinda B	132	1 620 000	132	
>2022	Nongoma	Usuthu	12	ZMAP16	KwaLuphonjwana	135	1 650 000	135	
>2022	Nongoma	Usuthu	12	Z346	Kwa'Ququ	5	350 000	5	
>2022	Nongoma	Usuthu	12	ZMAP14	Ndlazini	69	990 000	69	
>2022	Nongoma	Usuthu	12	Z374	Ngalonde	105	1 350 000	105	
>2022	Nongoma	Usuthu	12	Z339	Ngwabe	81	1 110 000	81	
>2022	Nongoma	Usuthu	12	Z373	Nhloyane	11	410 000	11	
>2022	Nongoma	Usuthu	12	ZMAP13	Nqalu	48	780 000	48	
>2022	Nongoma	Usuthu	12	ZMAP12	Nqobuzulu	61	910 000	61	
>2022	Nongoma	Usuthu	12	ZAM11	Nzama	100	1 300 000	100	
>2022	Nongoma	Usuthu	14	Z560	Khalweni	52	820 000	52	
>2022	Nongoma	Usuthu	14	ZJM2b	Kwazwede	71	1 010 000	71	
>2022	Nongoma	Usuthu	14	ZJM2b	Phenyane 2	50	800 000	50	
>2022	Nongoma	Usuthu	16	Z652	Mshanelo 2	54	840 000	54	
>2022	Nongoma	Usuthu	16	Z632	Nqokotho	189	2 190 000	189	
>2022	Nongoma	Usuthu	17	ZKAY1	Esiweni	25	550 000	25	
>2022	Nongoma	Usuthu	17	Z658	Mbengo	81	1 110 000	81	
>2022	Nongoma	Usuthu	17	ZKAY7	Msasaneni	37	670 000	37	
>2022	Nongoma	Usuthu	18	Z650	Esiqokolweni	206	2 360 000	206	
>2022	Nongoma	Usuthu	18	ZKAY6	Magedlana B	55	850 000	55	
>2022	Nongoma	Usuthu	21	Z614	Mayini / Ntonga	208	2 380 000	208	
>2022	Nongoma	Usuthu	21	Z598	Mpunzana	189	2 190 000	189	
>2022	Nongoma	Usuthu	21	Z597	Semangadini	95	1 250 000	95	
>2022	Nongoma	Usuthu	21	Z619	Zetheni	23	530 000	23	
>2022	Ulundi	Nkonjeni	11	ZNew98	Kwamhlongo	9	390 000	9	
>2022	Ulundi	Nkonjeni	13	ZAM5	Ensileni	10	400 000	10	
>2022	Ulundi	Nkonjeni	13	Z927	Kwabombo	3	330 000	3	
>2022	Ulundi	Nkonjeni	13	ZNew115	Kwa'Henie	200	2 300 000	200	

>2022	Ulundi	Nkonjeni	13	Z922	Kwankakazi	25	550 000	25	
>2022	Ulundi	Nkonjeni	13	ZNew87	Maduna	16	460 000	16	
>2022	Ulundi	Nkonjeni	13	ZTAS10	Mandeva	19	490 000	19	
>2022	Ulundi	Nkonjeni	13	Z923	Mbekuzeni	63	930 000	63	
>2022	Ulundi	Nkonjeni	13	ZMAP96	Mbombo	35	650 000	35	
>2022	Ulundi	Nkonjeni	13	ZMAP95	Mzingathi	25	550 000	25	
>2022	Ulundi	Nkonjeni	13	ZNew114	Nhlazatshe	25	550 000	25	
>2022	Ulundi	Nkonjeni	13	ZAM9a	Thkelana 1	28	580 000	28	
>2022	Ulundi	Nkonjeni	13	ZAM9b	Tukelana 2	3	330 000	3	
>2022	Ulundi	Nkonjeni	13	ZHC3	Witpoort	18	480 000	18	
>2022	Ulundi	Nkonjeni	14	Z408	Nyoni	127	1 570 000	127	
>2022	Ulundi	Nkonjeni	15	ZMAP92	Nsingizane	12	420 000	12	
>2022	Ulundi	Nkonjeni	15	Z707	Ntabankulu	13	430 000	13	
>2022	Ulundi	Nkonjeni	16	ZNew80	Mandevu 1	4	340 000	4	
>2022	Ulundi	Nkonjeni	16	ZNew24	Nyashana	5	350 000	5	
>2022	Ulundi	Nkonjeni	16	ZNew23	Qanuatho	10	400 000	10	
>2022	Ulundi	Nkonjeni	21	ZNew101	Dorsfontein	5	350 000	5	
>2022	Ulundi	Nkonjeni	21	ZMAP106	Jems	15	450 000	15	
>2022	Ulundi	Nkonjeni	21	ZMAP102	Kwamadumela	24	540 000	24	
>2022	Ulundi	Nkonjeni	24	ZTAS13	England	84	1 140 000	84	
>2022	Ulundi	Nkonjeni	24	ZNew100	Eskhaleni Kwankosi	14	440 000	14	
>2022	Ulundi	Nkonjeni	24	ZNew99	Isandlwana	8	380 000	8	
>2022	Ulundi	Usuthu	5	ZMAP111	Hluthy	40	700 000	40	
>2022	Ulundi	Usuthu	8	ZNew78	Qubenz	10	400 000	10	
>2022	Ulundi	Usuthu	14	ZNew102	Kwamswane	29	590 000	29	
>2022	Ulundi	Usuthu	14	Z706	Mbanda	39	690 000	39	
>2022	Ulundi	Usuthu	14	Z705	Mshayazafe	20	500 000	20	
>2022	Ulundi	Usuthu	15	Z688	Makhalathini	218	2 480 000	218	
>2022	Ulundi	Usuthu	15	ZMAP110	Mgubameni	22	520 000	22	
>2022	Ulundi	Usuthu	15	Z689	Obinda	29	590 000	29	
>2022	Ulundi	Usuthu	15	Z698	Pholela	128	1 580 000	128	
>2022	Ulundi	Usuthu	15	Z687	Thembalihle	65	950 000	65	
>2022	uPhongolo	Coronation	1	ZNew41	Kwamshikashika	32	620 000	32	
>2022	uPhongolo	Coronation	1	ZNew42	Kwaphatha	30	600 000	30	

>2022	uPhongolo	Coronation	1	ZNew37	Kwaslevu	41	710 000	41	
>2022	uPhongolo	Mkhuze	1	ZNew36	Emganwini	30	600 000	30	
>2022	uPhongolo	Mkhuze	1	ZNew44	Emkhayeni	112	1 420 000	112	
>2022	uPhongolo	Mkhuze	1	ZJD2	Esidakeni 3	70	1 000 000	70	
>2022	uPhongolo	Mkhuze	1	ZMAP52	Hhinihhini	19	490 000	19	
>2022	uPhongolo	Mkhuze	1	ZNew43	Morreson	89	1 190 000	89	
>2022	uPhongolo	Mkhuze	14	ZNew157	Ngulwane	30	600 000	30	
>2022	uPhongolo	Usuthu	1	ZNew35	Embanganeni	47	770 000	47	
>2022	uPhongolo	Usuthu	1	ZMAP32	Kwampondo	62	920 000	62	
>2022	uPhongolo	Usuthu	1	ZHC25	Mpalaza	88	1 180 000	88	

NEW RURAL SANITATION ROLLOUTS					
Local Municipality	New Sanitation Implementation Year	Ward	Settlement Name	Households	Cost
AbaQulusi	In Progress	5	Kwamadovjan	158	1 580 000
AbaQulusi	In Progress	5	Malangweni	68	680 000
AbaQulusi	In Progress	6	Kwamciyo	113	1 130 000
AbaQulusi	In Progress	6	Kwavilakazi 1	216	2 160 000
AbaQulusi	In Progress	6	Nkongolwane 1	103	1 030 000
AbaQulusi	In Progress	7	Rietvlei	115	1 150 000
AbaQulusi	In Progress	8	Kwa'Beshu	37	370 000
AbaQulusi	In Progress	14	Nhloshana	88	880 000
AbaQulusi	In Progress	14	Khuthuza	74	740 000
AbaQulusi	In Progress	17	Nceceeni	521	5 210 000
AbaQulusi	In Progress	17	Madresi D2	281	2 810 000
AbaQulusi	In Progress	17	Mawombe	32	320 000
AbaQulusi	In Progress	17	Mvuzini	401	4 010 000
AbaQulusi	In Progress	17	Phembukthula	583	5 830 000
AbaQulusi	In Progress	17	Kwamachanca	353	3 530 000
AbaQulusi	In Progress	20	Ezingadini	105	1 050 000
AbaQulusi	In Progress	21	Ezidulini	740	7 400 000
AbaQulusi	In Progress	21	Enhlahleni / Mhlongofarm	265	2 650 000
AbaQulusi	2018/2019	3	Kwandeni (East mine)	325	3 250 000
AbaQulusi	2018/2019	3	Kwabhokhi	381	3 810 000
AbaQulusi	2019/2020	1	Kwantebe	57	570 000
AbaQulusi	2019/2020	3	Shawelwo	72	720 000
AbaQulusi	2019/2020	3	Hlanewana	45	450 000
AbaQulusi	2019/2020	3	Mthumeni	8	80 000
AbaQulusi	2019/2020	3	Kewulane	77	770 000
AbaQulusi	2019/2020	3	Ndulinde	22	220 000
AbaQulusi	2019/2020	3	Mfabantu	22	220 000
AbaQulusi	2019/2020	3	Hlanganani CPA	7	70 000
AbaQulusi	2019/2020	6	Mciyo	36	360 000
AbaQulusi	2019/2020	6	Gobeni	16	160 000
AbaQulusi	2019/2020	6	Kwa'Boy 3	50	500 000
AbaQulusi	2019/2020	6	Uitzicht	45	450 000
AbaQulusi	2019/2020	6	Enkweleni	19	190 000
AbaQulusi	2019/2020	13	Mooiplaas	109	1 090 000
AbaQulusi	2020/2021	5	Shikila	256	2 560 000
AbaQulusi	2020/2021	5	Triangle store	257	2 570 000

AbaQulusi	2020/2021	7	Shoba 1	103	1 030 000
AbaQulusi	2020/2021	7	Shoba 2	249	2 490 000
AbaQulusi	2020/2021	15	Esigodini	230	2 300 000
AbaQulusi	2020/2021	17	Emadwaleni 1	121	1 210 000
AbaQulusi	2021/2022	1	Madanyini	23	230 000
AbaQulusi	2021/2022	2	Ongcwezeni	107	1 070 000
AbaQulusi	2021/2022	2	Ngongomane	184	1 840 000
AbaQulusi	2021/2022	2	Dlomodlomo	22	220 000
AbaQulusi	2021/2022	2	Kwakopie	12	120 000
AbaQulusi	2021/2022	2	Mkuze	17	170 000
AbaQulusi	2021/2022	2	Ndulo	9	90 000
AbaQulusi	2021/2022	2	Kwazondo	21	210 000
AbaQulusi	2021/2022	2	Kwathemba	29	290 000
AbaQulusi	2021/2022	2	Kwanmnunse	55	550 000
AbaQulusi	2021/2022	2	Makhwela	74	740 000
AbaQulusi	2021/2022	2	Kwabudula	28	280 000
AbaQulusi	2021/2022	2	Kwasithole	74	740 000
AbaQulusi	2021/2022	2	Emarondweni	12	120 000
AbaQulusi	2021/2022	2	Kwamadamu	90	900 000
AbaQulusi	2021/2022	2	Empumazi	15	150 000
AbaQulusi	2021/2022	2	Kwamsezane	60	600 000
AbaQulusi	2021/2022	3	Mabova	32	320 000
AbaQulusi	>2022	2	Thuthukani	15	150 000
AbaQulusi	>2022	2	Mphitiptini	134	1 340 000
AbaQulusi	>2022	4	Boschoek	19	190 000
AbaQulusi	>2022	4	Kwamashashi	29	290 000
AbaQulusi	>2022	4	KwaDevan	44	440 000
AbaQulusi	>2022	4	Kwa'Ngada	60	600 000
AbaQulusi	>2022	4	Emaqigwe	24	240 000
AbaQulusi	>2022	4	Hlongane	31	310 000
AbaQulusi	>2022	4	Enkaleni	53	530 000
AbaQulusi	>2022	4	Siyaphambile	35	350 000
AbaQulusi	>2022	4	Emgageni	160	1 600 000
AbaQulusi	>2022	4	Kwaschoeman	19	190 000
AbaQulusi	>2022	4	Kwa'Paul	6	60 000
AbaQulusi	>2022	4	Dagane	36	360 000
AbaQulusi	>2022	4	Leeunek 1	21	210 000
AbaQulusi	>2022	4	Enqothweni	68	680 000
AbaQulusi	>2022	4	Thabankulu	31	310 000
AbaQulusi	>2022	4	Elim	16	160 000
AbaQulusi	>2022	4	Entabeni 1	11	110 000
AbaQulusi	>2022	4	Berlin	8	80 000
AbaQulusi	>2022	4	Lenjane 1	50	500 000
AbaQulusi	>2022	5	Ekamvu	26	260 000
AbaQulusi	>2022	5	Kwa'John 2	20	200 000
AbaQulusi	>2022	5	Ma'Romenie	156	1 560 000
AbaQulusi	>2022	5	Ishoba	15	150 000
AbaQulusi	>2022	5	Kwa'Mdaga	108	1 080 000
AbaQulusi	>2022	5	Lenjane 2	43	430 000
AbaQulusi	>2022	7	Mtenteka	44	440 000

AbaQulusi	>2022	7	Bozuzu	23	230 000
AbaQulusi	>2022	7	Ntendeka 2	84	840 000
AbaQulusi	>2022	7	KwaboZuzu	18	180 000
AbaQulusi	>2022	7	Zungweni	51	510 000
AbaQulusi	>2022	7	Voorkeur	60	600 000
AbaQulusi	>2022	7	Entabeni 2	59	590 000
AbaQulusi	>2022	7	Emakwateni	64	640 000
AbaQulusi	>2022	7	Geluk 1	9	90 000
AbaQulusi	>2022	7	Kwalancast	18	180 000
AbaQulusi	>2022	8	Magot	38	380 000
AbaQulusi	>2022	8	Kwa'Ngethe	44	440 000
AbaQulusi	>2022	8	Kwa'Bevu	19	190 000
AbaQulusi	>2022	8	Hellberg farms	65	650 000
AbaQulusi	>2022	8	Kwatwo	29	290 000
AbaQulusi	>2022	8	Vryheid Dump Site	95	950 000
AbaQulusi	>2022	9	Stillwater	83	830 000
AbaQulusi	>2022	9	Kwa'Savells	23	230 000
AbaQulusi	>2022	9	Kwa'Matiela	21	210 000
AbaQulusi	>2022	12	Enyanyeni	21	210 000
AbaQulusi	>2022	12	Emooi	74	740 000
AbaQulusi	>2022	12	Vamba	30	300 000
AbaQulusi	>2022	12	Brakfontein	22	220 000
AbaQulusi	>2022	12	Langverwacht	36	360 000
AbaQulusi	>2022	12	Jimane	69	690 000
AbaQulusi	>2022	12	Mabunya	12	120 000
AbaQulusi	>2022	12	Tintas Drift	53	530 000
AbaQulusi	>2022	12	Grootfontein	36	360 000
AbaQulusi	>2022	12	Middelpunt	8	80 000
AbaQulusi	>2022	12	Geluk 3	11	110 000
AbaQulusi	>2022	12	Driefontein	33	330 000
AbaQulusi	>2022	12	Dubbelrecht	14	140 000
AbaQulusi	>2022	12	Brakfontein 2	12	120 000
AbaQulusi	>2022	12	Kandaspunt	143	1 430 000
AbaQulusi	>2022	13	Ishoba	101	1 010 000
AbaQulusi	>2022	13	Leeunek 2	12	120 000
AbaQulusi	>2022	13	Golden Valley	57	570 000
AbaQulusi	>2022	13	Beafort	59	590 000
AbaQulusi	>2022	13	Mpofini	59	590 000
AbaQulusi	>2022	13	Klipfontein	27	270 000
AbaQulusi	>2022	13	Kwabanga 2	48	480 000
AbaQulusi	>2022	13	Eskame	71	710 000
AbaQulusi	>2022	13	Ema'300	278	2 780 000
AbaQulusi	>2022	13	Banga	27	270 000
AbaQulusi	>2022	13	Hluma	53	530 000
AbaQulusi	>2022	13	Kwabanga 1	66	660 000
AbaQulusi	>2022	22	Eensgevonden plotte	83	830 000
AbaQulusi	>2022	22	Scheepersnek	34	340 000
AbaQulusi	>2022	22	Zaafontein	21	210 000
AbaQulusi	>2022	22	Fearmdale	68	680 000
AbaQulusi	>2022	22	Kwa'Lubeck	19	190 000

AbaQulusi	>2022	22	Betel	19	190 000
eDumbe	In Progress	1	Eloyi	49	490 000
eDumbe	In Progress	1	Rooipoort	55	550 000
eDumbe	In Progress	1	Jabula	68	680 000
eDumbe	In Progress	1	Koto	105	1 050 000
eDumbe	In Progress	2	Mangosuthu	1884	18 840 000
eDumbe	In Progress	5	Tholakela	970	9 700 000
eDumbe	In Progress	6	Lujojwana	89	890 000
eDumbe	In Progress	7	Nzenze	25	250 000
eDumbe	2019/2020	1	Khambula mission	59	590 000
eDumbe	2019/2020	1	Bivane	100	1 000 000
eDumbe	2019/2020	1	Ematafuleni	23	230 000
eDumbe	2019/2020	7	Ndabezitha	16	160 000
eDumbe	2020/2021	7	Makhwabe	7	70 000
eDumbe	2020/2021	7	Mazezeni	29	290 000
eDumbe	2020/2021	7	Zungwini	19	190 000
eDumbe	2020/2021	7	Gweje	87	870 000
eDumbe	2020/2021	7	Mqwabe	29	290 000
eDumbe	2020/2021	7	Sefamanzi	49	490 000
eDumbe	2021/2022	1	Kwalembe	60	600 000
eDumbe	2021/2022	1	Schikhoek (Land Reform)	57	570 000
eDumbe	2021/2022	1	Brecher	43	430 000
eDumbe	2021/2022	1	Tholwethu (Land Reform)	77	770 000
eDumbe	2021/2022	1	Titane	39	390 000
eDumbe	2021/2022	7	Mutshekazi	128	1 280 000
eDumbe	2021/2022	7	Doornkloof	25	250 000
eDumbe	>2022	1	Ntshakwe	25	250 000
eDumbe	>2022	1	Mhlamone	141	1 410 000
eDumbe	>2022	1	Bhinika	80	800 000
eDumbe	>2022	1	Biknyon	55	550 000
Nongoma	2018/2019	3	Mkhuze 1	2	20 000
Nongoma	2018/2019	3	Esikuthwaneni	88	880 000
Nongoma	2018/2019	3	Okhalweni 2	56	560 000
Nongoma	2018/2019	3	Esqelwini	4	40 000
Nongoma	2018/2019	3	Kolubomvu 2	33	330 000
Nongoma	2018/2019	3	Kwagongolozane	113	1 130 000
Nongoma	2018/2019	3	Macijo	58	580 000
Nongoma	2018/2019	5	Khethankomo	190	1 900 000
Nongoma	2018/2019	5	New Town	71	710 000
Nongoma	2018/2019	5	Mthincongo	191	1 910 000
Nongoma	2018/2019	5	Sinqanda	174	1 740 000
Nongoma	2018/2019	10	Shumeka	200	2 000 000
Nongoma	2017/2019	10	Mpondo	200	2 000 000
Nongoma	2017/2019	10	Dindela	200	2 000 000
Nongoma	2017/2019	10	Ngongomane	200	2 000 000
Nongoma	2017/2019	10	Mshiki		2 000 000

				200	
Nongoma	2018/2019	21	Semangadini	95	950 000
Nongoma	2018/2019	21	Mpunzana	189	1 890 000
Nongoma	2018/2019	21	Eningeni	27	270 000
Nongoma	2018/2019	21	Qanda 1	68	680 000
Nongoma	2018/2019	21	Sevuna	46	460 000
Nongoma	2018/2019	21	Emahashini	307	3 070 000
Nongoma	2018/2019	21	Holoba	40	400 000
Nongoma	2018/2019	21	Mangomhlophe	297	2 970 000
Nongoma	2018/2019	21	Sefamona	41	410 000
Nongoma	2018/2019	21	Mgogodi	43	430 000
Nongoma	2018/2019	21	Emancwangeneni	29	290 000
Nongoma	2018/2019	21	Emoyeni	211	2 110 000
Nongoma	2018/2019	21	Zetheni	23	230 000
Nongoma	2018/2019	21	Ntambakasi	29	290 000
Nongoma	2019/2020	3	Magendene	25	250 000
Nongoma	2019/2020	3	Sovana	94	940 000
Nongoma	2019/2020	3	Vesonweni	45	450 000
Nongoma	2019/2020	3	Machibini	128	1 280 000
Nongoma	2019/2020	3	Njonyomane	78	780 000
Nongoma	2019/2020	3	Mapambeni	120	1 200 000
Nongoma	2019/2020	3	Dlakuse	57	570 000
Nongoma	2019/2020	4	Mfankomo	102	1 020 000
Nongoma	2019/2020	4	Mhlwehlwe	77	770 000
Nongoma	2019/2020	4	Manyoni	245	2 450 000
Nongoma	2019/2020	4	Makholweni	71	710 000
Nongoma	2019/2020	4	Sindaba	92	920 000
Nongoma	2019/2020	4	Emakhandeni	96	960 000
Nongoma	2019/2020	5	Mpuphusi	137	1 370 000
Nongoma	2019/2020	5	Toyisa Langalesizwe	157	1 570 000
Nongoma	2019/2020	5	Esheshi	142	1 420 000
Nongoma	2019/2020	6	Ekuvukeni	201	2 010 000
Nongoma	2019/2020	6	Ndololwane	80	800 000
Nongoma	2019/2020	9	Sikheleni	87	870 000
Nongoma	2019/2020	9	Sikhleni	127	1 270 000
Nongoma	2019/2020	10	Nokhesheni	20	200 000
Nongoma	2019/2020	10	Kwandwandwe	162	1 620 000
Nongoma	2019/2020	10	Esweni	103	1 030 000
Nongoma	2019/2020	10	Hlathi	158	1 580 000
Nongoma	2019/2020	10	Magutshwa	126	1 260 000
Nongoma	2019/2020	11	Kwazungu	188	1 880 000
Nongoma	2019/2020	11	Emhemeni	65	650 000
Nongoma	2019/2020	11	Othinsangu	111	1 110 000
Nongoma	2019/2020	11	Hlathidumayo	78	780 000
Nongoma	2019/2020	12	Macekaneni	97	970 000
Nongoma	2019/2020	12	KwaLuphonjwana	135	1 350 000
Nongoma	2019/2020	12	Ndlazini	69	690 000
Nongoma	2019/2020	12	Nhloyane	11	110 000
Nongoma	2019/2020	12	Isizinda A	11	110 000
Nongoma	2019/2020	12	Ezingolaneni	31	310 000

Nongoma	2019/2020	12	Nqalu	48	480 000
Nongoma	2020/2021	1	Zidwadweni	92	920 000
Nongoma	2020/2021	1	Gega	52	520 000
Nongoma	2020/2021	1	Ntweni 1	75	750 000
Nongoma	2020/2021	1	Mngamunde	25	250 000
Nongoma	2020/2021	3	Mthonjaneni	105	1 050 000
Nongoma	2020/2021	3	Shalashala	66	660 000
Nongoma	2020/2021	3	Hlushwaneni	108	1 080 000
Nongoma	2020/2021	3	Mduda	96	960 000
Nongoma	2020/2021	3	Emathlomane	42	420 000
Nongoma	2020/2021	3	Mgxanyini	111	1 110 000
Nongoma	2020/2021	3	Esigodiphola 1	63	630 000
Nongoma	2020/2021	4	Emaqeleni 2	7	70 000
Nongoma	2020/2021	4	Emaqeleni 3	30	300 000
Nongoma	2020/2021	4	Mashenge	59	590 000
Nongoma	2020/2021	5	Mahlomane	79	790 000
Nongoma	2020/2021	5	Kwajuba	131	1 310 000
Nongoma	2020/2021	5	Kolubomvu 1	22	220 000
Nongoma	2020/2021	11	Nqala	86	860 000
Nongoma	2020/2021	11	Zampilo	42	420 000
Nongoma	2020/2021	11	Mcibilindini	49	490 000
Nongoma	2020/2021	11	Mhlabaneni	60	600 000
Nongoma	2020/2021	11	Kwavumela	76	760 000
Nongoma	2020/2021	11	Masokaneni	160	1 600 000
Nongoma	2020/2021	12	Ngalande	105	1 050 000
Nongoma	2020/2021	13	Embokodweni	82	820 000
Nongoma	2020/2021	13	Engwelezane	33	330 000
Nongoma	2020/2021	14	Badlaneni	151	1 510 000
Nongoma	2020/2021	14	Newgoli	117	1 170 000
Nongoma	2020/2021	14	Khalweni	52	520 000
Nongoma	2020/2021	17	Obhuqwini	126	1 260 000
Nongoma	2020/2021	17	Maqoma	151	1 510 000
Nongoma	2020/2021	17	Kwanomehle	28	280 000
Nongoma	2020/2021	21	Mgijiji	99	990 000
Nongoma	2021/2022	6	Esidinsi	589	5 890 000
Nongoma	2021/2022	16	Ophalule	673	6 730 000
Nongoma	2021/2022	16	Mcwembe	100	1 000 000
Nongoma	2021/2022	17	Echibini	14	140 000
Nongoma	2021/2022	17	Majomela	392	3 920 000
Nongoma	2021/2022	17	Efefe	143	1 430 000
Nongoma	>2022	11	Ngolotshe	341	3 410 000
Nongoma	>2022	11	Doncaneni	65	650 000
Nongoma	>2022	11	Eziqhumeni	128	1 280 000
Nongoma	>2022	11	Entwala	57	570 000
Ulundi	2018/2019	7	Xasane	199	1 990 000
Ulundi	2018/2019	7	Bhungwane	125	1 250 000
Ulundi	2018/2019	7	Esphiva	139	1 390 000
Ulundi	2018/2019	7	Enqunyaneni	231	2 310 000
Ulundi	2019/2020	8	Mganimbobo	118	1 180 000
Ulundi	2019/2020	8	Qubenz	10	100 000

Ulundi	2019/2020	14	Ewela 1	33	330 000
Ulundi	2019/2020	14	Njojo	108	1 080 000
Ulundi	2019/2020	14	Bhodludaka	50	500 000
Ulundi	2019/2020	14	Glula	68	680 000
Ulundi	2019/2020	14	Kwamswane	29	290 000
Ulundi	2019/2020	15	Makhukwane	207	2 070 000
Ulundi	2020/2021	15	Obinda	29	290 000
Ulundi	2020/2021	16	Mhlathuze	44	440 000
Ulundi	2020/2021	16	Mombeni	25	250 000
Ulundi	2020/2021	16	Langfontein	172	1 720 000
Ulundi	2020/2021	16	Ngenetsheni	22	220 000
Ulundi	2020/2021	16	Nzololo-Maganda	74	740 000
Ulundi	2020/2021	16	Dingaanstad	62	620 000
Ulundi	2020/2021	16	Qanuatho	10	100 000
Ulundi	2020/2021	16	Vaalbank 347	2	20 000
Ulundi	2020/2021	16	Ncele	12	120 000
Ulundi	2020/2021	16	Cokolo	105	1 050 000
Ulundi	2020/2021	16	Nkololweni	80	800 000
Ulundi	2020/2021	16	Mhlangeni	19	190 000
Ulundi	2020/2021	16	Hlengile	38	380 000
Ulundi	2020/2021	16	Mbundu	56	560 000
Ulundi	2020/2021	16	Nsingizane 1	24	240 000
Ulundi	2020/2021	16	Nyashana	5	50 000
Ulundi	2020/2021	16	Mpembeni	34	340 000
Ulundi	2020/2021	16	Qaba	23	230 000
Ulundi	2020/2021	21	Dorsfontein	5	50 000
Ulundi	2020/2021	24	Isandlwana	8	80 000
Ulundi	2021/2022	15	Mgababa 2	148	1 480 000
Ulundi	2021/2022	15	Okhukhu Phansikwentaba	70	700 000
Ulundi	2021/2022	15	Mgubameni	22	220 000
Ulundi	2021/2022	15	Lomo	186	1 860 000
Ulundi	2021/2022	24	Eskhaleni Kwankosi	14	140 000
Ulundi	2021/2022	24	England	84	840 000
Ulundi	>2022	9	Manaba	10	100 000
Ulundi	>2022	11	Kwamhlongo	9	90 000
Ulundi	>2022	13	Maduna	16	160 000
Ulundi	>2022	13	Nhlazatshe	25	250 000
Ulundi	>2022	13	Kwa'Henie	200	2 000 000
Ulundi	>2022	16	Mandevu 1	4	40 000
Ulundi	>2022	17	Qwasha	256	2 560 000
uPhongolo	In Progress	5	Gaqa (Inqabayamantungwa)	405	4 050 000
uPhongolo	In Progress	6	Nkosentsha	130	1 300 000
uPhongolo	In Progress	6	Ezinketheni 1	89	890 000
uPhongolo	In Progress	6	Bongaspoort	60	600 000
uPhongolo	In Progress	6	Mafindose	47	470 000
uPhongolo	In Progress	6	Kwambhucu	100	1 000 000
uPhongolo	In Progress	14	Cotlands	69	690 000
uPhongolo	In Progress	14	Hlambanyathi 2	52	520 000
uPhongolo	In Progress	14	Gumbi Trust	423	4 230 000

			(Mvokweni)		
uPhongolo	2018/2019	6	Ezibayeni 3	63	630 000
uPhongolo	2018/2019	6	Thusazane	42	420 000
uPhongolo	2018/2019	6	Mfaluvalo	71	710 000
uPhongolo	2018/2019	6	Manzabomvu 1	182	1 820 000
uPhongolo	2018/2019	6	Newstand	108	1 080 000
uPhongolo	2018/2019	14	Ngulwane	30	300 000
uPhongolo	2018/2019	14	Zonyama	143	1 430 000
uPhongolo	2019/2020	1	Eskhaleni	36	360 000
uPhongolo	2020/2021	6	Mfenyane	65	650 000
uPhongolo	2020/2021	6	Dlomodlomo	106	1 060 000
uPhongolo	2020/2021	6	Klipwal	180	1 800 000
uPhongolo	2020/2021	12	Kwazibhedlu	34	340 000
uPhongolo	2020/2021	12	Gabela (Manyandeni)	121	1 210 000
uPhongolo	2020/2021	12	Kwesimhlope (Manyandeni)	148	1 480 000
uPhongolo	2020/2021	12	Manyandeni	234	2 340 000
uPhongolo	2020/2021	12	Chicago (Highlands B)	81	810 000
uPhongolo	2021/2022	1	Magudu	151	1 510 000
uPhongolo	2021/2022	1	Kwasotsha	20	200 000
uPhongolo	2021/2022	1	Emganwini	30	300 000
uPhongolo	2021/2022	1	Nyaliza	86	860 000
uPhongolo	2021/2022	1	Hhinihini	19	190 000
uPhongolo	2021/2022	1	Manzanhlophe	101	1 010 000
uPhongolo	2021/2022	1	Kwaslevu	41	410 000
uPhongolo	2021/2022	1	Mthaniya	37	370 000
uPhongolo	2021/2022	1	Sithole	44	440 000
uPhongolo	2021/2022	1	Emthunzini	25	250 000
uPhongolo	2021/2022	12	Nyawoshane	122	1 220 000
uPhongolo	>2022	1	Embangeni	47	470 000
uPhongolo	>2022	1	Mpalaza	88	880 000
uPhongolo	>2022	1	Kwamhlanga	46	460 000
uPhongolo	>2022	1	Kwampondo	62	620 000
uPhongolo	>2022	1	Mpakama	234	2 340 000
uPhongolo	>2022	1	Dwarsrand	111	1 110 000
uPhongolo	>2022	1	Kwamshikashika	32	320 000
uPhongolo	>2022	1	Kwaphatha	30	300 000
uPhongolo	>2022	1	Morreson	89	890 000
uPhongolo	>2022	1	Emkhayeni	112	1 120 000

WASTE WATER TREATMENT WORKS – OPERATIONS AND MAINTENANCE					
Waste Water Treatment Works		Current Delivery	Cost Estimate Emergency Work	Cost Estimate Short Term	Cost Estimate Long Term (Excludes short term)
		ML/d	ex VAT and Prof fees	ex VAT and Prof fees	ex VAT and Prof fees
1	Frischgewaagd WWTW	0.08	R 0	R 300 000	R 40 000 000
2	Paulpieterburg WWTW	0.3	R 550 000	R 1 800 000	R 0
3	Vryheid Town WWTW	9	R 0	R 0	R 0
4	eMondlo WWTW	2.4	R 725 000	R 3 630 000	R 5 500 000
5	Nkongolwane WWTW	0.25	R 0	R 0	R 990 000
6	Alpha Mine WWTW	0	R 0	R 300 000	R 0
7	Hlobane WWTW	0.35	R 900 000	R 3 150 000	R 450 000
8	Coronation WWTW	1	R 850 000	R 3 980 000	R 6 000 000
9	Itshelejuba Hospital WWTW	0.09		R 70 000	R 800 000
10	Pongola Town WWTW*	2.5	R 13 000	R 363 500	R 1 390 000
11	Thulasizwe Hospital WWTW	0.03		R 220 000	R 50 000
12	Holinyoka/Nongoma WWTW**	1.8		R 1 719 753	R 4 310 000
13	Ceza WWTW	0.14		R 660 000	R 2 000 000
14	James Nxumalo WWTW	0.08		R 270 000	R 890 000
15	Nkonjeni Hospital WWTW	0.2		R 70 000	R 1 770 000
16	St Francis Hospital WWTW	0.06		R 75 000	R 840 000
17	Ulundi Town WWTW**	2.7		R 600 000	R 2 900 000
18	Enyathi WWTW	0	No assessments Scheduled		
Total			R 3 038 000	R 17 208 253	R 67 890 000

Map 28: Zululand District Spatial Development Framework