



PHOKWANE LOCAL MUNICIPALITY

LAND DEVELOPMENT PLAN / SPATIAL DEVELOPMENT FRAMEWORK

2014



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Prepared and adopted in terms of the Northern Cape Planning and Development Act 7 of 1998 and as far as possible aligned with the provisions of the Spatial Planning and Land Use Management Act, no. 16 of 2013.

PREPARED FOR:

PREPARED BY:



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Northern Cape Provincial Government (2012)
South African National Bio-diversity Atlas (2012)
Council for Geo-Science (2004)
Council for Scientific and Industrial Research – CSIR (2010)
National Geo-Spatial Information – NGI (2010)
Eskom (2010)
MandalaGIS (2012)
Agriculture Research Council (2012)
Municipal Demarcation Board (2011)
South African Weather Service (2010)
Statistics South Africa – Census 2011
Dept. Water Affairs and Forestry (2007)

Statistics:

Statistics South Africa Census 2001 and 2011

Photos:

Prof. M.C. Oranje

FOREWORD



It is more than five years' now since the Phokwane Local Municipality adopted a Spatial Development Framework. During these five years, the massive development challenges of poverty, unemployment, marginalisation and inequality in our municipality have rapidly expanded. At the same time, major regional and local economic development and job creation opportunities in our municipal area are not being utilised and are simply passing us by. Fully aware of this, we decided to change this by reviewing our SDF and mapping a new, progressive spatial development trajectory for the future.

With the adoption of this framework by my Council we are expressing a clear commitment to (1) the spatial vision it espouses of the Phokwane Local Municipality *'becoming a place in which all our citizens can sustainably and equally enjoy from the unique opportunities and rewards it offers'*, and (2) plan-led guidance and regulation of all land-uses and land development applications in our area of jurisdiction.

We invite everyone that shares in this vision and our enthusiasm for the rapid, inclusive, equitable and sustainable development of our municipal area to take hands and jointly make this vision a reality. I thank you in advance for all your ceaseless endeavours in this regard!

Executive Mayor: The Honourable Mr Vuyisile Khen

May 2014

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EXECUTIVE SUMMARY

The Phokwane Local Municipality (PLM) identified the review of its 2008-Spatial Development Framework (SDF) in its 2013/14-Integrated Development Plan as a crucial initiative to be undertaken with the assistance of the Department of Rural Development and Land Reform (DRDLR).

In order to give expression to this expressed need, the PLM, with the support of the Department of Rural Development and Land Reform, embarked on a process of reviewing its SDF, which consisted of a series of interrelated steps, viz.: (1) social, economic, spatial and geo-technical data-gathering, community participation and intergovernmental engagement; (2) data-analysis and synthesis; (3) framework preparation; and (4) implementation planning. The outcome of this process was this SDF, which provides a *spatial vision*, *spatial mission* and series of *spatial development objectives, strategies* and *projects* to (1) address the municipality's most pressing challenges and issues; (2) optimise its strengths; and (3) utilise the opportunities it offers.

The *spatial vision*, as put forward in and pursued by the PLM SDF is: *'To become a place in which all our citizens can sustainably and equally enjoy from the unique opportunities and rewards it offers'*. The accompanying *mission statement* of the municipality is: *'To plan for, put in place and maintain the facilities, services and infrastructure that will create and sustain real opportunities for all the citizens of our municipality to produce goods and offer their services in an environment where there is no exploitation, everyone is respected and no-one's dignity is compromised.'*

The *spatial development objectives for the PLM* are focused on the realisation of the spatial mission, and seek to:

- Protect and sustainably manage the limited agricultural land and water resources in the area;
- Expand the existing Vaalharts Irrigation Scheme;

- Further develop tourism in the PLM based on the beauty of the natural and agricultural environment;
- Improve connectivity of the PLM (1) locally in and between settlements, (2) provincially, (3) nationally, and (4) internationally;
- Revive and expand manufacturing, agro-processing and beneficiation in the PLM;
- Expand and exploit existing research and training facilities related to agriculture and agri-processing; and
- Develop sustainable settlements that provide the setting and services needed for its inhabitants to live healthy, dignified and productive lives.

The *overarching spatial development strategies for the municipality* are to:

- Vastly expand the existing irrigation scheme;
- Revive and expand manufacturing and beneficiation based on the agricultural produce in the area;
- Improve local connectivity, enhance intra-settlement trade and ensure the sharing of facilities and resources; and
- Pursue tourism and eco-residential estate development.

For each of the four spatial development strategies, a series of accompanying *spatial projects* are put forward. An *implementation framework* provides the objectives, target groups, location, outputs, project timeline, responsible agencies, major activities, cost/budget, source of funding, and development priority for each of these projects. It is now up to the PLM, its partners, communities, farmers and businesses, and the relevant provincial and national government departments to give expression to this SDF through rapid, focused and sustained implementation

GLOSSARY OF TERMS

DBSA: Development Bank of South Africa

DHE: Department of Higher Education

DM: District Municipality

DRSMDM: Dr. Ruth Segomotsi Mompati District Municipality

DTI: Department of Trade and Industry

DWA: Department of Water Affairs

FBDM: Frances Baard District Municipality

GTLM: Greater Taung Local Municipality

IDC: Industrial Development Agency

LM: Local Municipality

NCDARD: Northern Cape Department of Agriculture and Rural Development

NCDEDETEA: Northern Cape Department of Economic Development, Tourism and Environmental Affairs

NCDRDLR: Northern Cape Department of Rural Development and Land Reform

NCDRPW: Northern Cape Department of Roads and Public Works

NCP: Northern Cape Province

NCPSDF: Northern Cape Provincial Spatial Development Framework

NRF: National Research Fund

NWP: North West Province

PLM: Phokwane Local Municipality

PRASA: Passenger Rail Agency of South Africa

SDF: Spatial Development Framework

SDS: Spatial Development Strategy

TLTLM: Taung-Lekwa Teema Local Municipality

CHAPTER 1: INTRODUCTION



1.1 THE REVIEW OF THE 2008-PHOKWANE LM SDF

In its 2013/14 Integrated Development Plan, the Phokwane Local Municipality identified the review of its 2008-Spatial Development Framework as an initiative to be undertaken with the assistance of the Department of Rural Development and Land Reform (DRDLR).

1.2 WHY THE REVIEW OF THE 2008-PHOKWANE LM SDF?

There are **eight reasons** for undertaking the review. The existing SDF:

- Is not aligned with the Northern Cape PSDF;
- Predates the current global economic recession;
- Is informed by community views that are at least five years old;
- Was not prepared based on the 2011-Census data;
- Did not include, or make statements about the farm portions/areas in the municipality;
- Has served its purpose in relation to identification of further land for development with nearly all of this land now having been taken up for housing/urban settlement;
- Did not make specific statements with regards to roles and responsibilities in the implementation of the SDF proposals; and
- Was not prepared within the ambit of the DRDLR's current SDF Guidelines (Version 8) and the DRDLR's proposed 'SDF Prioritisation Matrix'.

At the same time, the FBDM is reviewing its SDF, and this provides an ideal opportunity to ensure cross-pollination of the two frameworks.

1.3 WHAT IS A MUNICIPAL SPATIAL DEVELOPMENT FRAMEWORK?

A municipal Spatial Development Framework (SDF) is the outcome of a Spatial Development Planning process undertaken by a municipal council (i.e. either a Metropolitan, District or Local Municipal Council) in accordance with the planning powers accorded to it in terms of the Municipal Structures Act, 1998 (Act No. 117 of 1998). This planning process can either be for the preparation of a 'new', or the review of an existing SDF. In terms of appearance and form, an SDF consists of:

- An analysis of all relevant data;
- A synthesis of the analysed data; and
- A series of proposals.

As such, an SDF includes:

- A series of maps;
- Supporting and explanatory text; and
- A plan with proposals in graphic and/or textual format.

Municipal SDFs were first called to life through the promulgation of the Local Government Municipal Systems Act, 2000 (Act No. 32 of 2000) and further elaborated on and described in the Local Government: Municipal Planning and Performance Management Regulations, 2001. On the 5th of August 2013 the President, by signing into life the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013), signed into existence a whole new era of spatial development planning and frameworks in South Africa. Not only does the new Act provide for the preparation and review of spatial development frameworks in the national, provincial, regional and municipal domains, it also makes a much stronger link between spatial development planning and land use management in municipalities. While it is still early days, the new Act is sure to

also change the dynamics and relationship between the municipal SDF and the municipal Integrated Development Plan (IDP).

For now, and in accordance with the existing legal and policy framework, a municipal SDF must guide, direct and regulate land development and land uses in a municipality's area of jurisdiction in accordance with the municipality's development vision, goals and objectives, as set out in its IDP, by providing for State interventions in the space economy of municipalities. On a *strategic level* and at the current historical post-apartheid juncture, this means rectifying the endemic inequalities and inefficiencies of South African settlements through decisive proposals on:

- The medium and long-term development trajectory of municipalities;
- The direction, nature and programming of future settlement expansion;
- The spatial location and capacity of investment in economic and household infrastructure; and
- The corrective and progressive broadening of access for previously excluded South Africans to wealth-generating natural and manmade resources, including land redistribution.

On an *operational level*, it means providing guidance for a Municipal Land Use Management System (LUMS) with regards to:

- The location, density, intensity, mix and use of desirable land uses;
- The location, impact, intensity and scale of operation of necessary, but undesirable land uses; and
- The attraction and facilitation of desirable land uses to ensure and enhance desired settlement patterns and land-use profiles in terms of diversity and intensity.

As such, and from an institutional perspective, the SDF has to be tightly aligned (1) at a *strategic level* with the municipality's IDP and Growth and Development Strategy, and (2) at an *operational level*, with the municipality's land-use planning and regulation and engineering services functions.

1.4 WHAT IS SPATIAL DEVELOPMENT PLANNING?

Spatial Development Planning is a legally-sanctioned, defined and guided activity by which the *use, utilisation and/or improvement* of space in a *geographically defined area* is carefully considered and planned to ensure the realisation of *social, environmental, economic and political objectives* during or at the end of a *given period of time*. As noted above, at the current juncture in South Africa, the key focus of Spatial Development Planning is the achievement of rapid sustainable, inclusive and equitable growth to counter the poverty, inequality and resource-use inefficiencies left by decades of colonial and apartheid-misguided spatial planning. In terms of the South African legal and policy framework, Spatial Development Planning is mandated, given substance to, and guided by the Local Government Municipal Systems Act, 2000 (Act No. 32 of 2000), the Local Government: Municipal Planning and Performance Management Regulations, 2001, the National Development Plan, 2011, the Spatial Planning and Land Use Management Act, 2013 (Act 16 of 2013) and the Department of Rural Development and Land Reform's Guidelines on the Preparation of Spatial Development Frameworks, 2011. In addition to these national documents, Spatial Development Planning in the Northern Cape Province is also framed and guided by the Northern Cape Province Planning and Development Act, 1998 (Act No. 7 of 1998) and the Northern Cape Spatial Development Framework, 2012.

Spatial Development Planning assists government, where possible and beneficial in partnership with the private sector and communities, to ensure that (1) *investment in places* and (2) *spending on people* is carefully planned,

targeted, synergised and programmed to achieve maximum developmental impact.

In order to ensure these desired impacts, Spatial Development Planning must:

- Be directed at the realisation of a spatial development vision that is shared and bought into by all stakeholders and role-players in the area;
- Be informed, guided by and focused on the features, the potentials and the constraints of (1) the people, (2) the place, (3) the institutions, and (4) the interplay and interactions in and between these entities;
- Tap into, use, strengthen and optimise beneficial activities, relations and links in places to achieve desired outcomes;
- Regulate or prevent detrimental activities, relations and links in places to achieve desired outcomes;
- Be done in a collaborative, collective, focused and constructive way by a group of actors from a variety of State and non-State institutions; and
- Be used by provincial sector departments when planning, budgeting and implementing developmental strategies, plans and programmes, and in so doing, strengthening intergovernmental harmonisation, alignment, integration and synchronisation in the actions of the various organs of State.

1.5 WHAT IS THE ROLE OF A LOCAL MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK?

A Local Municipality Spatial Development Framework is a *local level strategic* spatial development planning instrument. In terms of the current institutional and development planning framework, it occupies a unique, in-between place between (1) the Provincial SDF, (2) the District Municipal SDF, and (3) the Land Use Management System of the particular local municipality. As such it needs to:

- Give expression in the municipal sphere to the strategic objectives as set in the national and provincial spheres with regards to sustainable development, natural resource management, regional economic investment, job creation and poverty alleviation;
- Provide a clear expression of the long-term sustainable economic development trajectory to be jointly pursued in the geographical area of the municipality by all three spheres of government, the private sector and the community;
- Act as a bridge between the broader, strategic, longer-term socio-political, economic and ecological long-term analysis, thinking and strategizing in the provincial sphere and the more detailed short-to medium term land-use and infrastructure investment planning, regulation and implementation that has to be undertaken in the municipal sphere;
- Act as conduit between the strategic-level planning undertaken by the District Municipality and the provincial sphere, notably in the Premier's Office and in Sector Departments when preparing sector strategies, plans, programmes and budgets and the detailed spatial development analysis and planning done by the various sector departments in the local municipality;
- Provide an indicative framework for (1) infrastructure investment and development spending in regionally-significant nodes and corridors, (2) integrated rural development, (3) economic sectors to be targeted, and (4) environmental management, informed by provincial and national analyses within which the more detailed spatial development planning of the local municipality can be located;
- Harmonize, coordinate and align the spatial development planning done in and by the District Municipality with the spatial development objectives and intentions in the Local Municipality;
- Highlight areas of (1) real development potential, (2) dire need/poverty and (3) bottlenecks in the realization of the development potentials and alleviation and eradication of poverty, in the municipality; and

- Provide high-level, strategic guidance with regards to desired land use patterns, intensities, densities and mixing in broad zones/categories of human settlement-types in the municipality.

1.6 USING THE PHOKWANE LOCAL MUNICIPALITY SDF

The PLM SDF is an indicative, strategic planning document that provides strategic guidance on the future economic and spatial development of the municipality. As such, it does not seek to, but may make statements about the development or use of individual properties in settlements, or farms and farm portions. It does, however:

- Make strong *policy statements* about larger areas in which similar needs are prevalent, development possibilities exist, development challenges are experienced and economic activities and human settlement take place and could take place;
- Provide a future *spatial development vision, set of spatial development objectives and spatial development strategies* to which all investment and spending actions must be directed; and
- Set out an *implementation framework* and a series of *development indicators* with which to measure progress towards the realisation of the development objectives and the spatial development vision.

Together these three components provide officials, politicians and non-State actors with:

- A *proactive guide* for future spatial development investment decisions by both the State and the non-State actors active in the municipality;
- A “*strategic check-list*”, in the form of a simple, very easy measuring rod with which to test and establish whether a proposed development option or spatial development application will contribute to the realisation of the municipal vision; and

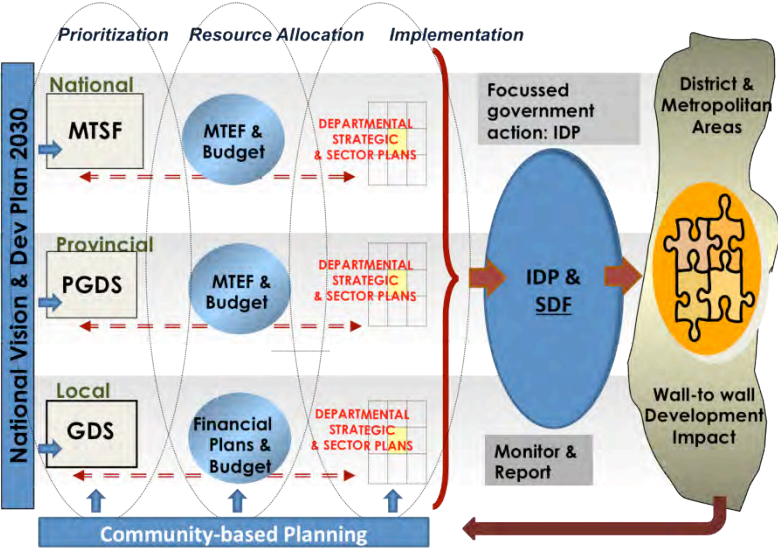
- A *set of strategic actions* to be undertaken during the course of the next five years to ensure progressive movement towards the realisation of the municipality’s vision over the next twenty to thirty years.

While providing strong guidance, the intention is not that this SDF must become a strait-jacket, a cage from which no other option or proposal can, or should be considered. *What matters is the long-term sustainable, equitable and inclusive development of the municipal area, and this must always be the frame against which to consider, deliberate and take decisions.* This tool (this SDF) is in the end just a tool. *As such it can enhance and support, but never replace creative, accountable, responsive, well-informed and caring collective and individual decision-making and action.*

1.7 WHERE IS A MUNICIPAL SDF LOCATED IN THE BROADER INTERGOVERNMENTAL DEVELOPMENT PLANNING FRAMEWORK?

The diagram below indicates where the Municipal Integrated Development Plan and the Spatial Development Framework are located within the broader framework of intergovernmental prioritisation, budgeting and implementation.

Figure 1: Locating the Municipal SDF in the Broader Intergovernmental Development Planning Framework



1.8 THE PROCESS THAT WAS FOLLOWED IN THE REVIEW OF THE 2008-PLM SDF

The process, as set out in **Figure 2** below, was followed in the review of the 2008-PLM SDF:

Figure 2: Process followed in the review of the 2008-PLM SDF

PHASES	PURPOSE	CONSULTATION
Phase 1: Start Up	<ul style="list-style-type: none"> Reach agreement on objectives, approach, methodology and timeframes Set out project management and communication processes 	
Phase 2: Issues & Vision	<ul style="list-style-type: none"> Identify, quantify and describe development challenges and issues in PLM Define the Vision of the PLM SDF 	PARTICIPATION SESSION 1
Phase 3: Analysis & Synthesis	<ul style="list-style-type: none"> Identify opportunities and constraints Identify strategic interventions required in PLM 	
Phase 4: Draft SDF	<ul style="list-style-type: none"> Preparation of a Draft SDF for PLM 	
Phase 5: Support for Draft SDF	<ul style="list-style-type: none"> Ensure buy-in and support for the Draft PLM SDF from the local community, government and private sector 	PARTICIPATION SESSION 2
Phase 6: Finalisation & Approval	<ul style="list-style-type: none"> Finalize PLM SDF based on comments from consultation processes and additional data-gathering and mapping (if required) 	
Phase 7: Implementation	<ul style="list-style-type: none"> Development of an Implementation Strategy and Monitoring and Evaluation System 	

CHAPTER 2: ALIGNMENT AND INTEGRATION



2.1 INTRODUCTION

A pillar of the 1996-Constitution and a core component of the South African development planning system is cooperation, alignment and integration. At the same time, and equally strongly advanced and protected in our Constitution, is the principle of distinctness, uniqueness and interdependence of the three spheres of government. In practice, and when preparing or reviewing a municipal SDF, this means that every effort has to be made to align the framework with the development, spatial, financial and sector plans within its own sphere (and 'host municipality'), as well as in the two other spheres. In the case of the review of the 2008-PLM SDF, the drivers that (1) impacted upon, (2) held out opportunities, and (3) could be enhanced and carried forward into the Phokwane municipal area, were identified and used in making sense of the space economy of the PLM and factored into the SDF proposals. The process of ensuring such alignment and integration requires an analysis in the national, provincial and local spheres. Each of these is dealt with in more detail below:

In the *national sphere*, the key drivers are (1) the National Development Plan, (2) the Comprehensive Rural Development Programme, (3) the New Growth Path, (4) the Industrial Policy Framework and the Industrial Policy Action Plan Two, and (5) the Industrial Policy Action Plan 2. In the *provincial sphere*, it is the Northern Cape Provincial Growth and Development Strategy and the Northern Cape Provincial Spatial Development Framework. Each of these is dealt with below in terms of the significance of the particular plan or programme for the PLM SDF. In the *local government sphere* it is the District and Local Municipal Spatial Development Frameworks and Sector Plans.

2.2 ANALYSIS OF NATIONAL SPHERES

2.2.1 The National Development Plan (2011):

The Plan argues that South Africa remains a divided society characterized by inequality, poverty and unemployment. The National Development Plan 2030 calls for (1) the elimination of poverty (reduce the proportion of households with a monthly income below R419 per person from 39% to 0%) and (2) the reduction of inequality by 2030 (the Gini-coefficient should fall from 0.69 to 0.6). The point of departure is that "*South Africa belongs to its people*" and they should join hands and realize that the future success of our country is our collective responsibility therefore the slogan "*Our future: make it work*". The rationale of the NDP is to address these challenges by bringing the gap in the divide. The foundation of the plan is based on the collaborative effort to unite South Africans, tapping their energies, building capacity and capabilities of both citizens and leaders alike and in the process growing an inclusive economy. Citizens are encouraged to actively participate in the development process – changing and growing together. The NDP provides a strategic framework document to guide decisions and actions, steered by the President and the Cabinet. The NDP identifies the following key priorities (p. 27):

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

One of the main driving forces of the document is to stimulate economic growth by increasing employment (from 13 million in 2010 to 24 million in 2030) and reducing poverty (raise per capita income from R 50 000 in 2010 to R 120 000 by 2030). The document sets the national income share of the bottom 40% of the population from 6% to 10%. In order to achieve these targets, the document identified thirteen areas for intervention (Economy and Employment, Economic infrastructure, Environmental sustainability and

resilience, *Inclusive rural economy*, South Africa in the region and the world, Transforming Human Settlements, Health care for all, Social protection, Building Safer Communities, Building a capable and developmental state, Fighting corruption, Nation building and social cohesion). The document furthermore sets a number of objectives (targets) for each area of intervention and proposes a series of subsequent actions to achieve these goals.

The NDP recognises that many of South Africa's rural areas are marked by high levels of poverty and have limited employment opportunities. The status quo has partly been created by the apartheid system that restricted the African population into rural reserves. The result was an advanced and diversified commercial farming sector relying on poorly paid farm labour with a limited economic outlook. The government is, however, committed to change the status quo by improving the overall livelihoods of the rural communities. This is clearly reflected in the NDPs spatial vision for rural South Africa as *"the development of vibrant, productive rural communities that create and keep wealth in their areas and also provide benefit to the nation"* (p. 283).

In terms of specifically *relevant principles and policies*:

- The NDP envisages an inclusive and integrated rural economy viz. dynamic spaces supplied with greater opportunities to *"participate fully in the economic, social and political life of the country"* supplied by an array of basic services including education, health care and transport opportunities. Basic services are considered to be a critical success factor that enables people to develop personally and in turn transfer their skills to their communities.
- The NDP proposes a multifaceted approach to rural development which includes successful land reform, infrastructure development, job creation (the proportion of adults working in rural areas are set to increase from 29% to 40% (p. 61)) and rising agricultural production. The agricultural sector is expected to create approximately 1 million jobs by 2030 (p. 219).
- In terms of land reform, the NDP stipulates that the principles underpinning land reform includes the de-racialization of the rural economy, democratic and equitable land allocation and use across race, gender and class, and lastly, a sustained production discipline for food security (p. 140). It is clear that National Food Security is high on the priority agenda of the NDP. The document proposes that region-based approaches to food security should be investigated. This implies that South Africa's agriculture sector should strive to become more *"specialised and efficient"* and therefore *"there may be a trend away from the production of staples to higher-value crops"* (p. 230).
- The NDP proposes that the South African economy should increase the export of products proven to be of comparative advantage including agriculture and agro-processing. The document also pro-actively encourages agro-processing, tourism and small enterprise development.
- Both the NDP and the Integrated Growth and Development Plan for the Department of Agriculture, Forestry and Fisheries refers to increasing support for small-scale farmers (the 'missing middle') to operate alongside the commercial farming sector and subsistence (rural farmers) sector in order to ensure the protection of rural livelihoods.
- The document distinguishes between three types of required interventions based on the varying opportunities of each rural settlement area (p. 218):
 - *"High Economic Potential areas"*: Expand irrigated agriculture (according to research, the 1.5 million ha can be expanded with an additional 500 000ha), supplemented by dry-land production;
 - *"Some Economic Potential areas"*: Support non-agricultural activities i.e. agro-processing, tourism and small enterprises; and
 - *"Low Economic Potential areas"*: The provision of basic services (health care and education) should be prioritised. The development of human capital is therefore encouraged.

In view of the differentiated characteristics of rural towns and settlements, it is critical that plans and rural strategies should be developed for each area based on its specific economic potential.

2.2.2 The Comprehensive Rural Development Programme (2009):

- The Comprehensive Rural Development Programme is included as “Strategic Priority Number 3” in the Government’s Medium Term Strategic Framework. The CRDP distinguishes itself as being premised on a “proactive participatory community-base planning approach rather than an interventionist approach to rural development”.
- Comprehensive, integrated and sustainable rural development has been put forward as one of the key priorities of Government. The aim with the focus on such development is to (1) address the deep poverty and destitution in many of the country’s rural areas, notably the former Bantustans, and (2) create sustainable rural communities throughout the country.
- In accordance with this view, the CRDP seeks to achieve social cohesion and development in rural communities through:
 - Coordinated and integrated broad-based agrarian transformation;
 - An improved land reform programme; and
 - Strategically increasing rural development.
- The Programme defines rural development as a people-centred approach whereby rural residents “take control of their destiny (thereby dealing effectively with rural poverty through the optimal use and management of natural resources”.
- In terms of the Programme, the underlying principles of rural development include the following (p. 5):

- The establishment of business initiatives, agro-industries, cooperatives, cultural initiatives and vibrant local markets in rural settings;
 - The empowerment of rural communities, especially women and the youth, through facilitating and mediating strong organisational and institutional capabilities and abilities to take full charge of their collective destiny;
 - Capacity building initiatives, whereby rural communities are trained in technical skills, which, if combed with indigenous knowledge, can be used to reduce community vulnerability to especially climate change, soil erosion, adverse weather conditions and natural disasters, hunger and food insecurity; and
 - Revitalisation and revamping of old, and the creation of new economic, social and information communication infrastructure and public amenities and facilities in villages and small rural towns.
- The document reiterates the prominence of rural development and, secondly, the principles of the document are supportive and in line with the project criteria viz. creating viable and sustainable rural settlements.

2.2.3 The New Growth Path (2011):

The New Growth Path framework was initiated in response to the prevalent dire economic conditions in the country and places job creation at the centre of the economic policy of the country. The strategy is targeted to create approximately five-million job opportunities by 2020. The document identifies a number of job drivers and key priority sectors that will be the focus of the government within the next few years.

The rationale of the framework is to identify the country’s economic priority in order to steer investment and actions of the private sector, organised labour and government alike in order to build partnerships in addressing the economic challenges (p. 1).

In terms of specifically *relevant principles and policies*:

- The New Growth Path framework proposes that more labour-absorbing activities across the main economic sectors should be targeted as key job drivers, more specifically the “agricultural value chain” the “green economy”, and “tourism and certain high-level services” (p. 24).
- One of the core strategies to achieve employment targets in the agricultural sector is to provide support for smallholder schemes and by upgrading employment in commercial agriculture in order to achieve the national target of food security (p. 29).
- The document foresees that approximately 300 000 households can benefit from the smallholder schemes, whilst the opportunity exist to upgrade the living conditions of an additional 660 000 farm-workers. The document supports and promotes the acceleration of the land claims process and support of new farmers following land-claims settlements.
- In order to prevent the current practice of large exports of raw products, the plan is strongly supportive of ‘*value-adding activities*’ to raw products, including agro-processing. The latter, it envisages can create 145 000 jobs by 2020 (p. 29).
- While the document clearly recognises the need for trade with other countries, it comes out strongly in support of ‘*deepening*’ the domestic market and of producing products with high multiplier effects in the local economy. As such, it is highly supportive of cooperatives that ‘*enable small producers to enter formal value chains and take advantage of economies of scale*’ and ‘*building on regional synergies and clusters*’.
- The framework indicated that one of the aspects that hampers rural employment is the finalisation 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*” (p. 35).

The government furthermore commits itself to improve their efforts to provide public infrastructure and housing in rural areas in order to lower the cost of economic activity and to foster sustainable communities. It is furthermore stated that the livelihoods of approximately 500 000 people can be improved by means of rural development programmes.

2.2.4 The National Industrial Policy Framework (2007) and the Industrial Policy Action Plan 2 (2011):

The National Industrial Policy Framework (NIPF) seeks to articulate government’s ‘*broad industrial policy vision*’ and approach to industrialisation in the context of its key economic growth and social inclusion targets. The Industrial Policy Action Plan 2 (IPAP) sets out the implementation approach to the NIPF, and outlines the key interventions to give effect to it. As such it seeks to provide clarity and certainty to the private sector and the social partners of government with respect to government’s industrial priorities up to 2014.

The NIPF clearly states that it is policy framework and not a blueprint for the South African industrial economy. It does not take a ‘*one-size-fits-all*’ approach to industrialisation. The focus is more on principles and processes by which sector strategies will be developed and prioritised, and not on imposing interventions on people or places. And, in contrast to standardised one size fits all approaches, it puts forward a policy that acts upon real opportunities for growth. In general, the NIPF seeks to diversify the South African economy, boost labour-absorbing economic activities and focus on ‘*value-adding tradable goods and services*’.

The IPAP is not only viewed by Government as the implementing programme of the NIPF. Government also sees it as a central tool in the NIPF-job-creation strategy. It is anticipated that the interventions it proposes for the period

2011/12- 2012/13, will lead to job growth of 43 000 direct jobs and 86 000 indirect jobs, i.e. altogether 129 000 jobs.

In terms of specifically *relevant principles and policies*:

- While noting that employment in agriculture has been on the decline in South Africa, the NIPF argues that there is still much scope in this sector, with agriculture and agro-processing described as ‘... *one of the most labour-intensive in the economy*’ and stating that it will, as such, ‘... *be investigated further to identify opportunities for employment creation and new enterprise development*’.
- In addition to this, the NIPF identifies agro-processing as area that needs to be supported. With this objective in mind, it calls for the investment in ‘*catalytic project-specific infrastructure such as cold chain facilities to unlock particular types of agro-processing activities*’.
- The NIPF also includes ‘*Small Enterprise Support*’ as area of focus, indicating that it will support activities that fall in this group through ‘... *finance and technical support, together with finding ways to strengthen market opportunities for small enterprises, including cooperatives*’.
- The IPAP identifies three key Clusters for focus in the period 2011/12-2013/4.
 - Included in Cluster 1 (‘*Qualitatively New Areas of Focus*’) is listed (1) ‘*Green*’ and energy-saving industries; and (2) Agro-processing, linked to food security and food pricing imperatives.
 - Included in Cluster 2 (‘*Scaled-up and Broadened interventions in Existing IPAP sectors*’) is ‘*Biofuels*’.
- The IPAP includes in the list of sub-sectors under ‘Agro-processing’ the following: (1) Food processing; (2) Beverages; and (3) Medicinal, aromatics and flavourants. It sees these activities as creating huge numbers of jobs, both up and downstream in the economy.
- Reference is made in the IPAP 2 to three broad product-groups in the Agro-processing sector, including (1) ‘*High-quality, high-value, competitive*

sub-sectors, e.g. fresh fruit, wine and fish products’; and (2) ‘*New*’ *sub-sectors with niche market potential but small-scale production, e.g. ostrich meat, indigenous flowers, biofuels, essential and olive oils, and medicinal extracts*’.

The IPAP indicates that a ‘*Food Processing Strategy and Action Plan*’ will be prepared, which will include the development of an institutional structure for engaging the food-processing sector.

2.2.5 Industrial Policy Action Plan 5 (2013):

IPAP 5 is in aligned with both the National Development Plan and New Growth Path Document, and is considered to be one of the key pillars of the latter. The rationale of IPAP 5 is to “*prevent industrial decline and support growth and diversification of South Africa’s manufacturing sector*” with the main focus being on job creation. IPAP 5 reemphasises the fundamental role of manufacturing in employment and economic growth of the country. It is also mentioned that industrial policy should particularly focus on “*value-adding sectors*” which holds high potential for employment and growth multipliers (p. 12).

In terms of specifically *relevant principles and policies*:

- The document states that the high rates of growth in many countries in Africa (including South Africa), is directly linked to the increase in resource and agricultural commodity prices. The document therefore argues (as the National Development Plan) that regional growth is the “*biggest stimulus to long-term growth in South-Africa*” (p. 20).
- IPAP 5 outlines the “*achievement highlights*” of IPAP2 and in terms of industrial financing, the Industrial Development Corporation (IDC) is committed and re-oriented to finance IPAP/NGP sectors. The IDC has committed R 5.5 billion for investment in the “*Green Economy*” and a further R 1.1 billion for investment in the “*agriculture and forestry value-chains*” (p. 26).

- The agriculture and agro-processing value chain has been identified as a potential area for labour-intensive growth. This value chain has the potential to create a number of direct and down-stream employment opportunities. In order to achieve these employment targets, the document makes provision for six Key Action Programmes, including the following:
 - Development of a Food-processing Strategy and Action Plan,
 - Development of a small-scale milling industry,
 - Enhancement of Competition in the Fruit and Vegetable Canning Industry,
 - Development of a Soybean Action Plan promoting market linkages between primary agricultural producers and processors,
 - Development of the organic food sector, and
 - Supporting the Public-Private Partnership for Food Security.

Although the Biofuels industry has experienced rapid growth internationally, the South African biofuels market is lagging behind. According to IPAP 5, this sector holds considerable employment opportunities, specifically in the agricultural sector (p. 92).

2.3 ANALYSIS OF THE PROVINCIAL SPHERE

2.3.1. The Northern Cape Provincial Growth and Development Strategy (2011):

The vision of the NC PGDS is *“Building a prosperous, sustainable growing provincial economy to eradicate poverty and improve social development for a caring society”*. It identifies the following sectors as areas of potential growth: (1) Agriculture and Agro-processing; (2) Fishing and Mari culture; (3) Mining and Mineral Processing; (4) Manufacturing; (5) Tourism; (6) Knowledge Economy; and (7) Energy. Of particular importance to PLM are the strategic

interventions in the agriculture sector outlined in the NC PGDS of which the key elements are: (1) Land reform and promotion of optimal and sustainable agricultural production; (2) Marketing support to improve market access by small holder farmers; (3) Promotion and support of agri-businesses and agro-processing; (4) Technology development and transfer; (5) Implementation of an integrated food security programme; and (6) The development of farm workers and dwellers to enhance their livelihood and full participation in the sector (NC PGDS 2011:27). The NC PGDS (2011:59) also identifies the ‘Kimberley Food Corridor’, which runs from Hartswater, Jan Kempdorp through to Prieska *via* Hopetown and Douglas.

2.3.2. The Northern Cape Provincial Spatial Development Framework (2012):

The vision for the Northern Cape Provincial Spatial Development Framework (NC PSDF), as inspired by the Northern Cape Provincial Growth and Development Strategy, is *‘Enhancing our future’*. Accordingly, the PSDF responds and gives practical effect to the overarching objective stipulated in the Northern Cape PGDS, i.e. to ensure integration of development processes and, in particular, to facilitate sustainable development throughout the province. The NC PSDF uses the Bioregional Planning approach and sees Bioregional Planning as *“planning and land management that promote sustainable development by enhancing environmental integrity and human well-being through economic efficiency within a defined geographical area, the boundaries of which are determined in accordance with environmental, social and economic criteria”* (NC PSDF 2013:17).

According to the NC PSDF, municipal SDFs must be aligned to the PSDF and all land-use amendments have to conform to the PSDF. District Municipalities are responsible for detailed delimitation of bioregions in accordance with Toolkit D7, while Local Municipalities must delimit neighbourhood areas as fine-

grained planning units as outlined in Toolkit D8. In addition to this Local Municipalities must undertake detailed land-use classification in their municipal areas in accordance with the Spatial Planning Categories and Sub-Categories as outlined in the Toolkit C1 and Chapter C1 of the NCPSDF (NC PSDF 2012:168). To a large extent, the LMs are dependent on the DMs to delimit the bio-regions in which the neighbourhood areas are to be determined, thus close collaboration with the Frances Baard District Municipality is crucial.

Specific areas of concern in delimiting these bioregions and neighbourhood areas are areas in the north of PLM where settlements cross the provincial boundary to the North West. These areas would probably, in accordance with bioregional planning, have to be included in the bioregions and neighbourhood areas of the NC, thus the cooperation of the North West Province will be needed. According to the NC PSDF these anomalies are to be addressed through “detailed inquiry and rectified through cooperative agreements of delineation of the border at the level of the municipal SDFs” (NC PSDF 2012: 90), the Department of Cooperative Governance, Human Settlements and Traditional Affairs are identified as the responsible institution for this initiative.

Key strategies as identified in the NCPSDF that have a bearing on the PLM SDF are:

- The N18 as a regional linkage, linking the NC to the North West and Western Cape provinces;
- The Spatial Plan for Spatial Category C (Agriculture) identifies the western section of PLM as an area for ‘Potential Intensive Irrigated Agriculture’ and the eastern section of PLM as ‘Non-arable, moderate potential grazing’ (NC PSDF 2012: 106-110)
- According to the Settlement Investment Typology the main towns in PLM are classified as (NC PSDF 2012: 111-132):
 1. *Hartswater*: High Development Potential/Low Human Development Need (Category 4 Investment Type = infrastructure, basic services and social capital);

2. *Jan Kempdorp*: High Development Potential/High Human Development Need (Category 4 Investment Type = infrastructure, basic services and social capital);
 3. *Pampierstad*: High Development Potential/High Human Development Needs (Category 4 Investment Type = infrastructure, basic services and social capital);
 4. *Category 3 to 6 towns* are as a whole classified as ‘Low Priority Areas’ for investment and infrastructure development according to the NCPSDF;
- The Spatial Plan for Spatial Category E (Industrial Areas) states that Hartswater, Jan Kempdorp and Pampierstad have development potential for ‘Agricultural Industry’ such as silos, wine cellars and packing facilities (excluding abattoirs) (NC PSDF 2012:137 - 237); and
 - The PLM is identified as an area for ‘Possible Wind Energy Generation’ (NC PSDF 2012: 148)

In the *local sphere* it is (1) the Frances Baard IDP, SDF, Environmental Management Framework, Integrated Transport Plan and Tourism Plan; and (2) the PLM IDP, SDBIP and Local Economic Development Plan.

2.4 ANALYSIS OF THE LOCAL GOVERNMENT SPHERE

2.4.1 The Frances Baard District Municipality Spatial Development Framework (Currently under Review)

The vision of the FBDM is “*To be a municipality with a clear development focus to improve the quality of life of all communities in the district*”. According to the FBDM SDF, in the case of the PLM: (1) Irrigation agriculture and agro-industries are to be supported; (2) The long term negative impact of irrigation farming of soils are to be studied, remedies developed and long term utilization of such land to be planned; (3) Land for urban expansion is very limited; (4) Unique tree lanes occur and need protection and utilization for tourism; (5) Location on primary routes is an advantage; and (6) Consistency of water supply is a problem. The FBDM SDF makes use of the Development

Typology as outlined in the NC PSDF above to determine investment in the settlements in PLM.

The following development objectives are formulated for Phokwane:

Spatial development:

- Promote a compact urban structure through urban infill and densification;
- Create a logical hierarchy of settlements to support effective service delivery; and
- Create an urban edge to contain urban sprawl.

Housing:

- Identify sufficient land for future housing development;
- Quantify housing backlogs and future needs;
- Locate new housing development within a rationale urban structure and urban development boundary to ensure sustainable development; and
- Enhance Nodal viability through development of housing in strategic locations.

The FBDM SDF proposes urban edges and land for housing development that has been incorporated into the current version of the PLM SDF. In addition to this, it (1) identifies the N18 as a Development Corridor, (2) proposes the further development of Hartswater as Agro-industrial Centre, and (3) proposes river-based tourism along the Hartsriver (see **Figure 3**).

2.4.2 The Magareng Local Municipality Spatial Development Framework (2008)

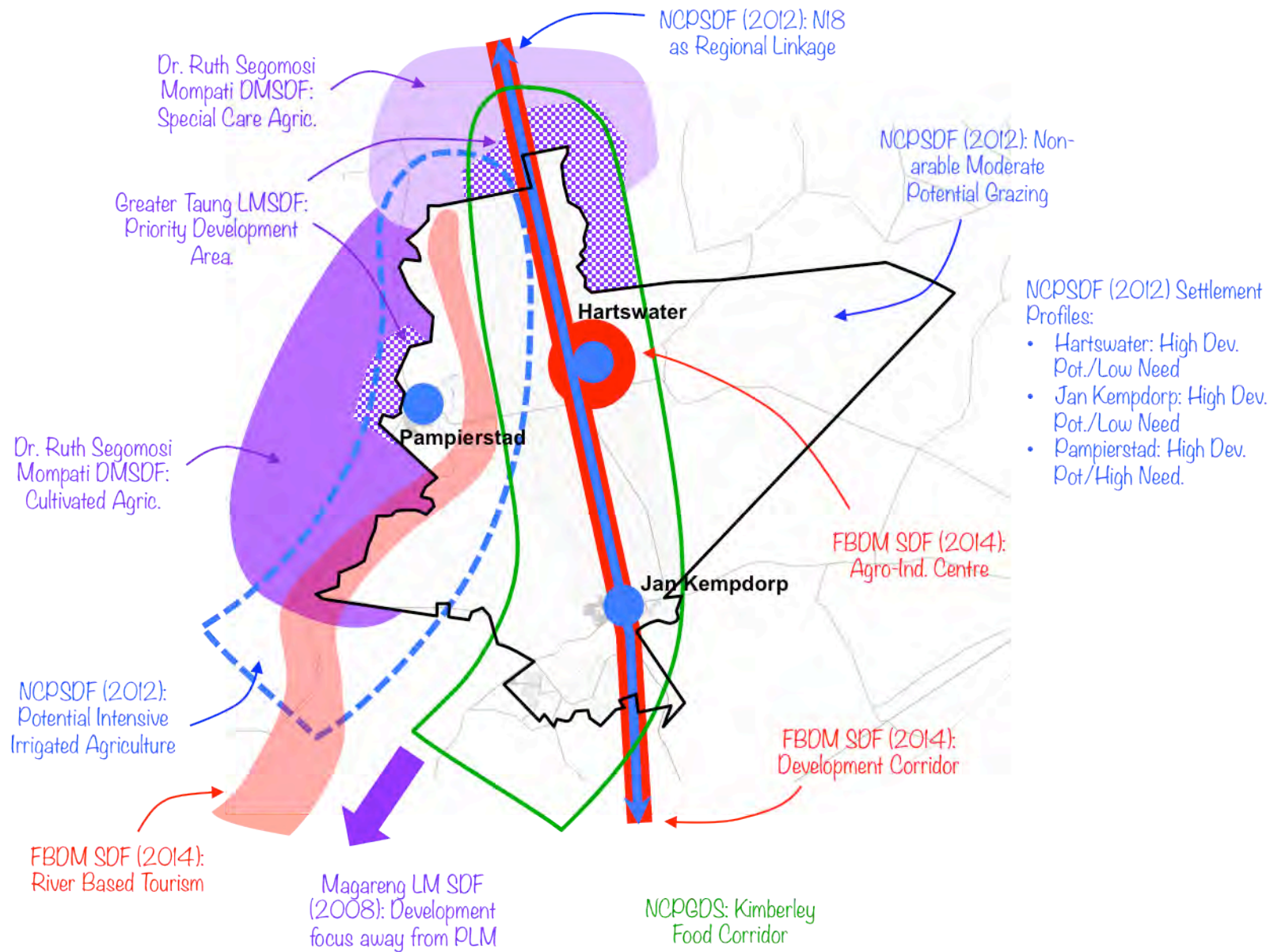
The vision of MLM is “to be an effective, efficient, accountable and sustainable local municipality”. According to the MLM IDP (2013/14:17) the MLM SDF aims

to direct medium to long-term development in the municipality towards the northwest, away from PLM. No reference is made in the IDP to the Vaalharts Irrigation Scheme but the effective management of the scheme is of the utmost importance as it crosses the border between PLM and MLM.

2.4.3 The North West Province Spatial Planning Implications

The PLM is bordered to the west, north and south by the Dr Ruth Segomotsi Mompati District Municipality, with the Greater Taung Local Municipality to the north and west and the Taung-Lekwa Teema Local Municipality to the east. According to the Dr Ruth Segomotsi Mompati DM SDF, the land directly to the north of PLM is identified as ‘*Special Care Agricultural Land*’, and the land to the west as ‘*Cultivated Agriculture*’. In more detail, the Greater Taung LM SDF identifies the settlements directly to the west and north of Pampierstad falling in the Greater Taung LM as ‘*Priority Development Areas*’. The same applies to the settlements to the north of Hartswater. It is important that the development of these settlements happens through cooperation between the PLM and the Greater Taung LM to ensure that no important agricultural land is lost. The majority of the land bordering the PLM is classified as land where intensive agriculture (irrigated) can possibly be extended and where a Veldcare Programme is to be implemented. Lastly the Greater Taung LM SDF proposes that the undeveloped land directly to the north of Hartswater inside the Greater Taung border be demarcated as a conservation area, but this is dependent on further investigation. Cooperation between PLM and the Greater Taung LM will be crucial for such an initiative. (The North West Provincial Growth and Development Strategy is not available on the Internet.)

Figure 3: Schematic Representation of Relevant Provincial, District and border Municipalities



2.5 SECTOR PLANS

Due to (1) the lack of response by Northern Cape Provincial Government sector departments (except for the Department of Water Affairs) to requests from the service provider for inputs into the PLM SDF, and (2) the unavailability of sector plans and strategies on the Internet, this section is based on the PLM IDP Review 2013/14 and supplemented by additional documentation, as and where available.

Table 1: Status of Sector Plans applicable to PLM (IDP Review 2012/13:60)

SECTOR PLANS	YEAR OF ADOPTION	CURRENT STATUS
Integrated Waste Management Plan	2011	Need to Review
Integrated Transport Plan	2003 (under review process)	FBDM- Incorporated
Disaster Management Plan	2006	FBDM-Incorporated
Spatial Development Framework	2008	Need to Review
Local Economic Development Plan	2004	Currently under review with Department of Economic Affairs and Tourism 2012/13
Housing Sector Plan	Not adopted	In the process of being drafted by FBDM 2012/13
Housing Charter and sector plan	In Process	FBDM-Incorporated
Water Services Development Plan	2008	2 nd Draft Released
Integrated Environmental Management Plan	2004	FBDM-Incorporated
Air Quality Management Plan	2011	FBDM-Incorporated

SECTOR PLANS	YEAR OF ADOPTION	CURRENT STATUS
Environmental Management Framework	2011	FBDM-Incorporated
Integrated Waste Management Plan	2011	FBDM-Incorporated
Crisis Communication Plan	2010	FBDM-Incorporated
HIV/AIDS Programme	2010	FBDM-Incorporated
District Growth and Development Strategy (DGDS)	2007	FBDM-Incorporated
Implementation Plan of the DGDS	2009	FBDM-Incorporated
Tourism Strategy	2009	FBDM-Incorporated
LED Strategy: Khulis Umnotho	2009	FBDM-Incorporated
The Investment and Marketing Strategy	2009	FBDM-Incorporated

Integrated Waste Management Plan

The Integrated Waste Management Plan was prepared in 2010 as a review and update of the IWMP completed and adopted in July 2004. The reviewed IWMP reflect on previous status quo and objectives set, as well as current conditions, limitation and challenges currently experienced by the local municipalities. Furthermore the document reflects on the current legislation, policies and statements that could affect waste management in the Frances Baard District Municipality. The purpose of the IWMP is to optimize waste management in order to maximize efficiency and minimize the associated environmental impacts of waste generation and financial costs of waste disposal and to improve the quality of life of inhabitants of the District.

Integrated Transport Plan (2003)

The DITP expresses a vision for a better transportation system for the District in the future, and provides a transitional plan to achieve the desired objectives by that date as provided for in the programme. With the help of a partnership between the three spheres of government, the private sector and civil society, this vision and programme for a safe, well-regulated, accessible and affordable integrated transport system that serves the needs of both users and operators can become a reality in Frances Baard District Municipality. The plans, projects and programmes outlined in the DITP document for the 2011 to 2016-planning period are comprehensive and far-reaching, requiring commitment and vision. The upgrading of all forms of transport and particularly the transformation of the public transport system in the Frances Baard District Municipality is the key to delivery in a series of other important areas of the District's development and economy according to the vision of the District's Integrated Development Plan.

Disaster Management Plan (2012)

The main purpose of the Disaster Management Plan (DMP) is to implement appropriate disaster risk reduction measures to reduce the vulnerability of communities and infrastructure at risk. The DMP was prepared in 2006 and the review of the document was prepared in 2012. The Key Performance Areas of the Disaster Management Plan are (1) Ensuring Institutional Capacity for Disaster Risk Management; (2) Disaster Risk Reduction which addresses the need for disaster risk assessment and monitoring to set priorities, guide risk reduction action and monitor the effectiveness of our efforts; (3) Disaster Management Planning and Implementation which addresses requirements for disaster management planning within provincial and municipal spheres of government, it also gives particular attention to the planning for and integration of the core risk reduction principles of prevention and mitigation into on-going programmes and initiatives; and (4) Disaster Response and Recovery focuses on preparedness of an area for disasters, rapid and effective response to disasters and post-disaster recovery and rehabilitation. According

to the Disaster Management Plan the following wards in the PLM has a high priority for mitigation: 6,3,7,8 and 9 and emergency services in the PLM must do the necessary preparations to respond to fire, floods, road accidents and hazmat accidents.

Frances Baard District Municipality Tourism Strategy (2009)

The Tourism Strategy was prepared in 2009, to optimally co-ordinate, manage and develop the District's tourism sector as a vibrant tourism destination that facilitates sustainable economic growth, environment and social benefit within the district. In order to position the District as a preferred tourism destination, the implementation framework intends on increasing the market share and tourism volumes through marketing promotion and branding; improving the geographic spread and tourist vacation through product, service and infrastructure development, which are just 2 of the 5 implementation programmes envisioned by 2015. According to the Frances Baard District Municipality Tourism Strategy (FBDMTS, 2009) PLM is ideal for the development of a 'farm tour and farm stay' industry where tourists can experience authentic farm life. It also identified the following tourist attractions that assist and could be incorporated into such an initiative: (1) Vaalharts Valley; (2) Burial Sites; (3) Hartswater wine cellar; (4) Vaalharts Museum in Jan Kempdorp; (5) Ganspan Waterfowl; (6) Poplar lane; (7) Magong gong show – ground nuts, olives and pecan nuts in summer; (8) Olives production with the Olive factory; (9) Closeness to Taung Heritage Site; (10) Agricultural activities and research; and (11) The Woman's Memorial.

LED Strategy: Khulis' Umnotho (2009)

The LED Strategy was prepared in 2009 with the purpose of formulating a strategic implementation document which highlights the situational (demographic, socio-economic and economic) trends, intervention programmes to address developmental challenges and emphasizes opportunities available to broaden the economic base of the Frances Baard District Municipality. The Khulis' Umnotho Strategy intends to address the

creation of employment opportunities, alleviate poverty and enable the facilitation of a conducive environment for investment and business development which subsequently results in positive spin-off effects that boosts the economy of the FBDM. The key thrusts of the strategy are: (1) The improvement of institutional capacity through learnership programmes, the establishment of a functional LED Forum, the implementation of an Economic Information System and meeting the service backlogs; (2) Agricultural Sector development through goat farming, game breeding, vegetable and fruit processing, field crop processing, meat processing and researching new products; (3) Manufacturing and Industry development through fruit and vegetable processing, field crop processing, meat processing, a tannery plan, a chips factory, the packing and distribution of products and the expansion of the manufacturing sector; (4) Mining Sector development through mining beneficiation and the formalisation of Pebble Mining; (5) SMME development through central freezing and cold storage transport, BPO&O Destination, SMME database and support programmes, the formation of a Business Support Network, skills training facilities and the Industrial Development Strategy; (6) Tourism development through mining tourism, eco-tourism, game viewing and trophy hunting, adventure tourism, the expansion of the hospitality industry and the use of a Tourism Marketing Strategy; and (7) Quality of Life improvement with a specific focus on the Expanded Public Works Programme and the improvement of service delivery in the district municipality.

Water Services Development Plan (2003)

The Water Services Development Plan (WSDP) was prepared in 2003, to ensure a holistic approach to water sector planning at the municipal level. The Department of Water and Forestry is assisting the district to continually review the plan.

Reconciliation Strategy for all Towns in the Central Region of the FBDM (2009)

According to the Reconciliation Strategy for the Pampierstad Town Area in PLM in the Lower Vaal WMA:

- The current water-use in the Pampierstad Town Area is estimated at 1.719 million m³/annum (4.70MI/day) and it is projected to increase to 1.967 million m³/annum (5.39 MI/day by 2030). (This includes the supply to industrial/commercial consumers but excludes water losses);
- The current water loss within the system is 47% for Pampierstad;
- The area has a high amount of unmetered connections, thus meters must be installed at these stands urgently to lower the amount of unaccounted for water in the system; and
- The WSA must implement a water conservation/demand management plan in order to establish baseline-data for accurate WC/DM projections as well as to reduce water losses within the reticulation system.

According to the Reconciliation Strategy for the Jan Kempdorp Town Area in PLM in the Lower Vaal WMA:

- The current water requirements of the Jan Kempdorp Town area is estimated at 1.460 million m³/annum (4.000 MI/day) and projected to grow to 2.675 million m³/annum (7.329 MI/day);
- Jan Kempdorp already exceeds the maximum contracted raw water abstraction of 882 000 m³/year (2.42 MI/day) by approximately 1.58 MI/day; and
- The PLM should apply strict WCDM measures to lower the amount of unaccounted- for-water in the area.

According to the Reconciliation Strategy for the Hartswater Town Area in PLM in the Lower Vaal WMA:

- The current water requirements for the town of Hartswater is estimated at 0.012 million m³/annum (3.250 MI/day) and projected to increase to 2.730 million m³/annum (7.480 MI/day);
- Hartswater already exceeds the maximum contracted raw water abstraction of 950 000 m³/year by 0,65 MI/day (0.236 m³/year); and
- The PLM needs to implement WCDM measures to reduce the amount of unaccounted for water in the area.

Environmental Management Framework (2010)

The Environmental Management Framework was prepared in 2010 and is incorporated with the Integrated Environment Plan, which was adopted in 2004. The EMF was prepared to identify areas of natural resource importance, ecological sensitivity and other biophysical environments within the District as well as revealing where specific land uses may best be practiced and to offer performance standards for maintaining appropriate use of such land. The Framework intends to proactively identify areas of potential conflict between development proposals and critical/sensitive environments and to bridge the divide between development planning and environmental considerations by integrating environmental opportunities, constraints and critical resource management issues into land use and development endeavors.

Air Quality Management Plan (2011)

The Air Quality Management Plan was prepared and adopted in 2011. The focus of the plan is to ensure the management and operation of ambient monitoring networks (if required), the licensing of listed activities, and the development of emission reduction strategies to ensure air quality. The plan intends to protect the environment and human health through reasonable measures of air pollution control.

Crisis Communication Plan (2010)

The Crisis Communication Plan was prepared in 2010, and is aligned with Disaster Management Plan. The Plan focuses on effective and efficient crisis

handling and management. The Plan also encourages community participation in governance and addresses the role of Frances Baard District Municipality and the identified task team in collecting information and conveying accurate and timely information to all internal and external stakeholders when confronted with an incident or crisis.

HIV/Aids Strategic Plan (2010)

The District HIV/Aids Programme was prepared in 2010 to support the Frances Baard District through a consultative process of defining local needs and vulnerabilities and channeling resources and energies through the development and implementation of an evidence-based HIV prevention programming at district level. The plan presents a useful opportunity to review existing HIV strategies, including strategies for resource allocation, mobilization and tracking, to ensure that essential HIV preventing measures are funded and implemented where they are most needed in order to slow down the transmission of new HIV-infections and to minimize the drivers of the epidemic in the France Baard District.

The Investment and Marketing Plan (2009)

The Investment and Marketing Plan was prepared in 2009 with the aim of developing an implementation plan with marketing information and investment opportunities for potential investors that can be utilized by Frances Baard District Municipality (DM) and the Local Municipalities (LMs) in its area of jurisdiction to entice investors to do business in the area. The plan provides information on the socio-economy, highlights the strategic economic growth sectors and business opportunities, provides information on the support structures and associations, as well as essential contacts for doing business in FBDM.

CHAPTER 3:

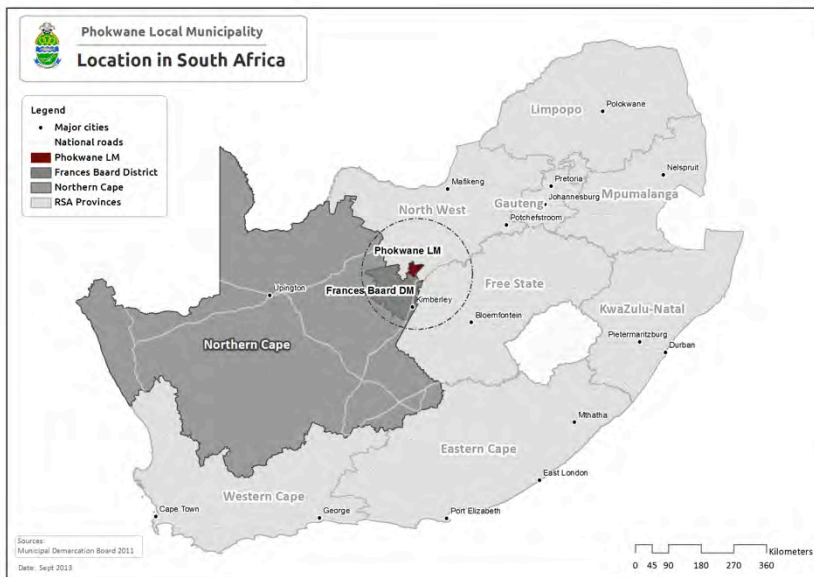
STATUS QUO



3.1 INTRODUCTION

The PLM is *located* in the north-eastern corner of the Northern Cape Province, in the centre of the country on the N12, which later becomes the N18, and which connects Kimberley to Johannesburg. In terms of *municipal administrative boundaries*, it is located in the Frances Baard DM (FBDM), and borders on (1) the Magareng LM in the FBDM, and (2) the Greater Taung LM, located in the Dr Ruth Segomotsi DM in the North West Province.

Map 1: Location of PLM in South Africa



Hundreds of thousands of years ago, the municipal area in which the current-day Phokwane LM is located was home to very early hunter-gatherer groups, to which the 500 000-year old Taung Skull bears testament. Later, it became the hunting ground of small nomadic groups of San people, followed in turn by larger groups of Tswana and Korana herders. The arrival of white settlers from

the Cape Colony in the second half of the Nineteenth Century heralded an era of tension and conflict, resulting in the gradual expulsion of the Tswana and the Korana from the area, and the establishment of large white cattle farms. The discovery of diamonds in Griqualand West in the 1860s, and the subsequent arrival of significant numbers of fortune-seekers in the region, brought further change to the area, as the mining activities in Kimberley created a need for a stable food supply. This led to Cecil John Rhodes establishing an irrigation scheme roughly 70 kilometers from Kimberley (the current-day town of Warrenton). At the same time, he identified the opportunity for creating a much larger irrigation scheme between the Vaal and the Harts Rivers on a flat plain north from this initial scheme. He also saw the area as becoming an important point on his envisaged Cape to Cairo railway route. The railway line that he eventually built between Kimberley and the current-day Zimbabwe would run right through the middle of what would become the Phokwane municipality with provision for stops at three stations in the area.

While the irrigation scheme that Cecil John Rhodes envisaged was already given the approval of the Cape Parliament in 1886, it would take nearly half a century to become a reality. While the Great South African War (1899-1902) contributed to this delay, the key inhibitor was the cost of the scheme. Eventually, however, (1) crippling droughts, (2) the 1929-Wall Street Crash and the onset of the Great Depression, and (3) the so-called 'Poor White Problem' provided the triggers for its resuscitation and construction in the 1930s. Together with the Loskop and Hereford Irrigation Schemes in the now Greater Sekhukhune District Municipality and the Boegoeberg Irrigation Scheme in the now Dr ZF Mgcawu District Municipality, the Vaalharts Scheme heralded an era of intense infrastructure-focused public works programmes in the country. Focused on both (1) the construction of dams and extensive canal systems, and (2) the establishment of irrigations schemes (through the removal of trees and rocks and the preparation of the soil), these schemes not only provided a

large number of 'Poor Whites' with a job, but also provided a sizeable number of these people with an opportunity to farm on the Schemes after completion.

Once the Vaalharts Scheme, the longest continuous irrigation scheme in the country and the second largest in the Southern Hemisphere, had outgrown its teething problems, the 1 280 farms in the scheme (each measuring 25.7 hectare in extent), became a highly productive farming area. Together with the scheme, government also established the towns of Jan Kempdorp and Hartswater, which became vibrant small towns in their lush green settings. The railway line running through the area also provided a strong link to both the current-day Gauteng Province and the port cities in the current-day Eastern and Western Cape Provinces.

With the advent of democracy in 1994, the Scheme, like the others in the country, was the sole prevail of white farmers. In the nearly two decades since then, very limited land reform has been undertaken in the Scheme, and also with limited success. Key reasons offered for this state of affairs are (1) the lack of state support post-settlement and (2) the difficulties associated with establishing a farm in what has become a highly competitive global economy. At the same time, farmers have steadily mechanized their operations in an attempt at remaining competitive in the difficult farming conditions. Farmers have also gravitated towards products that (1) fetch higher prices in international markets, (2) are more suitable to the local climatic and soil conditions, and (3) require small labour-inputs. These developments, together with a trend of farm workers and their families being relocated by farmers in the settlements of Pampierstad and Valspan, and to a lesser extent Ganspan, have resulted in the expansion of these settlements by temporary farm workers not familiar with town life and with limited means. This in turn has seen an increase in the indigent population in Phokwane, and a rapid growth of rural slum conditions in what is a very harsh climatic environment outside of the Scheme. This state of affairs has been aggravated further by significant in-movement of persons from primarily the North West Province in search of

employment on the farms. The shrinkage in the number of employment opportunities on the farms has not only increased, but has also not been absorbed by growth in other sectors, with especially the manufacturing activities in the towns of Hartswater and Jan Kempdorp experiencing a serious contraction over the last decade. Altogether, these developments have created a situation in which sizeable concentrations of people are living in haggard conditions on the margins of an intensive farming area, which is, despite its apparent greenery, increasingly also struggling to survive in an environment of (1) high and increasing input costs, and (2) a fluctuating and highly competitive global agricultural economy.

3.2 BIO-PHYSICAL CONDITIONS

3.2.1	Overview of the Bio-Physical Environment	p. 24
3.2.2	Geology and Soils	p. 26
3.2.3	Topography and Slope	p. 26
3.2.4	Climate	p. 26
3.2.5	Surface and Groundwater	p. 40
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3.2.7	Fauna and Flora	p. 49
3.2.8	Agriculture	p. 49
3.2.9	Environmental Challenges	p. 49

3.2.1 Overview of the Bio-Physical Environment

PLM is characterised by a relatively flat, semi-desert environment interspersed by a network of prospering green farms made possible by the extensive Vaalharts Irrigation Scheme constructed in the 1930s. High temperatures and low rainfall levels makes arable agriculture impossible without the irrigation system, with low intensity cattle farming or game farming the only alternative. Farming in PLM is mainly focussed on the production of maize, wheat, pecan nuts, barley, groundnuts, lucerne, vegetables and citrus with life-stock farming taking place on the smaller farms in the Ganspan, Pampierstad and Valspan areas.

The Hartsrivier is the only perennial river in PLM, running along its western border and together with the Vaal River it feeds the irrigation system. As a number four river order, the Hartsrivier is specifically vulnerable to upstream pollution, which if not managed could have decidedly detrimental impact on the agricultural economy. PLM has a medium level of useable groundwater exploitation potential but due to high temperatures, low rainfall, and high evaporation rates, the recharge of groundwater systems is problematic.

PLM is located in the Savannah Biome and in the Eastern Kalahari Bioregion, and with almost 70% of PLM made up of irrigated farming, no nature reserves are located in the municipality and insufficient information exist to effectively demarcate sensitive areas for fauna and flora.

Opportunities:

- Extension of the Vaalharts Irrigation System; and
- Beauty of the natural and agricultural environment.

Challenges:

- Climate change scenarios predict significant rises in temperatures in the Northern Cape which will have a decided impact on PLM due to its already limited water resources and high temperatures;
- Soil-salination due to intensive irrigation practices;
- Limited access to additional water sources;
- Soil pollution due to limited municipal refuse removal;
- Air pollution due to the air-spraying of pesticides, the use of wood for heating and cooking and the burning of illegal dumping sites; and
- Illegal fishing and swimming in the water canals which has resulted in a number of deaths of young children.



Irrigation Canals



Irrigated Agriculture



Livestock Farming



Pecan Nut Farming



Pollution through illegal dumping



Production of Livestock Feed

3.2.2 Geology and Soils

The western portion of Phokwane is covered by tillite, sandstone, mudrock and shale bedrock belonging to the Dwyka Formation, Karoo Supergroup. The central portion is underlain by andesite, dacite, conglomerate and shale bedrock belonging to the Rietgat Formation and by breccia, conglomerate and shale belonging to the Kameeldoorns Formation, both formations of the Platberg Group, Ventersdorp Supergroup. The entire eastern portion of the municipality is underlain by basalt and andesite bedrock belonging to the Allanridge Formation, Ventersdorp Supergroup (see **Map 2**). With regard to the mineral resources available for mining, PLM does not possess any significant deposits that can be exploited (see **Maps 3-4**).

The soils in the PLM are predominantly suited for grazing, with the area around the Vaal Harts Irrigation Scheme allowing for more intensive grazing. The soils in PLM is of generally of poor suitability for arable agriculture, but due to presence of the Vaal Harts Irrigation System agriculture is one of the main land uses (70,4%) in the PLM. A key concern with regards to the soil is the salination of the soils due to the intensive irrigation activities in the area. Another concern is the degradation of land in the North West Province, which is spreading across the border to PLM, specifically in the vicinity of Pampierstad and areas in the north-east (see **Maps 5-7**).

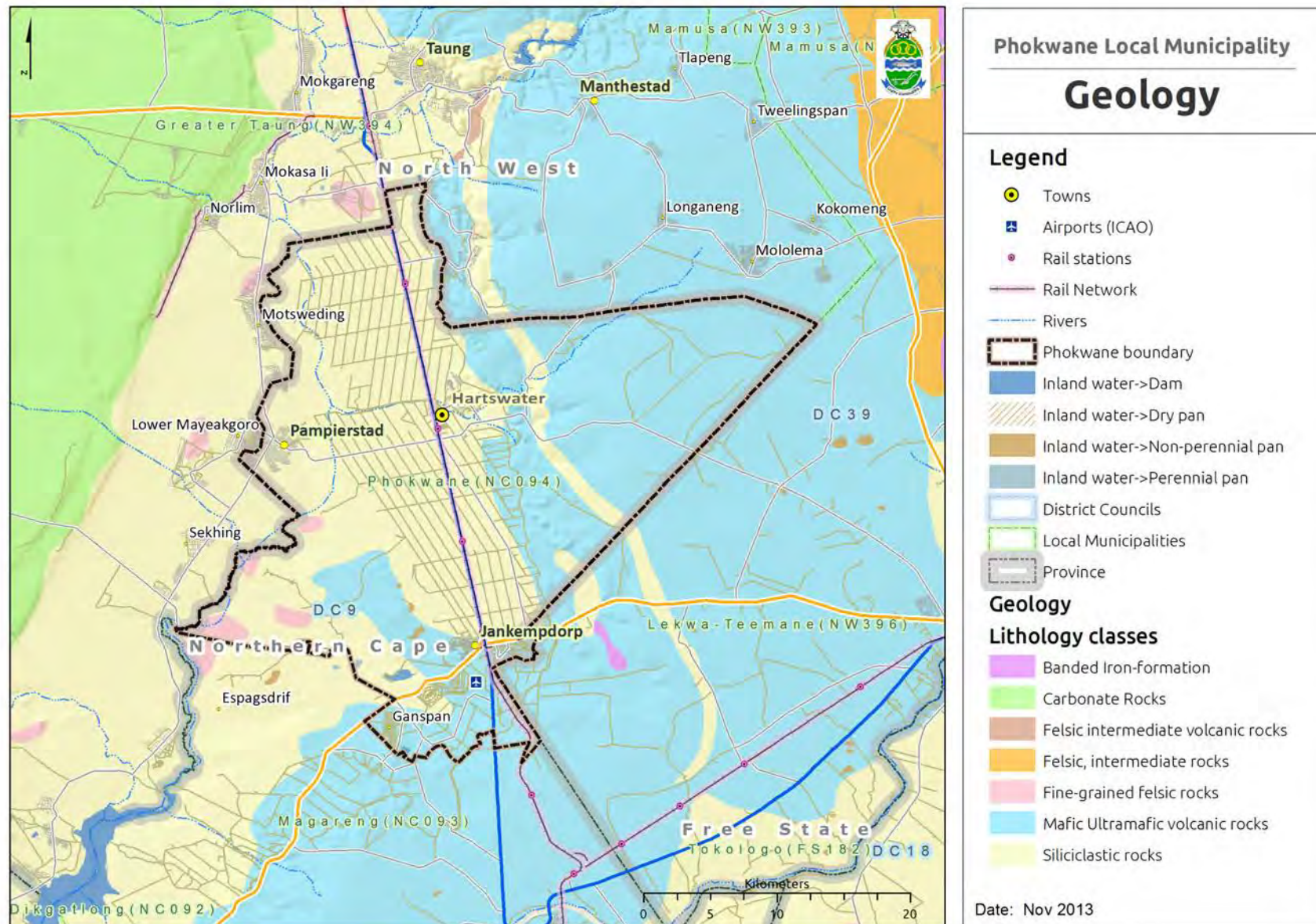
3.2.3 Topography and Slope

Largely regarded as 'flat', which was one of the key drivers in the original thoughts about establishing an irrigation scheme in the area in the late 1800s already, and the eventual development of the scheme in the 1930s. The only part of the PLM that is somewhat hilly (slopes of between 2 and 5% and in some cases between 5 and 8%), is in the western half of the municipality (see **Maps 8-9**).

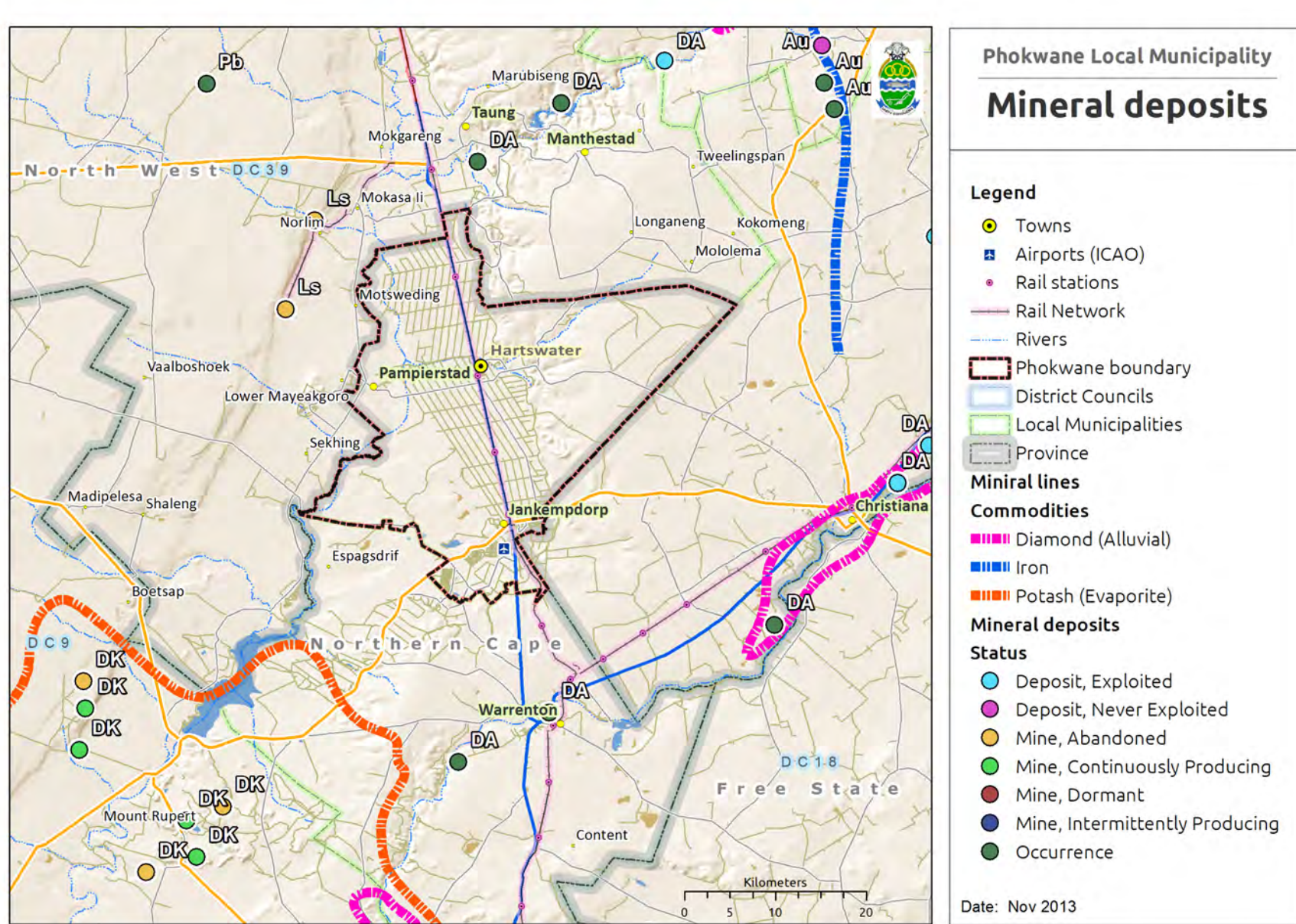
3.2.4 Climate

Marked by dry, semi-desert conditions, with average midday temperatures in the low 30 degrees C for at least six months of the year, and with high levels of solar radiation, which makes the area highly suitable for the generation of solar power. This is even possible in winter months, when the radiation is still high in terms of the national average. The rainfall is low; the average annual rainfall is between 401 and 600mm/annum (on average 450mm/annum), which is largely the same as the national average. Due to the rainfall falling predominantly in the summer months (with the highest rainfall between January and March), and in the form of short, often severe thunderstorms, evaporation is high and run-off quick, with little chance for rainwater to replenish the soil. Without the presence of the irrigation scheme, the area would have not been suitable for any other agricultural activity than low intensity cattle or game farming. Looking towards the future, the already high levels of solar radiation and low rainfall figures make the area highly vulnerable to even the smallest increases in temperature. With a number of climate change-scenarios predicting significant rises in temperature in the Northern Cape and North West Provinces, this does not bode well for the PLM (see **Maps 10-14**).

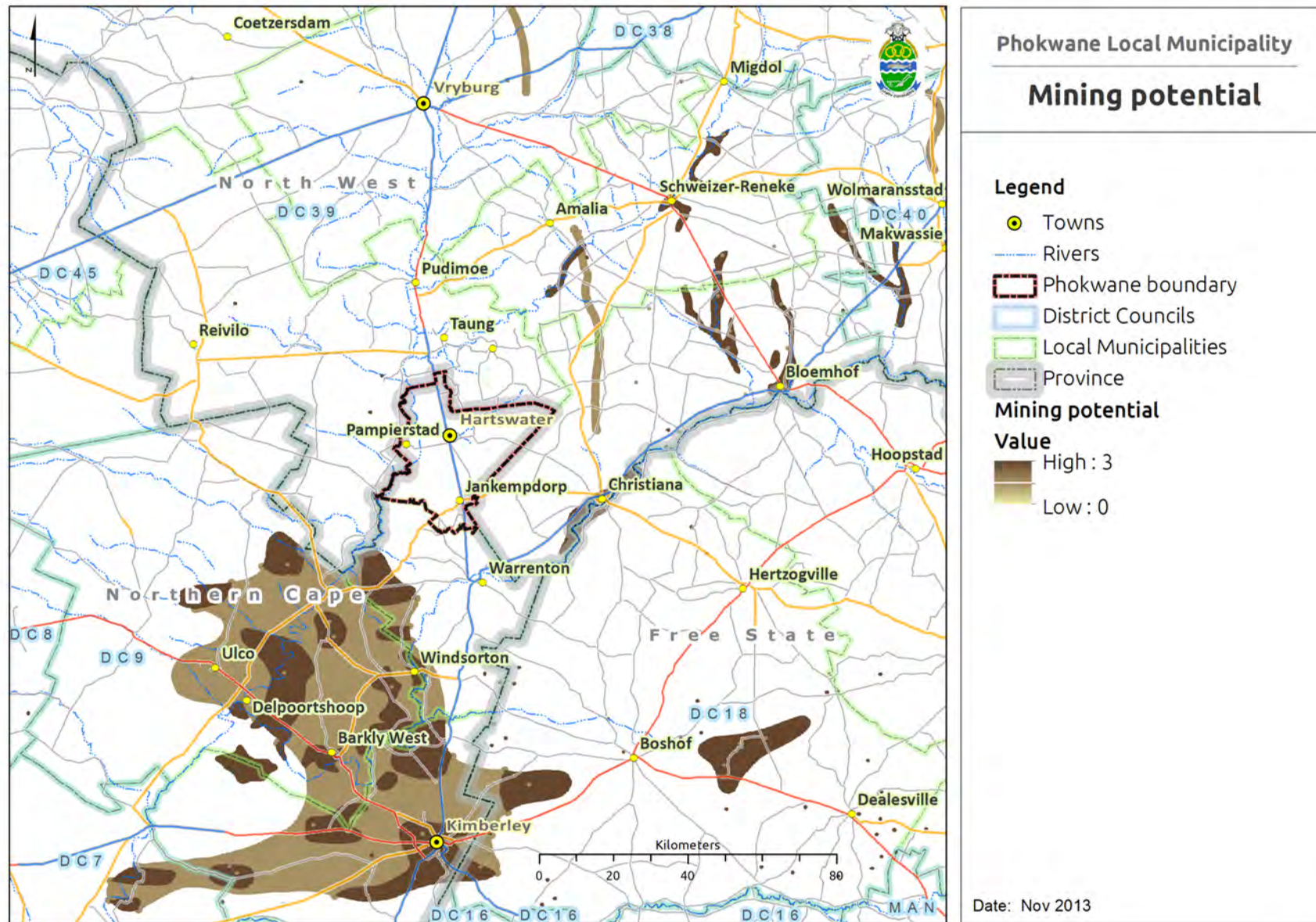
Map 2: Geology of PLM



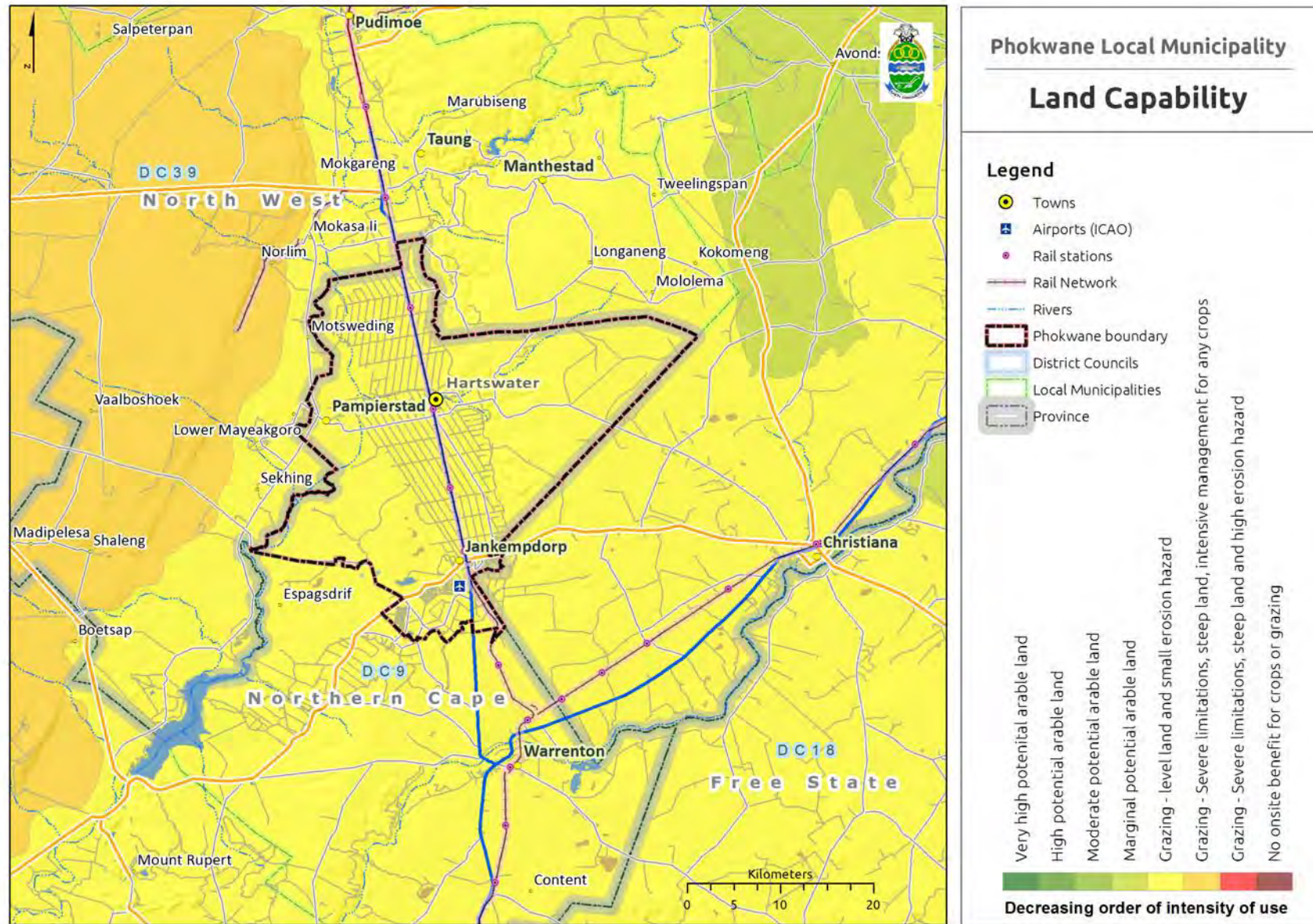
Map 3: PLM Mineral Deposits



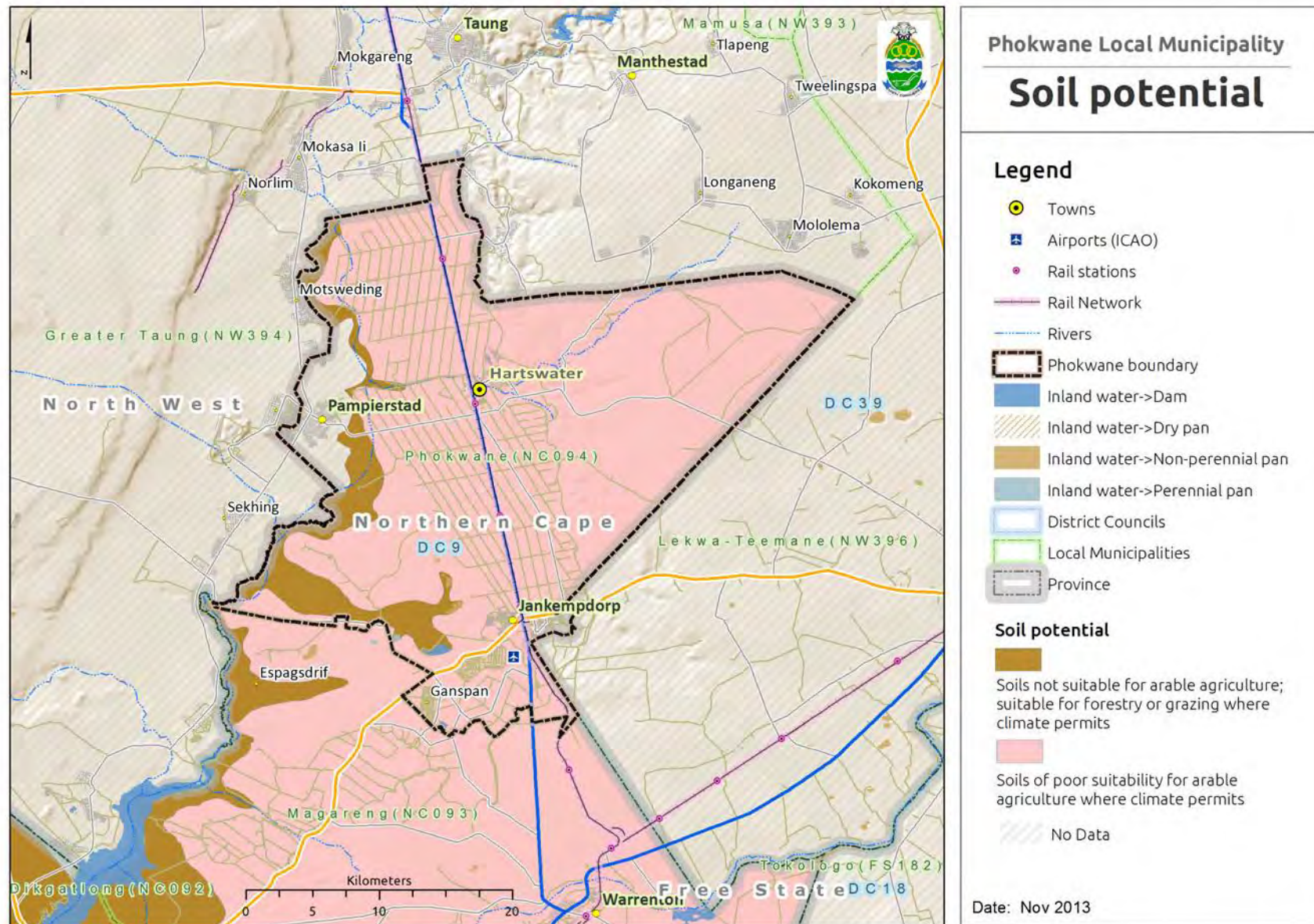
Map 4: PLM Mining Potential



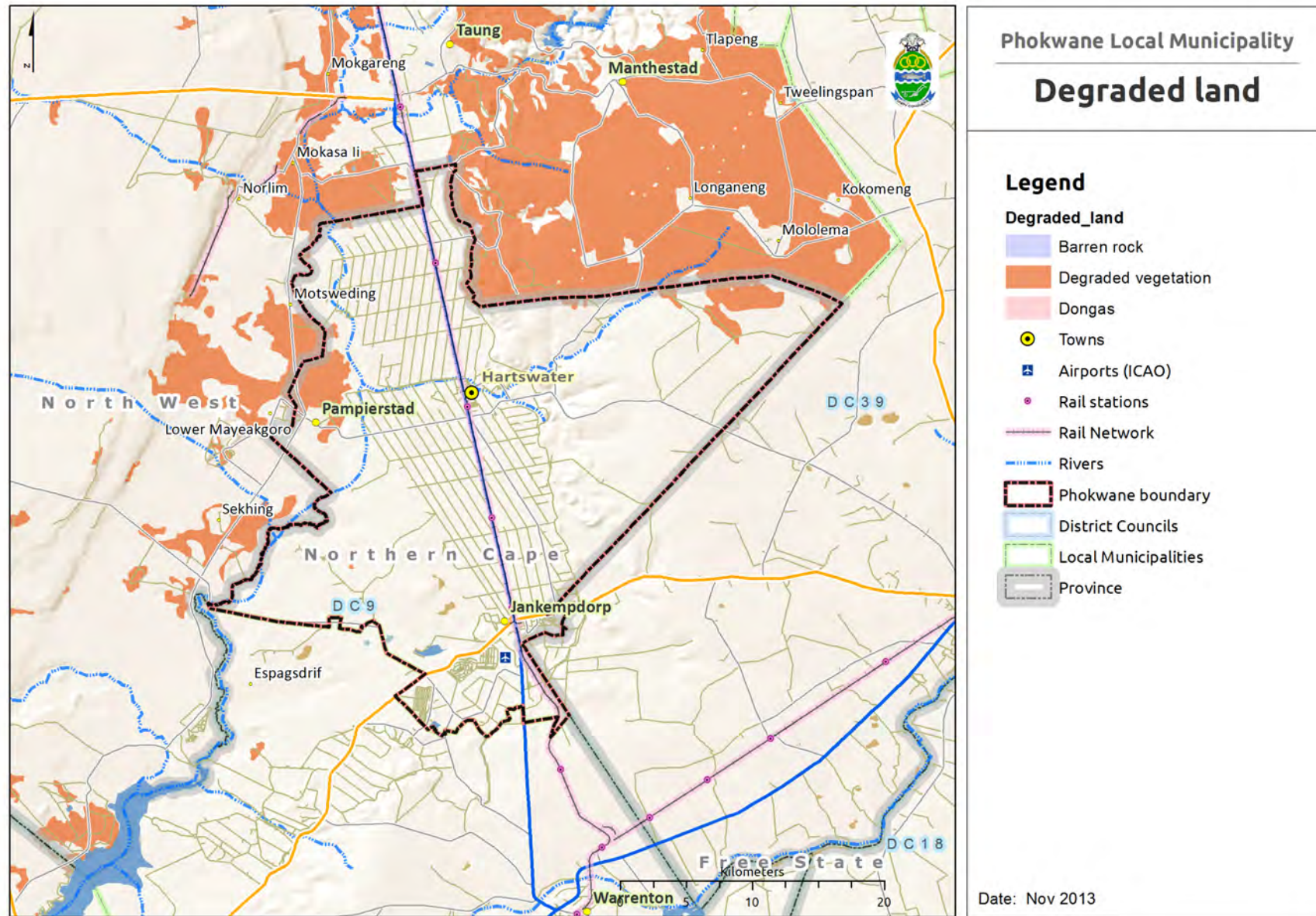
Map 5: PLM Land Capability



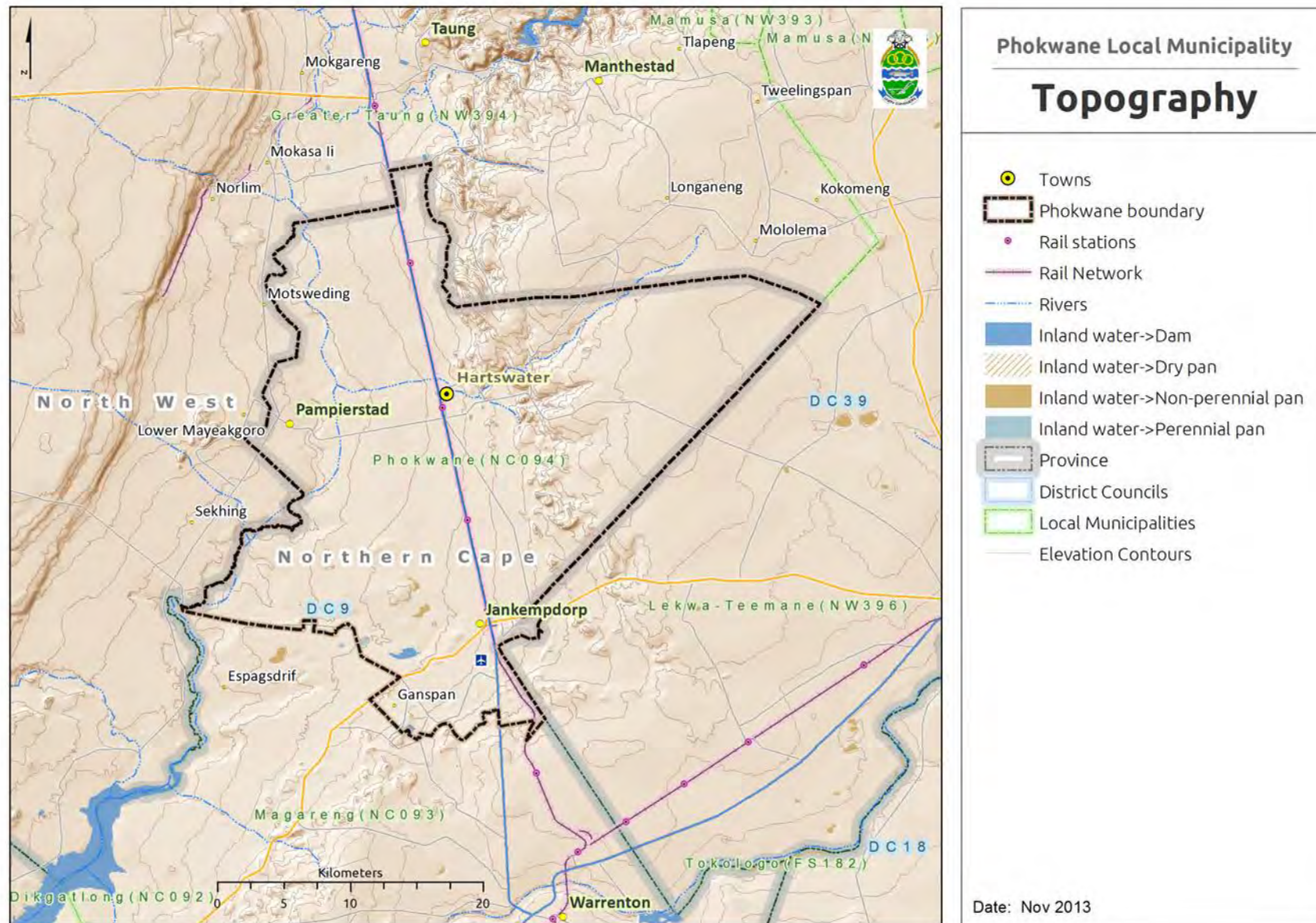
Map 6: PLM Soil Potential



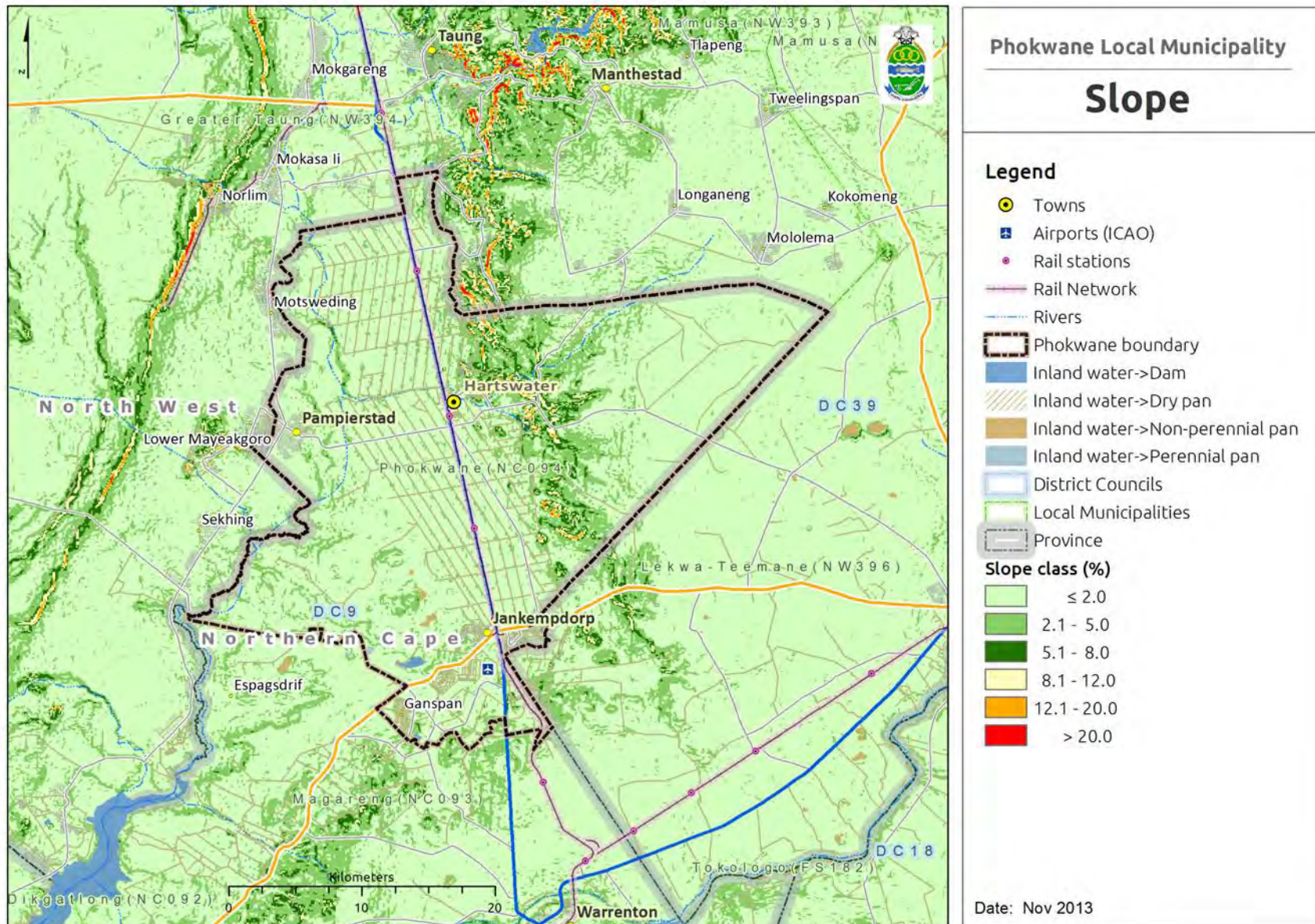
Map 7: PLM Degraded Land



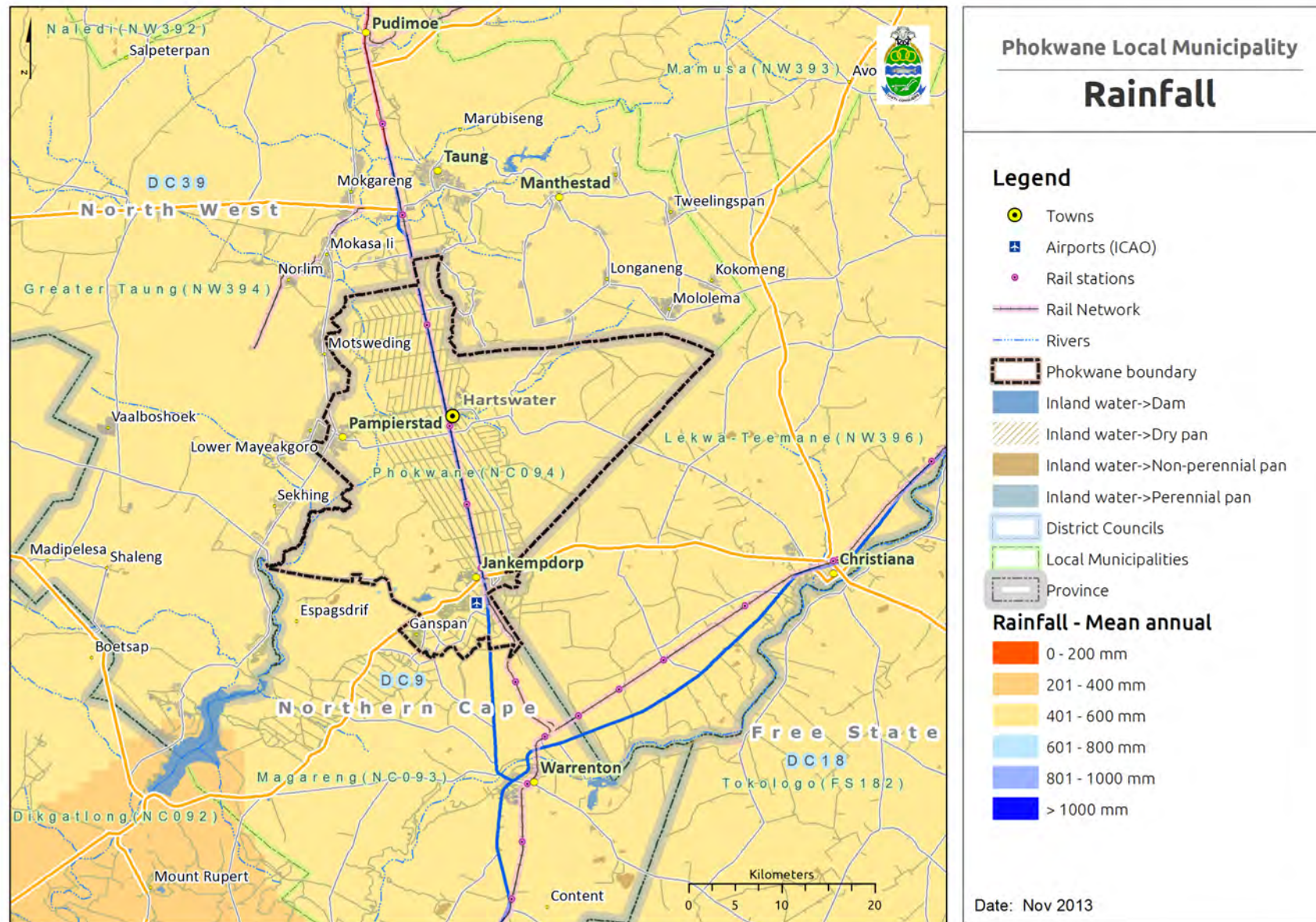
Map 8: PLM Topography



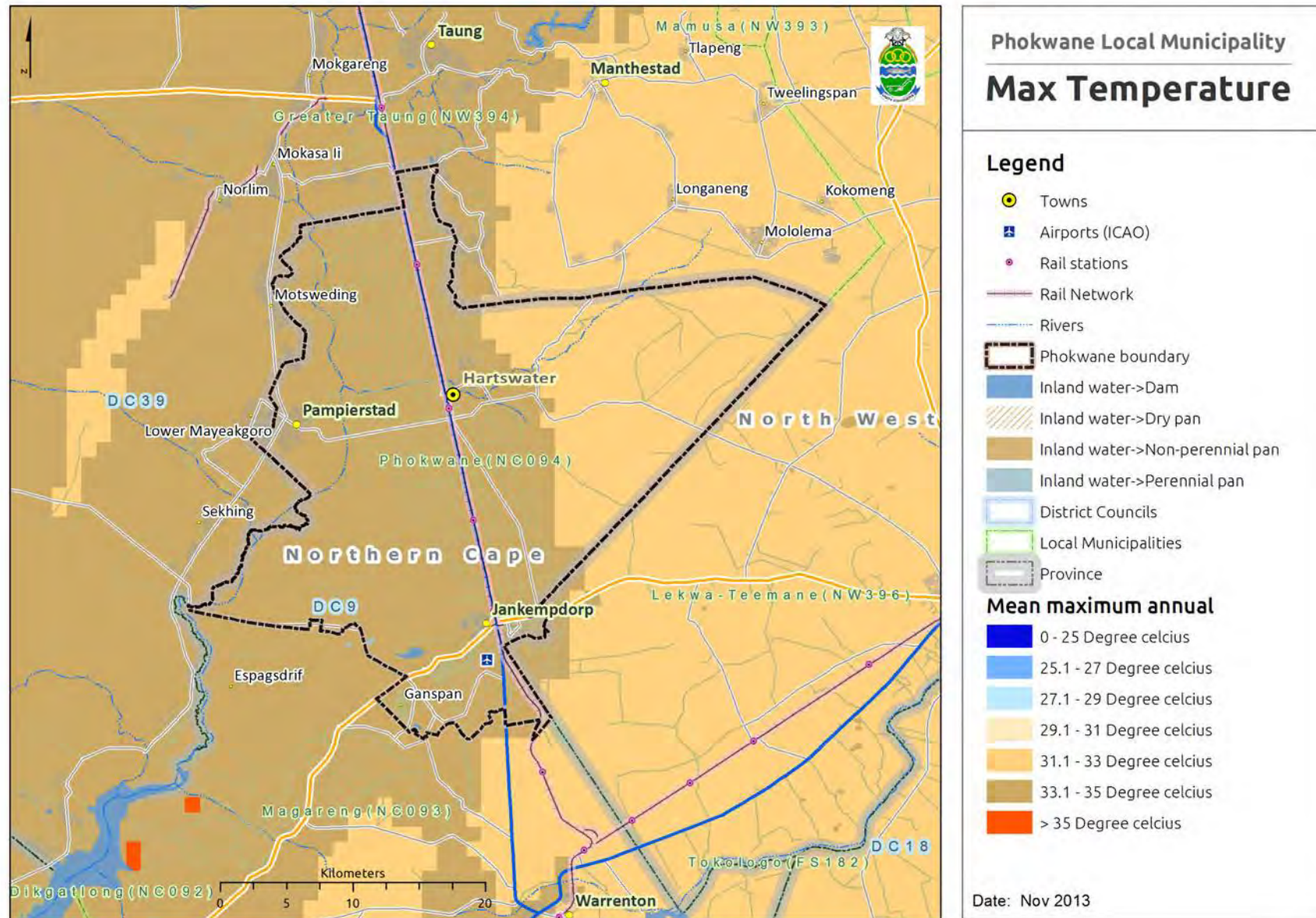
Map 9: PLM Slope



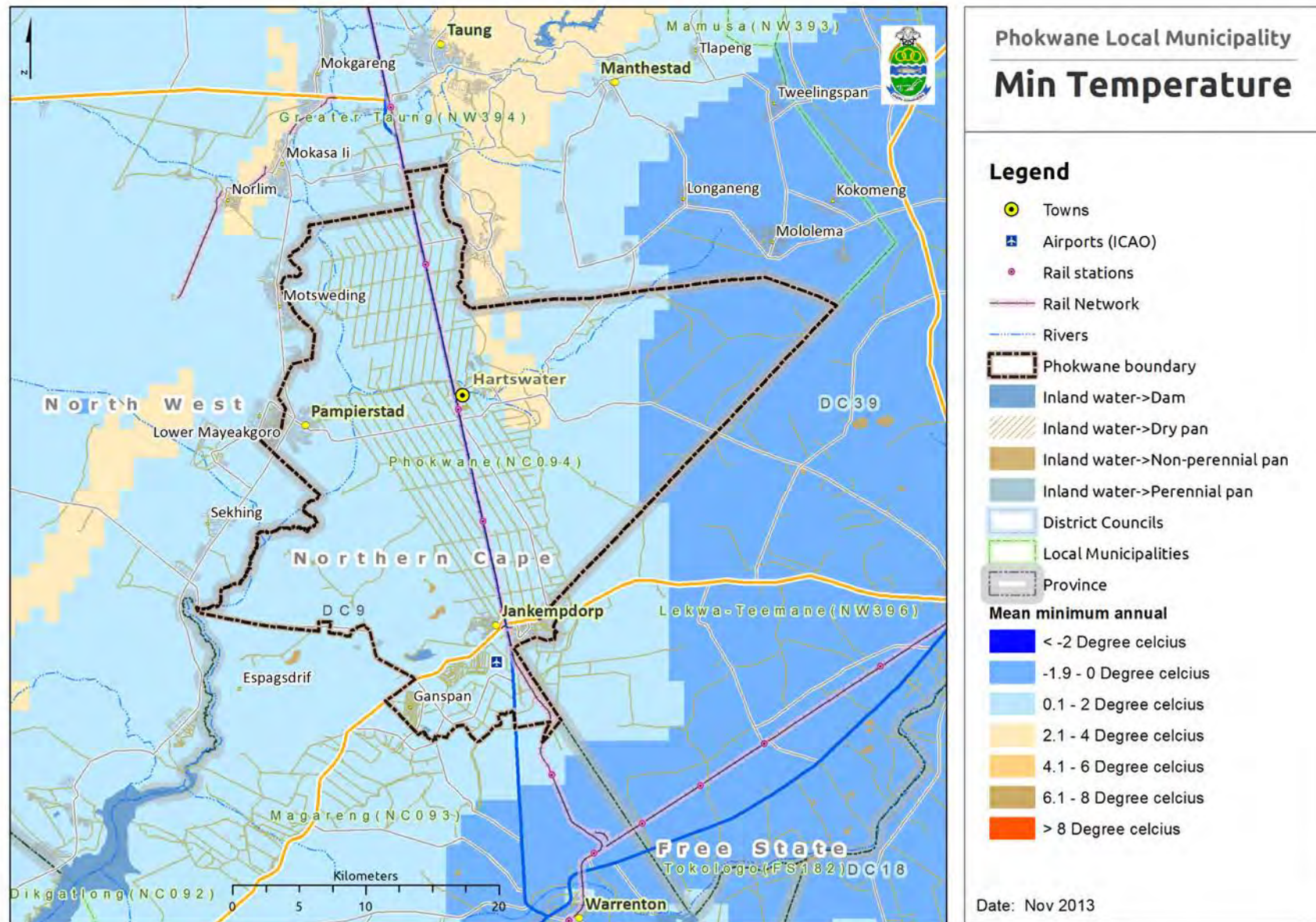
Map 10: PLM Mean Annual Rainfall



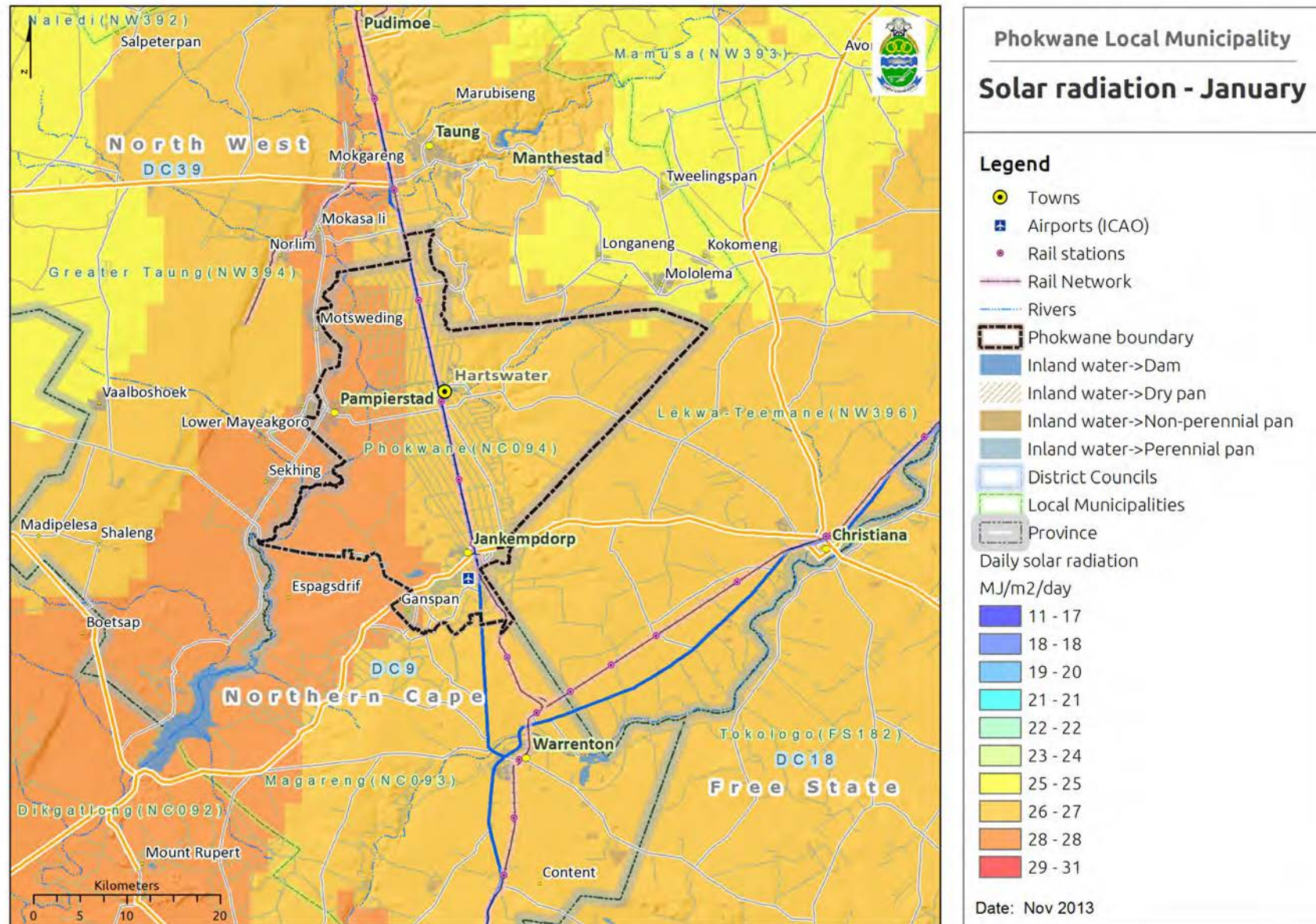
Map 11: PLM Mean Maximum Annual Temperature



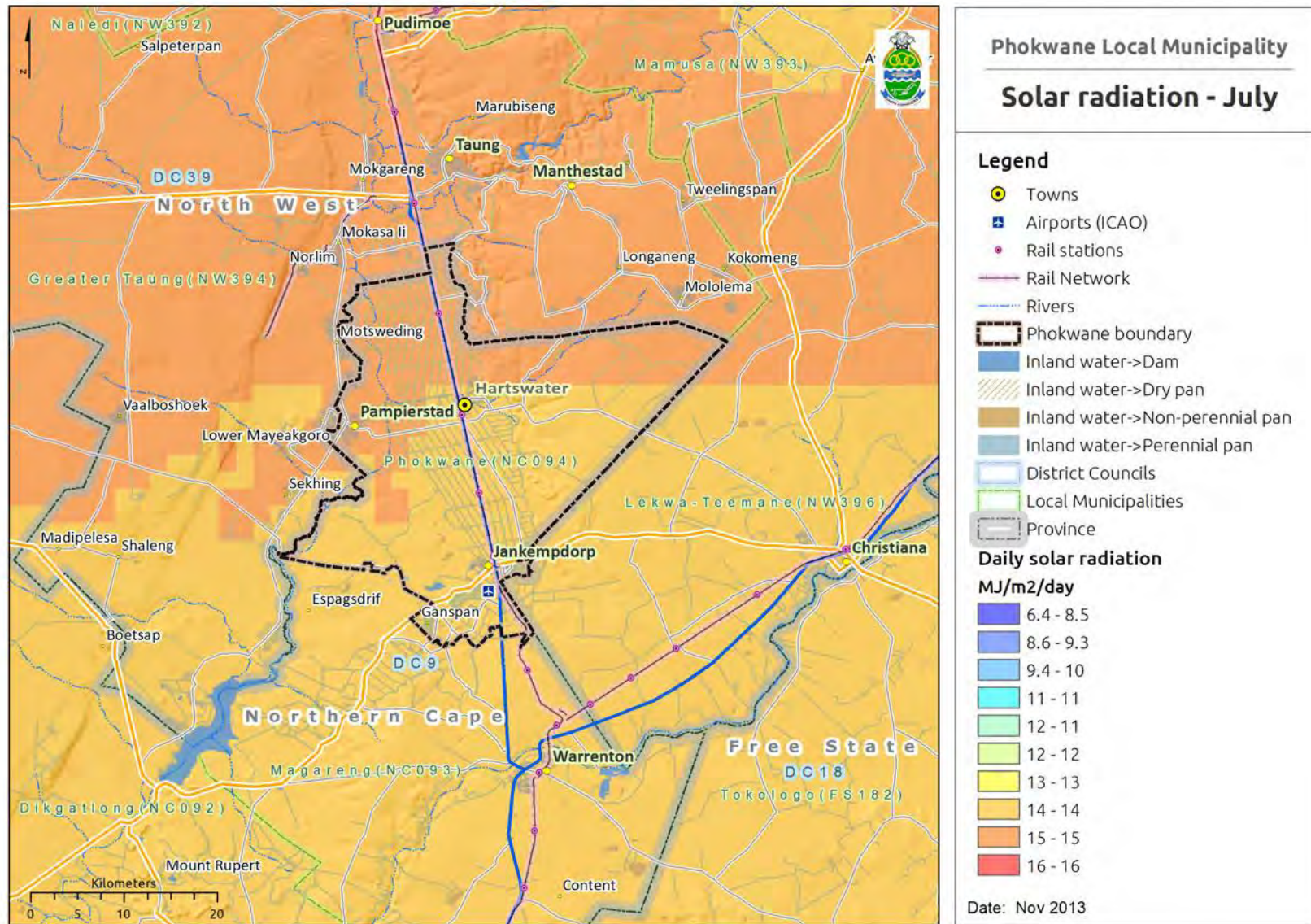
Map 12: PLM Mean Minimum Annual Temperature



Map 13: PLM Solar Radiation in January



Map 14: PLM Solar Radiation in July



3.2.5 Surface and Groundwater

The Harts River is the only perennial river that runs through PLM. Although the source of the Harts River is in the North West Province, the major part of the catchment (Quaternary Catchment C33A (15-27)) is located in the Northern Cape Province. The Harts River has a River Order of four (4), meaning that a rather large number of smaller tributaries run into the Harts River influencing the amount of sediment and type of life forms present in the river system, thus upstream activities might have a major impact on the quality of water present in the Hart River. A smaller non-perennial river runs through Hartwater and joins the larger Harts River in the west of PLM. The Harts River and the Vaal River feed the Vaalharts Irrigation Scheme without which farming in the arid conditions of PLM would basically be impossible. Access to, and maintenance of, the irrigation system is crucial for the continued development of the PLM (see **Maps 15-18**).

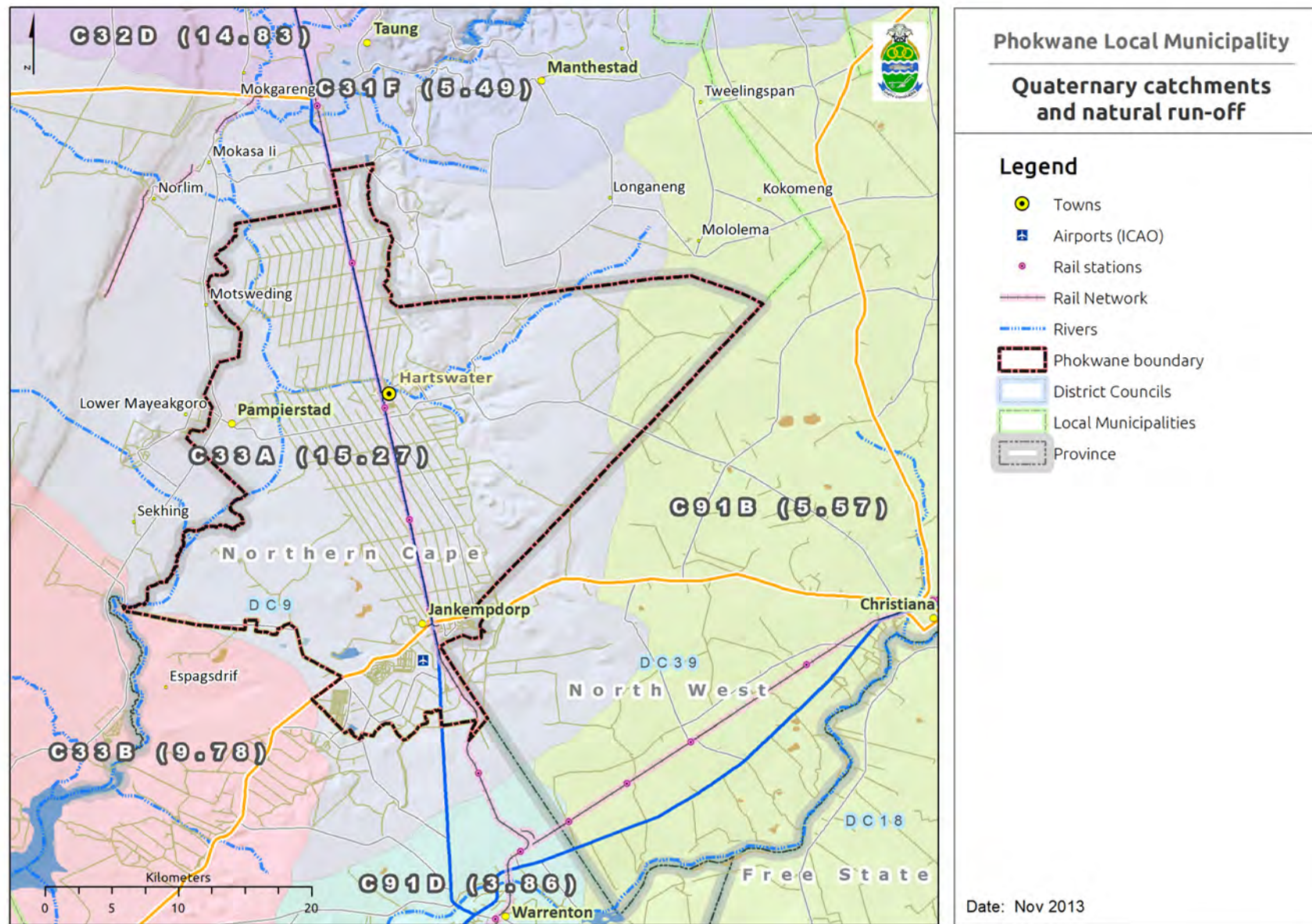
PLM has relatively low storage volumes in the aquifer underlying the area with storage only between 0 and 60 000 m³/km². PLM has a medium level of useable groundwater exploitation potential, which is already being taken advantage of in the western parts of PLM. However, high levels groundwater vulnerability in the south-western sections of PLM need to be taken into consideration in future, if further use of groundwater is to be made in the area (see **Maps 19-22**).

Aside from the irrigated farms and to some extent the towns of Hartswater and Jan Kempdorp, the area is marked by limited municipal refuse removal services, which results in high levels of *soil pollution* by domestic rubbish, notably in the settlements of Pampierstad, Ganspan and Valspan. Pollution of waterways in these three settlements is also high. In addition to this, the use of pesticides and fertilise on the intensive irrigation farms adds a further level of pollution to the area.

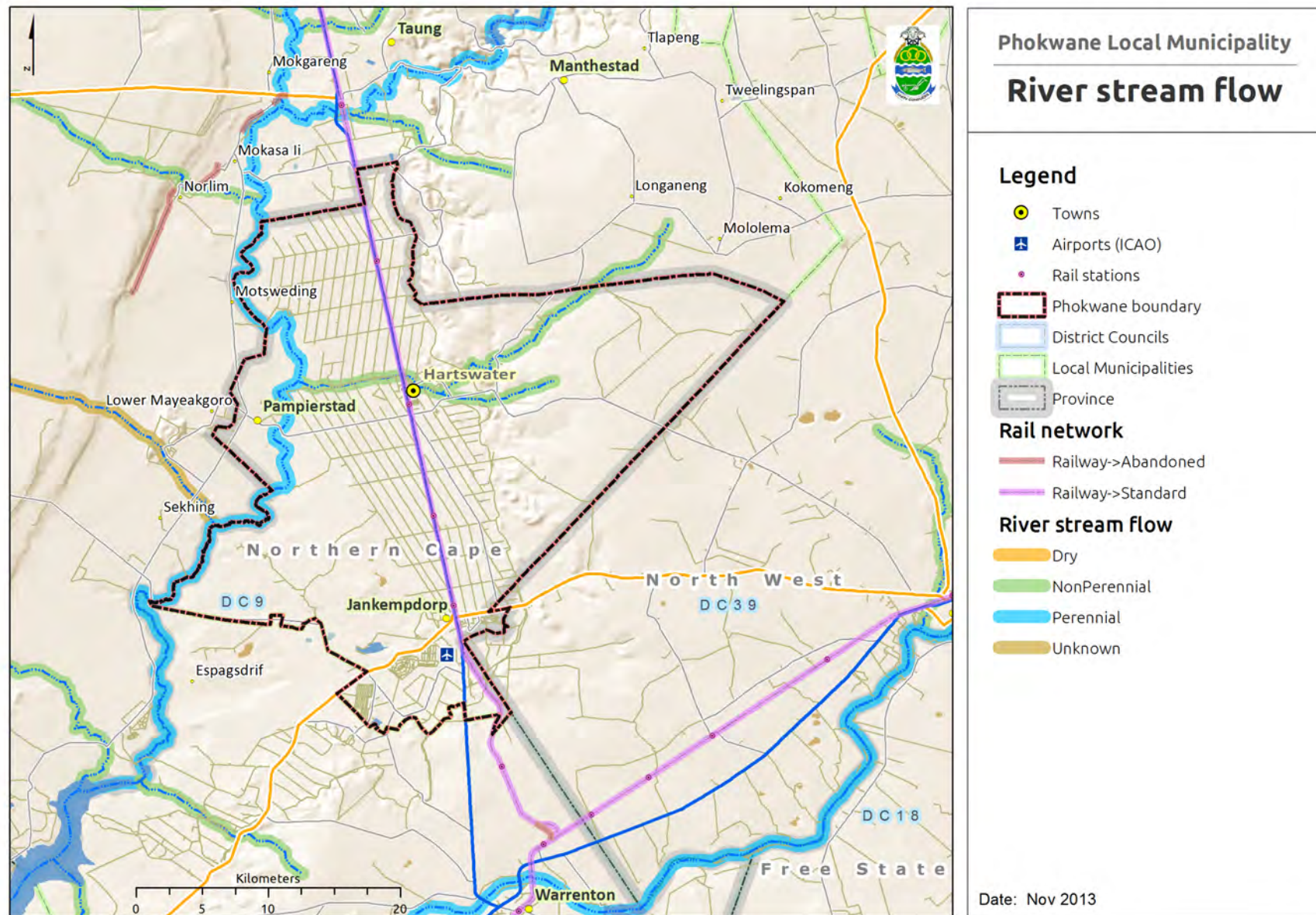
3.2.6 Air Quality

The activity of greatest potential impact on the air quality within the municipal area is agriculture. Pesticide use in agriculture, particularly through aerial spraying, results in spray drift, which can distribute organo-chemicals in the vicinity and downwind of the spray area causing air pollution. Crop spraying is a known contributor to detrimental changes in air quality resulting from the emission of air pollutants associated with chemical pest and disease control of crops. Other activities that influence the air quality in PLM are: (1) The use of wood for heating and cooking in areas with no access to electricity; (2) Industrial activities such as the Olive and Peanut factory; (3) Road upgrades in the vicinity of the main towns; (4) The burning of waste in illegal dumping sites (FBEMF 2009).

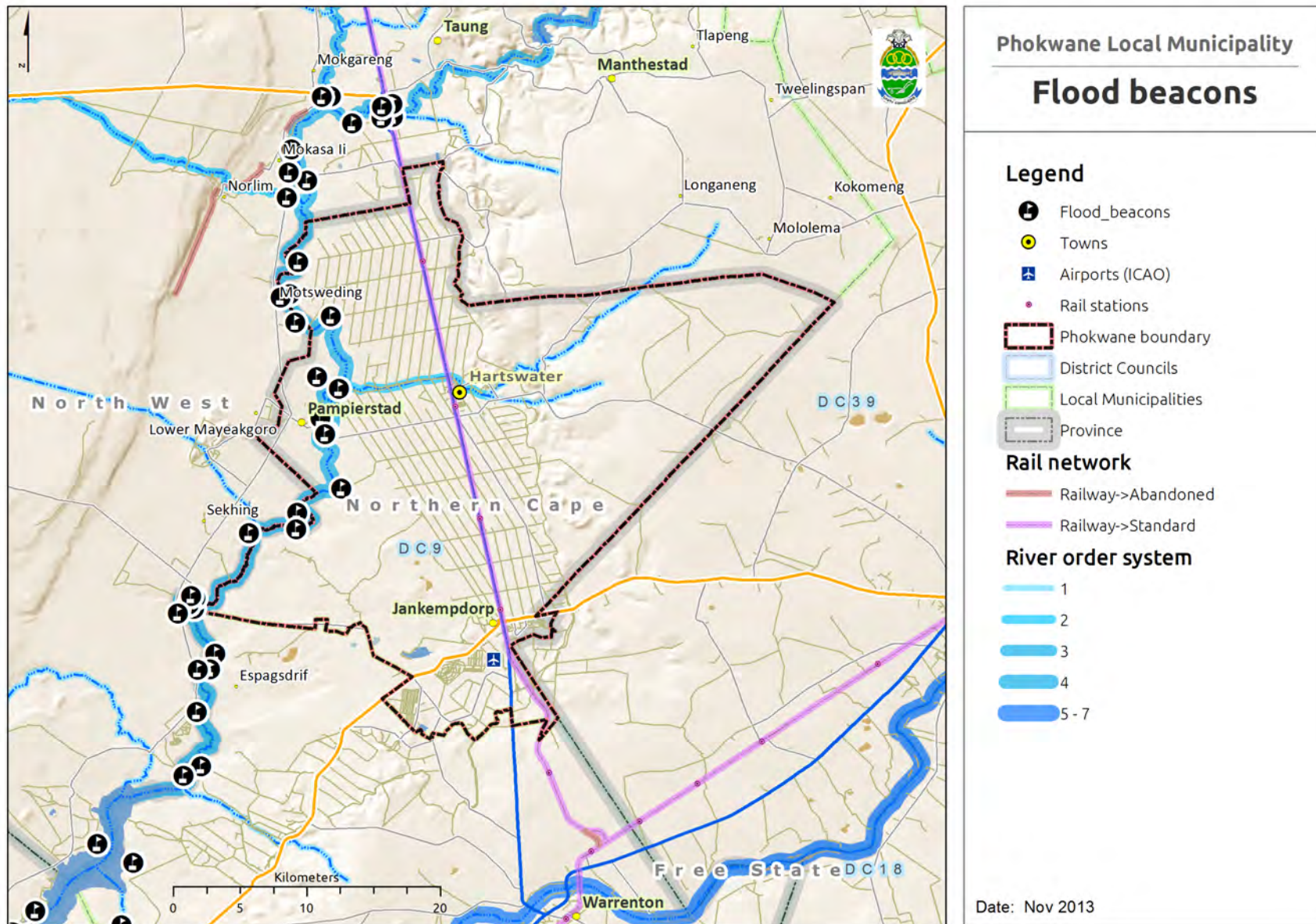
Map 15: PLM Water Catchments



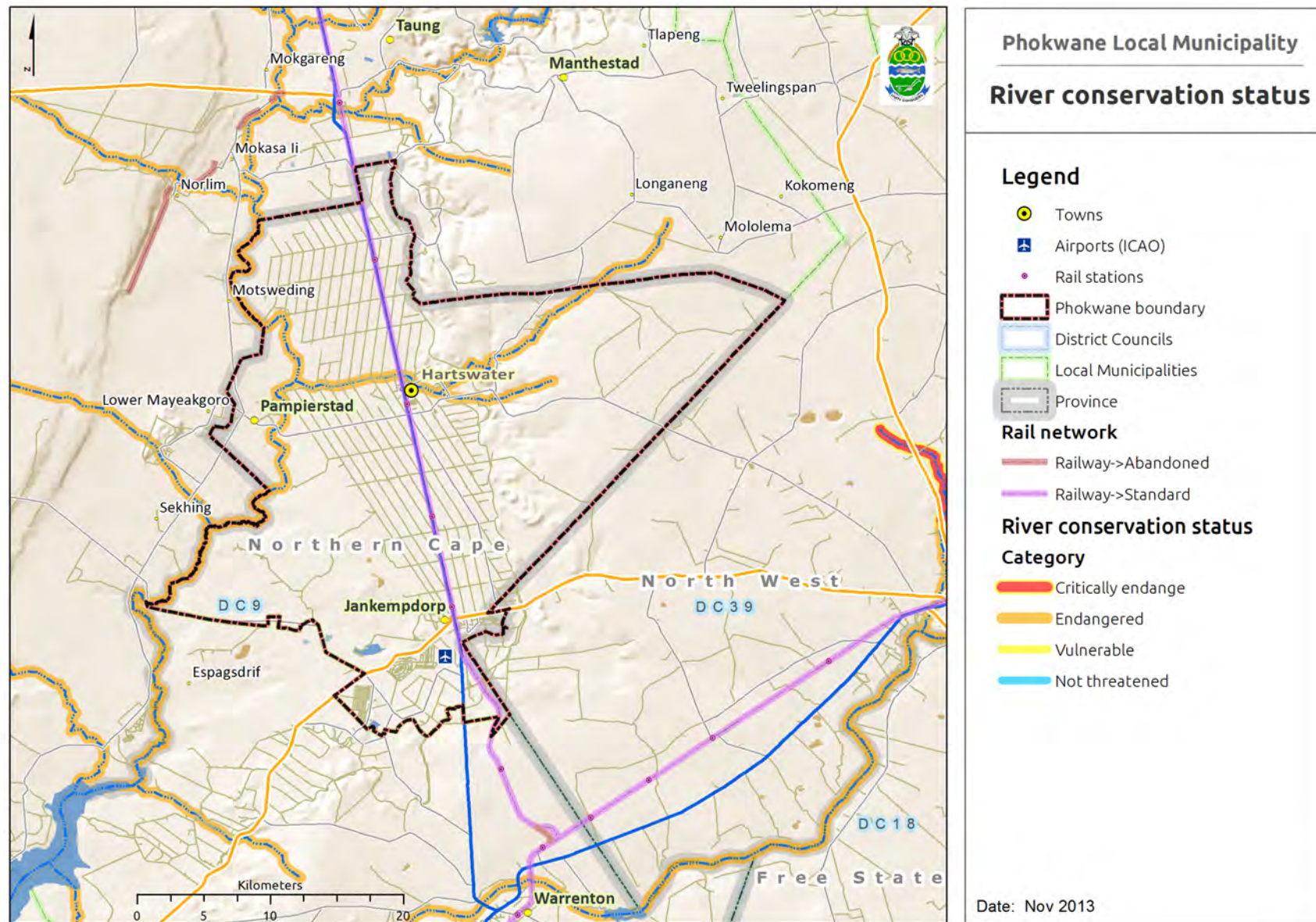
Map 16: PLM River Stream Flow



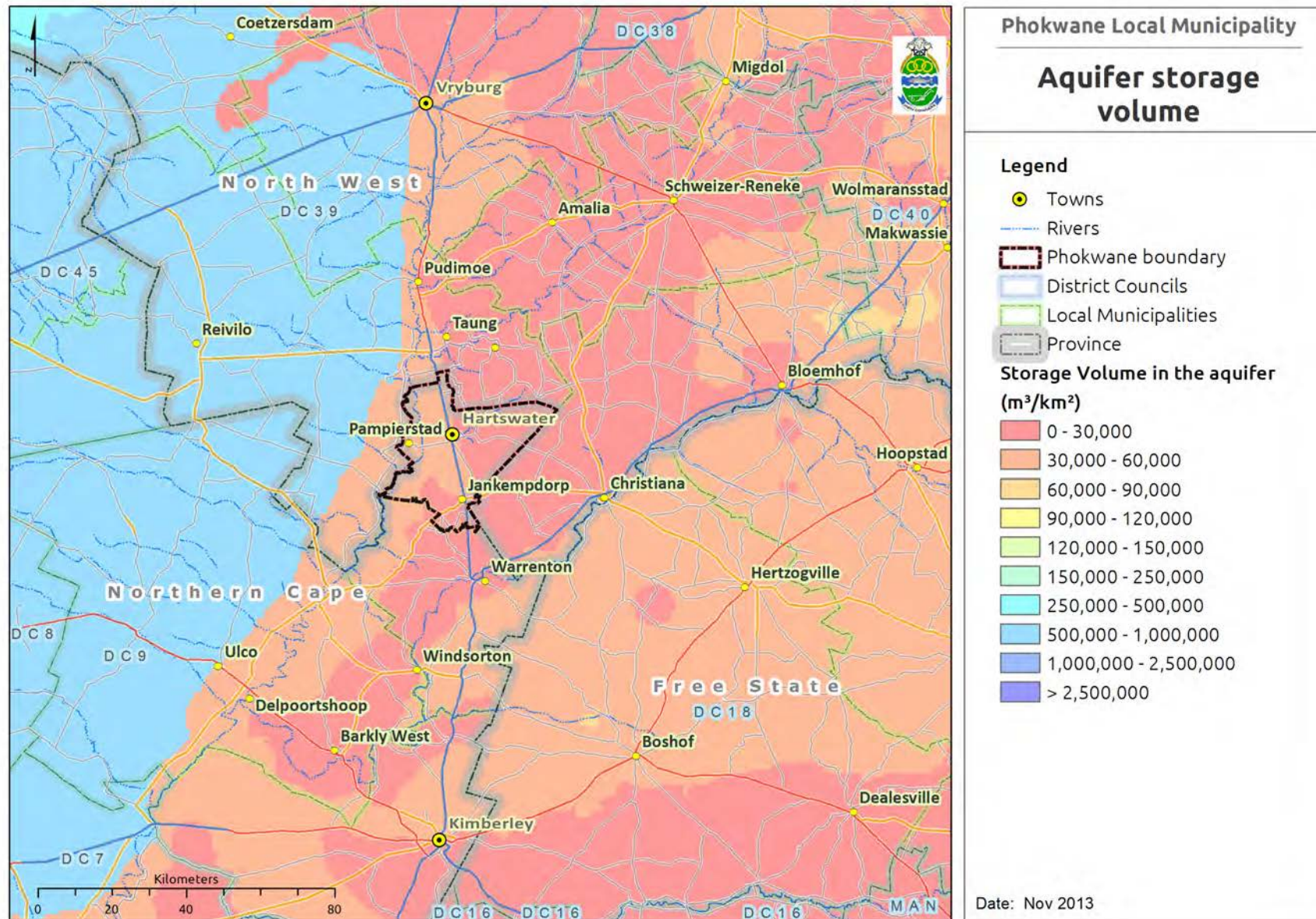
Map 17: PLM River Order System and Flood Beacons



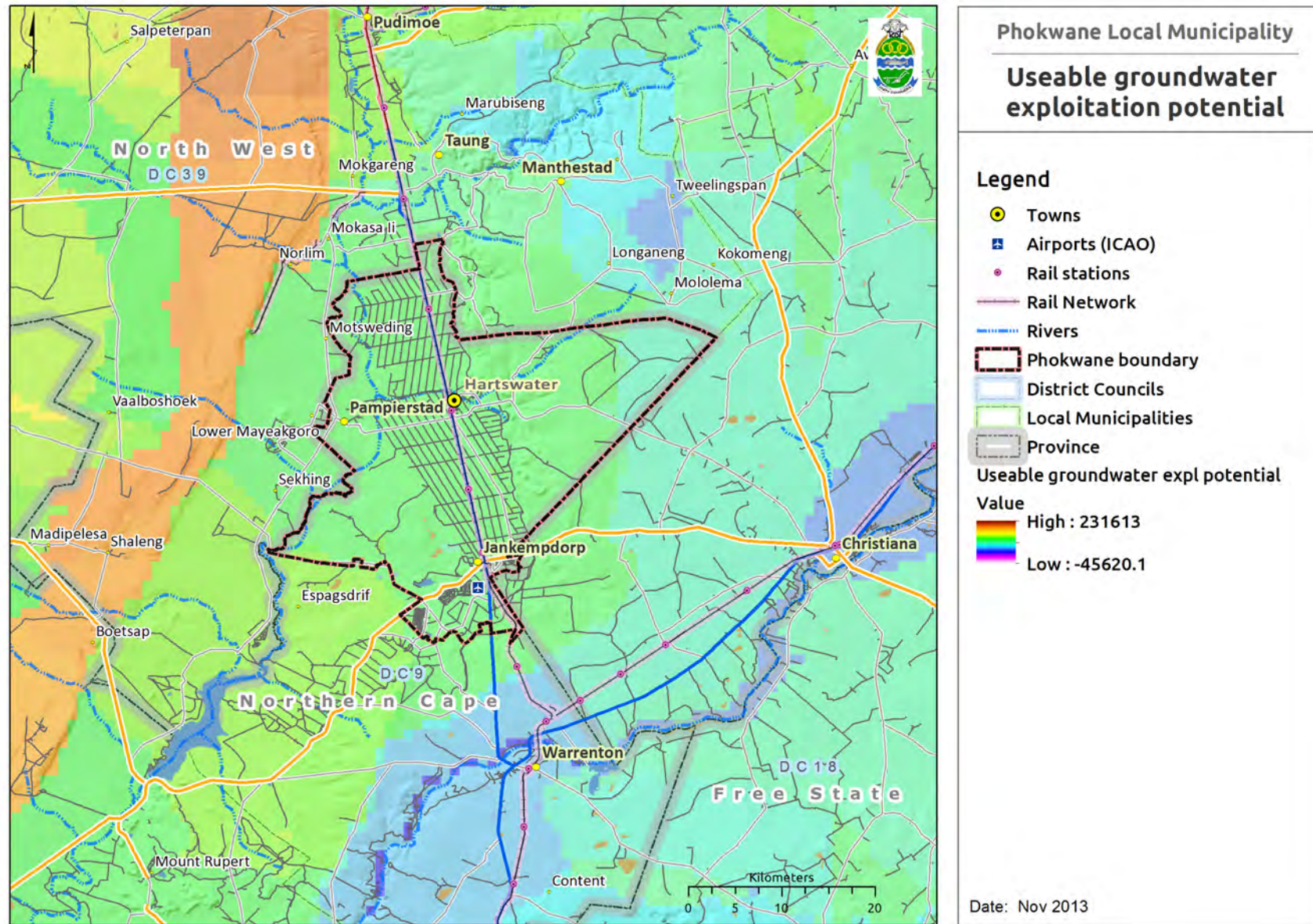
Map 18: PLM River Ecosystem Status



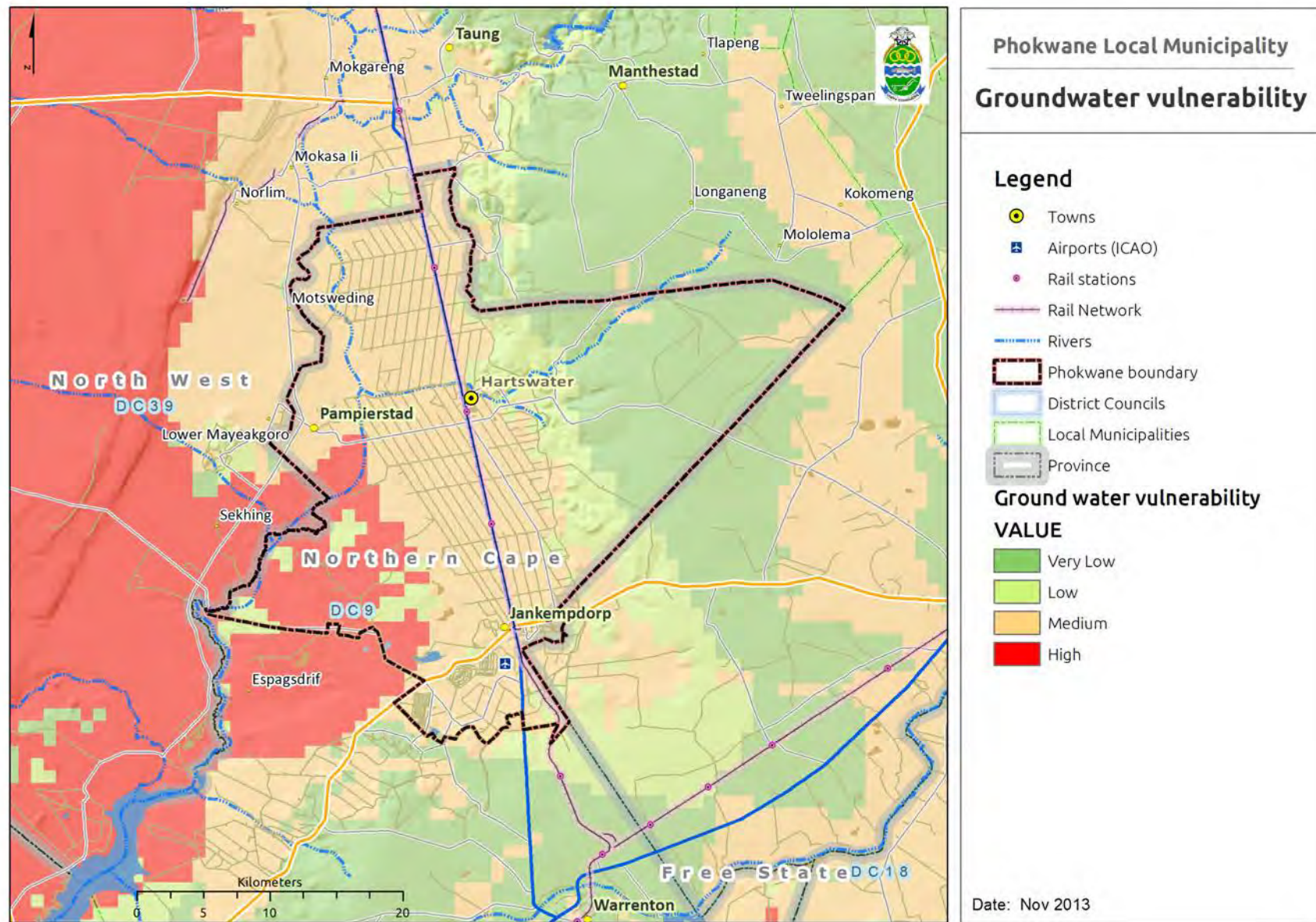
Map 19: PLM Aquifer Storage Volume



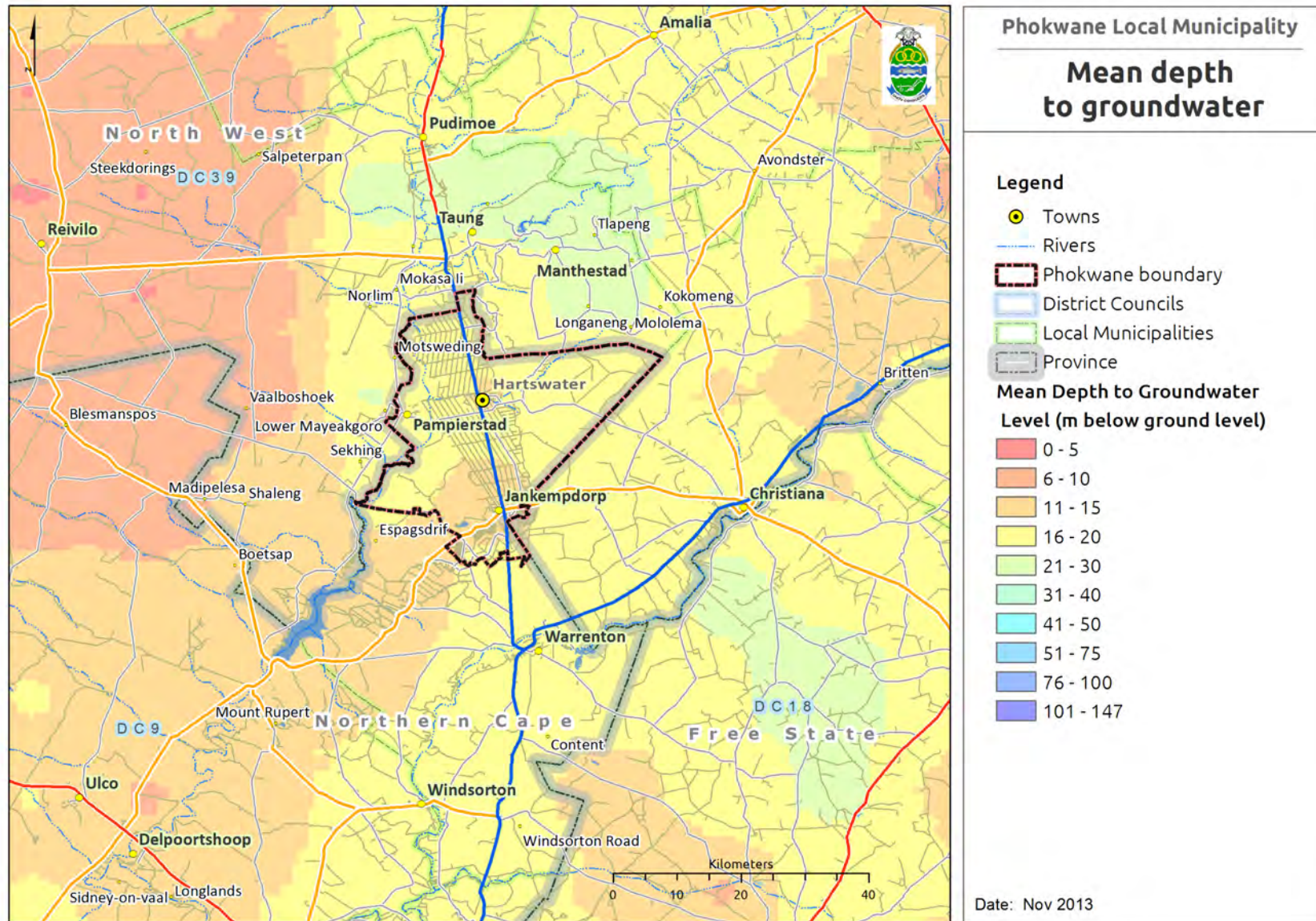
Map 20: PLM Useable Groundwater Exploitation Potential



Map 21: PLM Groundwater Vulnerability



Map 22: PLM Mean Depth to Groundwater



3.2.7 Fauna and Flora

The PLM is located in the Savannah Biome, the natural habitat of Africa's herbivore species, and in the Eastern Kalahari Bushveld Bioregion (see **Maps 23-24**).

The main vegetation types present in PLM is the (1) Kimberley Thornveld; (2) Highveld Salt Pans; and (3) Schmidtsdrift Thornveld (see **Map 25**). The table below is taken from the Frances Baard Environmental Management Framework, and provides an overview of the conservation status of the vegetation types present in PLM:

Table 2: Conservation Status of Vegetation Types in PLM

Vegetation unit	Conser-ved	Transfor-med	Target	Status	Area coverage	% Area coverage
Kimberley Thornveld	2%	18%	16%	Least Threatened	72 972ha	87.5%
Schmidtsdrift Thornveld	0.2%	13%	16%	Least Threatened	10 322.6ha	12.38%
Highveld Salt Pans	0%	4%	24%	Least Threatened	101.2ha	0.12%

According to the FBDM Environmental Management Framework, there is not sufficient information to effectively demarcate sensitive areas for fauna and flora in the area, and neither is there any indication of any species being under threat. However, Spitskop Dam (part of the Harts River) is located to the south-west of PLM and is demarcated by SANBI as an 'Important Bird Area', thus any activities upriver can negatively impact this environmentally sensitive area (see **Maps 26-28**).

3.2.8 Agriculture

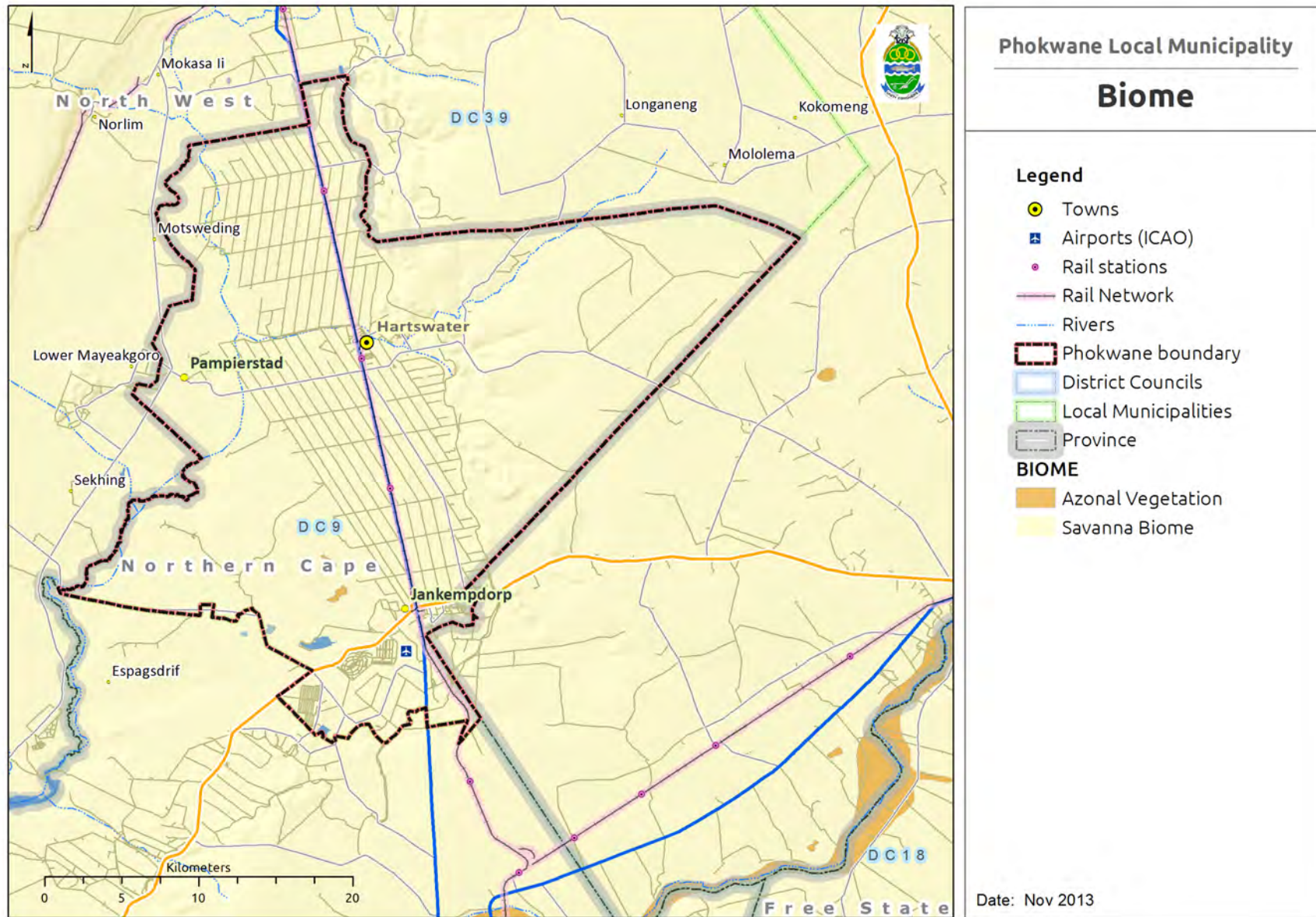
The Vaalharts Irrigation Scheme, constructed in the 1930, transformed more than 70% of the municipal area into extensive, high-value farms focussed mainly on the production of maize, wheat, pecan nuts, barley, groundnuts, Lucerne, vegetables and citrus. The method of irrigation is largely by flooding, with nearly 75% of farmers using this method. Sprinklers, pivots and drop irrigation are used far less frequently and primarily only on larger farms with quick-growing, high-value crops. Large-scale livestock farming is not common on the larger irrigation farms due although the area has a relatively high grazing capacity. It is, however, practised extensively on the smaller farms in the Ganspan area and Pampierstad and Valspan (see **Map 29-30**).

3.2.9 Environmental Challenges

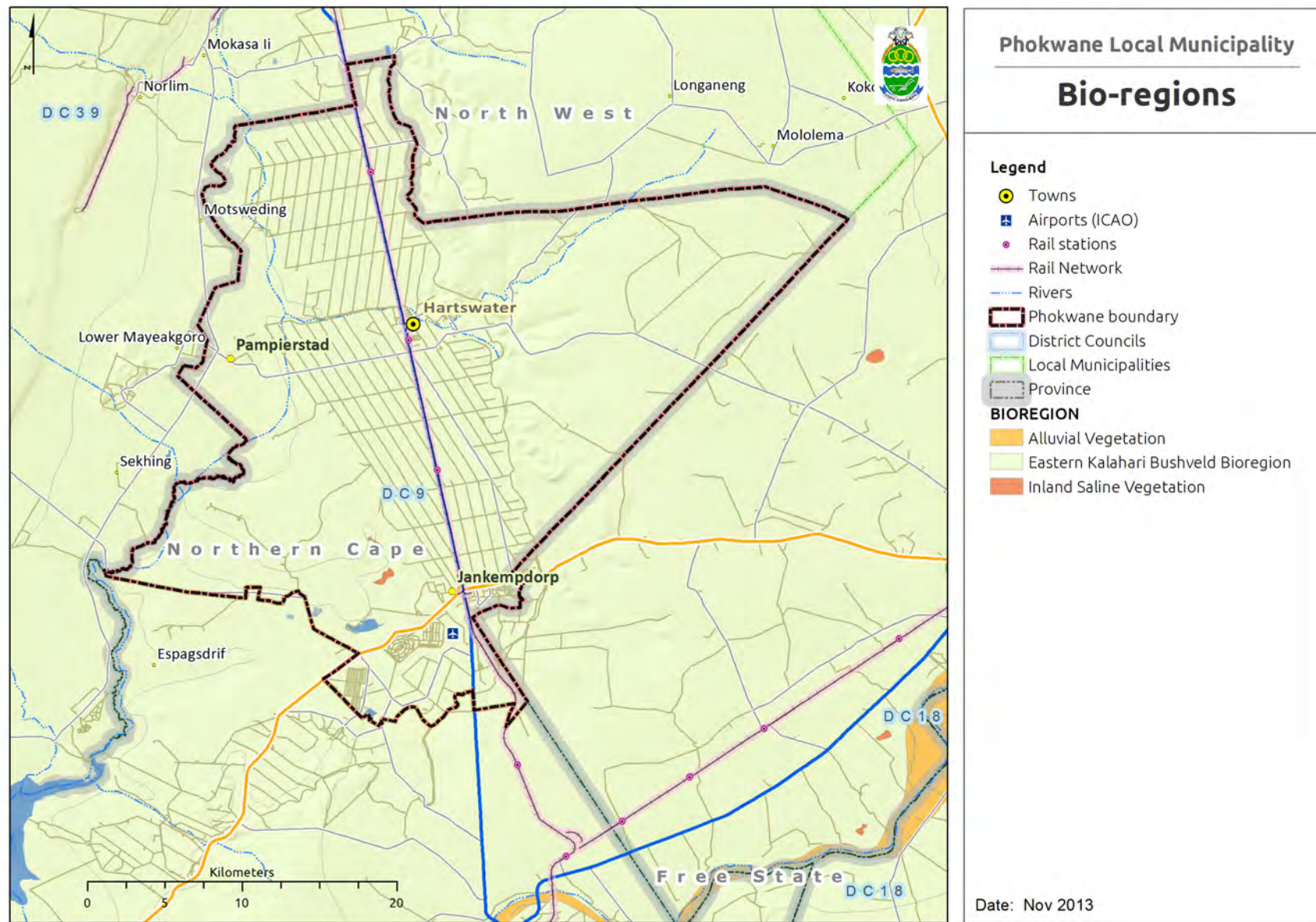
According to the FBEMF (2009) the following environmental challenges are present in the PLM:

- Air quality: air pollution from farming areas by spraying of pesticides and burning of dry crops and the burning of waste in the dumping sites and the illegal dumping sites;
- Waste: the blocking of sewer pipes, dumping in water canals and illegal dumping on open spaces in both towns and in townships;
- Cutting of trees: protected trees such as Camel Thorn trees are being cut down in Ganspan, Bonita Park and Thagadiepelaang for fuel for cooking and heating. This is problematic due to lack of education and access to basic services;
- Illegal fishing: this occurs in lakes and rivers in Ganspan and Pampierstad; and
- Swimming in the water canals: this is dangerous and illegal and has resulted in a number of deaths of young children due to drowning.

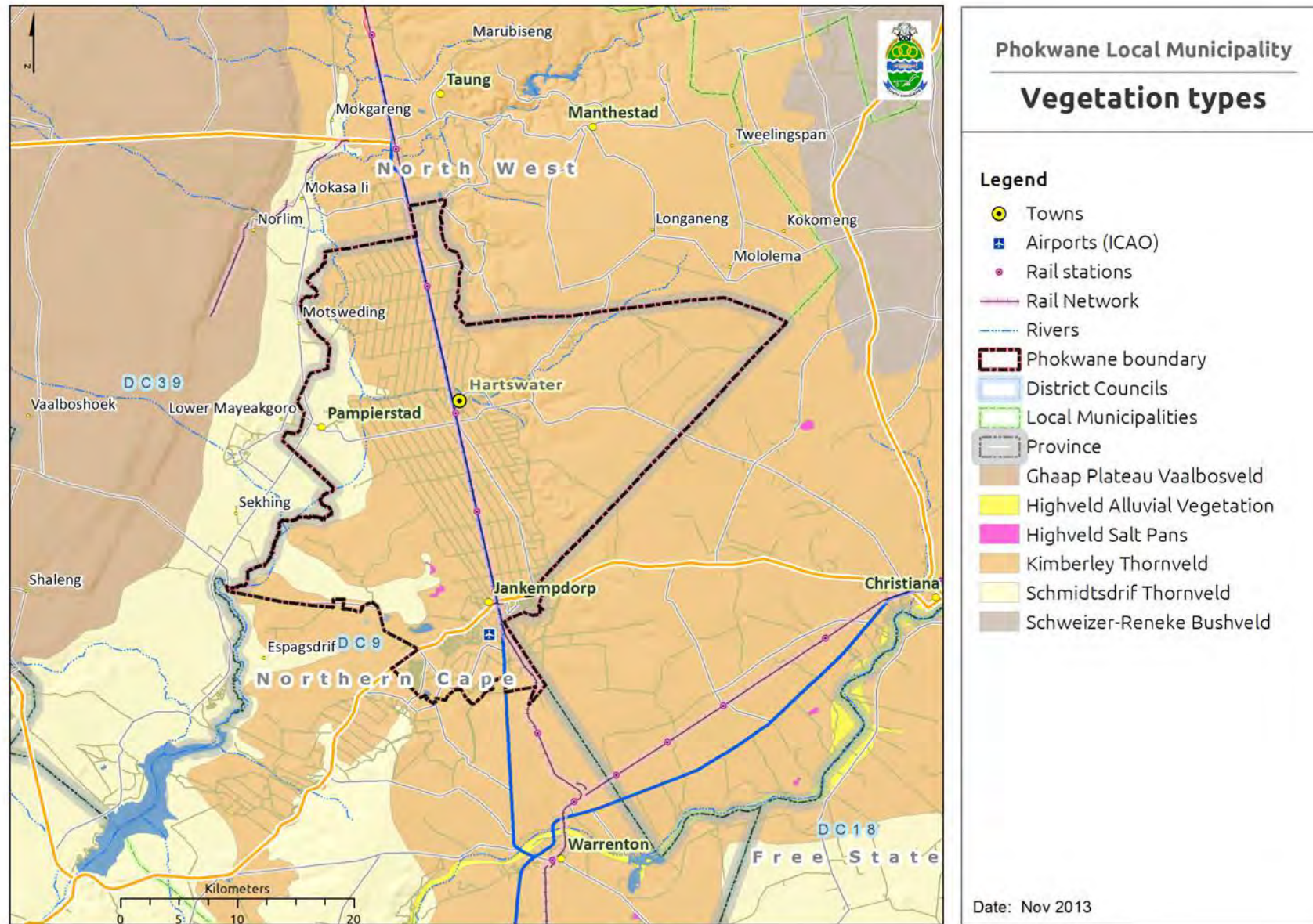
Map 23: PLM Biome



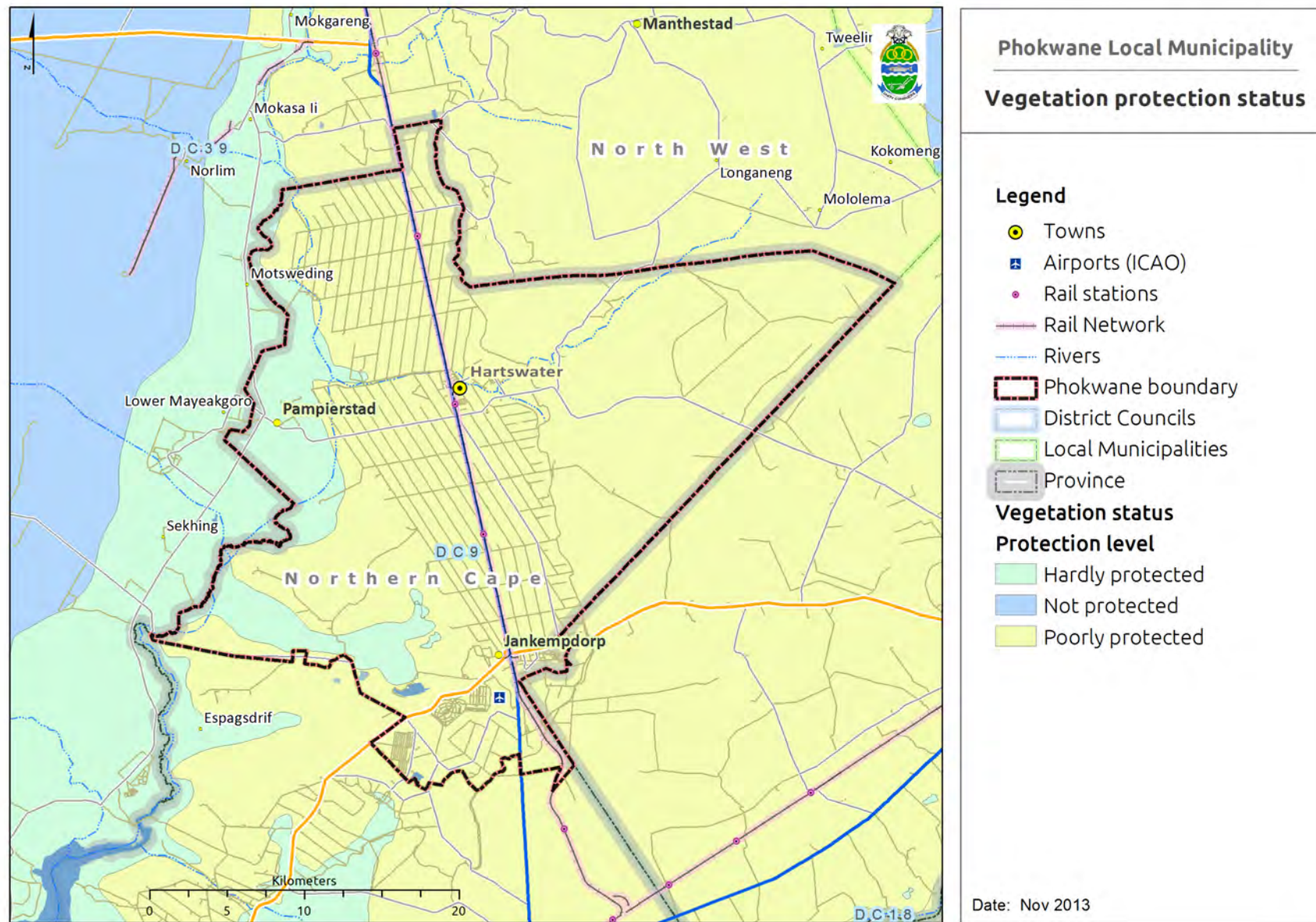
Map 24: PLM Bioregion



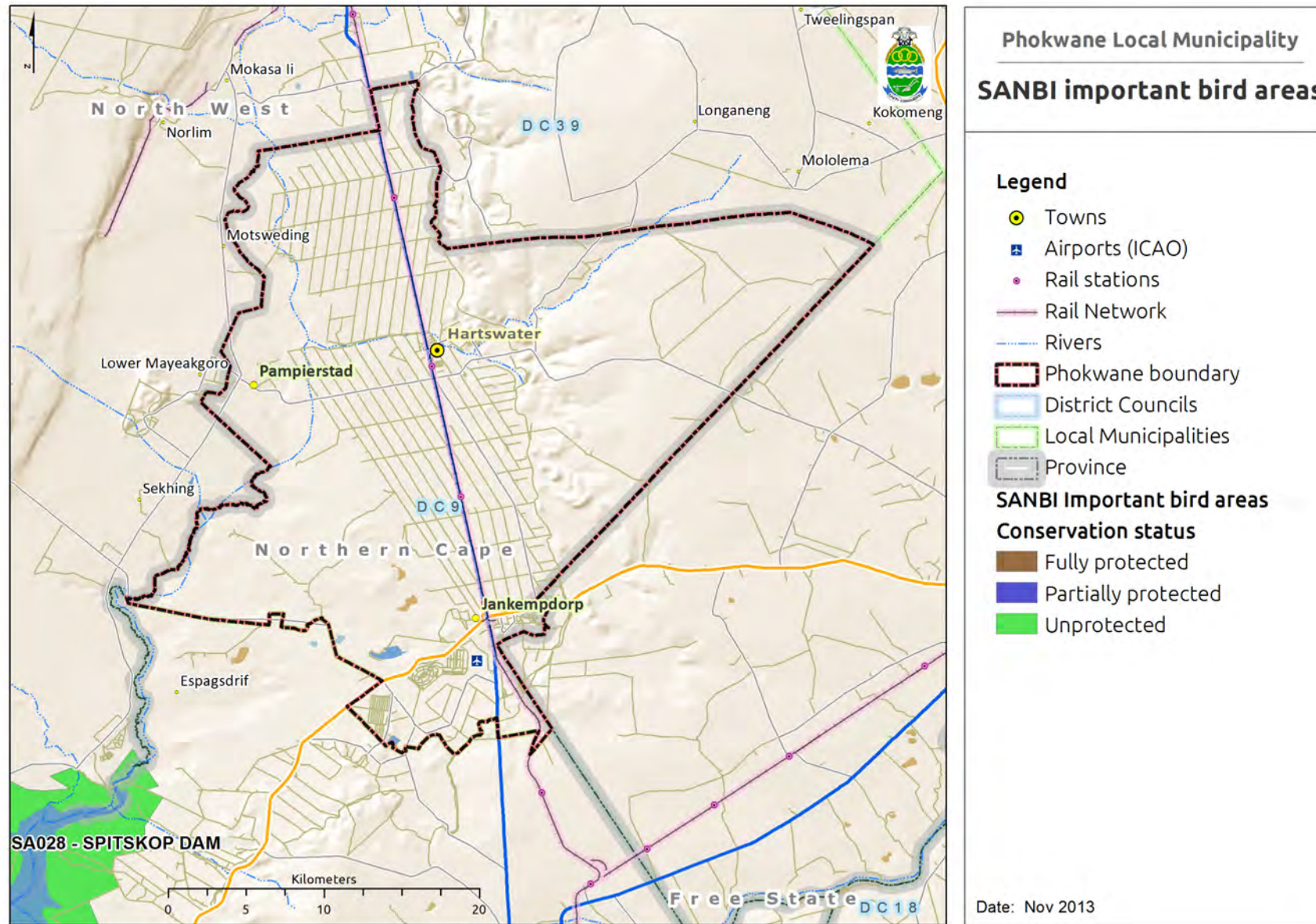
Map 25: PLM Vegetation Types



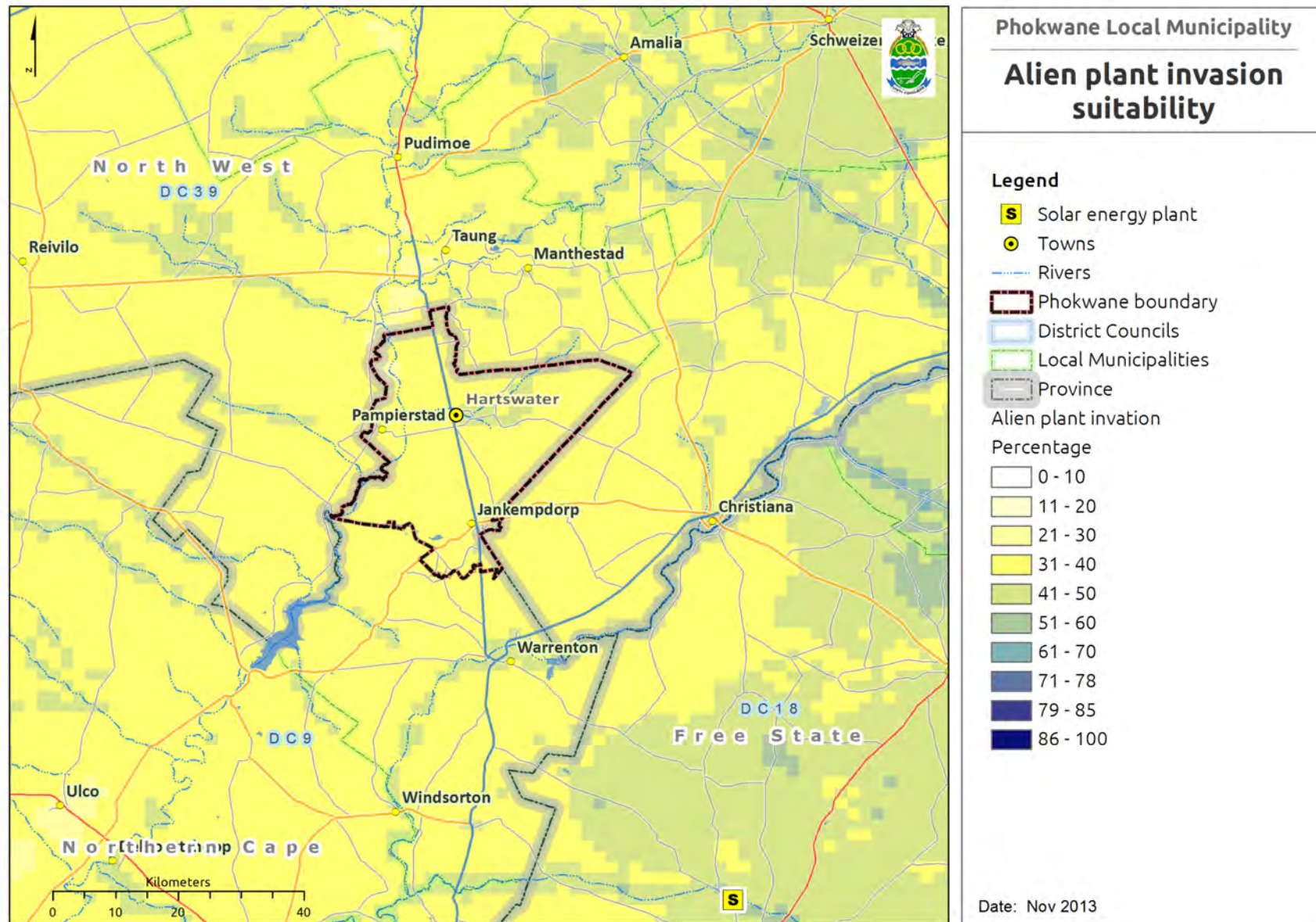
Map 26: Vegetation Protection Status



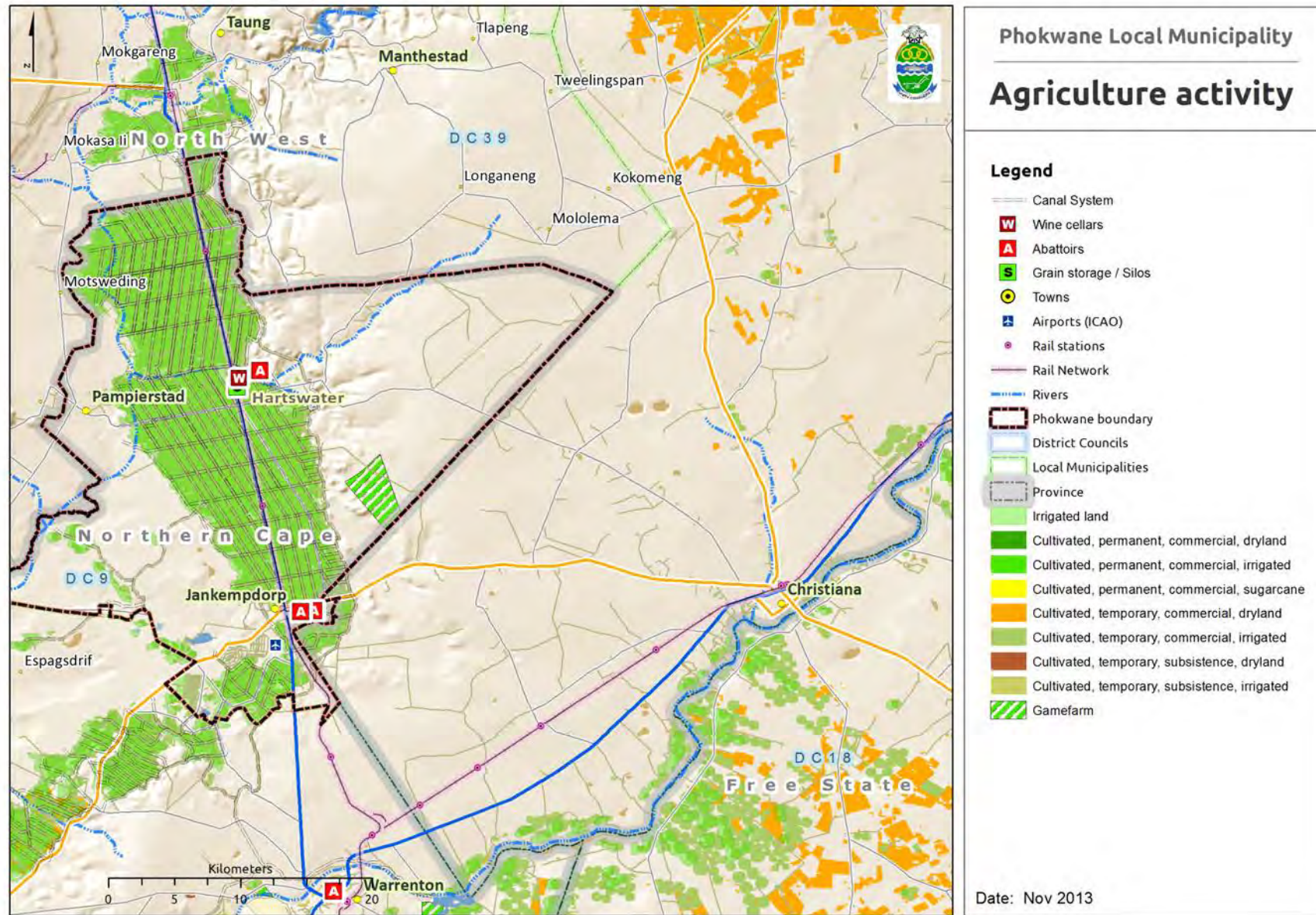
Map 27: SANBI Important Bird Areas



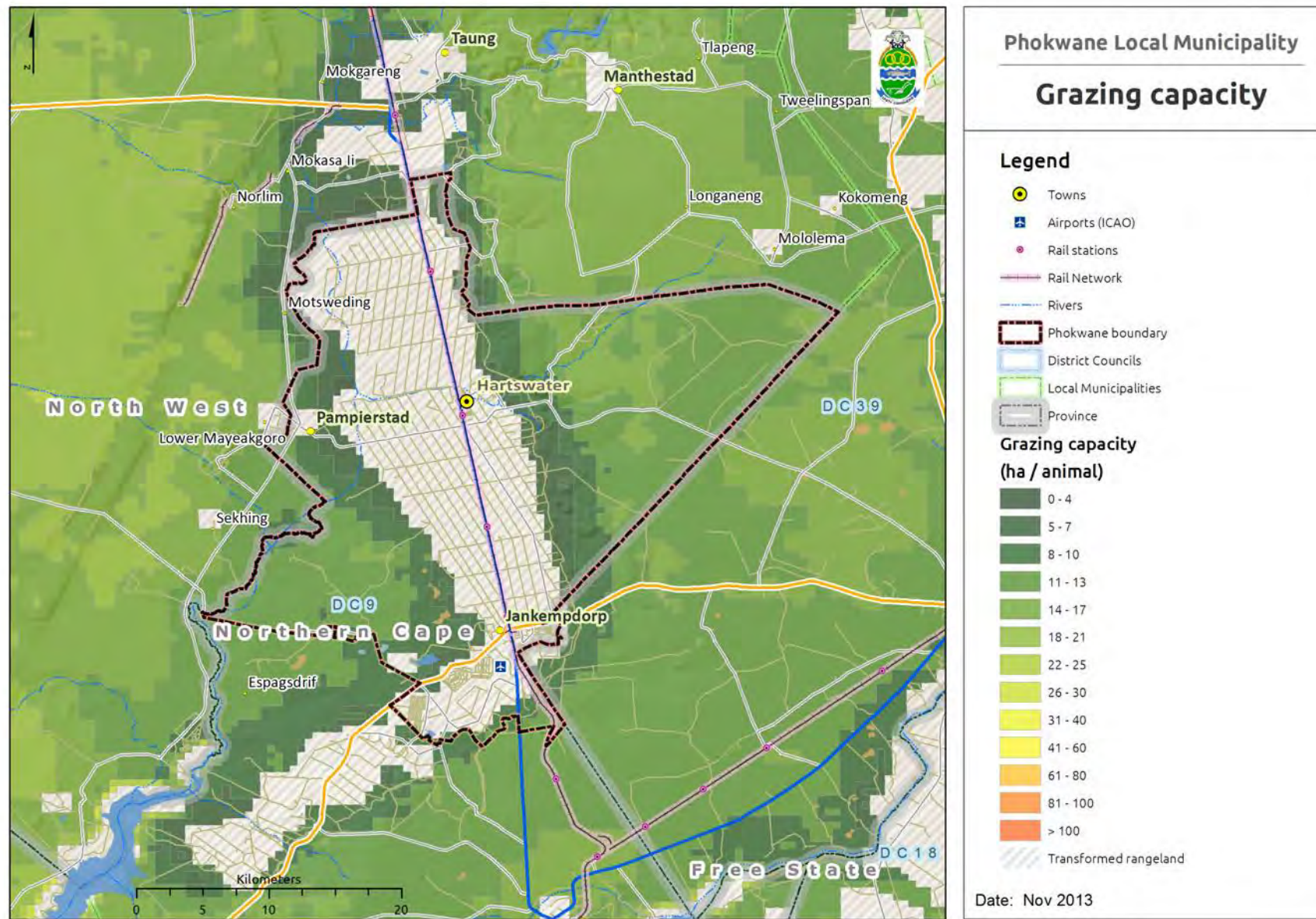
Map 28: Alien Plant Invasion Suitability



Map 29: PLM Agricultural Activity



Map 30: PLM Grazing Capacity



3.3 SOCIO-ECONOMIC CONDITIONS

3.3.1	Overview of the Socio-Economic Conditions	p. 58
3.3.2	A Note on the Census Data	p. 60
3.3.3	Demographic Profile	p. 60
3.3.4	Employment, Occupation and Income	p. 66
3.3.5	Economy	p. 71

3.3.1 Overview of the Socio-Economic Conditions

The PLM has a total of 63 000 individuals and 17 544 households with only a 1.6% increase in population between 2001 and 2011. The main settlements in PLM are Jan Kempdorp (38.4%), Pampierstad (34.5%) Hartswater (16.6%) and Ganspan (3.7%).

Education levels in PLM improved between 2001 and 2011 with the number of individuals with 'no schooling' falling from 32.3% to 17.1%. However, the number of individuals with higher education has remained basically unchanged (6.6%) although those with a Matric increased by almost 8%.

The PLM is the only local municipality in FBDM that saw an increase in unemployment between 2001 and 2011, rising from 35.5% to 37.7%. Hartswater, with a 75% employment rate and the highest labour force participation rate (63%) is the best performing settlement with regard to employment figures. On the other hand, Pampierstad, with an unemployment rate of 55%, also carries the largest percentage of the PLM's unemployed population (50%). The population of the PLM are responding to these figures by migrating to Hartswater (projected to see a 62.1% population increase by 2020) and Jan Kempdorp (projected to see a 23.4% population increase by 2020), while Pampierstad can only expect an increase in population of 1.9% by 2020. The majority of the employed population in the PLM works in the agricultural industry (21.2%) with the community, social and personal service industry providing 12.2% of the jobs.

The Vaalharts Irrigation Scheme, the second largest irrigation scheme in the southern hemisphere, is the foundation on which the PLM agricultural economy is built, with almost 70% of municipal land used for farming. The primary crops produced in PLM are maize, wheat, pecan nuts, barley, groundnuts, lucerne, vegetables and citrus, with livestock farming practiced on smaller farms. Other primary economic activities are retail and trade, personal

and government services and manufacturing. Retail and trade, as well as government services, are mainly concentrated in Hartswater and to a lesser extent in Jan Kempdorp, with Jan Kempdorp mainly focussed on manufacturing, transport, storage and financial and business services.

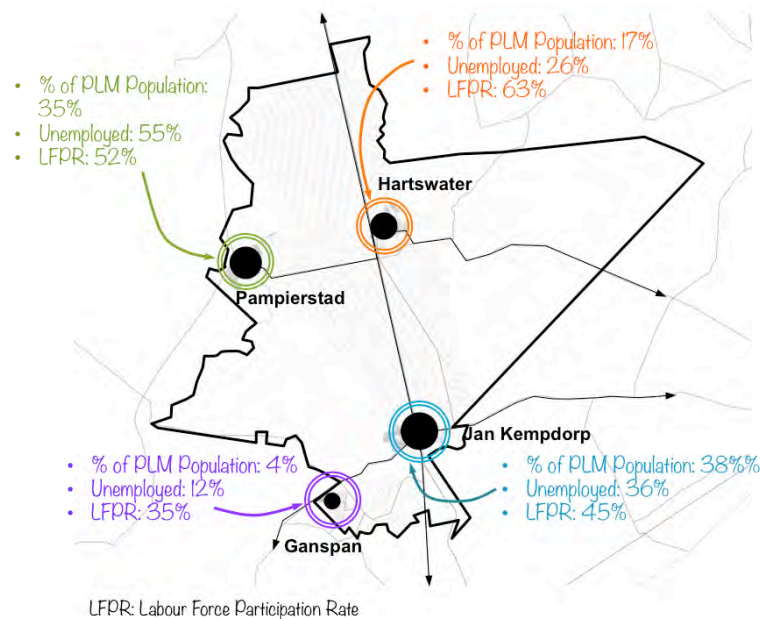
Opportunities:

- Expansion of the Agro-processing industry; and
- Relatively high levels of secondary education.

Challenges:

- Low levels of tertiary education;
- Increase in unemployment;
- Large number of unemployed individuals in Jan Kempdorp;
- Migration pressure placed on Hartswater and to a lesser extent on Jan Kempdorp; and
- Dependence on one economy: agriculture.

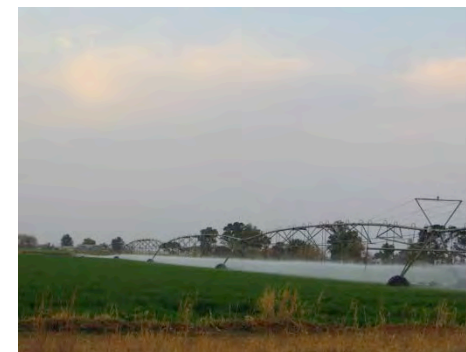
Figure 4: PLM Socio-Economic Overview



Ganspan Business



Manufacturing



Irrigated Farms



Jan Kempdorp Consultation



Road Stall selling fruit



Livestock farming

3.3.2 A Note on the Census Data used

The demarcation changes that have taken place in the wider area since 2001 make comparison between the 2001 and 2011-statistics problematic. Statistics SA published the Northern Cape Municipal Report in 2012 where the figures were adjusted to the 2011-boundaries to allow for comparison between data sets. This document makes use of this report when commenting on local, district and provincial statistic comparisons of the 1996, 2001 and 2011 statistics.

The *available* 2011 Sub-place Data is also used in this report, which allows a description of the main settlements in PLM. However, once again there are decided differences between the demarcations of the Sub-places of 2001 and 2011 that makes comparisons between the 2001 and 2011 data sets decidedly problematic. Making direct comparisons between these data sets will result in invalid conclusions being drawn about population growth and other settlement characteristics. Due to these data issues, detailed analysis between 2001 and 2011 data has not been done on Sub-place level. In **Section 4.1** population growth projections are made based on adjusted population figures for the settlements, in order to provide a more accurate description of population growth and possible future scenarios.

3.3.3 Demographic Profile

Overall Population

According to the latest statistics from Statistics South Africa (2011) FBDM, which had seen a decline in population between 1996 and 2001, has shown an increase of 1,8% between 2001 and 2011 in comparison to the population growth rate of the NC which is 1,6%. PLM has seen an increase of 0,3% per year between 2001 and 2011, with the municipality only gaining 737 households and 1 679 individuals in the ten years. Pampierstad (34,5%), Jan

Kempdorp (38,4%) and Hartswater (16,6%) have the highest population levels with areas in Jan Kempdorp and Hartswater reaching densities of 130-270 individuals/hectare (see **Tables 3-4** and **Map 31**).

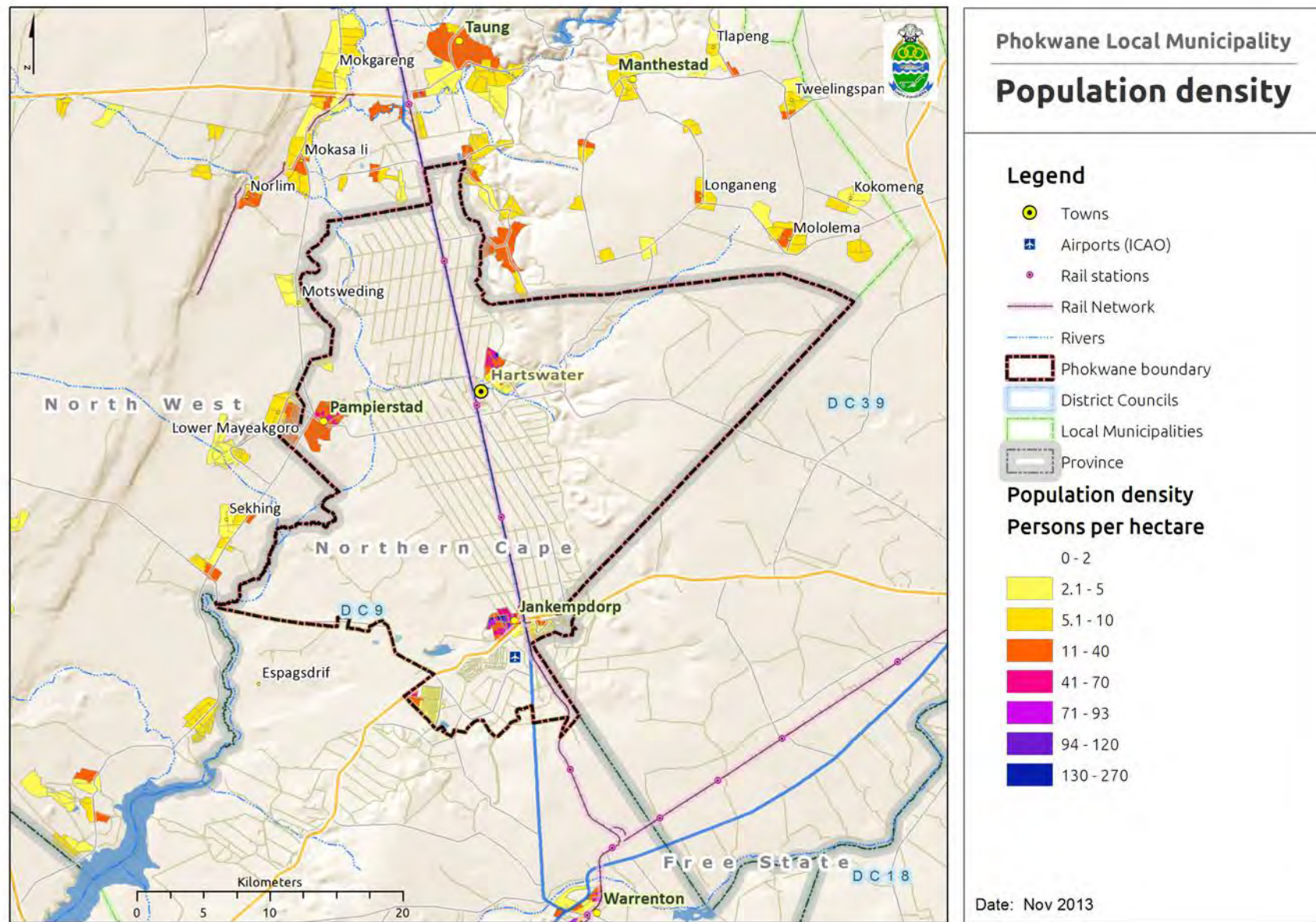
Table 3: Population Growth Rates for PLM, FBDM and NCP (1996; 2001; 2011)

	1996	2001	Population Growth (per year)	2011	Population Growth (per year)
PLM	56533	61321	1,7	63000	0,3
FBDM	324677	323563	-0,01	382086	1,8
NC	1011864	991919	-0,4	1145861	1,6

Table 4: Population Distribution per Enumerated Area - Sub Place 2011 Census

POPULATION DISTRIBUTION PER ENUMERATED AREA – SUB PLACE 2011	Total	% of PLM Population
Banksdrif	505	0,8
Phokwane NU	3802	6,0
Hartswater	10465	16,6
Pampierstad	21707	34,5
Jan Kempdorp	24220	38,4
Ganspan SP	2301	3,7
PLM	63000	100
FBDM	382086	NA
Northern Cape	1145861	NA

Map 31: Population Densities in PLM



Age and Gender Composition

The Functional Age Group distribution in PLM has stayed relatively stable, with the age group of '0-14' only increasing by 0,5% between 2001 and 2011, and the working age population declining by 1.1% while the district and provincial trend is growth in this age group (see **Table 5**). The PLM's Age Group Distribution changes between 2001 and 2011 indicates that there has been an increase in the percentage of the population that is older 50 years of age as well as an increase in the percentage of the population below 10 years of age (see **Figure 3 and Table 8** on next page).

Table 5: PLM Functional Age Group Composition

AGE	1996	2001	2011
PLM			
0-14	34,7	31,8	32,3
15-64	60,6	63,0	61,9
65+	4,7	5,3	5,7
FBDM			
0-14	32,7	30,0	29,6
15-64	62,4	64,7	64,9
65+	4,9	5,4	5,5
NCP			
0-14	34,8	32,1	30,1
15-64	60,3	62,5	64,2
65+	4,9	5,4	5,7

With regard to the individual settlements, the majority of the settlements have similar Functional Age Group distributions to PLM, with only Bankdrift and Phokwane NU not conforming to current trends. Bankdrift has a relatively low level of 'working age population' (49%) to the 62% of PLM, and Phokwane NU has higher levels of 'working age population' (68%). Lastly, Ganspan has slightly higher levels of '0-14' years of age (35%) than PLM (32%) (See **Table 6 and 8**)

Table 6: PLM Settlements Functional Age Group Composition

SETTLEMENT	0 - 14	15 - 64	65 and older
Bankdrif	40	49	10
Phokwane NU	26	68	6
Hartswater	32	63	5
Pampierstad	33	61	6
Jan Kempdorp	32	62	6
Ganspan	35	62	4
PLM	32	62	6
FBDM	30	65	6
Northern Cape	30	64	6

With regard to Gender Distribution, the majority of the settlements in PLM follow the general norm in South Africa of a slightly higher female than male population, except for the rural areas of Phokwane, which is composed of 47% females and 53% males (see **Table 7 and Figure 3**).

Table 7: PLM Settlement Gender Distribution

SETTLEMENT	Male	Female
Bankdrif	48	52
Phokwane NU	53	47
Hartswater	49	51
Pampierstad	47	53
Jan Kempdorp	49	51
Ganspan	50	50
PLM	48	52
FBDM	49	51
Northern Cape	49	51

Figure 5: PLM Age Distribution 2001 to 2011

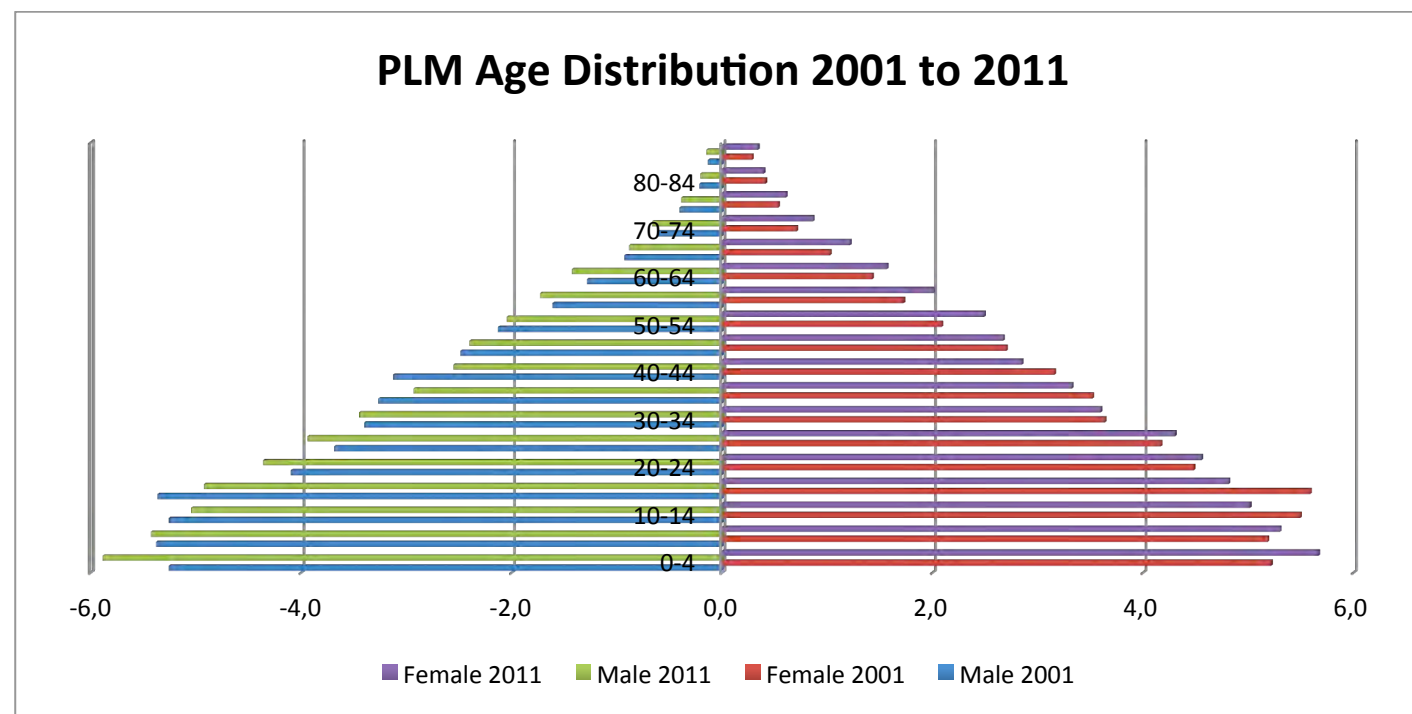


Table 8: PLM Settlements Age Distribution

	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 120
Banksdrif	15,2	13,3	11,7	11,3	6,5	5,0	3,8	3,8	4,2	2,2	4,6	4,0	4,0	10,5
Phokwane NU	9,3	8,3	8,3	7,7	6,9	7,7	6,9	7,2	7,6	7,5	7,4	5,4	4,2	5,7
Hartswater	11,6	10,4	10,2	9,4	8,9	8,9	7,9	7,1	5,6	4,8	4,5	3,4	2,5	4,7
Pampierstad	12,0	11,3	10,1	10,1	8,5	8,0	6,6	5,8	5,0	4,9	4,3	3,9	3,4	6,0
Jan Kempdorp	11,3	10,7	10,1	9,8	9,7	8,2	7,1	6,2	5,4	5,0	4,4	3,6	2,7	6,0
Ganspan	12,3	11,1	11,1	9,3	9,4	9,1	7,6	6,8	4,2	5,4	4,0	3,2	2,7	3,7
PLM	11,6	10,7	10,1	9,7	8,9	8,2	7,0	6,3	5,4	5,1	4,5	3,7	3,0	5,7
FBDM	10,7	9,7	9,2	9,4	9,4	9,1	7,8	6,7	5,9	5,3	4,7	3,7	2,9	5,5
Northern Cape	10,6	9,9	9,6	9,4	9,1	8,8	7,5	6,6	6,0	5,4	4,7	3,8	2,9	5,7

Racial Composition

PLM has seen an increase in its black population from 74,7% in 1996 to 82,3% in 2011, while the white population declined from 12,8% in 1996 to 6,3% in 2011. This decline in the white population is not just in terms of changes in the racial composition of PLM, but also in absolute numbers from 7 325 to 3 952. Hartswater and Jan Kempdorp are the most diverse in terms of racial composition, and closest to the district and provincial figure (see **Tables 9 - 10**).

Table 9: PLM Racial Composition 1996, 2001, 2011 (%)

SETTLEMENT	Black	Coloured	Indian/Asian	White
	1996			
PLM	74,7	12,5	0,0	12,8
FBDM	58,9	27,5	0,6	13,0
NCP	44,9	43,7	0,2	11,2
	2001			
PLM	77,3	11,2	0,1	11,4
FBDM	60,7	27,0	0,6	11,8
NCP	46,5	42,9	0,2	10,3
	2011			
PLM	82,3	11,1	0,4	6,3
FBDM	67,5	24,7	1,0	6,9
NCP	51,2	41,0	0,7	7,2

Table 10: PLM Settlement Racial Composition 2011 (%)

	Black	Coloured	Indian or Asian	White	Other
Banksdrif	99,8	0,0	0,0	0,2	0,0
Phokwane NU	63,0	8,4	0,4	27,5	0,7
Hartswater	56,3	30,2	0,6	12,0	1,0
Pampierstad	98,9	0,5	0,3	0,0	0,3
Jan Kempdorp	79,4	12,9	0,4	6,8	0,6

	Black	Coloured	Indian or Asian	White	Other
Ganspan	90,2	9,5	0,3	0,0	0,0
PLM	81,9	11,0	0,4	6,3	0,5
FBDM	65,5	24,0	0,9	6,7	2,9
Northern Cape	50,4	40,3	0,7	7,1	1,6

Education

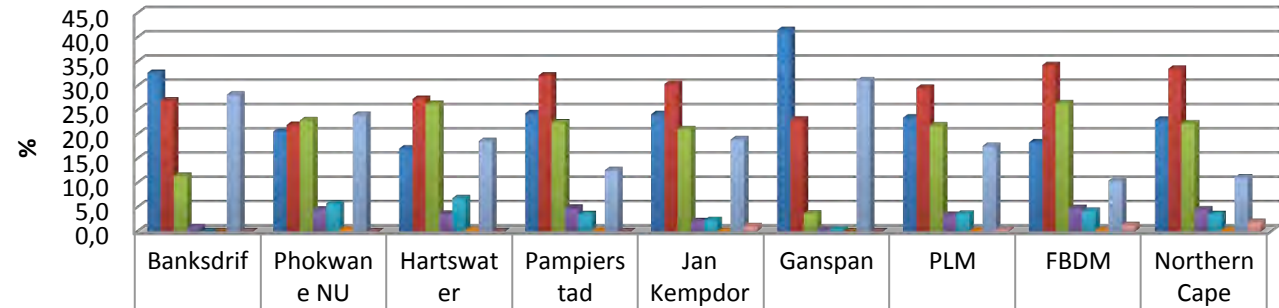
Education levels improved in PLM with 'no schooling' in those aged 20 years and older, dropping from 34,1% in 1996 to 17,7% in 2011, while those who attained Grade twelve increased from 10,6% to 22% (see **Table 7**). School attendance under the population aged 5-24 also increased from 61,9% to 72,5% between 1996 and 2011. In 2011, school attendance was higher in PLM than in FBDM and Northern Cape. Bankdrif and Ganspan have the lowest levels of education among those ages 20 years and older, with 28,2% and 31,1% respectively having received no schooling. However, in terms of total numbers, Jan Kempdorp has the highest number of individuals with no education (49% of the total population in PLM with no schooling) (see **Table 11** and **Figure 4**).

Table 11: PLM Education levels 1996, 2001 and 2011 (%)

	1996	2001	2011
	PLM		
No schooling	34,1	32,3	17,7
Complete primary	6,0	5,2	4,7
Grade 12	10,8	14,8	22,0
Higher	5,9	6,0	6,6
	FBDM		
No schooling	19,8	17,4	10,6
Complete primary	7,8	7,0	4,9
Grade 12	13,5	18,5	26,8
Higher	6,8	7,1	8,5
	NCP		
No schooling	22,7	19,3	11,3
Complete primary	8,5	8,0	6,4
Grade 12	11,1	15,8	22,7
Higher	6,2	5,9	7,5

Figure 6: PLM Settlements Highest Level of Education (20 Years and Older) (2011)

Highest Level of Education (20 Years and older) (2011)



■ Gade 0 - Grade 7 / Std 5/ ABET 3	32,7	20,6	17,1	24,3	24,1	41,5	23,4	18,3	23,0
■ Grade 8 / Std 6 / Form 1 - Grade 11 / Std 9 / Form 4	26,9	21,9	27,3	32,1	30,4	23,0	29,6	34,3	33,5
■ Grade 12 / Std 10 / Form 5	11,4	22,9	26,3	22,4	21,0	3,6	21,8	26,3	22,2
■ NTC I / N1/ NIC/ V Level 2 - Diploma with Grade 12 / Std 10	0,8	4,5	3,6	4,9	2,1	0,3	3,4	4,8	4,5
■ Higher Diploma - Higher Degree Masters / PhD	0,0	5,7	6,8	3,5	2,3	0,5	3,6	4,2	3,5
■ Other	0,0	0,4	0,3	0,1	0,1	0,0	0,2	0,3	0,3
■ No schooling	28,2	24,0	18,6	12,6	18,9	31,1	17,6	10,5	11,1
■ Unspecified - Not applicable	0,0	0,0	0,0	0,0	1,1	0,0	0,4	1,3	1,9

3.3.4 Employment, Occupation and Income

Employment

The PLM has seen an increase in unemployment since 1996, while the other local municipalities in the FBDM have seen a decline in unemployment. Between 1996 and 2011, the percentage of unemployed individuals in FBDM located in PLM has increased, from contributing 13,4% of the unemployed population in FBDM in 1996, to 17,2% in 2011, while the PLM's population has not seen much of an increase in total numbers during this time.

Table 12: Employment and Unemployment Trends in FBDM between 1996 and 2011

Municipality	Employment Rate			Unemployment Rate		
	1996	2001	2011	1996	2001	2011
Sol Plaatjies	65,6	58,6	68,0	34,4	41,4	32,0
Dikgatlong	56,7	54,7	60,0	43,3	45,3	40,0
Magareng	60,9	48,2	58,4	39,1	51,8	41,6
Phokwane	73,6	64,5	62,3	26,4	35,5	37,7
FBDM	65,8	58,7	65,9	34,2	41,3	34,1
NCP	67,6	64,3	72,9	32,4	35,7	27,1

Rural Phokwane (91%), Ganspan (88%) and Hartswater (74%) have the highest employment rates. Ganspan has one of the lowest Labour Force Participation Rates in PLM (35%), indicating that a large part of the population are 'discouraged work-seekers'. Overall, Hartswater with an unemployment rate of 26%, and the highest Labour Force Participation Rate (63%), is performing the best with regard to employment. Bankdrift has the poorest performance, with 61% of the population unemployed and the lowest Labour Force Participation Rate (34%) in PLM.

In terms of total numbers, Pampierstad has the largest population of the unemployed, with 50% of PLM's unemployed located in this settlement. Jan

Kempdorp at 33% has the second highest percentage of the unemployed population of PLM (see **Tables 13-14** and **Map 32**)

Table 13: PLM Settlements Employment and Unemployment Rates

	Employed	Unem- ployed	Labour force	Labour force participat ion rate (%)	Employ- ment Rate (%)*	Unem- ployment Rate (%)*
Banksdrif	33	52	85	34	39	61
Phokwane NU	1685	157	1842	71	91	9
Hartswater	3035	1083	4118	63	74	26
Pampierstad	3081	3763	6844	52	45	55
Jan Kempdorp	4341	2471	6812	45	64	36
Ganspan	435	62	497	35	88	12
PLM	12611	7589	20200	52	62	38
FBDM	87170	44836	132006	53	66	34
Northern Cape	282791	106723	389514	53	73	27

* The Employment and Unemployment rate are calculated by dividing the unemployed or employed by the total labour force (employed + unemployed). This calculation does not take the discouraged work-seeker into consideration.

** The Labour Force Participation Rate is calculated by dividing the total labour force (employed + unemployed) by the total working age population

Table 14: Distribution of the Unemployed and Employed in PLM

	Employed	Unemployed
Banksdrif	0,3	0,7
Phokwane NU	13,4	2,1
Hartswater	24,1	14,3
Pampierstad	24,4	49,6
Jan Kempdorp	34,4	32,6
Ganspan	3,4	0,8
PLM	100	100

Employment Trends

Due to changes in the demarcation of sub-places between the 2001 and 2011 censuses, it is not possible to look at employment trends between 2001 and 2011. Below is an approximation of the exponential growth of Hartswater, Pampierstad and Jan Kempdorp, based on the aggregation of reasonable 'urban areas' of the 2001-Stats SA-statistics. It is evident from the growth rate between 2001 and 2011 that Hartswater and Jan Kempdorp have seen a considerable amount of in-migration, possibly from the surrounding rural areas in order to access services and in search of employment opportunities. This growth rate is considerably higher than the local, district and provincial growth rate. Whether the population will continue to grow at such a rate is unclear (see **Table 15**).

Table 15: Exponential Growth for the largest PLM Settlement

	2001	2011	GROWTH RATE 2001 TO 2011	2020	% INCREASE FROM 2011	2030	% INCREASE FROM 2011
Hartswater	5262	10465	0,069	16963	62,1	33819	223,2
Pampierstad	21125	21707	0,0027	22121	1,9	22727	4,7
Jan Kempdorp	17907	24220	0,03	29880	23,4	40333	66,5
PLM	61321	63000	0,0027	64202	1,9	65959	4,7
FBDM	323563	382086	0,017	430370	12,6	510120	33,5
Northern Cape	991919	1145861	0,014	1263842	10,3	1453764	26,9

Combining the above trends with the following key PLM employment rate statistics: (1) the rise in unemployment in PLM as a whole, (2) the high level of unemployment in Pampierstad, and (3) the reasonably well performing Hartswater and Jan Kempdorp, the following can reasonably be stated:

- Unless employment and job creation is seriously addressed in the PLM, the municipality will continue to see a decline in employment over the next five years;

- If employment rates continue as is, Pampierstad will see an increase in unemployment over the next five years, but due to the decidedly low growth rate, this increase will not be substantial; and
- Hartswater and Jan Kempdorp with their high growth rate will experience the most pressure to provide new jobs as they struggle to support the in-migration of people over the next five years.

Occupation

According to the 2007 Community Survey (Census 2011 data not yet available for occupation and industry), the majority of those employed in PLM are active in 'Agriculture, hunting, forestry and fishing' (21,2%) and 'Community, social and personal services' (12,2%). The majority of these occupations can be termed as 'Elementary' (18%) or 'Skilled agriculture and fishery' occupations (11,4%) (see **Tables 16-17**).

Income

The main income categories per household in the PLM are 'R9 601 – R19 600' (22,8%) and 'R19 601 – R38 200' (21,9%), with 14,2% of the households not receiving any income. Jan Kempdorp (17,1%) and Pampierstad (16,1%) are the settlements with the largest percentage of households receiving 'no income', while Hartswater and Phokwane NU contain the largest percentages of higher-income groups (see **Table 18**).

With regard to the distribution of household income groups across PLM, the largest proportion of the 'no income' groups are located in Jan Kempdorp (42,3%) and Pampierstad (41,1%). Hartswater is home to relatively large percentages of the 'R38 201-R76 400' and higher income groups, with Phokwane NU (despite only containing 6% of the total PLM population) housing large percentages of the highest income groups (see **Table 19**).

Map 32: PLM Unemployment Rate

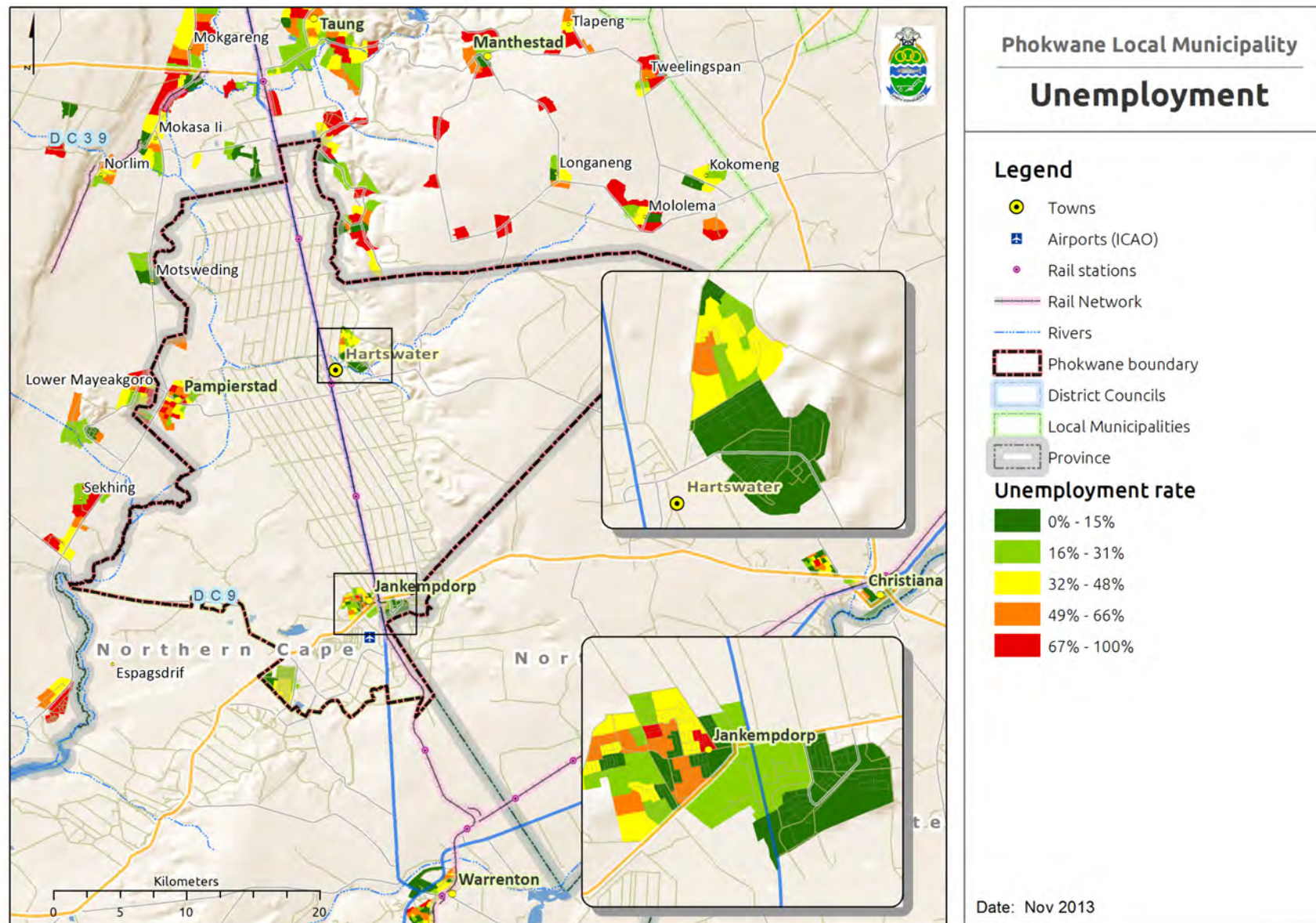


Table 16: Industry Sectors in PLM (2007 Community Survey (%))

Industry	Agriculture; hunting; forestry and fishing	Mining and quarrying	Manufacturing	Electricity; gas and water supply	Construction	Wholesale and retail trade	Transport; storage and communication	Financial; insurance; real estate and business services	Community; social and personal services	Other and not adequately defined	Unspecified
PLM	21,2	1,0	9,9	2,2	4,2	8,9	3,0	4,4	12,2	9,7	23,2
FBDM	6,2	4,5	9,4	0,6	5,1	12,2	4,1	9,3	22,4	9,4	16,8
NCP	14,7	7,0	8,6	0,7	5,2	11,7	3,7	7,0	17,7	9,3	14,2

Table 17: Occupation Sectors in PLM (2007 Community Survey 2007) (%)

Occupation	Legislators; senior officials and managers	Professionals	Technicians and associate professionals	Clerks	Service workers; shop and market sales workers	Skilled agricultural and fishery workers	Craft and related trades workers	Plant and machine operators and assemblers	Elementary occupations	Occupations unspecified and not elsewhere classified
PLM	5,6	9,1	2,8	10,2	5,7	11,4	9,0	6,4	18,0	21,8
FBDM	8,7	10,7	6,5	0,0	11,3	4,6	10,7	6,0	14,0	17,0
NCP	8,7	9,2	4,4	8,7	9,0	7,3	11,5	6,6	19,6	14,9

Table 18: PLM Annual Household Income (%)

	No income	R 1 - R 4800	R 4801 - R 9600	R 9601 - R 19 600	R 19 601 - R 38 200	R 38 201 - R 76 400	R 76 401 - R 153 800	R 153 801 - R 307 600	R 307 601 - R 614 400	R 614 001 - R 1 228 800	R 1 228 801 - R 2 457 600	R 2 457 601 or more	Total
Banksdrif	14,2	7,5	11,9	34,3	19,4	9,7	0,0	1,5	0,7	0,0	0,0	0,0	100
Phokwane NU	4,1	1,6	4,0	29,3	23,4	12,0	8,9	9,2	4,6	1,5	0,6	0,8	100
Hartswater	8,8	3,2	5,2	15,5	23,6	16,8	12,3	8,7	3,8	1,3	0,6	0,4	100
Pampierstad	16,1	5,6	8,7	23,7	20,7	10,3	7,1	5,2	2,1	0,2	0,1	0,1	100
Jan Kempdorp	17,1	5,4	9,0	22,3	21,8	11,0	6,8	4,4	1,6	0,2	0,2	0,2	100
Ganspan	14,4	8,6	12,9	35,0	23,3	4,8	0,7	0,2	0,0	0,0	0,2	0,0	100
PLM	14,2	4,9	8,0	22,8	21,9	11,5	7,7	5,6	2,3	0,5	0,3	0,2	100
FBDM	12,8	3,9	6,2	18,8	20,2	13,8	10,2	7,7	4,4	1,3	0,4	0,3	100
Northern Cape	12,0	3,7	6,3	19,2	21,2	14,7	10,4	7,3	3,7	1,0	0,3	0,2	100

Table 19: Annual Household Income Distribution throughout the PLM (%)

	No income	R 1 - R 4800	R 4801 - R 9600	R 9601 - R 19 600	R 19 601 - R 38 200	R 38 201 - R 76 400	R 76 401 - R 153 800	R 153 801 - R 307 600	R 307 601 - R 614 400	R 614 001 - R 1 228 800	R 1 228 801 - R 2 457 600	R 2 457 601 or more
Banksdrif	0,8	1,2	1,1	1,1	0,7	0,6	0,0	0,2	0,2	0,0	0,0	0,0
Phokwane NU	2,4	2,8	4,2	10,7	8,9	8,7	9,6	13,7	16,5	25,3	20,5	27,5
Hartswater	10,0	10,4	10,4	10,9	17,4	23,4	25,6	24,8	26,7	42,5	36,4	30,0
Pampierstad	41,1	41,1	39,5	37,7	34,4	32,4	33,6	33,8	32,3	14,9	15,9	15,0
Jan Kempdorp	42,3	38,7	39,4	34,4	35,1	33,6	31,0	27,5	24,0	16,1	25,0	25,0
Ganspan	3,4	5,8	5,3	5,1	3,5	1,4	0,3	0,1	0,0	0,0	2,3	0,0
PLM	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0

3.3.5 Economy

Agriculture

Surely the most striking feature of the PLM is the Vaalharts Irrigation Scheme, dating back to the 1930s, the longest continuous irrigation scheme in the country, and the second largest irrigation scheme in the southern hemisphere. The scheme brings a very marked element of greenery to what is otherwise a very dry and barren part of the country.

The primary economic activity and the lifeblood of the municipality is agriculture, driven by the Vaalharts Irrigation Scheme, which is practised on (1) the 1 280 farms, with the smallest farm being 25.4 hectares in extent; (2) smaller landholdings of just below a hectare in size; and (3) a limited number of very small plots and communal grazing lands in and around primarily Pampierstad, Ganspan and Valspan. Just over 70% of the municipal land area is used for it, and the existence of the five settlements in the area are all tied to it, in either upstream or downstream value-chains. The primary crops produced in the area are constantly undergoing change as farmers adapt to prices and changes in consumer tastes and fashions. The most popular crops over the last decade have been maize, wheat, pecan nuts, barley, groundnuts, lucerne, vegetables and citrus. Large-scale livestock farming is not common on the larger irrigation farms. It is, however, practised extensively on the smaller farms in the Ganspan area and Pampierstad and Valspan. Flooding is the most common method of irrigation used, with nearly 75% of farmers using it. Sprinklers, pivots and drop irrigation are used far less frequently and primarily only on larger farms with quick-growing, high-value crops (see **Maps 33-35**).

Secondary Economic Activities

Other than agriculture, the primary economic activities in the PLM are retail and trade, followed by personal and government services and lastly manufacturing. These are primarily concentrated in Hartswater and Jan

Kempdorp, and to a lesser extent in Pampierstad. While Hartswater has by far the strongest retail area and offers the most extensive set of community, social and personal services, Jan Kempdorp is stronger in the area of manufacturing, transport, storage and financial and business services. On a district and national scale, all of the non-agricultural economic activities are, however, small. In terms of the performance of the PLM since 1996 and during the first few years of the current economic recession, the economy of the PLM (1) grew by between 0 and 2.5% per annum between 1996 and 2009, which is very similar to the rest of the Northern Cape Province; (2) went up in terms of GVA, and down in terms of employment, between 1996 and 2009; and (3) shrunk by between 0% and -2.9 between 2007 and 2009 (see **Maps 35-43**).

Tourism

The tourism industry in the PLM is poorly developed, in part due to the fact that the area does not possess any national, provincial or local nature reserves or national heritage sites and conservancies. However, according to the Frances Baard District Municipality Tourism Strategy (FBDMTS 2009), the PLM is ideal for the development of a '*farm tour and farm stay*'-industry where tourists can experience authentic farm life. It also identified the following tourist attractions that assist and could be incorporated into such an initiative:

- Vaalharts Valley;
- Burial Sites;
- Hartswater wine cellar;
- Vaalharts Museum in Jan Kempdorp;
- Ganspan Waterfowl;
- Poplar lane;
- Magong gong show – ground nuts, olives and pecan nuts in summer;
- Olives production with the Olive factory;
- Closeness to Taung Heritage Site;
- Agricultural activities and research; and
- The Woman's Memorial.

In addition to these, according to the IDP Review of 2013/14, two ‘priority issues’ in PLM are: (1) the development of the Phokwane Tourism Information Centre in Hartswater; and (2) the development of Ganspan-Pan into a Tourism resort, suggesting a more serious focus on tourism in municipality.

Land Reform

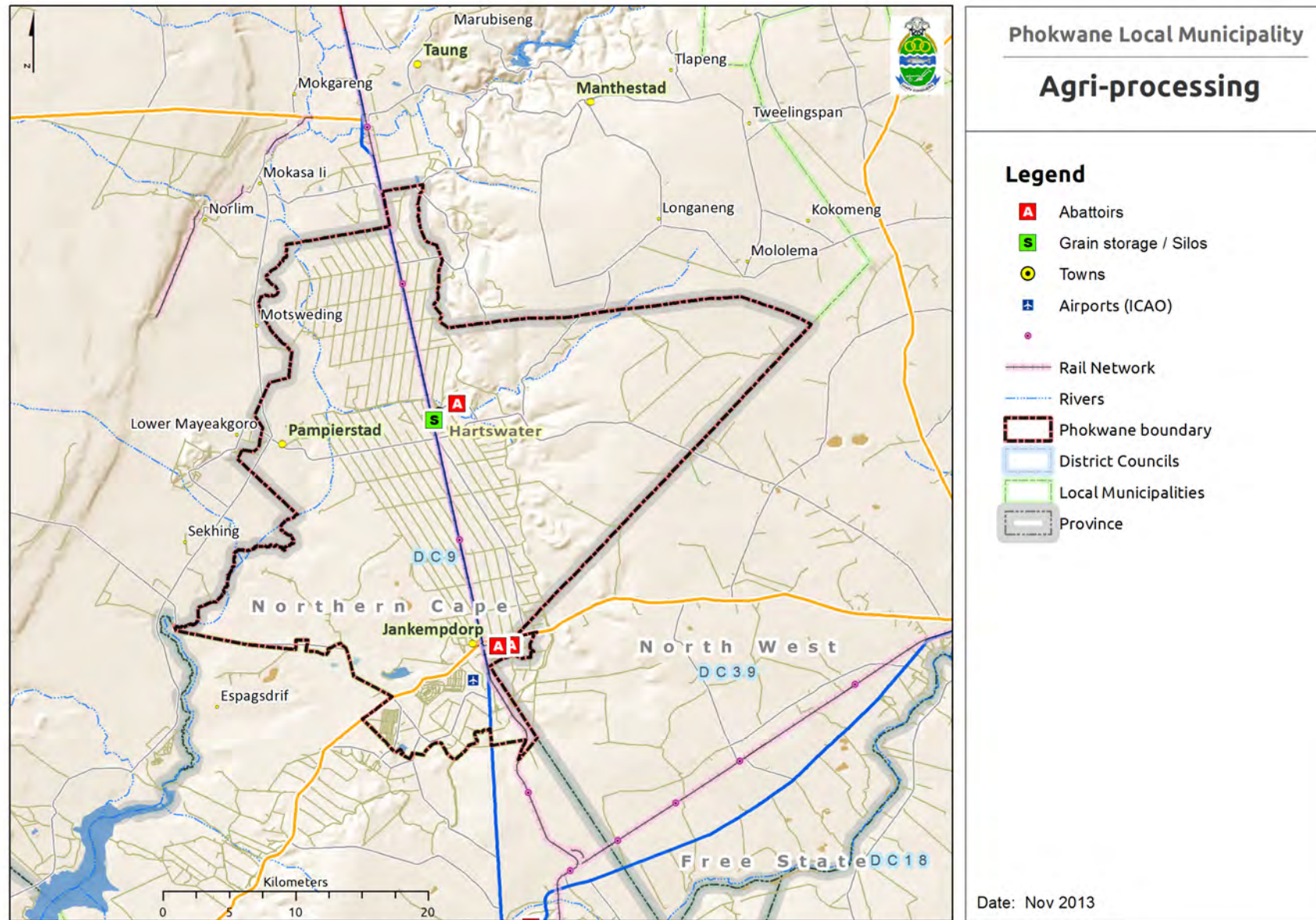
Based on available information, land reform has not taken place on a large scale in PLM. There are some LRAD-projects in the eastern half of the PLM, notably on the eastern border of the Vaalharts Irrigation Scheme, and a PLAS-project in Magareng LM, just outside the PLM (see **Map 45**). Given the stated need in the community and stakeholder engagements for more land for agriculture, it is an aspect in urgent need of attention.

Spatial Economic Trends

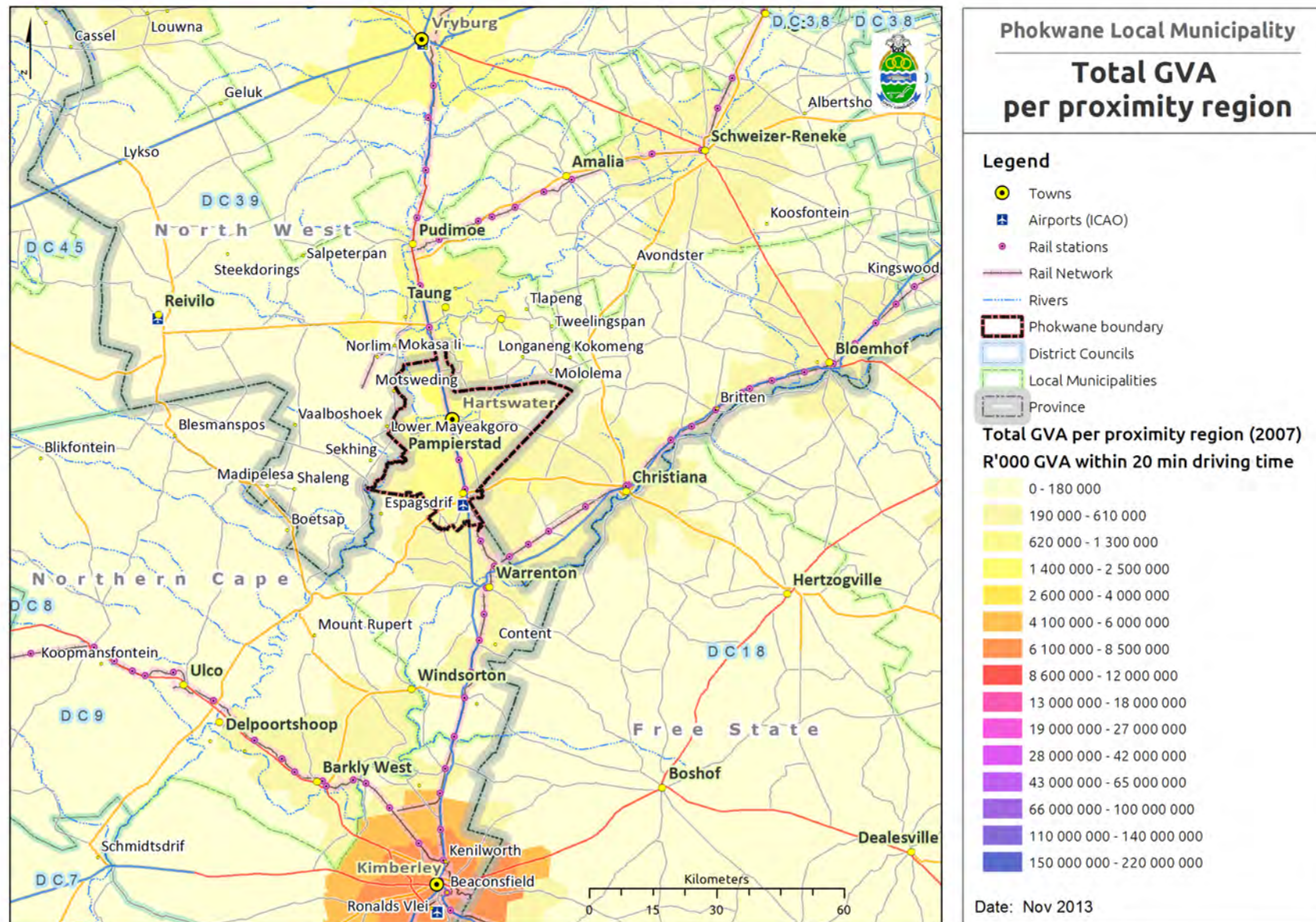
Based on spatial economic trends (notably the location of economic activities and migration patterns in the wider region) over the last decade, it is envisaged that the current concentration of economic activities in the Hartswater-node will continue for the foreseeable future (see also **paragraph 3.4.5** below). While Jan Kempdorp may experience some growth, it is not foreseen to match that of Hartswater. At the same time, without government intervention, the slack economic growth in Pampierstad, Valspan and Ganspan is set to continue. Whether government intervention will enable the development of economic nodes in the latter three settlements, is uncertain. What could be achieved with such intervention would be the development of small-scale locally-focused economic development.

A detailed spatial economic study of the PLM (scale, spatial location and trends) would be useful in providing more detailed information for planning purposes.

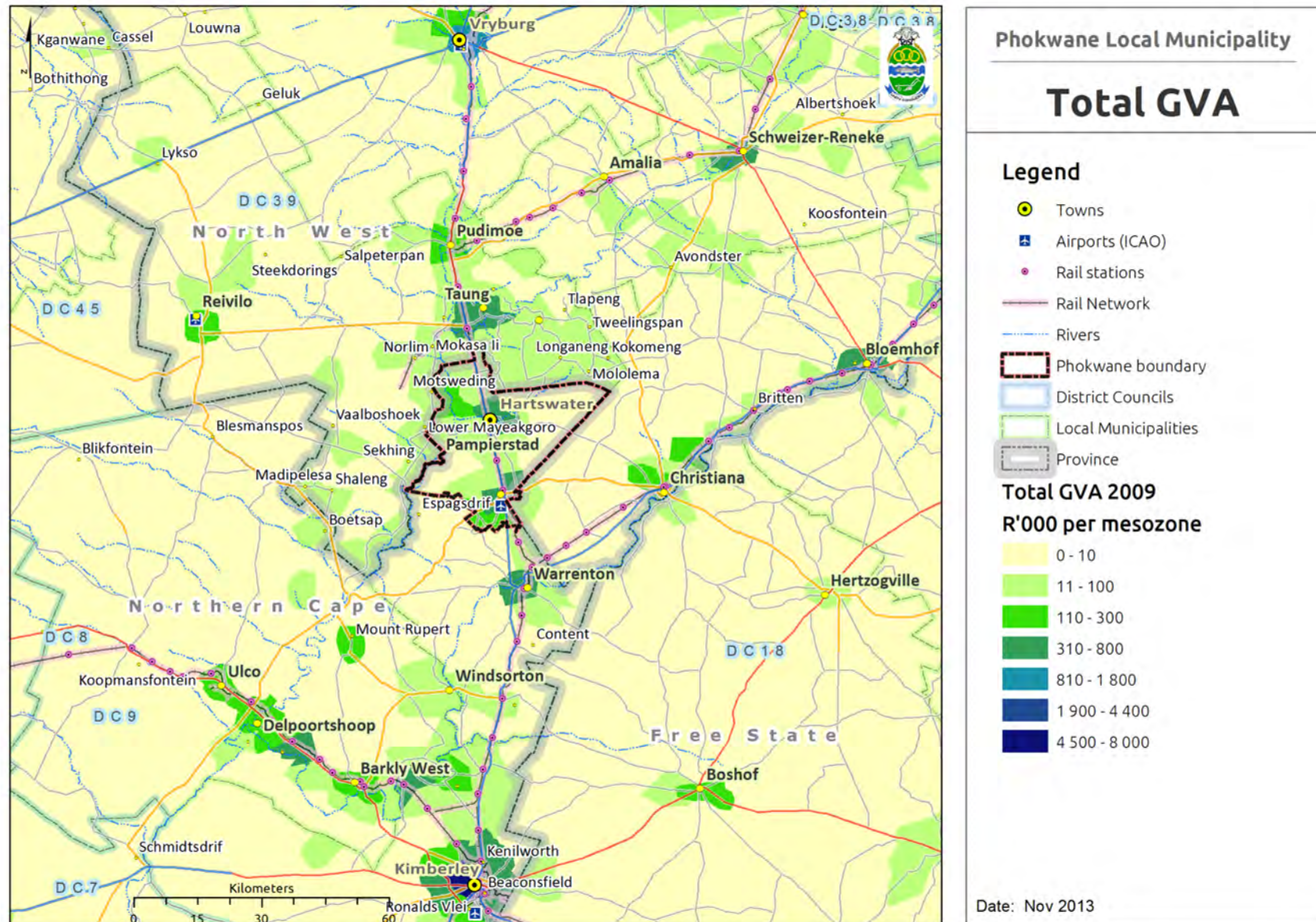
Map 33: PLM Agri-Processing



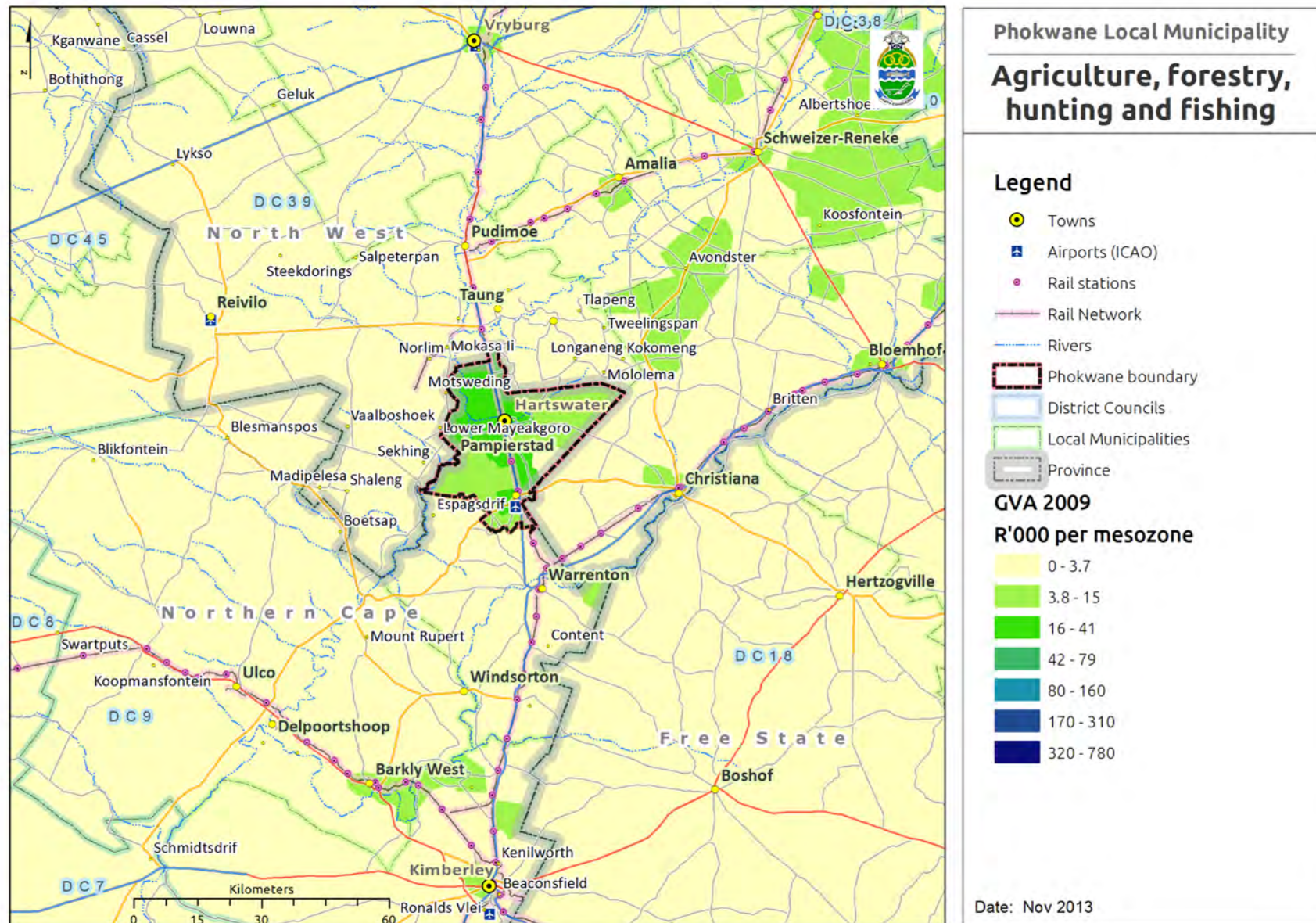
Map 34: Total GVA per Proximity Region



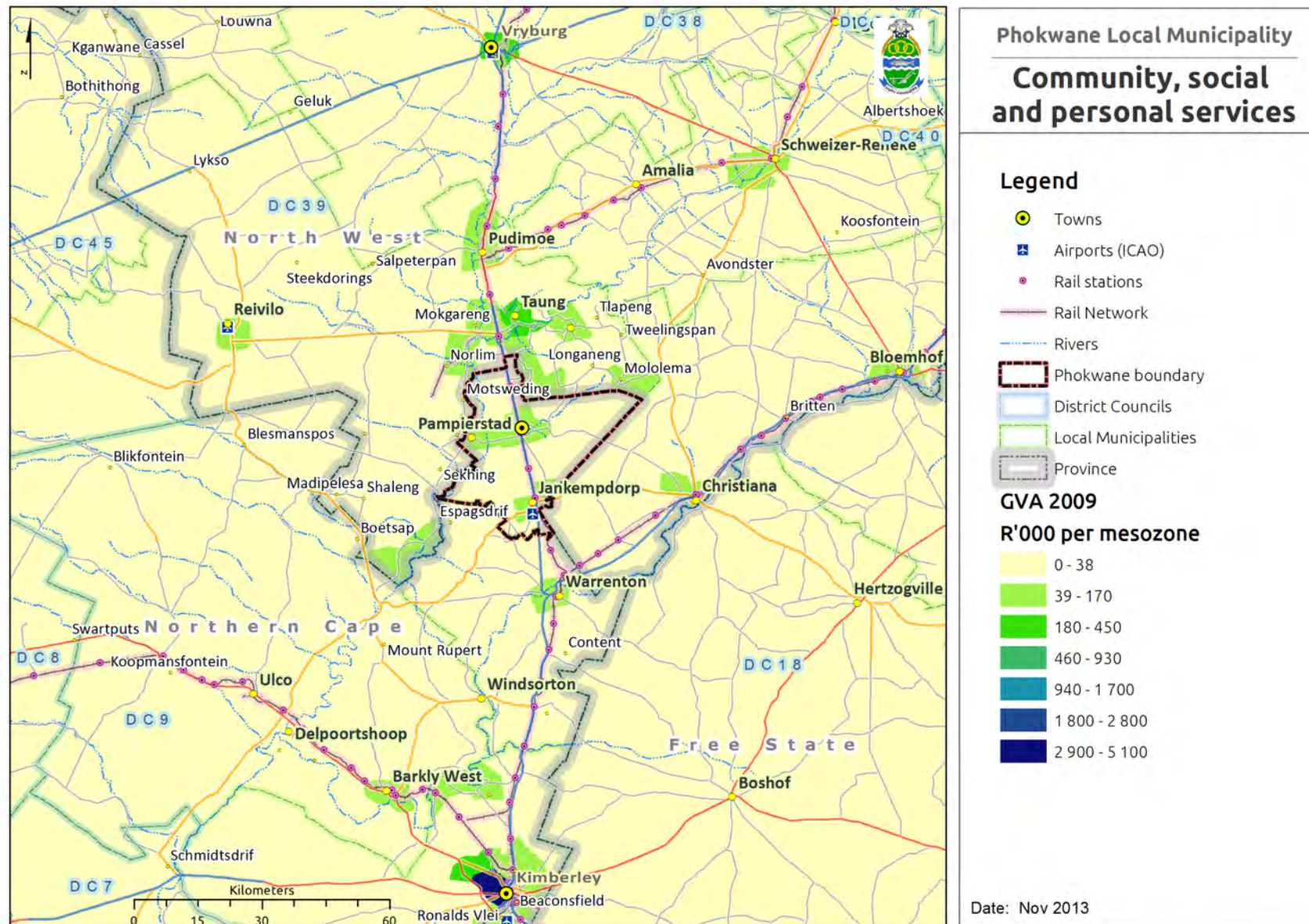
Map 35: PLM Total GVA



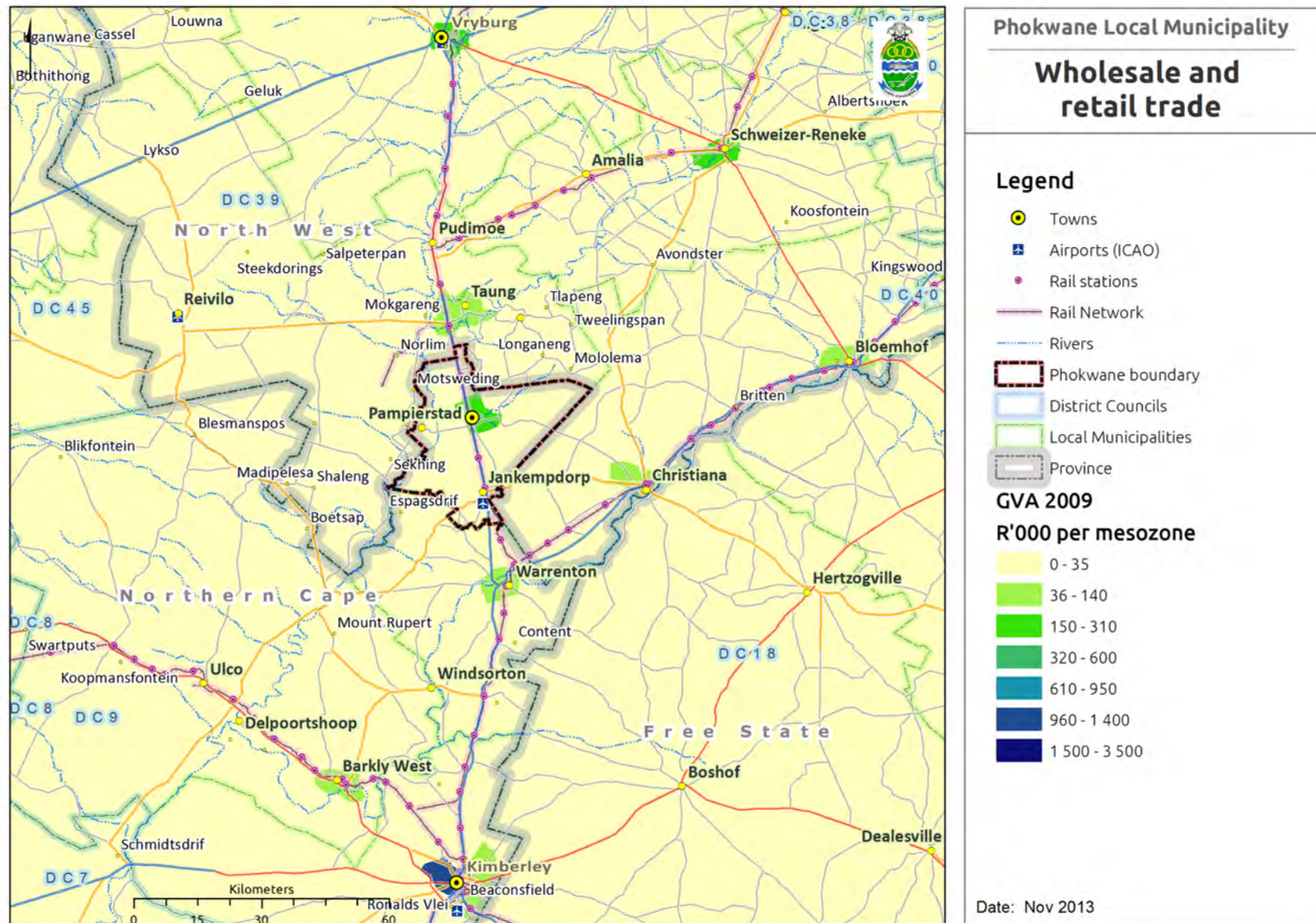
Map 36: PLM Agriculture, Forestry, Hunting and Fishing GVA



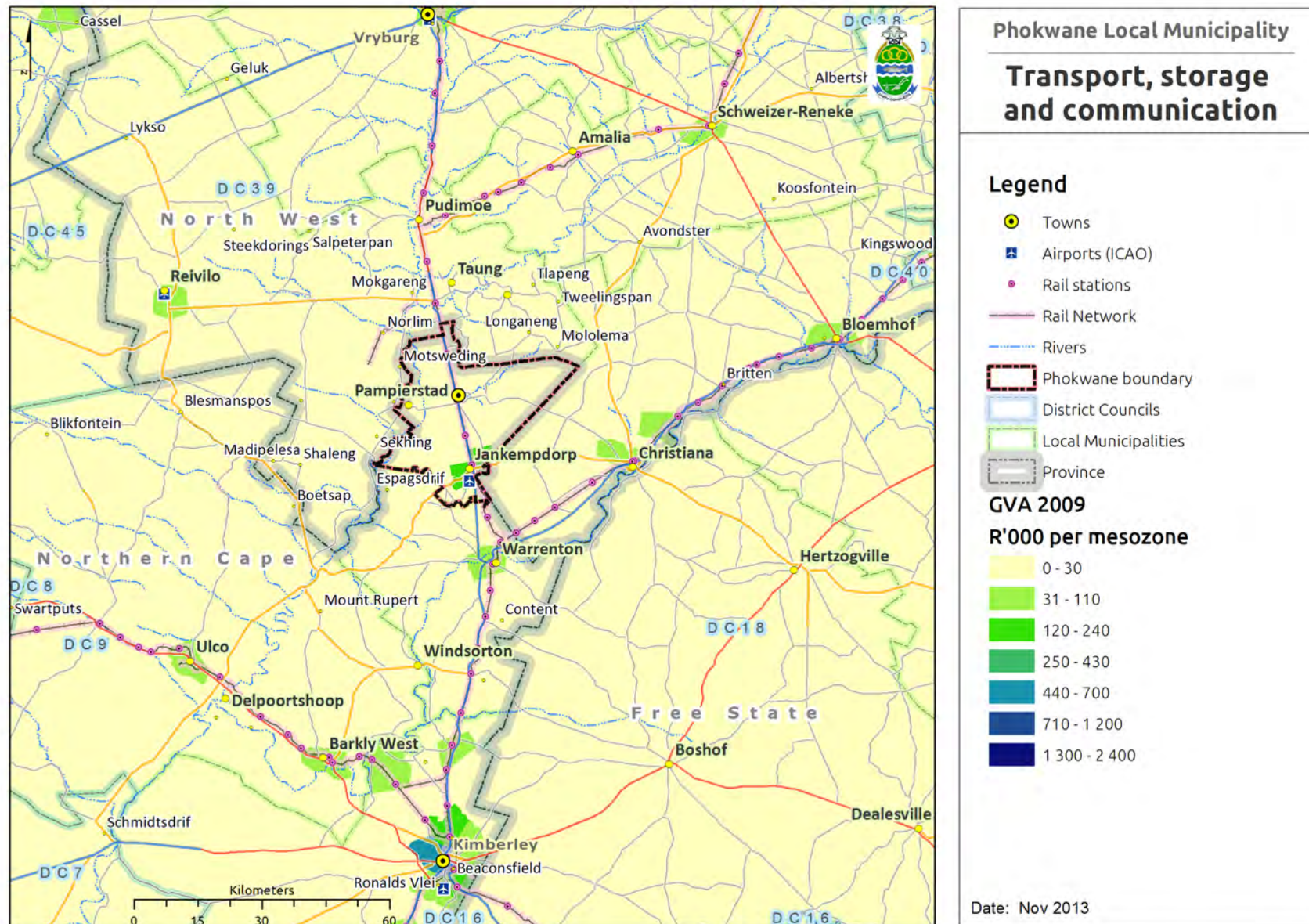
Map 37: PLM Community, Social and Personal Services GVA



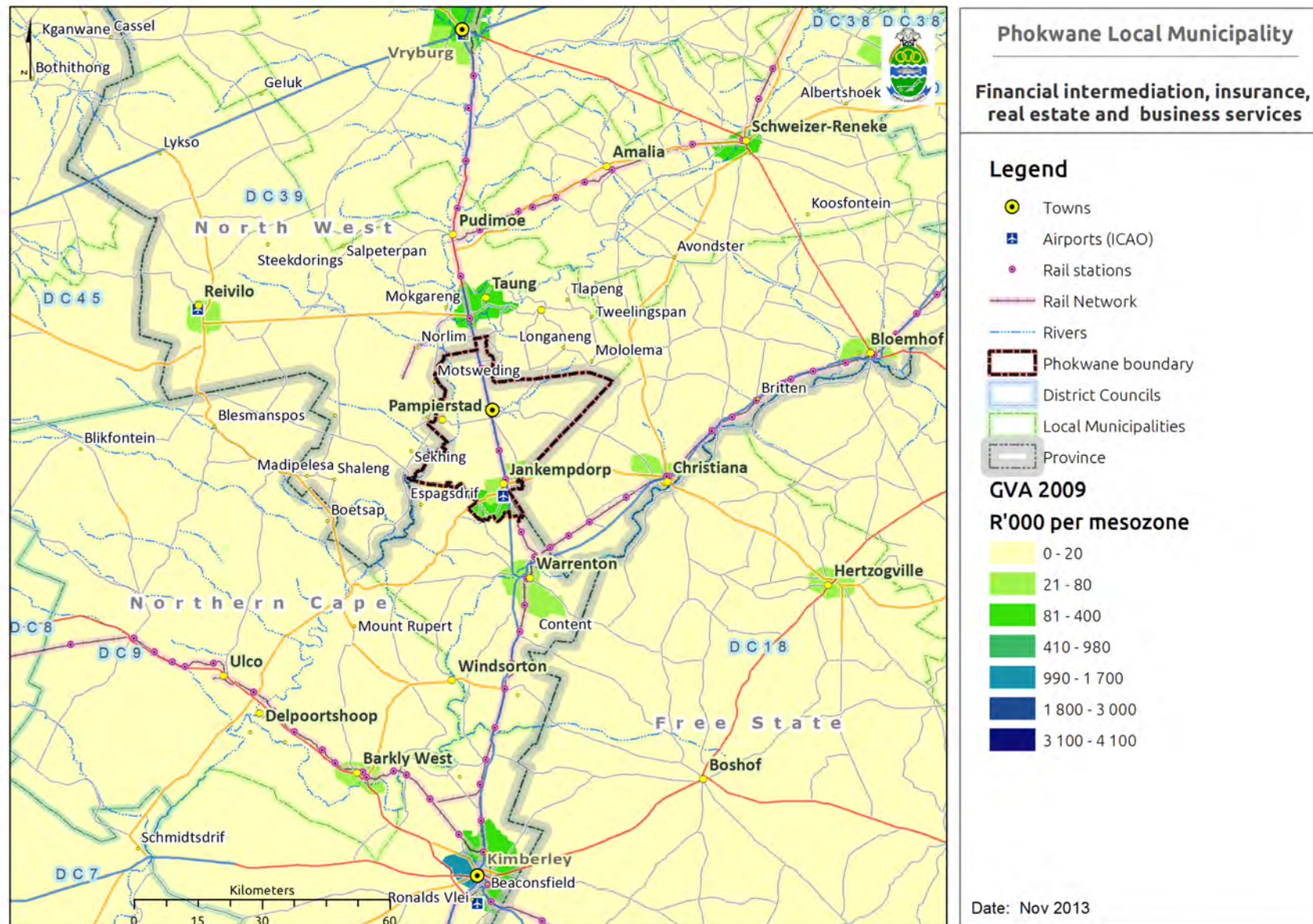
Map 38: PLM Wholesale and Retail Trade GVA



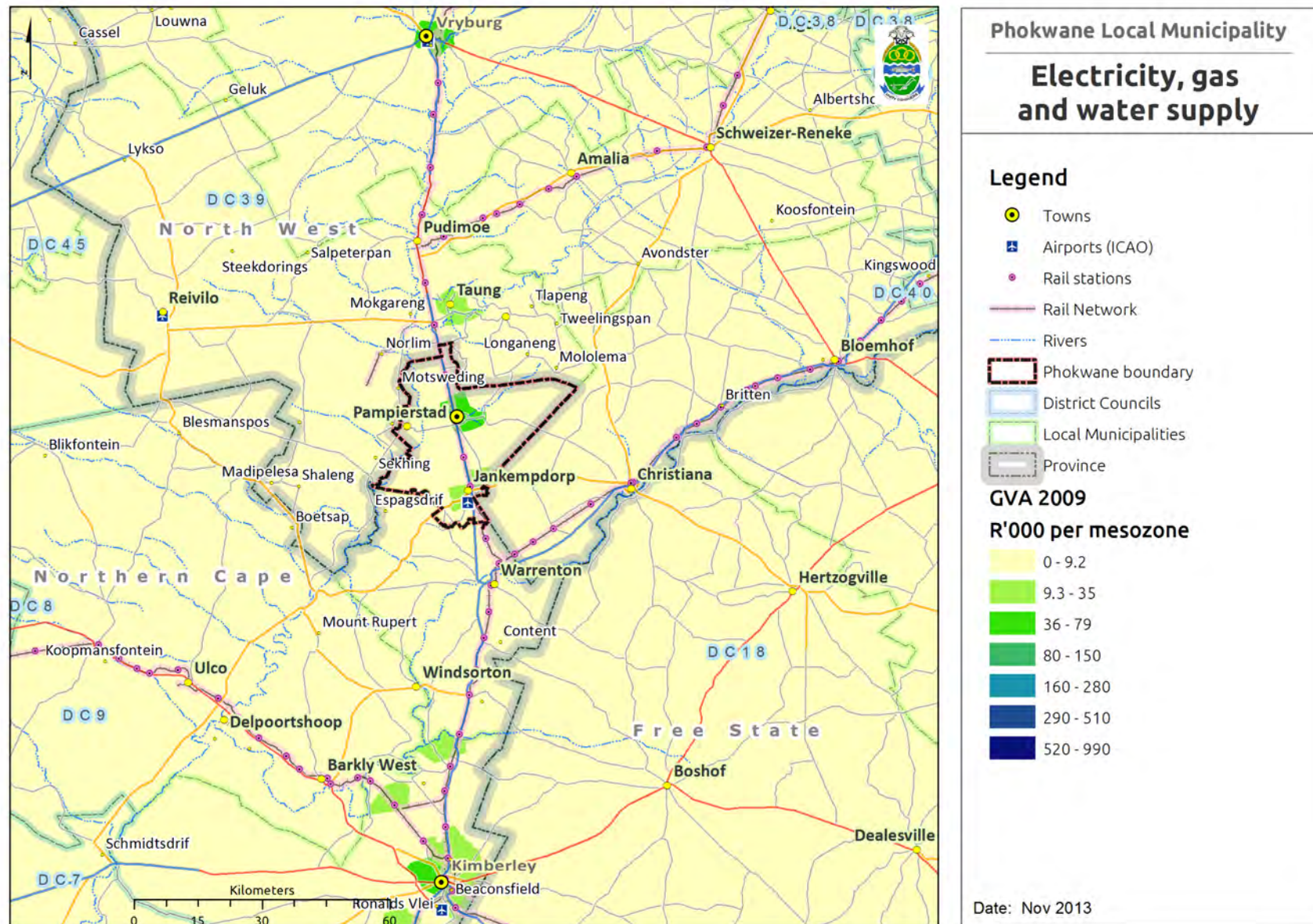
Map 39: Transport, Storage and Communication GVA



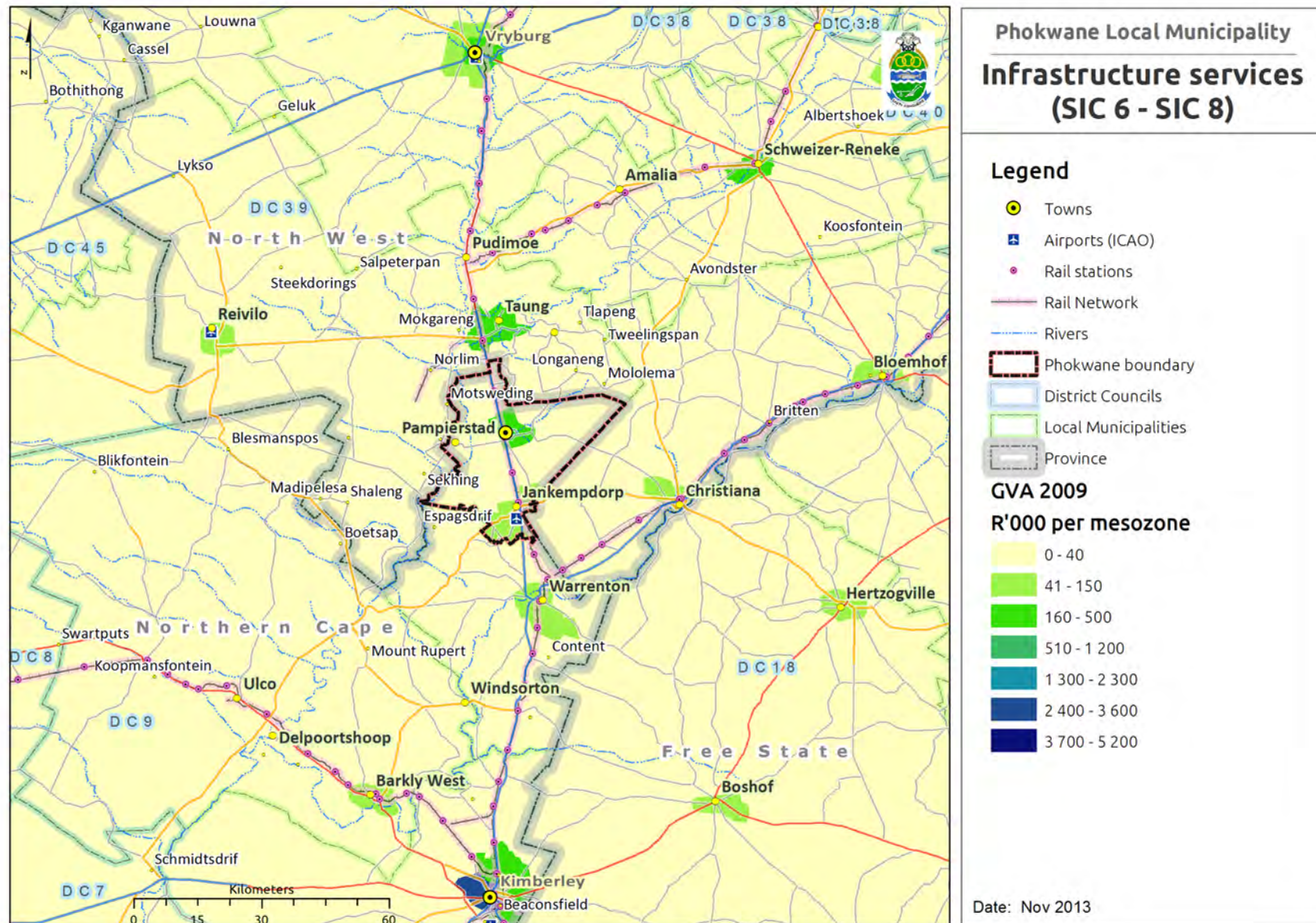
Map 40: PLM Financial Intermediation, Insurance, Real Estate and Business Services GVA



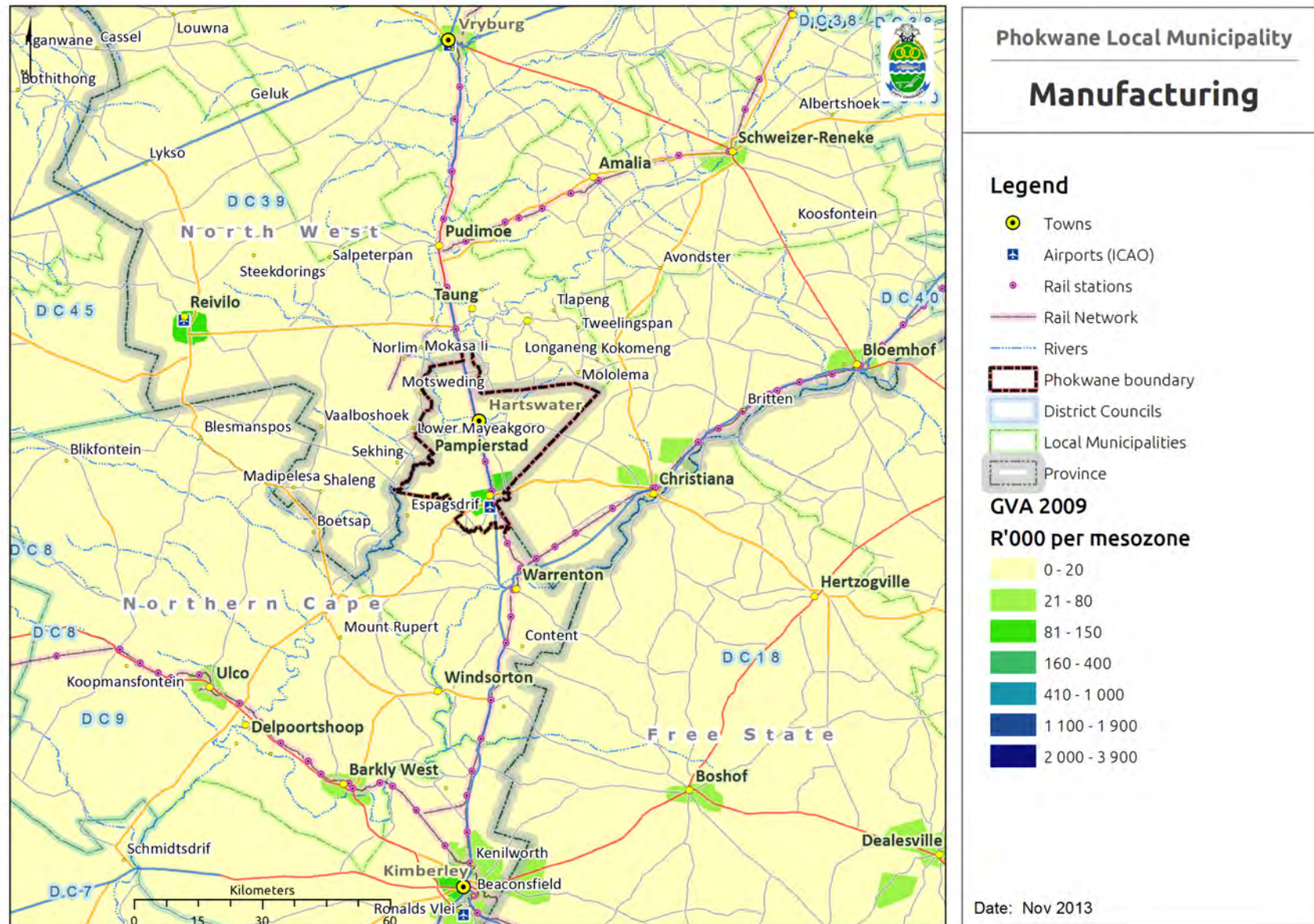
Map 41: Electricity, Gas and Water Supply GVA



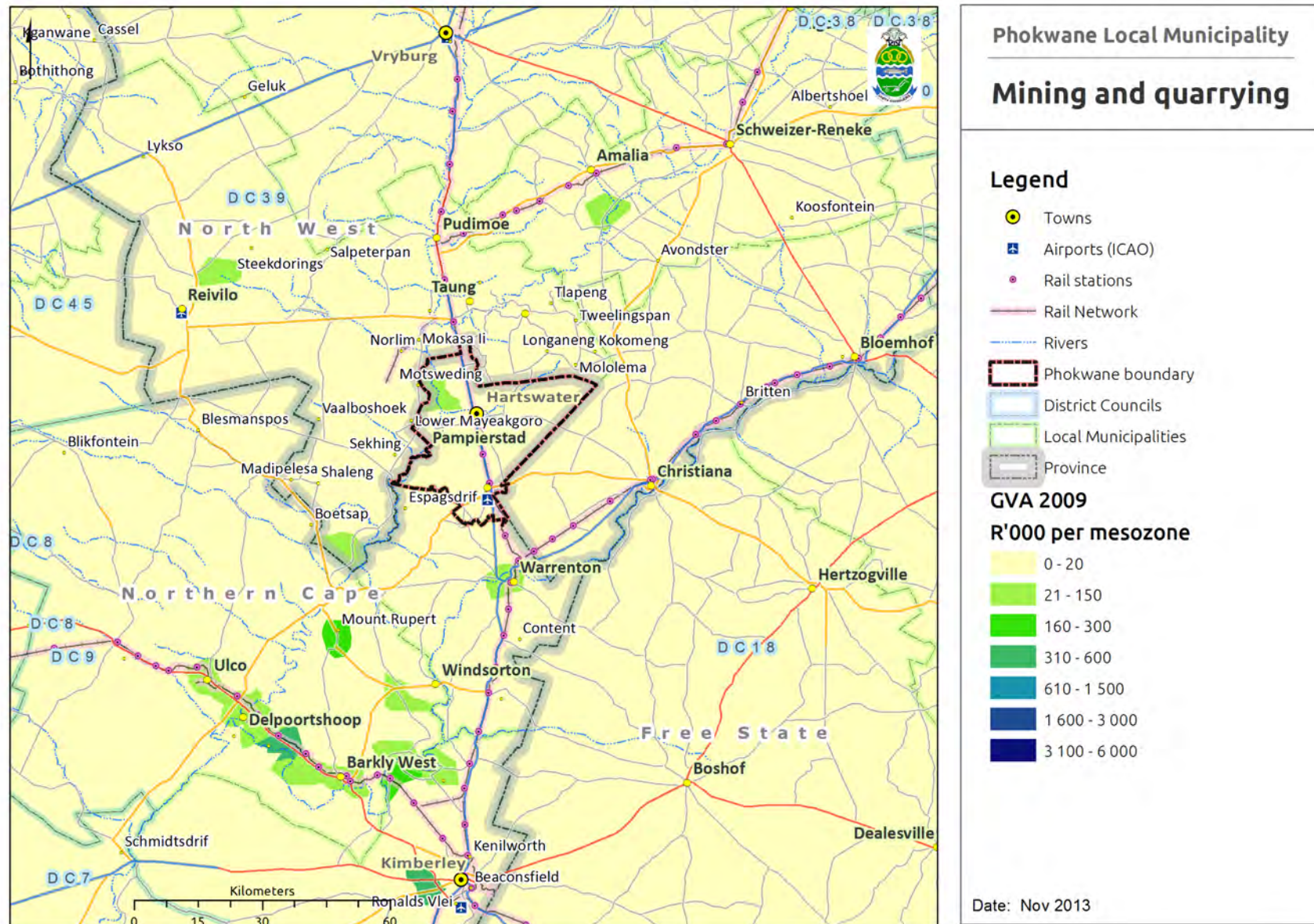
Map 42: PLM Infrastructure Services



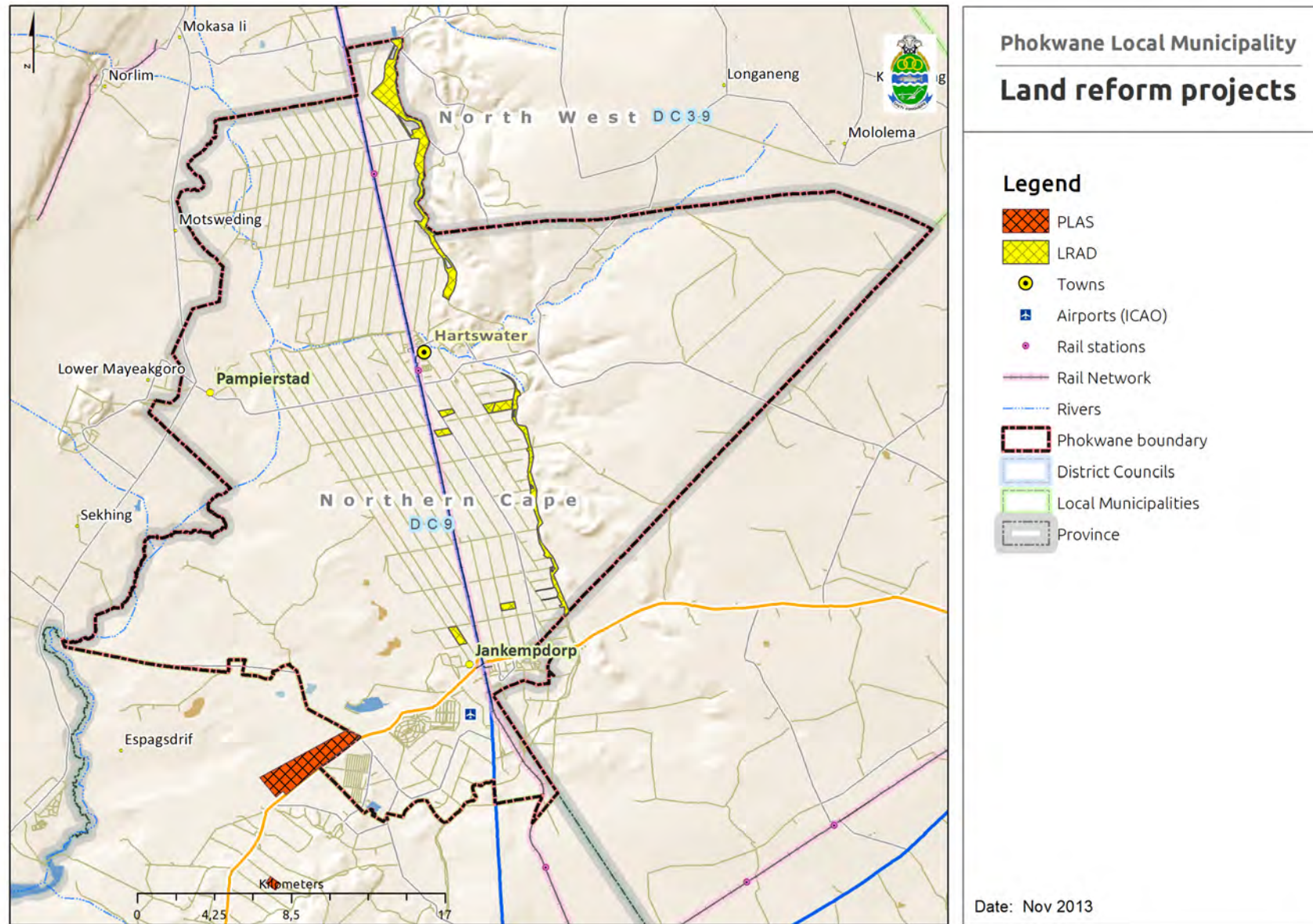
Map 43: PLM Manufacturing GVA



Map 44: PLM Mining and Quarrying GVA



Map 45: PLM Land Reform Projects



3.4 URBAN SETTLEMENT PATTERNS

3.4.1	Overview of the Urban Settlement Patterns	p. 88
3.4.2	PLM Settlements	p. 90
3.4.3	PLM Settlement Characteristics	p. 90
3.4.4	Access to Services	p. 99
3.4.5	Urban Settlement Projections	p. 105

3.4.1 Overview of the Urban Settlement Pattern in PLM

The main settlements in the PLM are Hartswater (the administrative centre), Jan Kempdorp, Pampierstad and Ganspan. While Jan Kempdorp has the largest population it is Pampierstad with the largest number of households (36,3%).

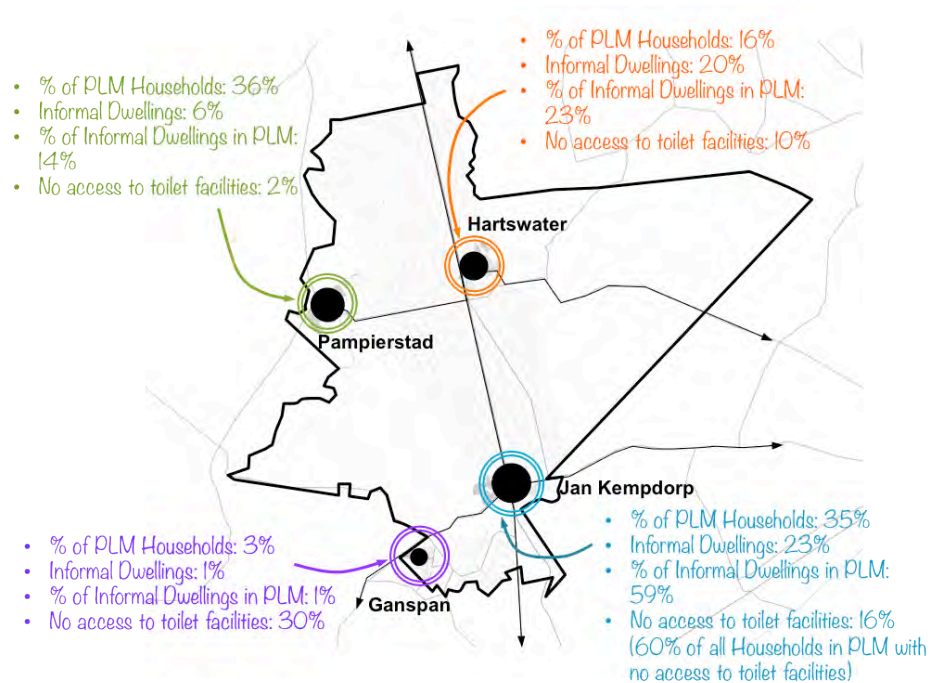
Although Pampierstad houses 50% of all unemployed individuals in the PLM, it has the highest percentage (91,8%%) of households living in formal houses. On the other hand, Hartswater, which had seen its population almost double since 2001, and Jan Kempdorp, which has experienced a 35% growth since 2001, have large informal settlements – 20% of Hartswater’s 23% of Jan Kempdorp’s households are living in informal dwellings. In the PLM as a whole, Jan Kempdorp houses 58,6% of all informal dwellings.

With regard to service provision, Jan Kempdorp fares the worst. Although 46% of Ganspan’s households have to walk further than 200m to access water at a community stand, Jan Kempdorp has 40,4% of all households in the PLM with no access to piped water. And, although access to toilet facilities had decidedly increased in the PLM since 2001, 9,3% of all households still have no access to such services, with 60,2% of those households in the PLM located in Jan Kempdorp. The largest percentage (44,9%) of households with ‘no access to rubbish disposal’ were also located in Jan Kempdorp.

Challenges:

- Changes made in demarcation of census sub-places makes comparison between 2001 and 2011, making the identification of trends problematic;
- There is a need for a detailed housing study to determine the needs of PLM’s population; and
- Increasing pressure is being placed on Jan Kempdorp and Hartswater to provide housing and services to their growing populations.

Figure 7: PLM Urban Settlement Overview



Informal settlement



Pollution



More established formal settlement



Recent formal settlement



Luxury settlement



Illegal rubbish dump

3.4.2 PLM Settlements

As noted in **paragraph 3.4.1** above, the PLM has five settlements: (1) Hartswater and Bonita Park; (2) Pampierstad; (3) Jan Kempdorp; (4) Valspan; and (5) Ganspan. Of these five, Hartswater not only has the most non-farming economic activities, but is also the home of the Phokwane LM Offices. Hartswater is also the settlement with the highest urban-order function, meaning that it offers the widest range and depth of urban services in closest proximity to each other. Pampierstad, Valspan and Ganspan are experiencing strong pressure for urban expansion. A key constraint on further urban expansion throughout the PLM is the fact that most settlements are boxed in by the intensive agricultural activities on the farms that are a part of the scheme. In the case of Pampierstad, which borders on the North West Province to its west, the challenge is not just one of (1) finding land in an area in which traditional leadership is strong, but also (2) the provision and maintenance of services by the Greater Taung and Phokwane LMs, as well as the two respective provincial governments (see **Maps 46-50**).

The five settlements by and large still reflect the old apartheid imagery, with (1) Hartswater, excluding Bonita Park and to some extent Jan Kempdorp, still displaying features of relatively ‘well-serviced rural towns’, and (2) Pampierstad, Ganspan, Valspan and Bonita Park displaying clear features of ‘dense rural townships’ that are bursting at their seams, and in which service delivery has become a serious problem.

3.4.3 PLM Settlement Characteristics

According to the 2011-Census, there is a total of 17 544 households in the PLM, which reflects a 4.4% increase in households between 2001 and 2011 per year, decidedly lower than the provincial growth rate of 23%. Pampierstad (36,3%), Jan Kempdorp (35,2%) and Hartswater (16,1%) have the largest number of households, with densities in some parts of Jan Kempdorp and

Hartswater reaching 130-270 individuals/hectare (see **Table 20-21** and **Map 46**).

Table 20: PLM Households 1996, 2001 and 2011

	1996	2001	2011	1996 to 2001	2001-2011
PLM	13391	16807	17544	25,5	4,4
FBDM	72208	83286	95929	15,3	15,2
NCP	218339	245086	301406	12,3	23,0

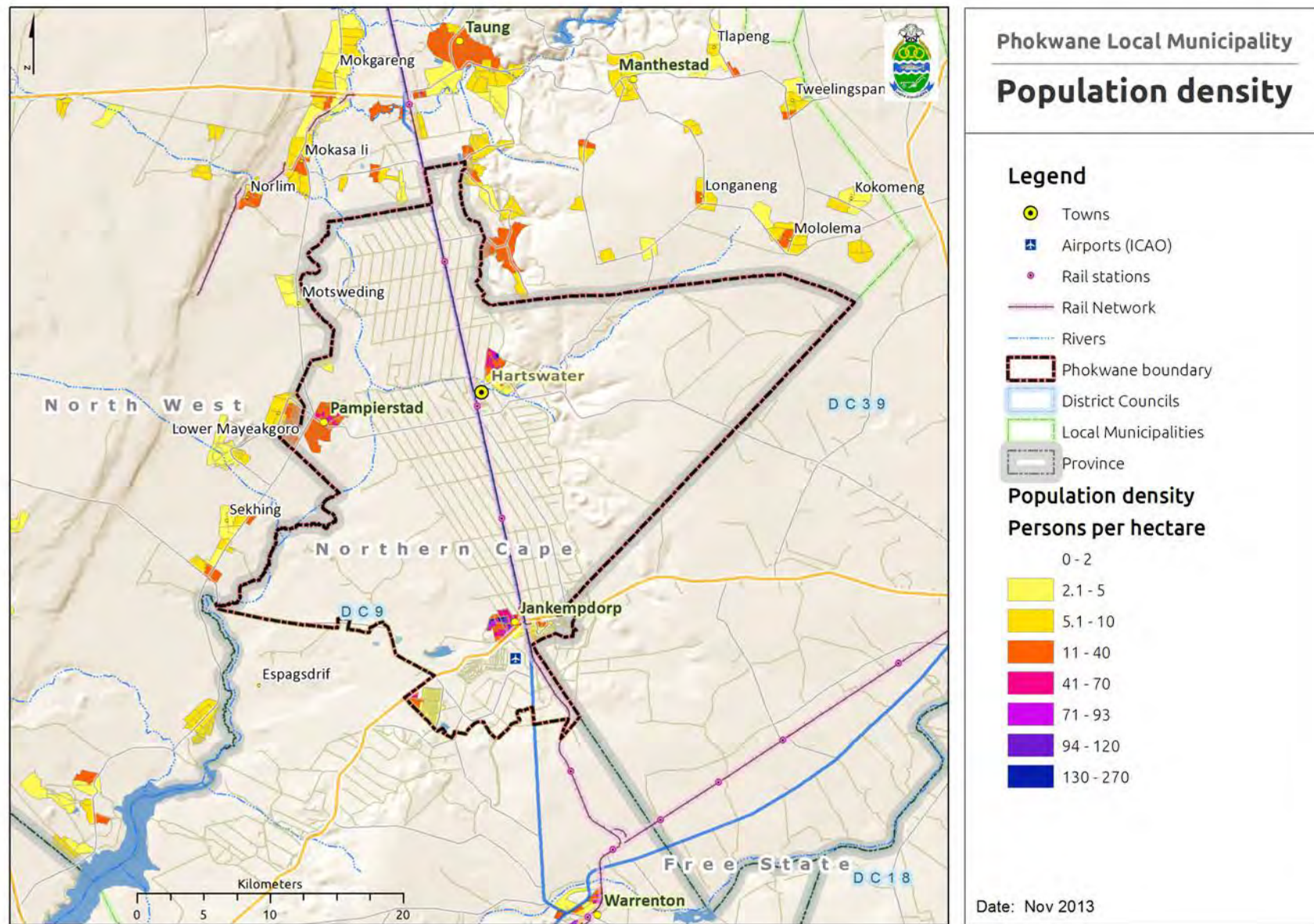
Table 21: PLM Households per Settlement

	Total	% of PLM households
Banksdrif	134	0,8
Phokwane NU	1464	8,3
Hartswater	2829	16,1
Pampierstad	6365	36,3
Jan Kempdorp	6167	35,2
Ganspan	583	3,3
PLM	17544	100,0

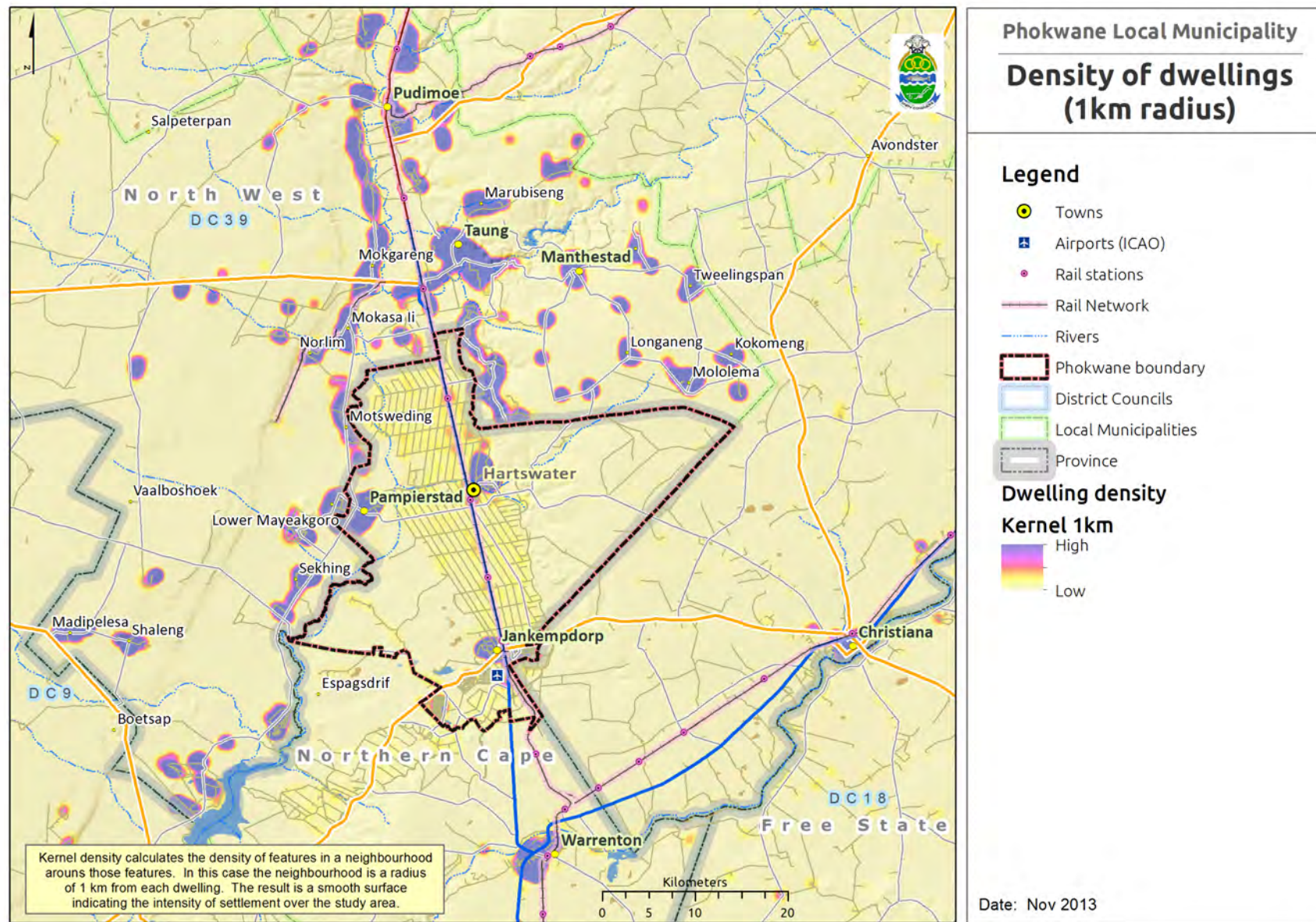
Formal housing has steadily been increasing in PLM from 76,4% in 1996 to 83,8% in 2011, with traditional housing at 1,2% in 2011, almost disappearing. Jan Kempdorp (23%) and Hartswater (19,5%) have the largest percentage of households living in informal dwellings, while 91,8% of Pampierstad’s households live in a formal house on a separate stand (see **Tables 22-23**). In total numbers, the largest percentage of informal settlements are located in Jan Kempdorp (58,6%) and Hartswater (22,8%).

Between 2001 and 2011, there was a strong increase in the number of houses 'owned and fully paid off'. The tendency to rent also declined. In the case of Ganspan, 95,9% of housing structures had been paid off by 2011. It is also the settlement with the highest percentage of households with only one room (64,2%). The majority of households in this settlement are made up of between one and three individuals (see **Table 24-26**).

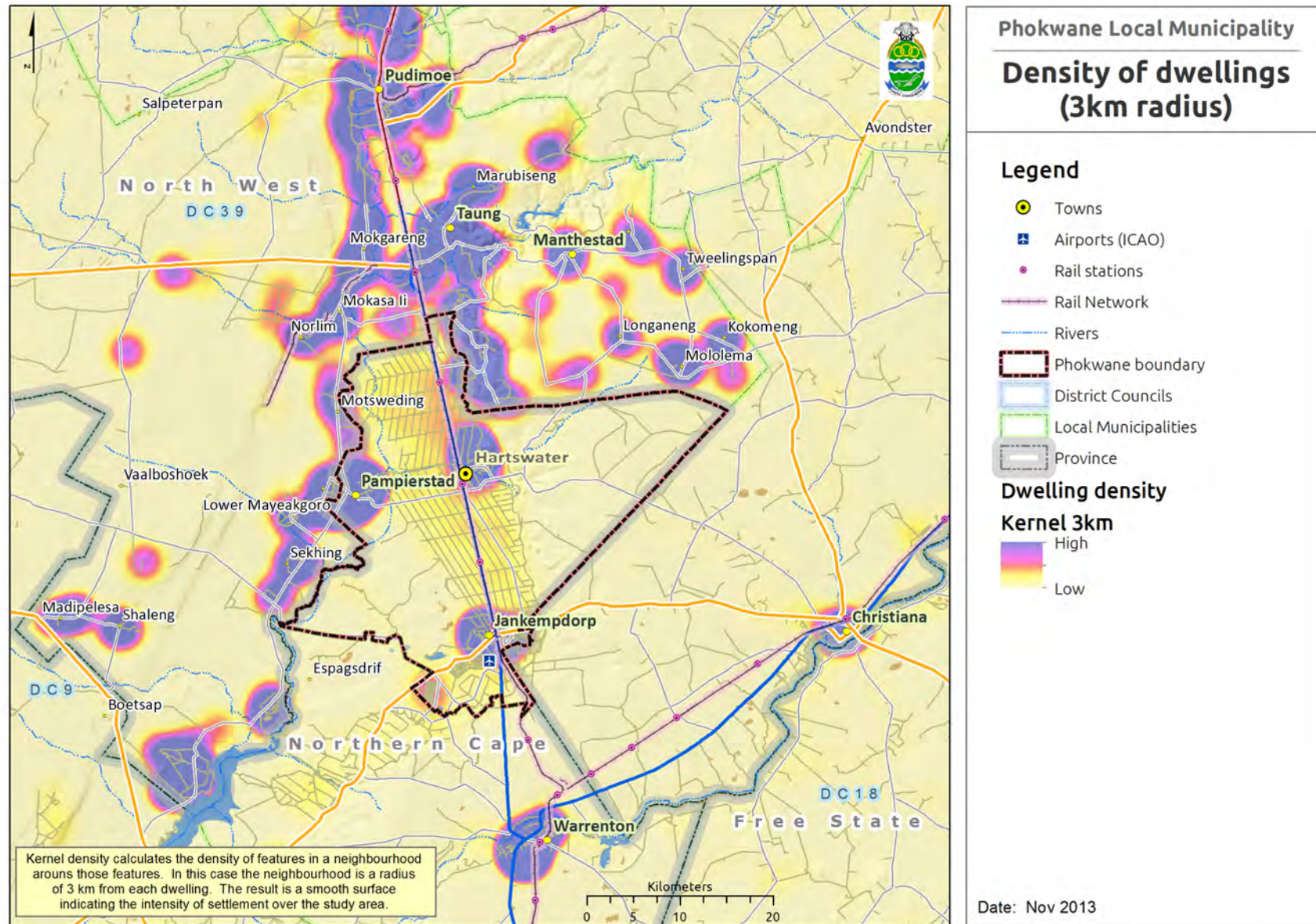
Map 46: PLM Population Density



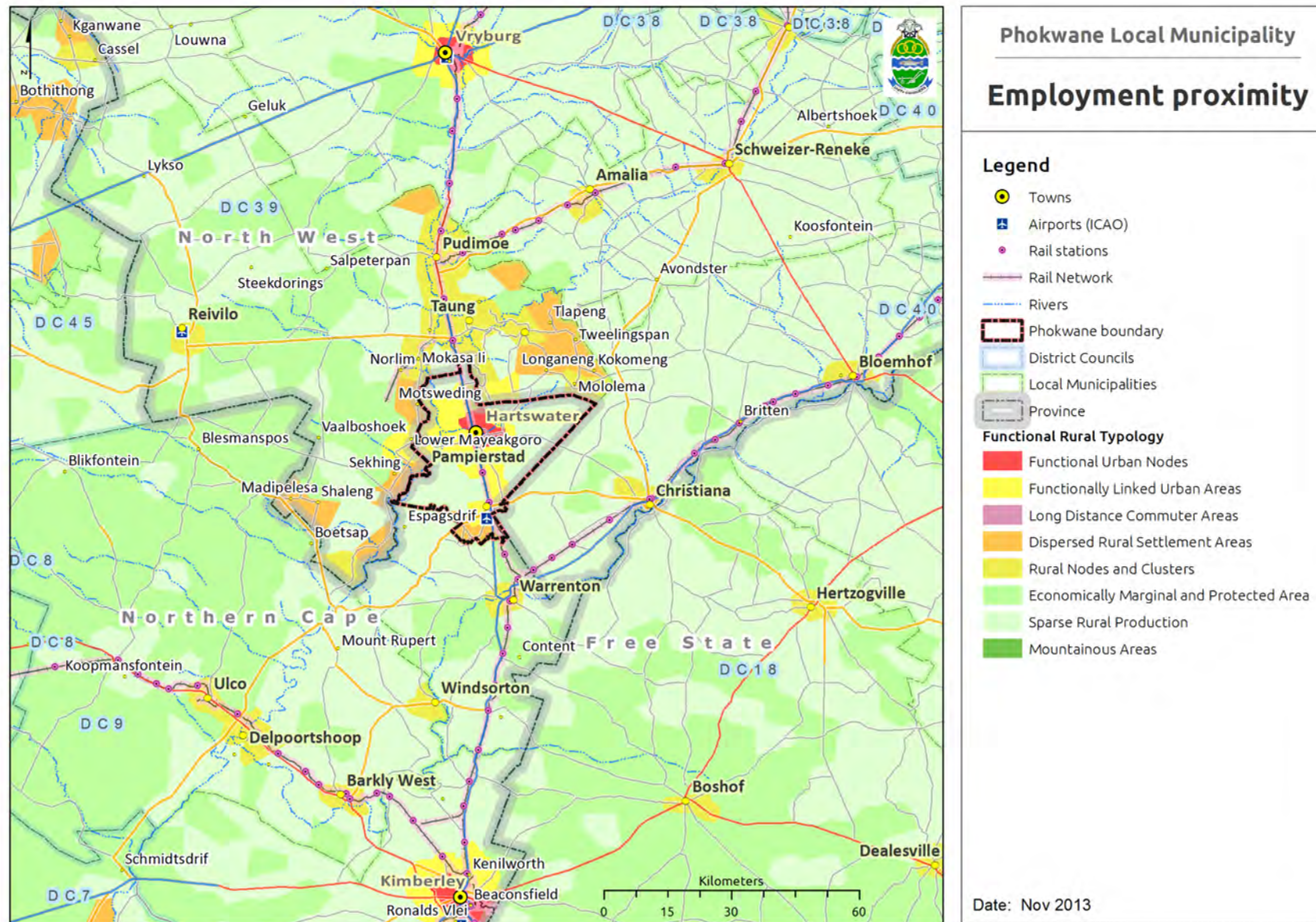
Map 47: PLM Density of Dwellings (1km Radius)



Map 48: PLM Density of Dwellings (3km Radius)



Map 49: PLM Functional Settlement Typology



Map 50: PLM Combined Urban Access and Density

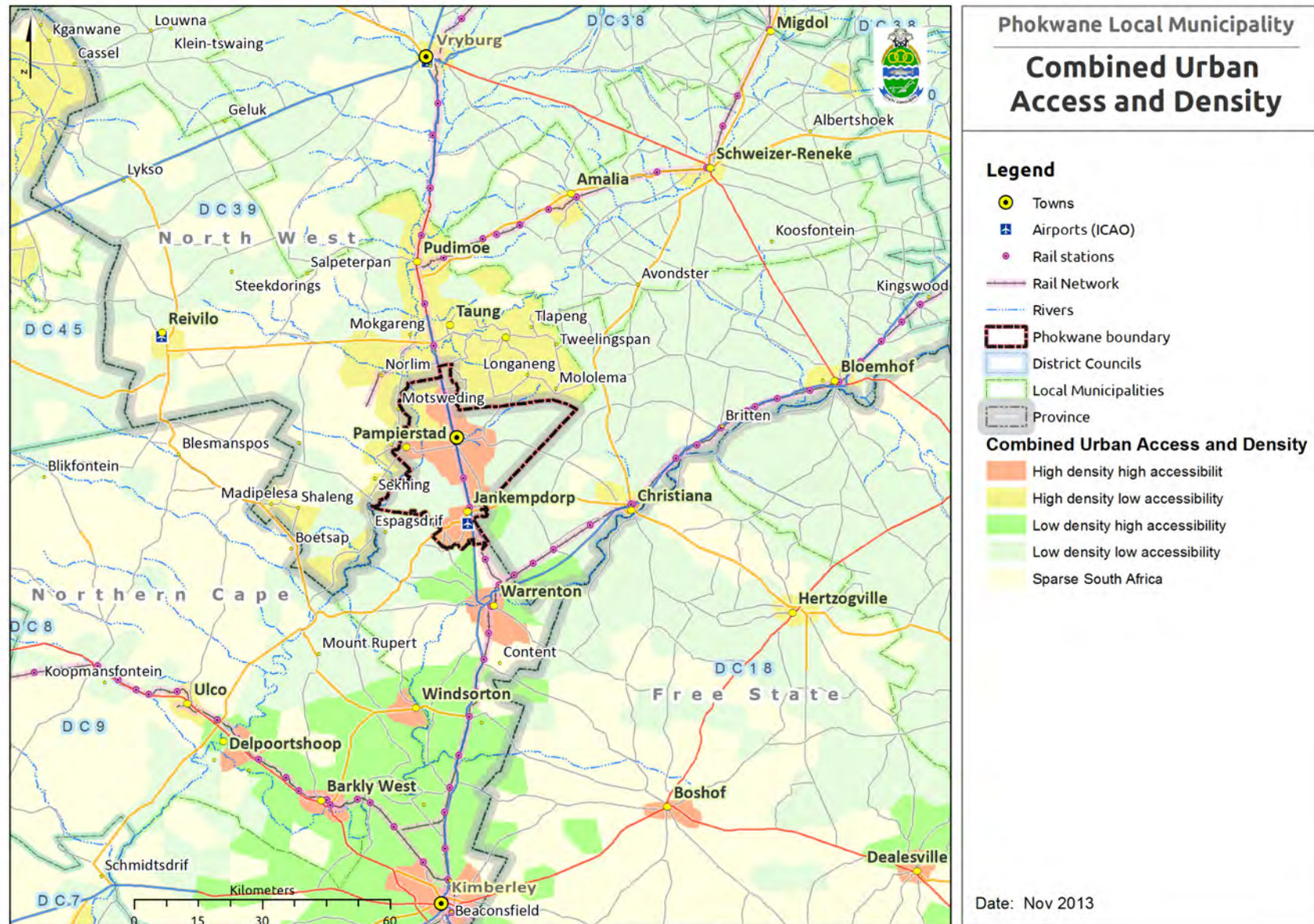


Table 22: PLM Household Dwelling Types 1996, 2001 and 2011

	1996			2001			2011		
	Formal	Informal	Traditional	Formal	Informal	Traditional	Formal	Informal	Traditional
PLM	76,4	15,0	7,9	81,3	12,8	5,7	83,8	13,8	1,2
FBDM	73,3	22,2	3,4	80,4	16,3	2,9	82,0	16,2	0,6
NCP	77,8	12,7	7,6	79,9	11,2	6,9	82,4	13,1	3,2

Table 23: PLM Settlements Household Dwelling Types 2011 (%)

	House or brick/concrete block structure on a separate stand or yard or on a farm	Traditional dwelling/hut /structure made of traditional materials	Flat or apartment in a block of flats	Cluster house in complex	Townhouse (semi-detached house in a complex)	Semi-detached house	House/flat/room in backyard	Informal dwelling (shack; in backyard)	Informal dwelling (shack; not in backyard; e.g. in an informal/squatter settlement or on a farm)	Room/flatlet on a property or larger dwelling/servants quarters/granny flat	% of PLM Informal Dwellings
Banksdrif	79,9	1,5	0,0	0,0	0,0	0,0	14,9	0,7	2,2	0,0	0,2
Phokwane NU	83,9	1,6	1,0	0,2	0,3	4,8	1,2	0,4	5,5	1,0	3,6
Hartswater	68,5	0,2	4,2	0,0	0,5	0,4	5,8	3,1	16,4	0,2	22,8
Pampierstad	91,8	0,8	0,1	0,1	0,1	0,0	0,3	1,8	3,7	0,0	14,3
Jan Kempdorp	69,1	2,1	1,9	0,4	0,1	1,1	0,6	3,0	20,0	0,0	58,6
Ganspan	96,2	0,0	0,7	0,0	0,0	0,3	0,0	0,5	1,9	0,0	0,6
PLM	79,4	1,2	1,5	0,2	0,2	0,9	1,5	2,3	11,6	0,1	100
FBDM	75,7	0,6	2,0	0,2	0,4	2,0	1,4	3,7	12,5	0,4	NA
Northern Cape	76,2	3,2	2,2	0,2	0,3	1,7	1,2	3,2	10,0	0,5	NA

Table 24: PLM Settlements Household Size 2011 (%)

	1	2	3	4	5	6	7	8	9	10+
Banksdrif	26	11	9	21	9	9	5	3	2	4
Phokwane NU	24	31	17	15	6	3	2	1	0	1
Hartswater	24	21	15	15	10	7	4	2	2	2
Pampierstad	26	17	15	13	10	7	5	3	2	2
Jan Kempdorp	25	19	15	14	10	7	4	2	2	2
Ganspan	22	21	17	12	10	7	3	3	3	2
PLM	25	20	15	14	10	6	4	2	2	2
FBDM	21	19	16	17	11	7	4	2	1	2
Northern Cape	23	20	16	15	10	6	4	3	2	2

Table 25: PLM Tenure Type 2001 - 2011

	Owned fully paid off			Owned but not yet paid off			Rented		
	2001	2011	% Change	2001	2011	% Change	2001	2011	% Change
PLM	6189	9834	58,9	1367	466	-65,9	2690	2438	-9,4
FBDM	38902	45346	16,6	15398	11095	-27,9	12158	15288	25,7
NCP	119233	131426	10,2	29686	24657	-16,9	38468	56530	47,0

Table 26: PLM Settlements Tenure Type 2011 (%)

	Rented	Owned but not yet paid off	Occupied rent-free	Owned and fully paid off	Other
Banksdrif	0,0	0,0	30,6	67,2	3,0
Phokwane NU	31,3	1,6	51,4	14,1	1,6
Hartswater	25,5	7,3	40,6	25,3	1,4
Pampierstad	7,4	0,8	26,1	59,9	5,7
Jan Kempdorp	12,8	2,9	7,7	72,1	4,6
Ganspan	0,7	0,9	1,7	95,9	1,0
PLM	13,9	2,7	23,3	56,1	4,1
FBDM	15,9	11,6	19,9	47,3	5,3
Northern Cape	18,8	8,2	20,9	46,9	5,3

3.4.4 Access to Services

Access to Piped Water

Access to 'Piped water inside dwelling/yard' increased in the PLM from 71,5% in 2001 to 78% in 2011, with only 3,2% of households having 'No access to Piped Water'. In absolute numbers, Jan Kempdorp at 40,4% had the largest percentage of households with 'No access to piped water' in PLM, in 2011. In Hartswater (64%) and rural Phokwane (NU) (45%) the main means to access piped water is through a tap inside the dwelling. In Pampierstad (41%) and Jan Kempdorp (51%) 'Piped water inside the yard' is the main means of accessing water. In Banksdrif, the majority of the households (81%) access water on a community stand within 200m of their dwelling, while 46% of Ganspan's households have to walk further than 200m to access water on a community stand (see **Tables 27-29**).

Access to Toilet Facilities

The PLM has seen a decided increase in access to 'Flush or chemical toilets' between 2001 and 2011, from 51,5% to 70,1%. Pit latrines and Bucket toilet facilities have decreased considerably. However, 9,3% of households still have no access to toilet facilities. Of these 9,3% of households, the majority are located in Jan Kempdorp (60,2%) (see **Table 30-32**).

Access to Electricity

Hartswater, the Jan Kempdorp Central Business District, Adalusia Park and Ganspan are provided with electricity by the PLM, while Pampierstad, Valspan, Kingston and Masakeng are serviced by Eskom. The majority of the households (82,3%) in PLM make use of electricity for lighting. Only Ganspan's residents predominantly make use of candles for lighting, with only 12% using electricity for this purpose. The majority of the PLM's households (66,9%) use electricity for heating purposes, with only Banksdrif (43,3%) and Ganspan (60,4%) predominantly making use of wood. In Ganspan 24,2% of the households make

no use of fuel for heating purposes. However, in total numbers the largest percentage of households not making use of any fuel for heating, are located in Pampierstad (57,1%) and Phokwane NU (21,4%). 76,3% of households in the PLM make use of electricity for cooking, with only households in Ganspan predominantly making use of wood for this purpose (60,4%). In total numbers, the largest percentage of those making use of no fuel for cooking are located in Jan Kempdorp (57,1%) (see **Tables 33-36**).

Access to Refuse Removal

The local authority or private companies collect refuse from 60,8% of the households in PLM at least one a week, with only Banksdrif households predominantly making use of 'no rubbish disposal' (79,3%). In rural Phokwane (NU) and Ganspan they predominantly make use of their 'own refuse dump'. In total numbers, Jan Kempdorp had the largest percentage (44,9%) of households with 'no rubbish disposal' in 2011 (see **Table 37**).

Table 27: PLM Household Access to Piped Water 1996, 2001 and 2011 (%)

	Piped water inside dwelling/yard			Piped water on communal stand			No access to piped water		
	1996	2001	2011	1996	2001	2011	1996	2001	2011
PLM	80,6	71,5	78,0	9,0	22,9	18,8	9,9	5,6	3,2
FBDM	85,2	81,7	85,2	9,6	15,5	13,3	4,9	2,9	1,5
NCP	73,4	72,0	78,0	15,2	22,0	19,3	11,1	6,1	2,6

Table 28: PLM Household Access to Piped Water 2011 (%)

	Piped (tap) water inside dwelling/institution	Piped (tap) water inside yard	Piped (tap) water on community stand: distance less than 200m from dwelling/institution	Piped (tap) water on community stand: more than 200m from dwelling/institution	No access to piped (tap) water
Banksdrif	8	1	81	9	1
Phokwane NU	45	28	14	5	9
Hartswater	64	22	11	1	2
Pampierstad	34	41	15	8	2
Jan Kempdorp	32	51	9	4	4
Ganspan	9	43	2	46	0
PLM	38	40	12	6	3
FBDM	52	33	10	4	1
NCP	46	32	13	7	3

Table 29: Access to Piped Water Distribution across the PLM 2011 (%)

	Piped (tap) water inside dwelling/institution	Piped (tap) water inside yard	Piped (tap) water on community stand: distance less than 200m from dwelling/institution	Piped (tap) water on community stand: more than 200m from dwelling/institution	No access to piped (tap) water
Banksdrif	0,2	0,0	5,0	1,1	0,4
Phokwane NU	9,8	5,8	9,4	6,1	23,8
Hartswater	27,2	8,8	14,7	2,3	9,1
Pampierstad	32,2	37,4	44,6	42,7	26,7
Jan Kempdorp	29,8	44,5	25,7	23,9	40,4
Ganspan	0,8	3,5	0,6	23,9	0,0
PLM	100,0	100,0	100,0	100,0	100,0

Table 30: Access to Toilet Facilities 1996, 2001 and 2011

	Flush or chemical toilets			Pit latrines			Bucket toilets			None		
	1996	2001	2011	1996	2001	2011	1996	2001	2011	1996	2001	2011
PLM	47,7	51,5	70,1	38,2	34,6	16,7	9,6	2,7	1,8	4,1	11,2	9,3
FBDM	69,7	72,8	80,1	10,1	10,6	6,7	14,3	8,3	4,6	5,6	8,3	6,5
NCP	52,6	58,6	66,5	20,0	18,4	19,9	15,6	10,0	4,0	11,6	13,1	8,0

Table 31: PLM Settlements Access to Toilet Facilities 2011 (%)

	None	Flush toilet (connected to sewerage system)	Flush toilet (with septic tank)	Chemical toilet	Pit toilet with ventilation (VIP)	Pit toilet without ventilation	Bucket toilet	Other
Banksdrif	0,0	1,5	0,7	0,0	6,7	88,8	2,2	0,0
Phokwane NU	5,8	39,1	5,5	0,4	22,7	22,5	2,3	1,8
Hartswater	10,3	78,9	2,1	0,1	0,4	4,0	0,8	3,4
Pampierstad	1,6	73,6	1,0	0,2	3,9	17,6	1,8	0,2
Jan Kempdorp	16,0	71,7	1,6	0,2	0,6	4,3	2,3	3,3
Ganspan	29,8	7,9	0,3	0,0	36,7	23,3	0,9	0,9
PLM	9,3	68,2	1,8	0,2	4,9	11,9	1,8	2,0
FBDM	6,5	77,2	2,8	0,1	1,8	4,9	4,6	2,1
Northern Cape	8,0	60,1	5,9	0,6	9,1	10,7	4,0	1,6

Table 32: Distribution of Access to Toilet Facilities across the PLM 2011 (%)

	None	Flush toilet (connected to sewerage system)	Flush toilet (with septic tank)	Chemical toilet	Pit toilet with ventilation (VIP)	Pit toilet without ventilation	Bucket toilet
Banksdrif	0,0	0,0	0,3	0,0	1,1	5,7	0,9
Phokwane NU	5,2	4,8	26,0	18,2	39,0	15,8	10,2
Hartswater	17,7	18,7	19,5	9,1	1,3	5,4	7,4
Pampierstad	6,2	39,2	21,1	42,4	29,4	53,7	36,2
Jan Kempdorp	60,2	37,0	32,1	30,3	4,1	12,9	43,7
Ganspan	10,6	0,4	0,6	0,0	25,1	6,5	1,5
PLM	100	100	100	100	100	100	100

Table 33: PLM Electricity Used for Lighting 1996, 2001 and 2011

	Electricity for lighting		
	1996	2001	2011
PLM	69,2	74,7	82,3
FBDM	76,6	77,9	83,3
NCP	64,2	72,4	85,4

Table 34: PLM Settlements Electricity Used for Lighting 2011 (%)

	Electricity	Gas	Paraffin	Candles (not a valid option)	Solar	None
Banksdrif	82,1	2,2	1,5	13,4	0,0	1,5
Phokwane NU	84,1	0,3	0,9	14,3	0,4	0,1
Hartswater	79,3	0,0	2,2	18,1	0,2	0,3
Pampierstad	87,3	0,1	1,3	11,1	0,2	0,1
Jan Kempdorp	84,7	0,1	1,3	13,5	0,1	0,2
Ganspan	12,0	0,7	1,0	85,8	0,0	0,5
PLM	82,3	0,1	1,4	15,8	0,2	0,2
FBDM	83,3	0,3	3,5	12,4	0,2	0,3
NCP	85,4	0,2	1,7	11,3	1,1	0,3

Table 35: PLM Settlements Fuel Used for Heating 2011 (%)

	Electricity	Gas	Paraffin	Wood	Coal	Animal dung	Solar	Other	None
Banksdrif	41,8	1,5	3,0	43,3	4,5	0,0	0,0	0,0	6,0
Phokwane NU	72,1	1,0	0,6	15,2	0,3	0,1	0,4	0,0	10,4
Hartswater	72,1	2,5	7,5	9,8	0,7	0,2	0,0	0,0	7,2
Pampierstad	74,6	1,4	6,8	10,9	0,1	0,0	0,3	0,0	6,0
Jan Kempdorp	61,4	1,2	6,5	16,8	0,1	0,1	0,1	0,0	13,9
Ganspan	7,4	0,7	4,3	60,4	3,1	0,0	0,0	0,0	24,2
PLM	66,9	1,4	6,2	15,0	0,4	0,1	0,2	0,0	9,9
FBDM	66,5	3,0	5,9	13,0	0,3	0,1	0,4	0,0	10,7
NCP	62,2	2,3	3,9	19,9	0,6	0,2	0,4	0,0	10,5

Table 36: PLM Settlements Fuel Used for Cooking 2011 (%)

	Electricity	Gas	Paraffin	Wood	Coal	Animal dung	Solar	Other	None
Banksdrif	58,5	3,7	5,9	25,2	3,7	0,0	1,5	0,0	1,5
Phokwane NU	78,3	2,9	1,6	16,7	0,0	0,1	0,3	0,0	0,1
Hartswater	75,6	4,5	14,9	4,2	0,4	0,1	0,0	0,1	0,2
Pampierstad	86,0	1,4	11,3	0,9	0,1	0,0	0,2	0,0	0,1
Jan Kempdorp	73,1	2,5	14,9	8,9	0,1	0,1	0,1	0,0	0,3
Ganspan	7,7	2,6	28,6	60,4	0,7	0,0	0,0	0,0	0,0
PLM	76,3	2,5	12,8	7,7	0,2	0,1	0,2	0,0	0,2
FBDM	78,0	6,2	11,2	4,0	0,1	0,0	0,1	0,0	0,3
Northern Cape	78,1	6,0	5,3	9,8	0,1	0,1	0,2	0,1	0,3

Table 37: PLM Settlements Refuse Disposal 2011 (%)

	Removed by local authority/private company at least once a week	Removed by local authority/private company less often	Communal refuse dump	Own refuse dump	No rubbish disposal	Other
Banksdrif	0,0	0,0	0,0	20,0	79,3	0,7
Phokwane NU	10,4	0,5	3,6	73,9	9,6	1,9
Hartswater	84,5	0,3	4,4	9,9	0,7	0,3
Pampierstad	72,6	0,2	0,4	21,9	4,7	0,2
Jan Kempdorp	55,9	18,0	2,4	14,4	9,0	0,3
Ganspan	8,0	0,5	9,4	60,4	20,0	1,5
PLM	60,8	6,5	2,3	22,9	7,1	0,4
FBDM	74,3	3,2	1,3	14,2	5,4	1,6
NCP	64,0	2,2	1,6	24,7	5,4	2,0

3.4.5 Urban Settlement Projections

Due to changes in the demarcation of sub-places between the 2001 and 2011 Censuses, it is not possible to look at changes in housing and service trends between 2001 and 2011. Below (**Table 38**) is an approximation of the exponential growth of Hartswater, Pampierstad and Jan Kempdorp based on the aggregation of reasonable 'urban areas' derived from the 2001-statistics. It is evident from the growth rate between 2001 and 2011 that Hartswater and Jan Kempdorp are seeing a considerable amount of in-migration, most probably from the surrounding rural areas in order to access services and in search of employment opportunities. This growth rate is considerably higher than the local, district and provincial growth rate, and whether the population will continue to grow at such a rate, is at this stage unclear.

Table 38: Exponential growth rate for the largest PLM Settlements

	2001	2011	GROWTH RATE 2001 TO 2011	2020	% INCREASE FROM 2011	2030	% INCREASE FROM 2011
Hartswater	5262	10465	0,069	16963	62,1	33819	223,2
Pampierstad	21125	21707	0,0027	22121	1,9	22727	4,7
Jan Kempdorp	17907	24220	0,03	29880	23,4	40333	66,5
PLM	61321	63000	0,0027	64202	1,9	65959	4,7
FBDM	323563	382086	0,017	430370	12,6	510120	33,5
Northern Cape	991919	1145861	0,014	1263842	10,3	1453764	26,9

Table 39: Informal Housing and Service Statistics per PLM Settlement (2011)

	No Piped Water	No Toilet Facilities	Informal Dwelling
Banksdrif	2	0	4
Phokwane NU	134	85	87
Hartswater	51	290	553
Pampierstad	150	102	347
Jan Kempdorp	227	985	1420
Ganspan	0	174	14
PLM	562	1637	2424

Although some of the PLM's settlements are struggling more with regards to informal settlements and lack of services, in absolute numbers on a municipal level, the majority of the informal settlements and areas with low service levels are located in Jan Kempdorp and Hartswater (see **Table 39**). These statistics, in combination with growth rate statistics, indicate that this trend will continue and worsen, specifically in the case of Hartswater if the migration to these towns continues. It would be very useful if a *detailed housing and service provisions study be undertaken to accurately determine the type of housing that will be needed in these towns, as well as the services needed to support them.*

3.5 PHYSICAL INFRASTRUCTURE

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3.5.1 Overview of Physical Infrastructure

The PLM is linked to the wider regional environment by the N18, connecting Kimberley and Vryburg on a north-south axis and Christiana and the Free State on an east-west axis. However, the PLM's connectivity to the western mining-rich areas of the Northern Cape Province is limited. Locally, the road network provides for a high level of connectivity, with the N18 providing the spine and (1) an east-west axes running in the north between Hartswater and Pampierstad, and (2) a similar axes running in the south, connecting Jan Kempdorp, Valspan and Ganspan. Within the settlements themselves, Hartswater and Jan Kempdorp are well-provided with local connector routes. The same cannot be said about Pampierstad, Valspan and Ganspan, where local connectivity and ease of movement, especially so in cases of emergencies, is compromised by untarred, gravel roads.

With regard to other movement systems, (1) a closed north-south rail runs through the PLM, and (2) the PLM is located 130km from the Kimberley International Airport. Partly due to the relatively small and 'flat' character of the PLM, walking and bicycling is a very common form of transport, although no dedicated bicycles routes exist in the municipality.

The extensive Vaalharts Irrigation System is by far the most crucial form of physical infrastructure in the area, allowing for irrigated farming on almost 70% of the PLM's land area. In addition to this, the agri-processing facilities, located in Hartswater and Jan Kempdorp, provide further support to the agricultural industry.

With regard to service-related infrastructure, the PLM mainly sources water from the Vaal and or Harts Rivers, sourcing water directly from the riverbed.

Solid waste management is problematic in PLM, with only one of the three landfill sites having been licensed and with very little management being practiced on these sites.

While Hartswater, Jan Kempdorp and Pampierstad all have primary, middle and high schools, there are no tertiary education in PLM. All the major towns have at least one clinic. However, the distance that has to be travelled by those living outside the town, is problematic, and only Hartswater and Jan Kempdorp have hospitals.

Opportunities:

- Re-opening of the closed railway line;
- Possible use of the Ammunition Depot Airport;
- Expansion of the Vaalharts Irrigation System; and
- Development of dedicated bicycle lanes.

Challenges:

- Lack of tarred roads in Pampierstad, Ganspan and Valspan, which limits local connectivity;
- Insufficient landfill sites;
- No tertiary education facilities in the PLM; and
- Distance to hospitals in Hartswater and Jan Kempdorp, exasperated by lack of internal connectivity.



Cycling to work



Vaalharts canal system



Illegal dumping



Closed railway line



Unpaved roads



Library

3.5.2 Major Movement Systems

Road Systems

On a national level, the central location of the PLM makes it highly accessible from all the corners of the country. With the recent upgrading of large parts of the road network in the Northern Cape and the North West Provinces, this accessibility has been given a significant boost. Regionally, the N18 and N12 make the municipality very accessible on a north-south axis running between Kimberley and Vryburg. From an east-west perspective, the area is well connected to Christiana and the Free State, but less so to the west into the mining-rich areas of the Northern Cape Province. Locally, the road network provides for a high level of connectivity, with the N18 providing the spine and (1) an east-west axes running in the north between Hartswater and Pampierstad, and (2) a similar axes running in the south, connecting Jan Kempdorp, Valspan and Ganspan. Within the settlements themselves, Hartswater and Jan Kempdorp are well-provided with local connector routes. The same cannot be said about Pampierstad, Valspan and Ganspan, where local connectivity and ease of movement, especially so in cases of emergencies, is compromised by un-tarred, gravel roads.

Rail System

The PLM has a north-south rail running through its centre, which, albeit not in use at the moment, provides massive opportunities for enhancing (1) the cross-border (into Zimbabwe); and (2) national and regional and local accessibility of the PLM (see **Map 61**).

Air

The PLM is located 130 kilometres from the Kimberley Airport, which is connected to Johannesburg and Cape Town by daily flights. This provides a strong link into the national and international economies. There is also an

airport located at the Ammunition Depot, itself located to the southwest of Jan Kempdorp (see **Map 61**).

Foot and Bicycle

Walking and bicycling is a very commonly used form of transport. Bicyclers can be seen in sizeable numbers commuting between Pampierstad and farms in the area and Hartswater in the early mornings and afternoons. Older male members of the community also use the bicycle in Pampierstad, Valspan and Ganspan. Provision has until recently not been made in the form of dedicated, well maintained bicycle routes. This is now beginning to change, with such routes now being built along some of the main routes in the PLM. While seemingly not popular amongst the younger generation, bicycling is a mode of transport that is ideally suited to the 'flat' basin on which the scheme was built.

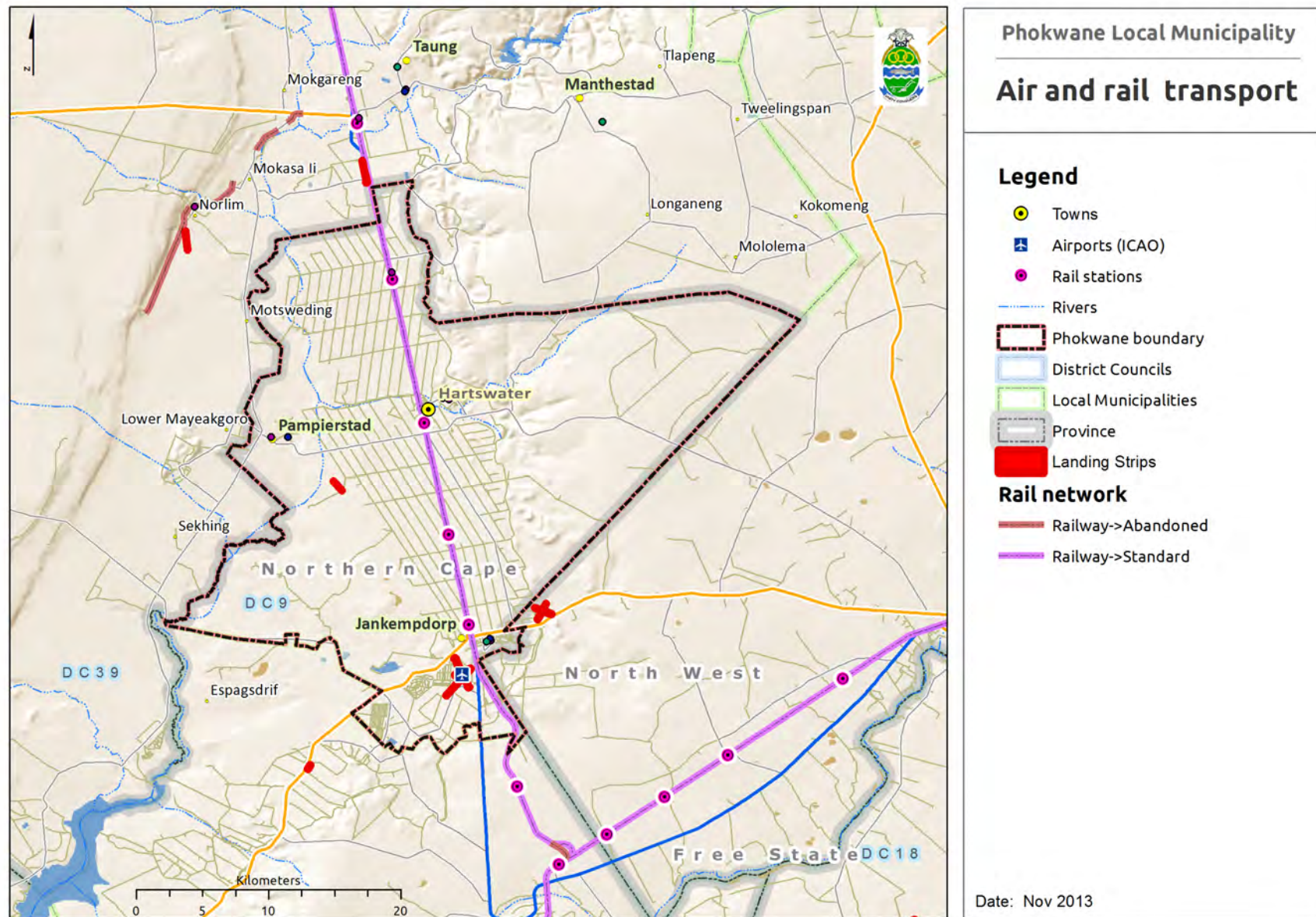
3.5.3 Telecommunications

While the provision of landline-based phone network is not a problem in the PLM, access to the Internet is. In the case of the latter it is not so much a case of there not being network coverage in the area, but rather the costs of the service and the ownership of and access to the necessary hardware that is. The limited availability (e.g. two computers/points in the Jan Kempdorp municipal library) and the high costs associated with its use (R10 for every 30 minutes after the initial 15 minutes for free) is a major constraint.

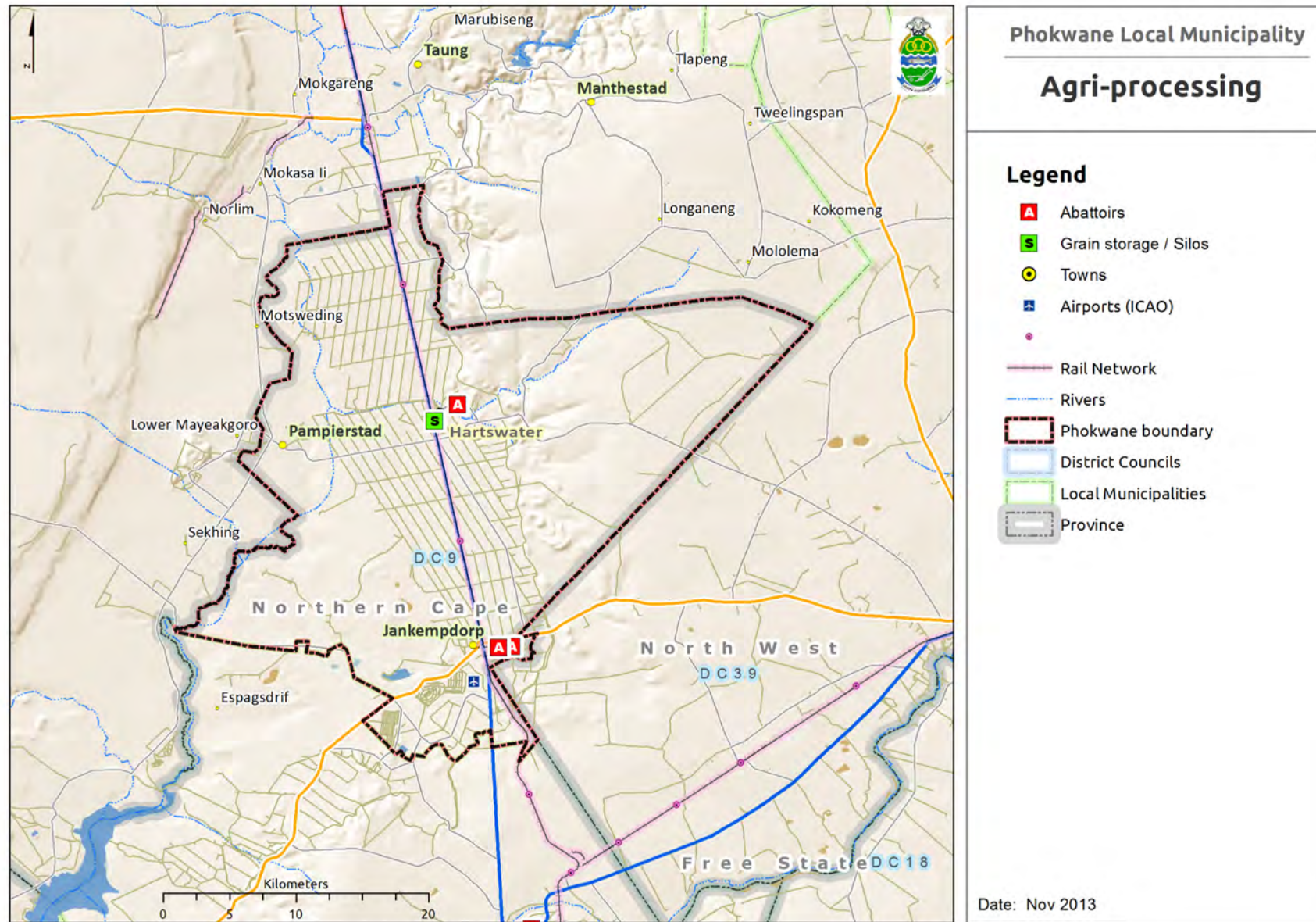
3.5.4 Agricultural Infrastructure

The PLM's economy is mainly based on agriculture, which is only made possible by the extensive canal system. Supporting the agricultural industry is the agri-processing facilities located in Hartswater and Jan Kempdorp (see **Map 52**).

Map 51: Major Movement Systems in the PLM



Map 52: Agri-Processing Facilities in the PLM



3.5.5 Service-Related Infrastructure

Water Provision Infrastructure

Water for the Phokwane Local Municipality is mainly sourced from the Vaal- and Harts Rivers. Hartswater is supplied by water extracted directly from the riverbed – a canal (with the water coming from the Vaal River) runs from Warrenton to Hartswater. Jan Kempdorp is also supplied with water from the Vaal River. Phokwane Municipality supplies water to Hartswater and Jan Kempdorp and Ganspan. Pampierstad is supplied from the Harts River; the service provider in this case being ‘Sedibeng Water’. Groundwater-usage for human consumption is very limited. Smaller areas, such as Ganspan and Magogong, use boreholes as the main source of water supply.

Solid Waste Management

There are three landfill sites located in the PLM in Hartswater, Pampierstad and Jan Kempdorp, with only the one in Hartswater having been licensed. The old Hartswater landfill site in Thagadiepelajang is not ideally situated, as it is in very close proximity to residents. As a result of this, it is currently in the process of being closed and then to be rehabilitated. No management is done at the refuse sites, and burning of waste is a frequent occurrence. As such, illegal dumping and insufficient and badly managed landfill-sites pose major environmental and health problems to the residents of the PLM.

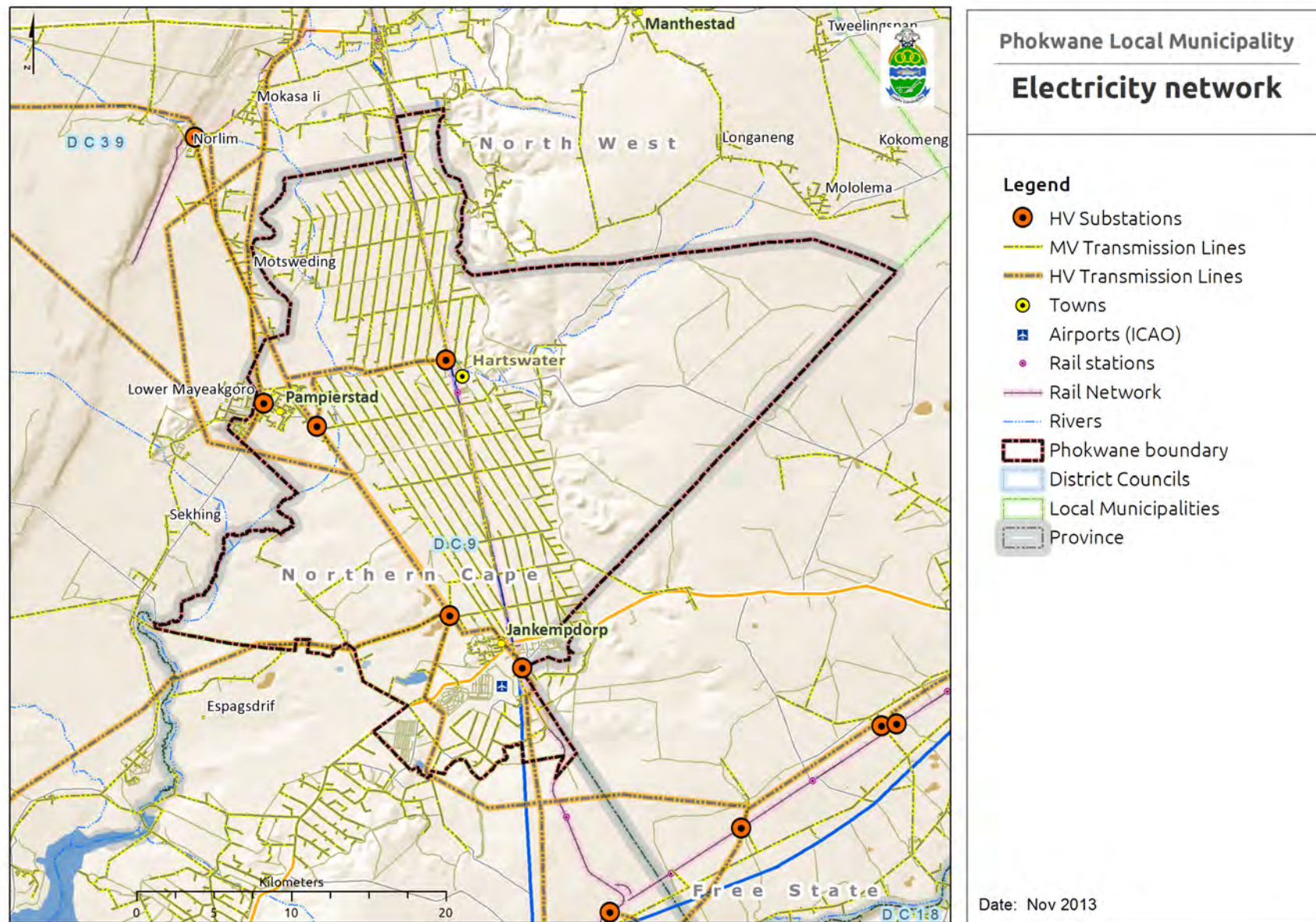
Electricity

Hartswater, Jan Kempdorp Central Business District, Adalusia Park and Ganspan are provided with electricity by the Phokwane Municipality, while Pampierstad, Valspan, Kingston and Masakeng are serviced by Eskom (see **Map 53**).

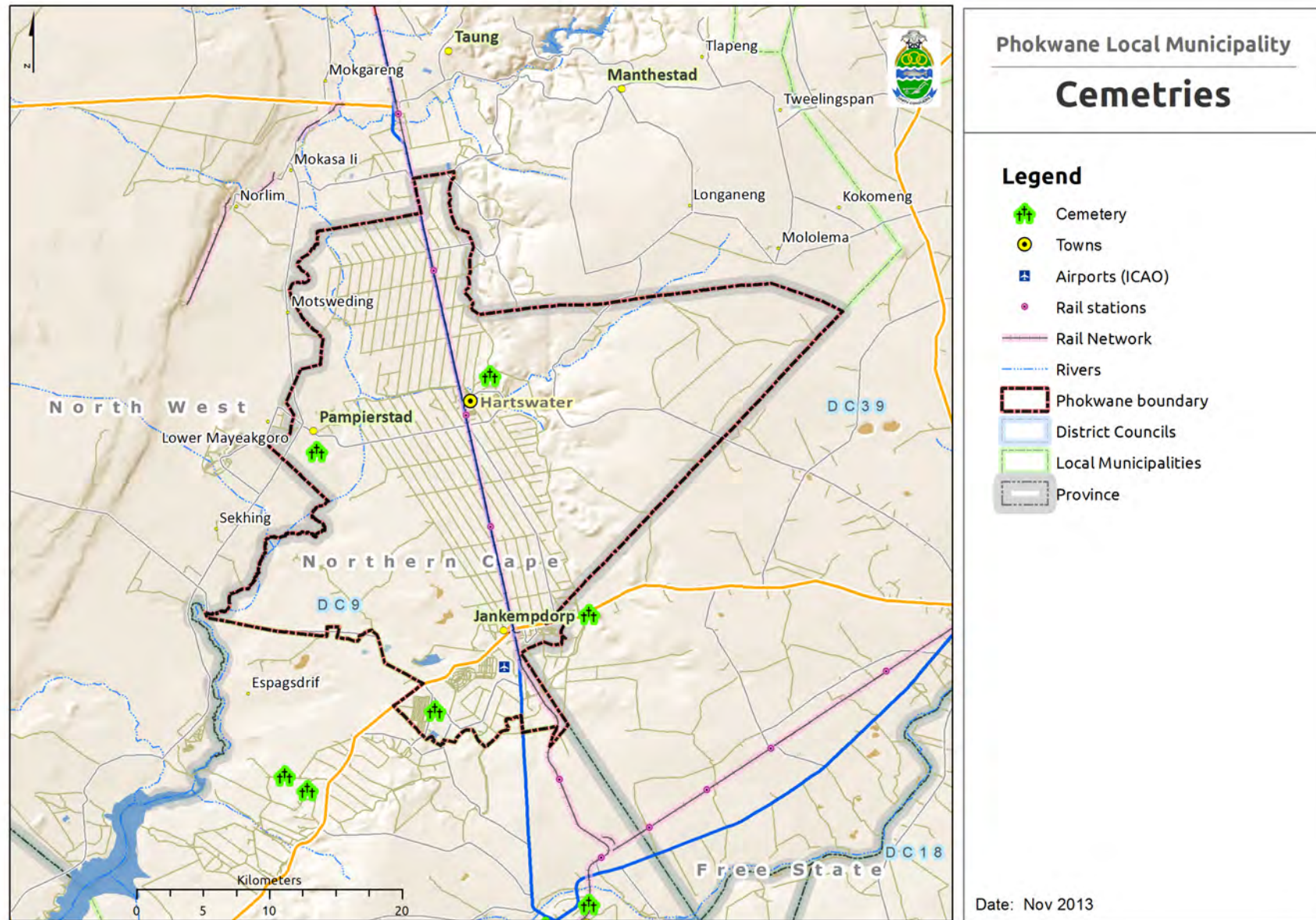
Cemeteries

All the major settlements (Hartswater, Pampierstad, Jan Kempdorp and Ganspan) possess cemeteries (see **Map 54**), with the Hartswater cemetery having been extended in 2012 due to pressure for space, and the Jan Kempdorp cemetery in the process of being expanded.

Map 53: PLM Electricity Network



Map 54: PLM Cemeteries



3.5.6 Social Facilities

Pampierstad, Hartswater and Jan Kempton all have primary, middle and high schools, with Pampierstad totalling at eleven schools. There are, however, no tertiary education facilities in the PLM. While all the major towns have at least one clinic, the distance that has to be travelled by those living outside the main towns is problematic. Only Hartswater and Jan Kempdorp have hospitals. Community facilities such as Community Halls and Sports Grounds can be found in all the major towns in the PLM (see **Tables 30-32** and **Maps 53-60**).

Table 40: PLM Education Facilities (IDP Review 2013/14)

Educational Facilities		
Ward	Facility	Number
(2) Pampierstad	Primary Schools (Grade 1-6)	3
	High School (Grade 8-12)	1
(3) Pampierstad	Primary Schools (Grade 1-6)	1
	Middle School (Grade 7-9)	1
(4) Pampierstad	Primary Schools (Grade 1-6)	3
	Middle School (Grade 7-9)	1
	High School (Grade 8-12)	1
(5) Hartswater (Bonita Park)	Primary Schools (Grade 1-6)	2
	High School (Grade 8-12)	1
(6) Jan Kempdorp and part of Hartswater	Primary Schools (Grade 1-6)	2
	High School (Grade 8-12)	3
(7) Jan Kempdorp	Primary Schools (Grade 1-6)	1
(8) Jan Kempdorp	Primary Schools (Grade 1-6)	2
	High School (Grade 8-12)	1

Table 41: PLM Health Facilities (IDP Review 2013/14)

Health Facilities		
Ward	Facility	Number
(2) Pampierstad	Clinic	1
(6) Hartswater	Hospital	1
(2) Jan Kempdorp	Clinic	2
	Hospital	1
(8) Ganspan	Clinic	1
(5) Hartswater (Thagadiepelajang)	Clinic	1

Table 42: PLM Recreational Facilities (IDP Review 2013/14)

Recreational and Sports Facilities (sports facilities not linked to a school)		
Ward	Facility	Number
(5) Hartswater (Bonita Park)	Sports Ground	1
	Community Hall	1
(6) Hartswater	Community Hall	1
(7) Jan Kempdorp	Sports Ground	1
	Community Hall	1
(8) Ganspan	Sports Ground	1
	Community Hall	1
(8) Jan Kempdorp	Sports Ground	1
	Community Hall	1

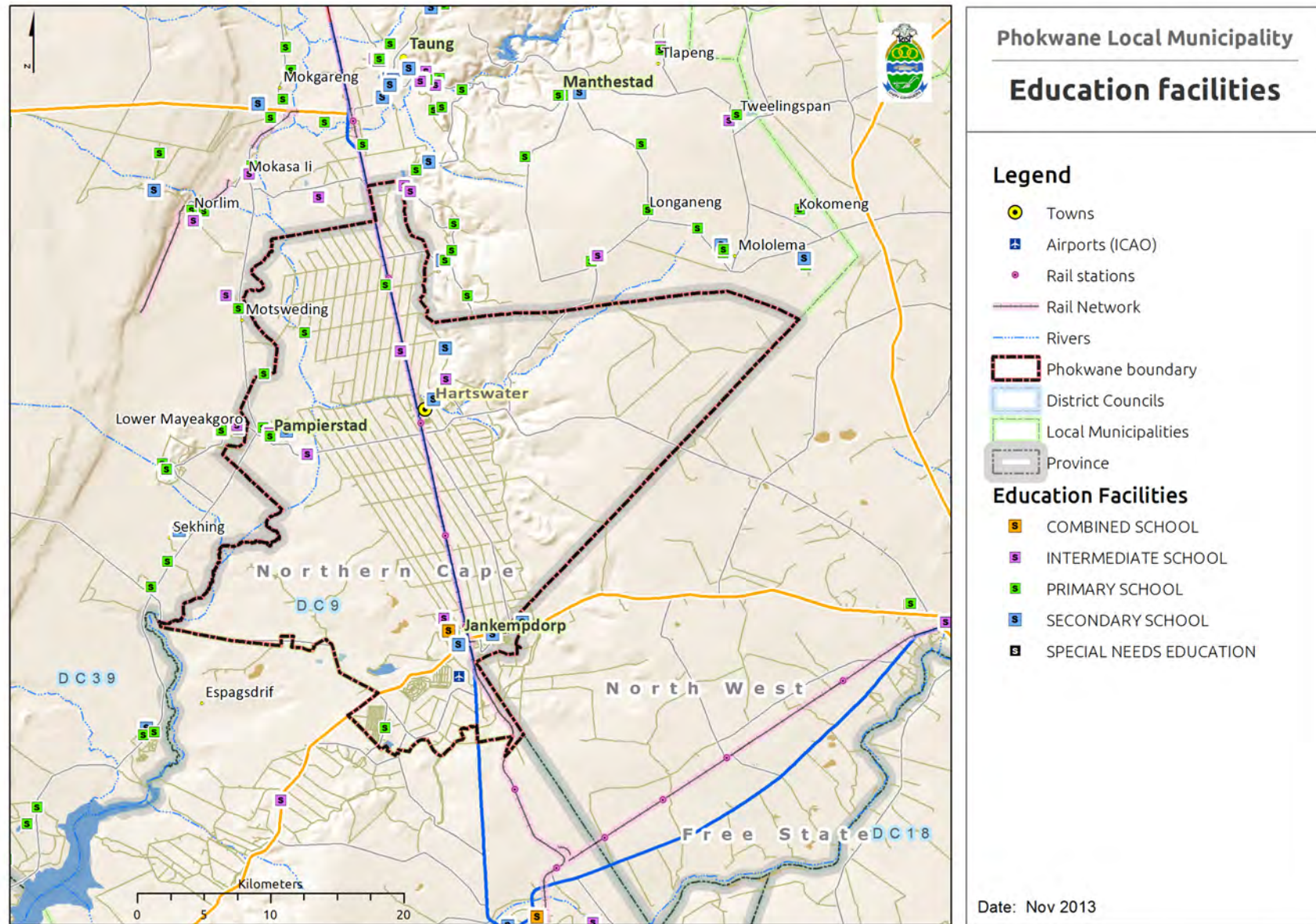
Table 43: PLM Government Institutions (IDP Review 2013/14)

Town	Government Institutions
Hartswater	Department of Social Development, Department of Justice, Phokwane Municipality Offices and Police Station
Jan Kempdorp	Department of Water Affairs, Home Affairs, Department of Justice, Department of Public Works, Department Social Development, Department of Agriculture, Department of Defence and Police Station
Pampierstad	Home Affairs, Police Station, Department of Social Development and Department of Justice

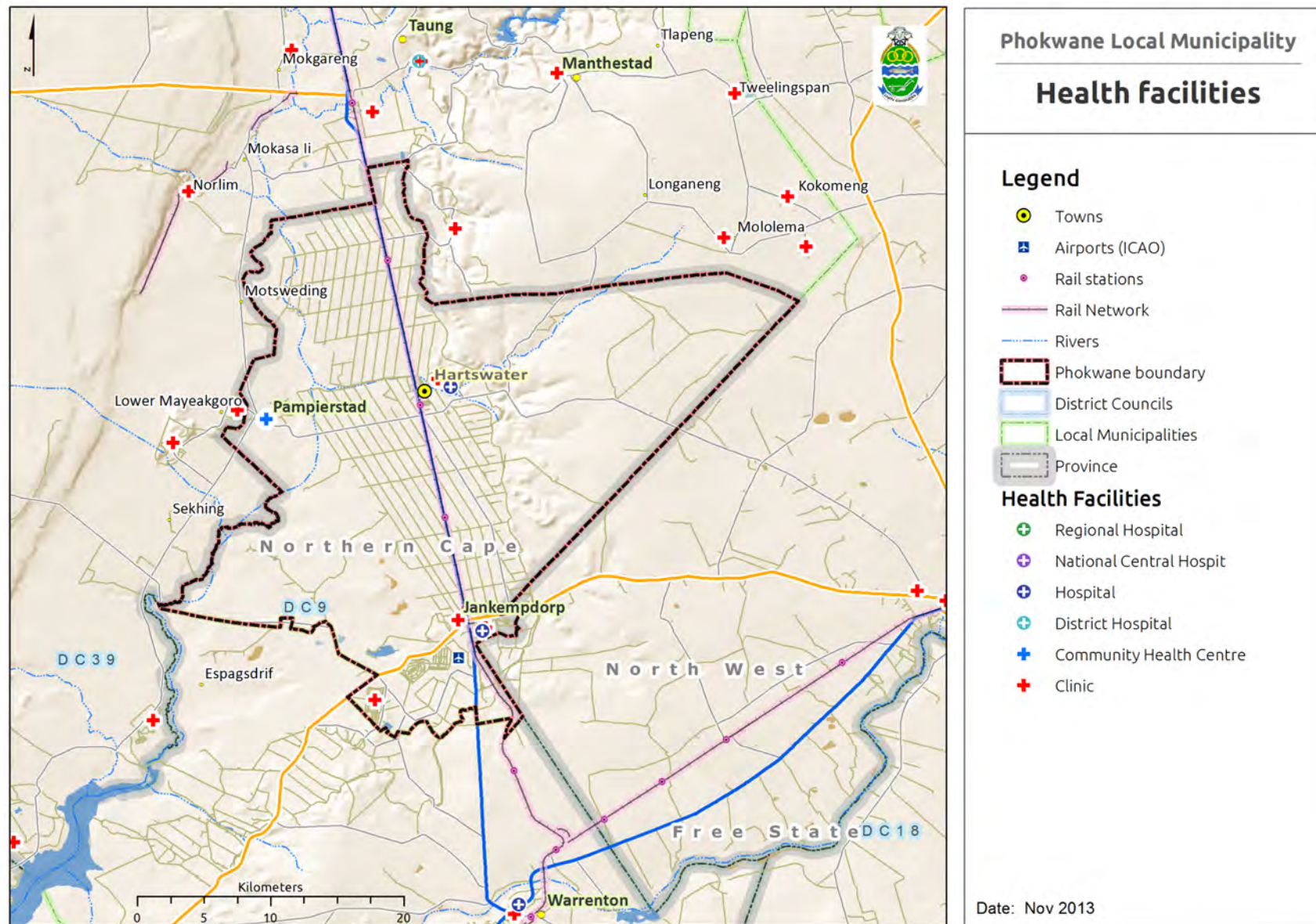
The PLM is serviced by three police precincts: Hartswater, Pampierstad and Jan Kempdorp, with the Jan Kempdorp precinct predominantly located in the North West Province (see **Map 55b**). For an overview of the crime statistics in Hartswater, Pampierstad and Jan Kempdorp see **Tables 31-33**. In general, crime in the area is low, with a progressive decline in many categories of reported crime over the last ten years, except for 2012 to 2013 where a slight increase in the number of crimes is evident.

Crime categories that *did experience an increase* are: (1) robbery and theft, stock theft and drug-related crimes in Hartswater; (2) sexual crimes, theft and burglary and drug-related crimes in Jan Kempdorp; and (3) sexual crimes, malicious damage to property, burglary to residential premises and *crimen injuria* (injury to individual dignity) in Pampierstad.

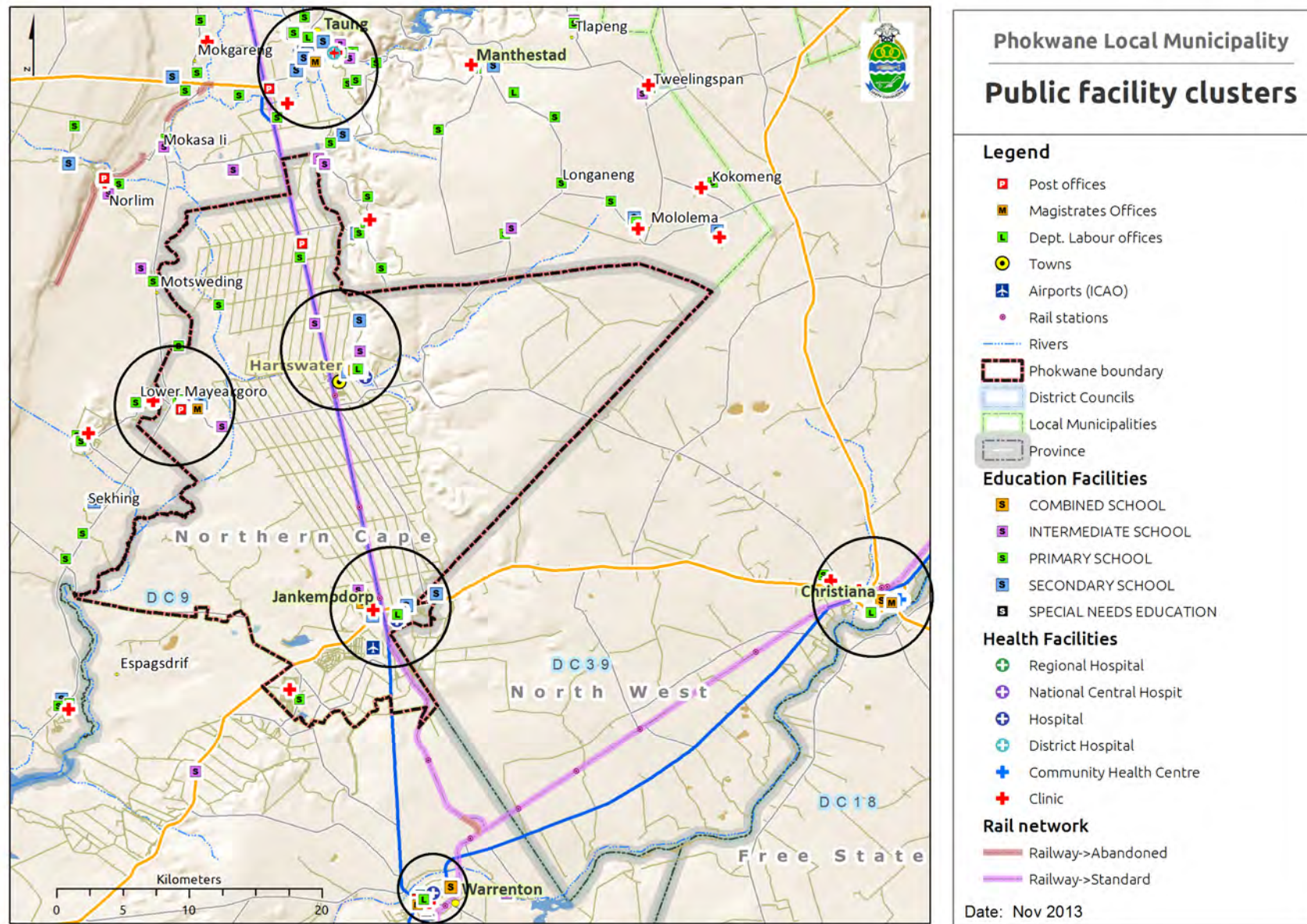
Map 55: PLM Education Facilities



Map 56: PLM Health Facilities



Map 57: PLM Public Facility Clusters



Map 58: Police Precincts

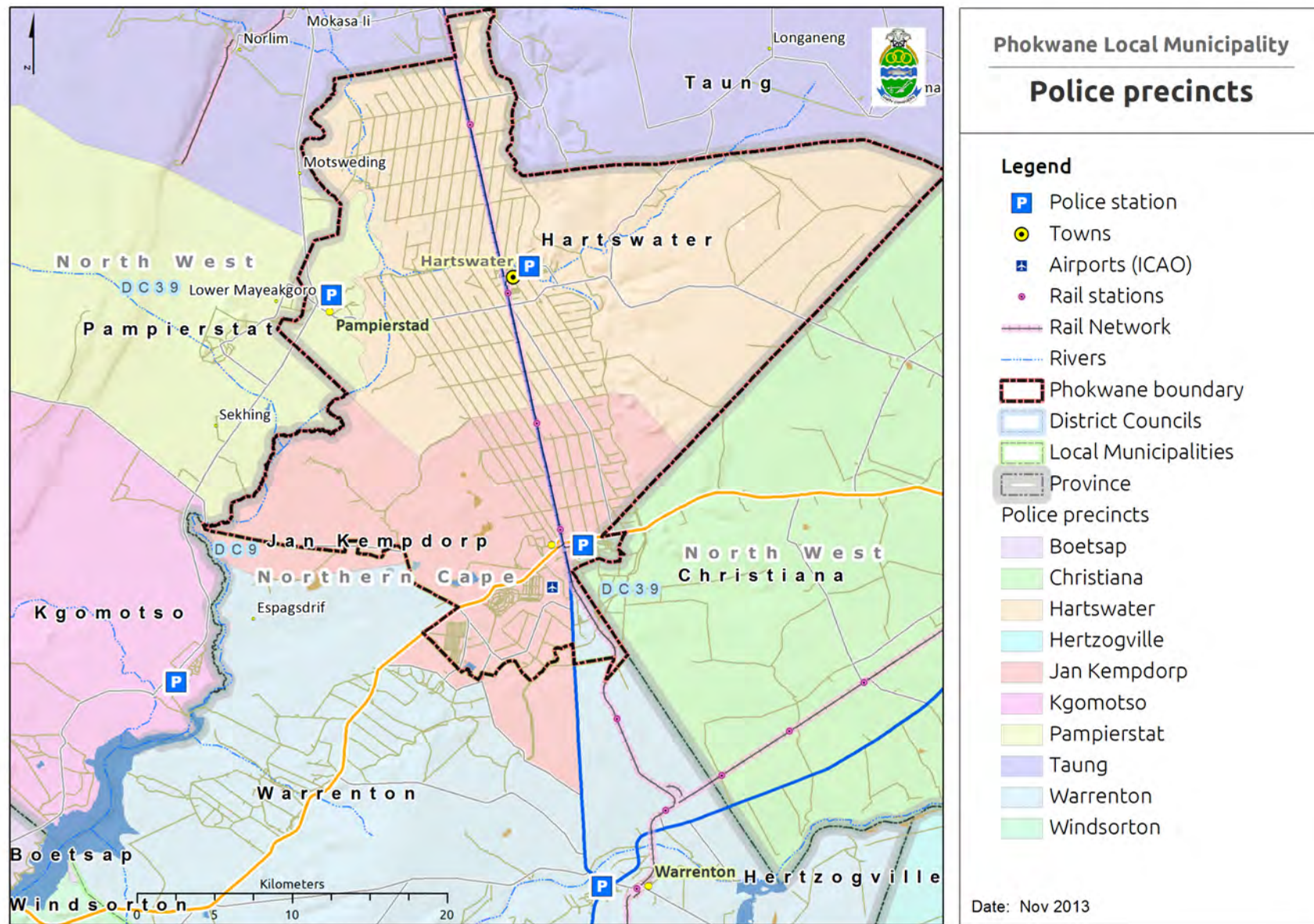


Table 44: Crime in Hartswater from April to March 2003/2004 to 2012/2013 (Source: South African Police Service)

Crime Category	April 2003 to March 2004	April 2004 to March 2005	April 2005 to March 2006	April 2006 to March 2007	April 2007 to March 2008	April 2008 to March 2009	April 2009 to March 2010	April 2010 to March 2011	April 2011 to March 2012	April 2012 to March 2013
CONTACT CRIME (CRIMES AGAINST THE PERSON)										
Murder	9	7	4	6	3	5	4	6	6	5
Total Sexual Crimes	58	56	40	32	27	23	47	31	18	22
Attempted murder	61	47	44	22	14	10	9	10	6	7
Assault with the intent to inflict grievous bodily harm	164	133	131	111	108	126	104	105	100	93
Common assault	158	172	93	59	28	49	34	40	22	50
Common robbery	30	46	28	24	11	20	19	15	10	18
Robbery with aggravating circumstances	9	14	13	7	6	17	13	2	7	12
CONTACT-RELATED CRIMES										
Arson	4	5	3	3	4	2	3	5	0	2
Malicious damage to property	80	83	52	56	44	63	42	31	26	35
PROPERTY-RELATED CRIMES										
Burglary at non-residential premises	78	48	80	96	96	89	64	72	59	60
Burglary at residential premises	260	281	233	222	166	158	213	106	126	119
Theft of motor vehicle and motorcycle	32	34	20	11	10	9	4	18	9	6
Theft out of or from motor vehicle	87	65	31	47	33	36	27	40	41	34
Stock-theft	32	22	20	28	23	18	18	18	18	21
CRIMES HEAVILY DEPENDENT ON POLICE ACTION FOR DETECTION										
Illegal possession of firearms and ammunition	1	5	3	2	1	0	0	0	2	1
Drug-related crime	9	10	14	12	7	13	12	8	12	14
Driving under the influence of alcohol or drugs	13	16	18	17	10	9	11	13	8	8
OTHER SERIOUS CRIMES										
All theft not mentioned elsewhere	479	405	360	191	211	219	133	157	118	161
Commercial crime	29	46	29	27	19	28	31	47	41	47
Shoplifting	105	180	104	106	57	68	52	49	47	51
SUBCATEGORIES OF AGGRAVATED ROBBERY FORMING PART OF AGGRAVATED ROBBERY ABOVE										
Carjacking	1	0	0	0	0	0	0	0	0	0
Truck hijacking	0	0	0	0	0	0	0	0	0	0
Robbery at residential premises	0	1	1	2	1	2	6	1	0	5

Crime Category	April 2003 to March 2004	April 2004 to March 2005	April 2005 to March 2006	April 2006 to March 2007	April 2007 to March 2008	April 2008 to March 2009	April 2009 to March 2010	April 2010 to March 2011	April 2011 to March 2012	April 2012 to March 2013
Robbery at non-residential premises	1	0	0	0	1	8	3	0	1	2
OTHER CRIME CATEGORIES										
Culpable homicide	12	17	17	12	13	7	11	11	5	6
Public violence	0	0	1	1	0	0	1	0	0	0
Crimen injuria	47	49	38	13	7	4	5	7	8	9
Neglect and ill-treatment of children	3	3	1	2	3	2	3	0	1	0
Kidnapping	0	1	0	0	0	0	0	0	1	0

Table 45: Crime in Jan Kempdorp for April to March 2003/2004 - 2012/2013 (South African Police Service)

Crime Category	April 2003 to March 2004	April 2004 to March 2005	April 2005 to March 2006	April 2006 to March 2007	April 2007 to March 2008	April 2008 to March 2009	April 2009 to March 2010	April 2010 to March 2011	April 2011 to March 2012	April 2012 to March 2013
CONTACT CRIME (CRIMES AGAINST THE PERSON)										
Murder	13	8	4	7	5	11	8	7	3	11
Total Sexual Crimes	45	40	39	36	36	37	29	33	40	42
Attempted murder	7	9	7	6	4	3	8	5	5	3
Assault with the intent to inflict grievous bodily harm	246	213	209	161	157	174	120	102	73	85
Common assault	189	169	94	77	56	71	52	56	67	38
Common robbery	38	45	24	30	24	23	12	16	16	12
Robbery with aggravating circumstances	9	11	9	14	23	14	26	15	22	11
CONTACT-RELATED CRIMES										
Arson	1	4	4	2	2	3	2	1	0	2
Malicious damage to property	67	68	62	42	67	52	37	32	46	33
PROPERTY-RELATED CRIMES										
Burglary at non-residential premises	50	43	60	68	75	56	46	32	55	55
Burglary at residential premises	207	183	217	156	143	128	132	96	154	163
Theft of motor vehicle and motorcycle	11	10	15	9	6	6	4	15	6	11
Theft out of or from motor vehicle	47	40	38	21	52	25	31	16	18	30

Crime Category	April 2003 to March 2004	April 2004 to March 2005	April 2005 to March 2006	April 2006 to March 2007	April 2007 to March 2008	April 2008 to March 2009	April 2009 to March 2010	April 2010 to March 2011	April 2011 to March 2012	April 2012 to March 2013
Stock-theft	26	15	21	15	6	33	14	17	15	17
CRIMES HEAVILY DEPENDENT ON POLICE ACTION FOR DETECTION										
Illegal possession of firearms and ammunition	0	1	3	3	2	0	0	0	2	2
Drug-related crime	10	9	7	18	11	10	17	12	34	37
Driving under the influence of alcohol or drugs	8	7	15	8	13	12	13	7	9	5
OTHER SERIOUS CRIMES										
All theft not mentioned elsewhere	314	228	189	110	172	136	124	106	126	114
Commercial crime	24	17	21	18	24	20	27	29	38	29
Shoplifting	42	34	31	25	20	36	28	9	8	10
SUBCATEGORIES OF AGGRAVATED ROBBERY FORMING PART OF AGGRAVATED ROBBERY ABOVE										
Carjacking	1	0	0	0	0	0	0	0	1	1
Truck hijacking	0	0	0	0	0	0	0	0	0	0
Robbery at residential premises	0	0	0	0	0	1	4	1	3	3
Robbery at non-residential premises	0	0	1	1	0	1	14	10	10	4
OTHER CRIME CATEGORIES										
Culpable homicide	5	6	3	7	10	9	4	4	3	7
Public violence	0	0	0	1	2	0	1	0	0	0
Crimen injuria	76	43	17	16	13	25	7	6	12	8
Neglect and ill-treatment of children	1	3	2	4	2	3	2	0	1	2
Kidnapping	0	0	0	0	0	0	0	0	1	0

3.6. COMMUNITY, TECHNICAL AND COUNCILLOR ENGAGEMENT

3.6.1	Introduction	p. 124
3.6.2	Engagement with the PLMTCC	p. 125
3.6.3	Community Meetings	p. 127
3.6.4	Summary of the Community, Technical and Councillor Engagement	p. 135

3.6.1 Introduction

The consultation process entailed two interrelated sets of activities: Meetings and workshops with (1) the Phokwane Local Municipality Technical Committee and Councillor (PLMTCC) participation and support, and (2) Community members and representatives and other stakeholders.

The **PLMTCC engagements** endeavoured to:

- Identify the view of the PLMTCC on local needs and expectations;
- Identify the desired spatial development outcomes for the municipality; and
- Develop, discuss and gain support for spatial development proposals for the municipality.

The **Community and Stakeholder Participation Sessions** endeavoured to:

- Enable and allow community members and representatives and stakeholders to participate meaningfully in the deliberations around the SDF and its subject matter;
- Tap into and utilize the local knowledge of the community;
- Hear and make sense of the needs and priorities of the community;
- Get spatial development proposals from the community and other stakeholders; and
- Unite the community and other stakeholders behind the SDF.

What follows is a summary of the main issues and opportunities as captured in a separate 'Phokwane Local Municipality Spatial Development Framework Public Participation Report 2014'.

3.6.2 Engagement with the PLM Technical Committee and Councillors (PLMTCC)

PLM Technical Committee and Councillors Meetings

A PLMTCC-workshop was held in the Hartswater Community Library on the 9th of September 2013 (attendance register attached as Annexure 'A'), during which:

- A presentation was made by the service provider of the technical data gathered to date, and the issues and emerging trends as extracted from the data;
- The PLMTCC's views on the presentation, local needs and expectations and desired spatial development outcomes for the municipality were discussed; and
- The service provider responsible for the FBDM provided the committee with a CD containing its analysis of the issues, needs and possibilities in the district, and invited the PLMTCC to provide him with inputs and comments.

Challenges, Concerns and Threats:

- While Agriculture is the largest economic sector in the PLM, it does not have an equally large segment of the population involved in it. A focus on high-value crops and mechanisation of the sector were regarded as the key reasons for this state of affairs.
- More private sector investment is required in the PLM to grow especially manufacturing sector jobs. The need for identifying ways of increasing the attractiveness of the PLM as investment destination was highlighted. The PLM SDF was seen as a tool to assist with attracting more investment.
- There is a need for increasing regional connectivity to allow communities to engage in the economy and buy and sell goods and services, including the tarring, upgrading and maintenance of roads,

the re-utilisation of the railway system and the building and upgrading of enabling infrastructure, such as taxi ranks with surrounding government offices and facilities (such as clinics, police stations and MPCCs/Thusong Centres). The lack of bus and taxi services in some settlements was seen as limiting the opportunities to get to job opportunities in the PLM.

- A concern was raised about the loss of skilled young people to (1) larger centres, after they received higher education in these places, and (2) mining areas, notably the JTGDM, the Bojanala DM in the North West and the Waterberg DM in Limpopo. The hope was expressed that the university in Kimberley will to some extent reduce this outflow from the province. The building of a FET College was seen as something that could also assist in this regard on a more local level. The ability of agriculture to provide a strong enough magnet for retaining younger people was raised as a concern.
- The lack of 'things to do' in the PLM, especially at night, was seen as a contributing factor to especially younger persons not staying in the area.
- Electricity provision in Pampierstad was described as at times erratic with 'blackouts' occurring regularly in some parts of the settlement.
- It was noted that (1) there is a lack of clinics in the area and (2) many of the clinics are badly equipped and have limited opening times. Valspan was singled out as having only one clinic.
- The displacement of farm workers from farms in the area over the course of many decades, resulting in farm workers having to relocate in the towns in the PLM, notably Ganspan, Valspan and Pampierstad, was seen a contributor to social tensions in the PLM between racial and income groups.
- The lack of national government regional offices in the PLM was seen as a contributing factor to the lack of public officials with stable incomes in the area. This, it was argued, meant that the PLM was losing out on activities and facilities following such stable public sector

groups (such as restaurants and private sector services and office development).

- It was noted that the majority of the inhabitants in the PLM are highly dependent on government grants for their daily survival.
- Poverty and income inequality were seen as key contributing factors to frustration, despair and growing anger in the PLM.
- It was stated that communities do not move around the PLM in terms of where they choose to stay, and that people tend to spend their lives in the town/settlement where they were born.
- A lack of suitable housing for professionals was seen as a major hindrance on attracting investment to the area. A need for rental housing in this regard was emphasised.
- The release of land owned by the PLM Council was raised as an issue that needed urgent attention. The speed of decision-making by the Council on land development and land-release requests was also raised as a hindrance to investment.
- Traditional leaders were seen as frustrating human settlement and investment in land by not releasing land.
- Land invasion (of farming land), not necessarily for farming, but especially for settlement (housing), was seen as a major threat. It was noted that farmers tend not to develop land as intensively as they could immediately adjacent to settlements, most probably due to fear of theft of crops.
- The lack of involvement by certain segments of the population in the governance of the PLM was seen as a concern.



Opportunities and Prospects:

- It was proposed that corridor development may offer ways of connecting the former apartheid-separated settlements in the PLM.
- The influx of funding and workers with the Vaalharts Revitalization Scheme (at least R750-million and 300 workers) over the next 8 years was noted as a sizeable positive injection into the local economy.
- It was noted that there is enough water for urban and manufacturing (beneficiation) expansion in the PLM. Water rights were also not seen as a constraint to such expansion.
- The central location of the PLM in the country regarding access, manufacturing and distribution was seen as an underutilised opportunity.
- A focus on crops with higher local beneficiation possibilities was seen as something to explore.
- It was suggested that the proximity to the mining areas in especially the JTGDM and the Bojanala DM, could be exploited in terms of providing (1) food products and (2) the beneficiation of minerals mined in these places.
- It was noted that crime is very low in the area despite the high poverty levels, most probably as access to cheap food is high, and communities are closely-knit and caring, and that this could be used as a marketing tool for investment.
- It was stated that most of the settlements in the PLM have been growing and that both informal settlements and backyard shacks have been expanding in the area.
- The lack of land for further expansion around Hartwater and Jan Kempdorp due to the 'boxing-in' of development by agricultural land was raised as a serious concern. The need to make careful trade-offs in settlement expansion (housing, manufacturing, schools, clinics, etc.) and the use of land for agriculture around existing settlements was discussed. Restricting urban sprawl, as raised in numerous policy

documents, and the NDP, was highlighted. The existing possibility of walking to work in many of the settlements was seen as something that should be retained.

- The 'Scheme' provides, but has not yet been used to any large extent for land redistribution, and this was seen as something that had to be explored with great urgency.
- The construction of the new hospital in the Greater Taung LM in the North West Province, but in close proximity to the major settlements in the PLM, was seen as a huge opportunity in terms of the introduction of (1) medical staff and (2) opening up downstream value chains.
- Ganspan Pan was raised as a tourist opportunity that should be explored in the SDF review process.
- It was stated that the PLM's LED strategy and proposals must be considered and where possible, incorporated in the PLM SDF.

3.6.3 Community Meetings

Introduction

Community meetings were held in the various settlements in the PLM from the 11th to the 13th of September 2013. The meetings were attended by the PLM officials involved in the PLM SDF review and councillors (attendance registers attached as Annexures 'B' to 'E'). During the meetings the (1) objectives of the project, (2) the steps that are being followed in the execution of the project, and (3) the opportunities for involvement by the community, were discussed. The largest segment of the meetings was devoted to listening to and capturing the issues, needs, wishes and proposals of the community. In the following sections, the issues, concerns and opportunities, as raised in the meetings in the various settlements, are listed.

The key issues that were raised are:

- A shortage of land for (1) housing, (2) grazing for animals, (3) businesses, and (4) graves – the graveyard is full;
- The Harts River forming a barrier to further expansion of the settlement;
- The location of people in the area that were removed from other places without consideration of their land and housing needs;
- A lack of communication from the side of the municipality regarding implementation of promises and proposals in plans, such as the IDP and the SDF;
- The extremely period of time it takes the municipality to process applications for land development;
- The quality of work of contractors, which often was weak;
- Contractors who in many cases did not clean up after they had done their work, resulting in unsightly building rubble in the settlement;
- Dust, which is especially a problem when the wind blows, and which is worsened by the rubbish dumps and gravel roads in the area;
- A lack of recreational facilities in the settlement, especially so for children and youth;
- Illegal dumping, which was a huge concern from a variety of health, amenity and other quality of life aspects;
- Land claims, which took very long to complete;
- Maintenance of infrastructure investments and facilities, such as the community hall;
- The constant engagement of communities on IDPs, SDFs, LEDs, etc., with the community beginning to feel over-workshopped, and developing the view that the municipality does not plan ahead;
- The quality of roads and water drains in the settlement, which had been built a long time ago, and which was generally regarded as very bad;

- The lack of job opportunities in the settlement, and the PLM in general;
- The lack of school attendance by especially younger children in the settlement;
- The limited opening hours of the two clinics in the settlement, and the long walking distances to the clinics;
- The lack of visible policing and street lighting in parts of the settlement, which makes the township dangerous at night;
- The lack of dedicated sites for crèches, which results in these facilities being located in buildings not suited for the task (i.e. toilet facilities and spaces for play and rest);
- The lack of universities and FET colleges in the Northern Cape and the PLM, which results in parents spending a lot of money on sending children to higher education facilities in other provinces;
- The long distances that need to be travelled to hospitals;
- Tuck shops selling expired stock and charging exuberant prices;
- The rubbish problem and huge dumping sites, which were creating a health hazard in the settlement;
- People not developing land that they have been given, resulting in it becoming a dumping site; and
- The under-utilisation of local skills and the persistent in-sourcing of service providers from outside the area.

The meeting was not in favour of:

- Higher-density housing/flats.

The meeting was in favour:

- More diversity in the kind of housing provided/offered, e.g. gap housing and social housing;
- The municipality negotiating with farmers and chiefs to secure/get more land;

- Job creation, especially so for younger people, and especially so long-term, not part-time, short-term jobs;
- The provision of more clinics and clinics offering a 24-hour service;
- A satellite facility tied to the new university in Kimberley that will focus specifically on agriculture;
- Government exploring the possibility of there being minerals to be mined/extracted in the area;
- Councillors engaging the people more regularly and providing feedback on progress on development projects – at least once every three months;
- The construction of a MPCC/Thusong Centre in the settlement;
- The building of a swimming pool; and
- The provision of a facility in the settlement where rubbish can be sold for recycling.

Ganspan

The key issues that were raised are:

- Weak service delivery by the municipality and government at large;
- The huge delays between plan preparation and implementation – up to 25 years;
- The lack of grazing land for animals;
- The bad state of the clinic, the limited opening hours and its weak location on the periphery/'far side' of the settlement;
- The absence of recreation facilities in the settlement;
- The absence of street lighting;
- The lack of space for crèches, resulting in these facilities being provided on unsuitable properties and in unsuitable buildings;
- The shortage of class rooms and teachers at the existing school (only one primary school in the settlement), resulting in very high learner-teacher ratios;
- The lack of a proper shopping complex in the settlement;

- The lack of buses and taxis, resulting in high levels of dangerous hitchhiking;
- The constant engagement with the community in seemingly very similar processes, notably the preparation and review of the IDP, the SDF and the LUMS; and
- The lack of recreational facilities resulting in 'youngsters spending a lot of their time drinking and getting drunk'.

The meeting was not in favour of:

- Higher-density housing/flats;
- The provision of bicycle lanes (although many of the older members of the community were in favour of it); and
- Sharing their plans for starting a new business out of fear that the municipal officials of councillors would 'steal' their ideas.



The meeting was in favour of:

- The refurbishment and upgrading of the existing recreational facilities and the swimming pool;
- The building of a stand/pavilion at the soccer stadium;
- The provision of more sporting facilities;
- The building of proper housing for those community members living in shacks;
- The securing and provision of more land for (1) housing and (2) farming in the area;
- The building of a water purification plant in the settlement;
- The provision of an FET college focusing on agriculture in the settlement;
- The renovation of the asbestos houses in the settlement;
- The building of a shopping complex and taxi rank in the settlement; and
- The settlement becoming a very clean and green area by 2030, with all government services functioning optimally, children being able to walk to good schools, the economy being built around agriculture, the people from Ganspan no longer feeling and being excluded and forgotten, and there being enough for young people to do, so there will be less teenage pregnancies.

Valspan

The key issues that were raised are:

- An absence of 'the fruits of democracy' for the people in the settlement;
- A lack of positive outcomes/results from going to community meetings;
- A lack of delivery in the settlement;

- A lack of land for (1) building your own house and (2) businesses in the settlement;
- Nepotism in the municipality resulting in a small group of well-connected people getting all the opportunities (including LED projects) and the masses getting nothing and losing out on development opportunities;
- A confusion in the municipality between politics and administration;
- A lack of the application of the Batho Pele principles in municipalities;
- A lack of communication on progress with development plans, projects and programmes in municipalities;
- The weak condition of roads in the area;
- A lack of effective and strong leadership in the municipality and in the community;
- The foul smell coming from the abattoir;
- The lack of proper waste removal and management of dumping sites in the area;
- The lack of economic opportunities and job creation programme in the settlement;
- The lack of transparency as to the work that councillors do;
- A feeling that Jan Kempdorp is 'an island that is still trapped in the past and that the State is not concerned about';
- The high levels of illiteracy in the settlement, resulting in people being easily exploited;
- The lack of parks and recreational facilities in the area;
- The high levels of vandalism in the area;
- The limited opening hours of clinics;
- Some of the settlement and street names in the PLM, which came from the apartheid era;
- The Youth Desk at the PLM, which was not working; and
- The lack of recreational facilities and sense of despondency amongst youth resulting in high levels of alcohol consumption and associated problems in the community.

The meeting was in favour of:

- The vision and mission of the PLM, as indicated on the wall of its offices, being implemented;
- The community in Valspan being made a part of the history of the area by contributing to the further development of the unique place/area in a meaningful way;
- Councillors having to account for what they have promised and delivered;
- Everyone in the PLM coming together, sharing and working together to improve conditions and make life better for everyone;
- The community becoming more involved in its own development;
- The creation of more jobs in Valspan, notably in farming;
- The building of a youth centre in the settlement;
- The better placement of schools in the area for access and safety reasons;
- The building of a primary school in the settlement;
- The provision of more clinics and the appointment of more doctors in the area;
- The provision of a mobile clinic in the informal area;
- The provision of more recreational facilities in the area;
- More visible policing and street lighting in the settlement;
- Staying in the area, with jobs being provided in the settlement;
- The construction of a SASSA and national Department of Labour Offices in the settlement;
- The building of a MPCC/Thusong centre in the area;
- The provision of housing that people can purchase and rent out to others and make a living from;
- The provision of more libraries in the area – the closest one is in JKD and the new one was built in Hartswater, not in Valspan, as had been hoped by the community in Valspan;

- The establishment of a National Youth Service office in the settlement;
- The provision of regional offices of national government departments in the area;
- The construction of an Internet Café in the settlement;
- The construction of an FET college in the settlement; and
- By 2030, the (1) settlement will have good services, enough jobs, tarred roads, (2) the community will be treated with respect and dignity by the State, (3) the municipality will be transparent in its dealings, (4) the private sector being involved in the economy of the area, and (5) Valspan will have been integrated into the wider area.



The key issues that were raised are:

- An absence of 'the fruits of democracy' for the people in the settlement;
- A lack of positive outcomes/results from going to community meetings;
- A lack of delivery in the settlement;
- A lack of land for (1) building your own house and (2) businesses in the settlement;
- Nepotism in the municipality resulting in a small group of well-connected people getting all the opportunities (including LED projects) and the masses getting nothing and losing out on development opportunities;
- A confusion in the municipality between politics and administration;
- A lack of the application of the Batho Pele principles in municipalities;
- A lack of communication on progress with development plans, projects and programmes in municipalities;
- The weak condition of roads in the area;
- A lack of effective and strong leadership in the municipality and in the community;
- The foul smell coming from the abattoir;
- The lack of proper waste removal and management of dumping sites in the area;
- The lack of economic opportunities and job creation programme in the settlement;
- The lack of transparency as to the work that councillors do;
- A feeling that Jan Kempdorp is 'an island that is still trapped in the past and that the State is not concerned about';
- The high levels of illiteracy in the settlement, resulting in people being easily exploited;
- The lack of parks and recreational facilities in the area;

- The high levels of vandalism in the area;
- The limited opening hours of clinics;
- Some of the settlement and street names in the PLM, which came from the apartheid era;
- The Youth Desk at the PLM, which was not working; and
- The lack of recreational facilities and sense of despondency amongst youth resulting in high levels of alcohol consumption and associated problems in the community.

The meeting was in favour of:

- The vision and mission of the PLM, as indicated on the wall of its offices, being implemented;
- The community in Valspan being made a part of the history of the area by contributing to the further development of the unique place/area in a meaningful way;
- Councillors having to account for what they have promised and delivered;
- Everyone in the PLM coming together, sharing and working together to improve conditions and make life better for everyone;
- The community becoming more involved in its own development;
- The creation of more jobs in Valspan, notably in farming;
- The building of a youth centre in the settlement;
- The better placement of schools in the area for access and safety reasons;
- The building of a primary school in the settlement;
- The provision of more clinics and the appointment of more doctors in the area;
- The provision of a mobile clinic in the informal area;
- The provision of more recreational facilities in the area;
- More visible policing and street lighting in the settlement;
- Staying in the area, with jobs being provided in the settlement;

- The construction of a SASSA and national Department of Labour Offices in the settlement;
- The building of a MPCC/Thusong centre in the area;
- The provision of housing that people can purchase and rent out to others and make a living from;
- The provision of more libraries in the area – the closest one is in JKD and the new one was built in Hartswater, not in Valspan, as had been hoped by the community in Valspan;
- The establishment of a National Youth Service office in the settlement;
- The provision of regional offices of national government departments in the area;
- The construction of an Internet Café in the settlement;
- The construction of an FET college in the settlement; and

By 2030, the (1) settlement will have good services, enough jobs, tarred roads, (2) the community will be treated with respect and dignity by the State, (3) the municipality will be transparent in its dealings, (4) the private sector being involved in the economy of the area, and (5) Valspan will have been integrated into the wider area

Hartswater

The key issues that were raised are:

- The lack of land for housing for the poor in the area;
- A lack of housing and the inadequacy of RDP housing in the area (i.e. no ceilings, bad construction);
- The lack of (1) housing for middle income earners and (2) land for the development of middle income housing in the area;
- A lack of access to water in the informal settlements in the area – water has to be sourced from far away, often entailing long (and unsafe) journey by foot to get water;

- The erratic nature of water availability in the area coupled with water pressure being very low, leading to long spells during the day without any water;
- A rocky terrain creating problems for the provision of water in the area by the municipality;
- A lack of job opportunities in the area;
- A feeling of having been ‘dumped’ in the area by some of the inhabitants who used to live and work on farms on the Scheme (there are also residents who moved from backyard shacks in other parts of the municipality to the informal settlements in the area);
- Groups of youth who steal from farmers and businesses in the area, and who then hide in the informal settlements and which often results in farmers coming to look for them, endangering the law-abiding residents in the area and causing disturbances in the settlements;
- Uncertainties regarding tenure in the area due to the informal nature of the settlement and uncertainties amongst people about the status of the stands they were told ‘were fine to settle and build their houses on’ – this situation is being attended to by the municipality in collaboration with the NC Department of Cooperative Governance, Human Settlements and Traditional Affairs (COGHSTA). A process is underway and communities will be alerted as to when and where community meetings will be held;
- Livestock roaming freely in the area and creating an unhealthy situation;
- A lack of grazing land for animals in the proximity of the settlement;
- The huge dumping site in the area, which is a huge health risk (including the smoke from burning waste) and which needs to be closed up as soon as possible;
- Illegal dumping in the area, which is causing a health risk;
- Lack of access roads to some of the informal settlements in the area, which is also hindering access for ambulances, fire engines, police cars and refuse removal trucks;

- Lack of access to land for farming;
- People building shacks in a number of settlements, also in neighbouring municipalities and waiting to see where they will get services first;
- 'Shack fires', which are worsened by the lack of water and the inability of fire engines to enter the area (the Ammunition Depot is assisting with the provision of fire prevention services to the municipality);
- A lack of provision for people with disabilities in the construction of public buildings and facilities, housing and toilets;
- A lack of skills development and job creation projects for people with disabilities;
- A lack of a school for children with disabilities in the area;
- Crime, which is worsened by the lack of adequate high mast lighting facilities in the area;
- A lack of 24-hour clinics and inadequate health care at clinics;
- A lack of proper sanitation services creating a health risk;
- A lack of jobs in the area, especially for youth, and which is worsened by farm mechanisation;
- Some farmers in the area not paying workers minimum wages;
- A lack of Union representation amongst people living in the area and the lack of support services by the Department of Labour;
- A reliance on grants for survival;
- No sporting grounds or parks in the area;
- A lack of secure playing areas for children and youth;
- A lack of skills development amongst the youth;
- A lack of learnerships and bursaries for youth from the area to go to university; and
- A lack of community/town halls in the area.

The meeting was in favour of:

- The pressing issue of the future of the informal settlements, and with that the issues surrounding the provision of services and housing, being addressed as soon as possible;
- The community taking ownership of their public facilities;
- The dumping site being closed and being redeveloped as a park;
- Bursaries and learnerships being made available for youth from the area to go to university;
- The establishment of internet cafés;
- The provision of information on bursaries, learnerships, tenders and job opportunities being made available to the residents in the area;
- Longer operating hours for clinics and the expansion of the number of health care workers in the area; and
- The identification and making available of land for farming for both younger and older people in the area.



3.6.4 Summary of the Community, Technical and Councillor Engagement

Issues, as raised by the community, officials and councillors:

Hard Infrastructure:

- The lack of tarred roads in the area
- The bad condition of roads and water canals in the area
- The lack of adequate street lighting
- A lack of maintenance of infrastructure
- A lack of rubbish dumps and associated refuse removal services
- A lack of space in the existing cemeteries

Soft Infrastructure and Social Services:

- The lack of and limited opening hours of clinics
- The lack of libraries
- The lack of schools
- A lack of land and buildings for crèches
- A lack of higher education facilities
- A lack of parks, sport and recreation facilities
- A lack of visible policing
- A lack of access to the Internet

Economic:

- The lack of job opportunities, notably for youth
- Persisting and deepening inequality and poverty
- A lack of shopping complexes in many of the settlements

Land and Housing:

- A lack of land for businesses, grazing for animals, and housing
- A huge housing backlog
- Limited construction of housing by the private sector
- A small range of available housing options

Governance and Service Delivery:

- Weak leadership
- A general sense and experience of 'lack of service delivery' by the State
- Lack of engagement by the municipality with the people, leading to a feeling of alienation and 'being forgotten'
- Lack of feedback on progress with the implementation of development plans
- Lack of transparency in the work/dealings/decisions of the municipality
- The blurring of the lines between administration and politics in the municipality
- Slow processing of land development applications
- Traditional leaders not releasing land or slow to release land
- High levels of illiteracy making people exploitable
- Lack of application of Batho Pele principles in the municipality
- Confusion regarding the difference between the various development plans, strategies and frameworks prepared by the municipality and other spheres of government
- Weak LED and Youth development opportunities and services offered by the municipality
- Utilisation of weak contractors resulting in bad workmanship and lack of clearing up of building rubble

Development Opportunities

- Tourism, including a wide range of unique historical, natural and leisure-based opportunities
- Further expansion of the already highly successful irrigation scheme and agricultural production
- Beneficiation and manufacturing tied to (1) the agriculture sector in the area and (2) the mining sector in adjoining districts

- The central location of the PLM in the country with a view to logistical services and distribution and the location of regional offices and national government departments in the area
- The railway line, which runs through the area and connects Kimberley to Zimbabwe
- The flatness of the area, which lends itself ideally to bicycle ways
- The existing, concentrated location of business, churches, schools and clinics along a number of roads that could be developed into activity corridors/streets
- The provision of housing for workers in government agencies, such as the Agricultural Research Centre



3.7. SYNTHESIS

3.7.1	Synthesis of the Status Quo Analysis	p. 136
3.7.2	PLM Settlement Summaries	p. 137
3.7.3	Summary of the SWOT Analysis	p. 149

3.7.1 Synthesis of Status Quo Analysis

In this section the emerging issues, trends and opportunities, as extracted from the Analysis and the engagements with the technical committee, councillors and local communities are presented and discussed.

The area is marked by a very strong single economic sector – agriculture – on which the other economic sectors are by and large dependent. This sector, in turn, is dependent on water sources from catchments (the Vaal River) that are themselves under severe strain, and themselves dependent on water transfers from cross-national border catchments (Lesotho). While there are no immediate signs that this source is under stress, this could change very dramatically in a short span of time.

In addition to the huge dependency of the area, the local space economy is marked by tracts of land with very high levels of economic activity in close proximity to large areas of very limited activity in which life is a daily struggle to survive. Of the five settlements in which the bulk of the population of the PLM is concentrated, only Hartswater and to a limited extent, Jan Kempdorp, have an economic base. The other three settlements – Pampierstad, Valspan and Ganspan – are marked by limited economic activity, high levels of unemployment, deep levels of poverty and in many cases, extreme spatial, social and economic marginalisation. In these settlements, grant dependency is high and living conditions very harsh. This is worsened by the semi-desert climate in the area with its very high summer temperatures and low rainfall figures. Given the high levels of poverty, the number of indigents is high, and the municipality struggles to provide and maintain essential services in especially the areas of deepest poverty and need. Housing provision is also a major concern and one that requires urgent action. To do so, will require either building higher density housing, which communities are not keen on, or purchasing land around existing settlements from farmers or traditional leaders. In response to these enormous challenges, current investment and

spending ventures by the State in the area have largely consisted of small-scale LED-project-style appeasement measures – quick fix band aids, hastily designed to keep the clock ticking and to keep the pot from boiling over. They do, however, not present a prospect of a different future that is better for all.

Communities living in the three areas with the highest concentration of poverty – Pampierstad, Valspan and Ganspan – are deeply frustrated with their economic situation, living conditions, and the life chances of their children. The relative sense of deprivation is also made extra stark by the very visible intensive agricultural activities, of which most are still owned and operated by white farmers. This situation is worsened by the inability of the municipality, and the State at large, to provide adequate services to the poor looking into the irrigation-farms and the economy built on this sector. In these conditions, the anger and frustration is growing, and could result in actions that would not only *not be* in the interest of anyone in the area, but also imperil and even destroy the agricultural economy on which the area was built. To prevent this from happening, all the communities and leaders in the LM need to come together to jointly (1) make sense of their situation and (2) map a way forward. Unless there is a fairer dispensation put in place in terms of access to the economy (land and agriculture) and the benefits of living in the area, serious violence and destabilisation could ensue. Without over-dramatizing the situation, the success of whatever is planned or done in the PLM in future, will depend on the ability of communities amongst themselves, and with the State as key partner, being able to forge a local collective with a joint vision and shared interest in a better life for all.

3.7.2 PLM Settlement Summaries

Maps 59 – 60 and Figures 8 - 15 provides an overview of the main findings from the analysis of the settlements in PLM.



Polluted Vaalharts Canal



Garden in informal settlement



Schoolgirl



Informal Settlement

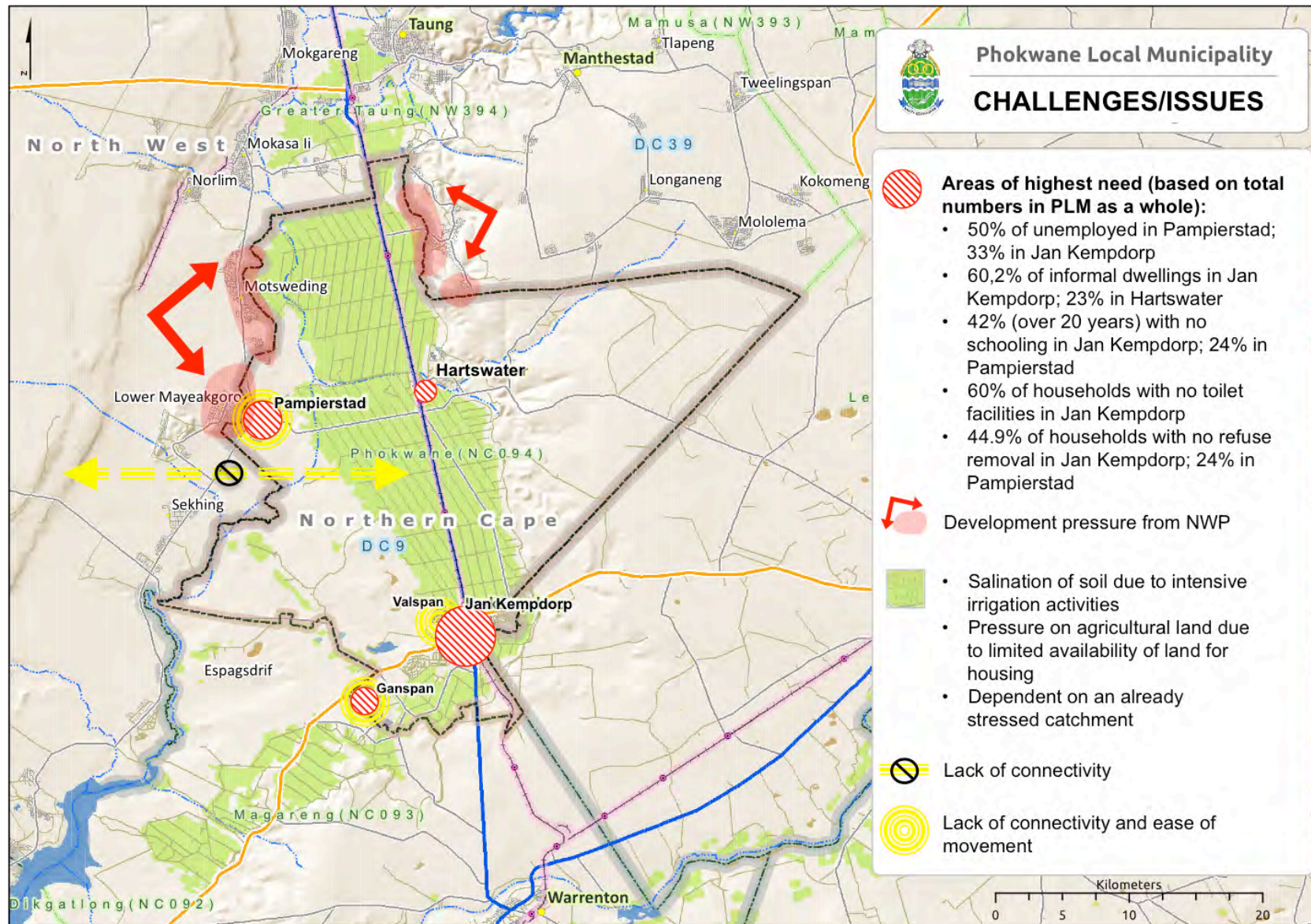


Irrigated farmland



Recycling

Map 59: PLM Challenges



Map 60: PLM Opportunities

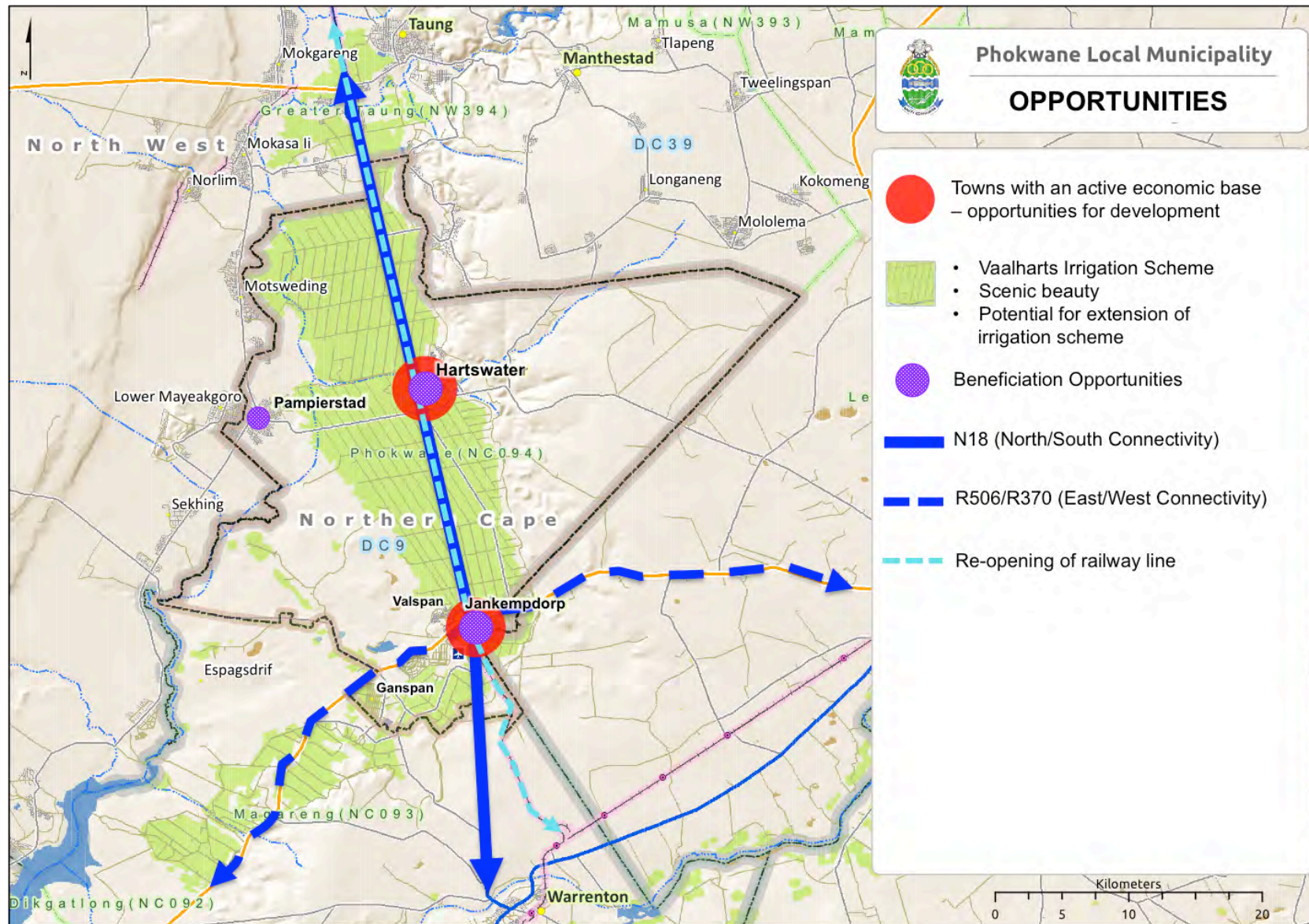


Figure 8: Hartswater Analysis Synthesis



Figure 9: Hartswater Community Participation Summary



Figure 10: Jan Kempdorp Analysis Synthesis

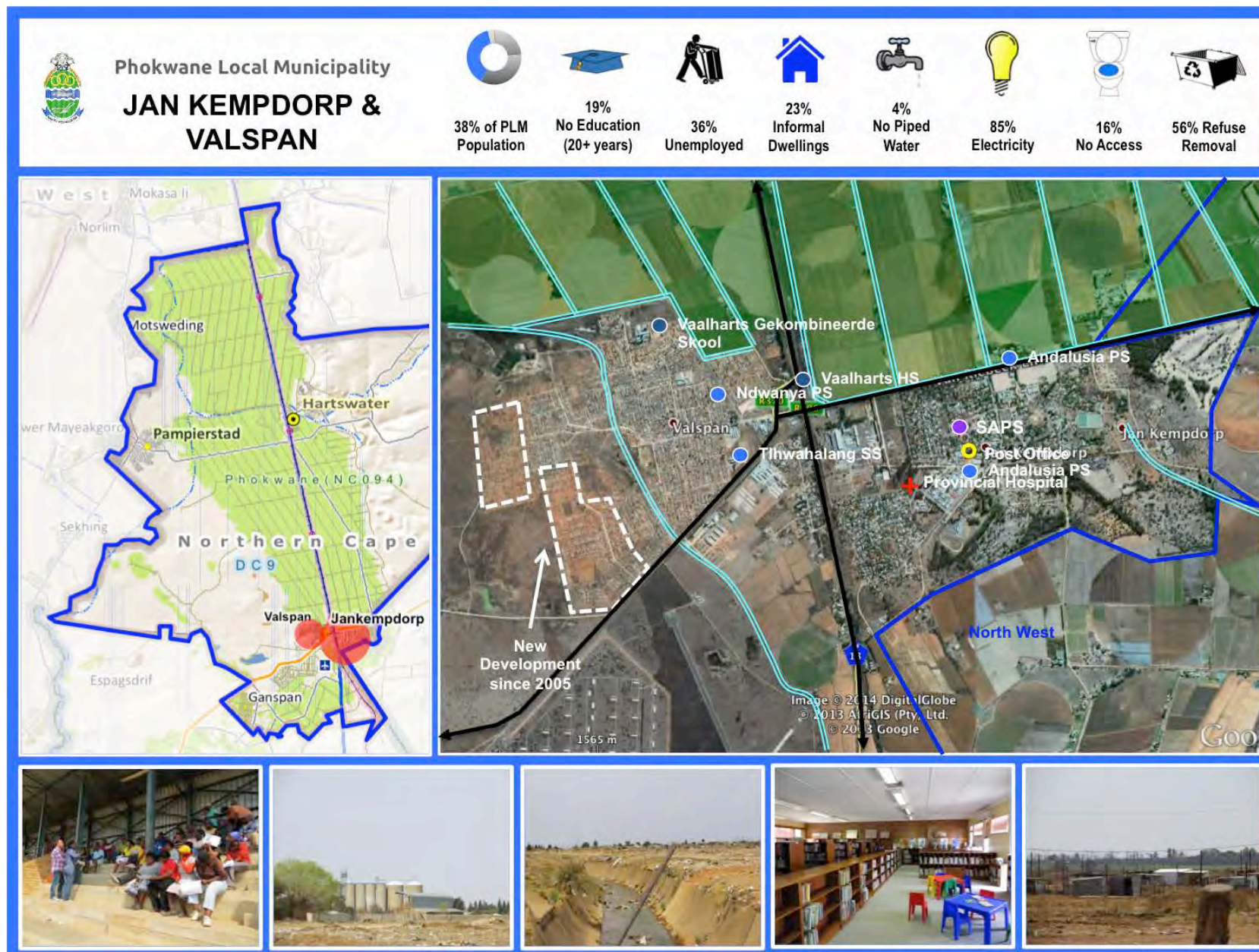


Figure 11: Jan Kempdorp Community Participation Summary



Figure 12: Pampierstad Analysis Synthesis

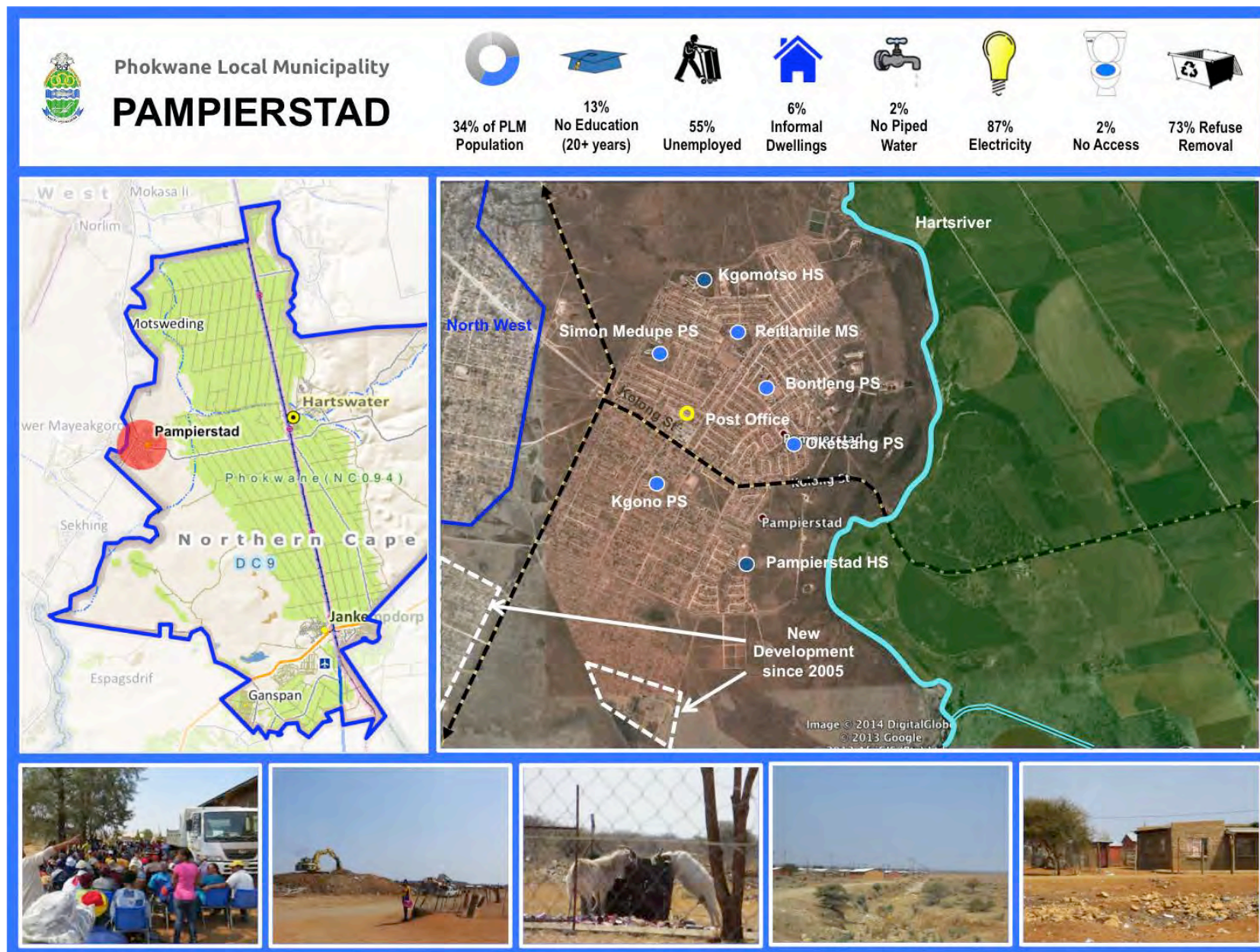


Figure 13: Pampierstad Community Participation Summary

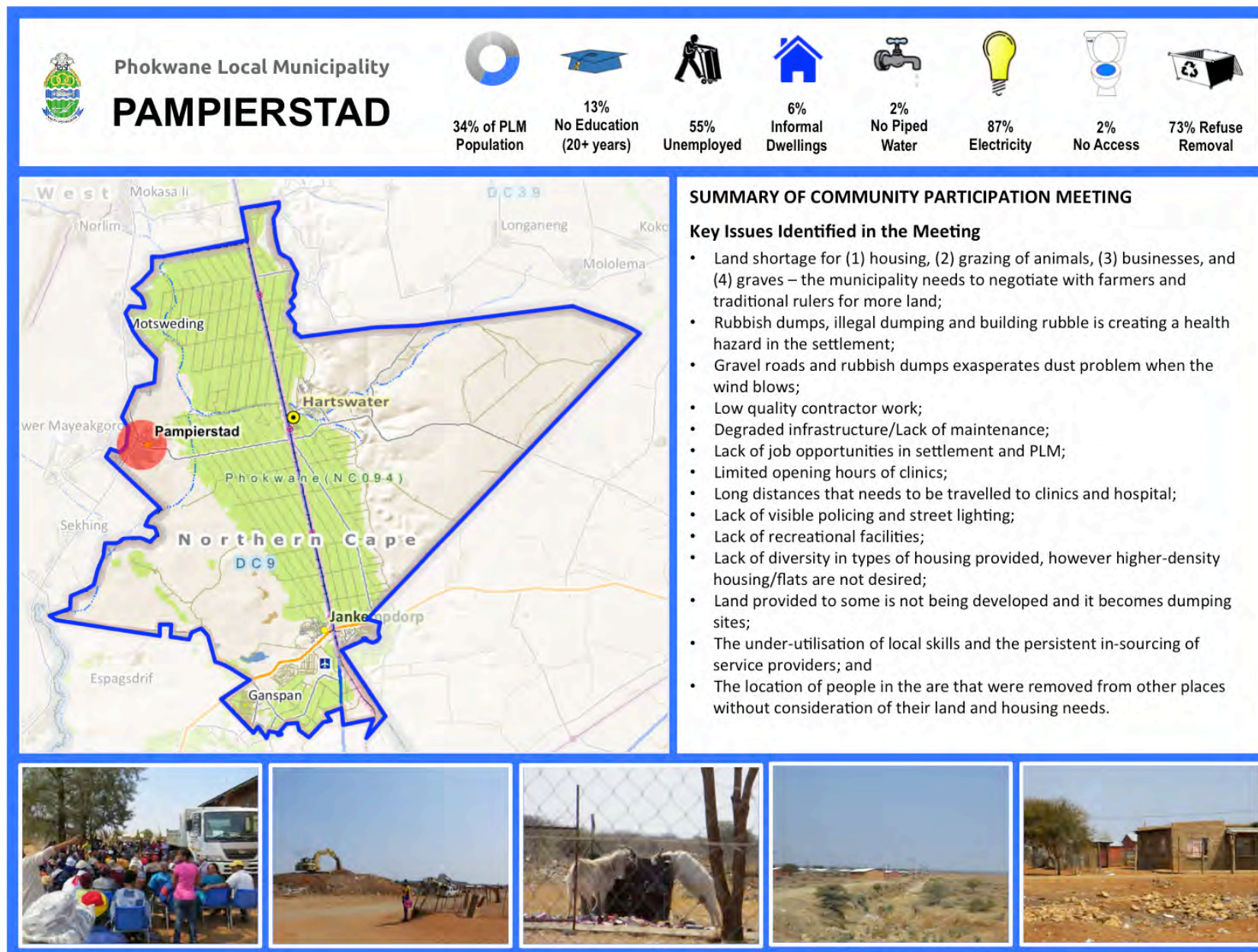


Figure 14: Ganspan Analysis Synthesis

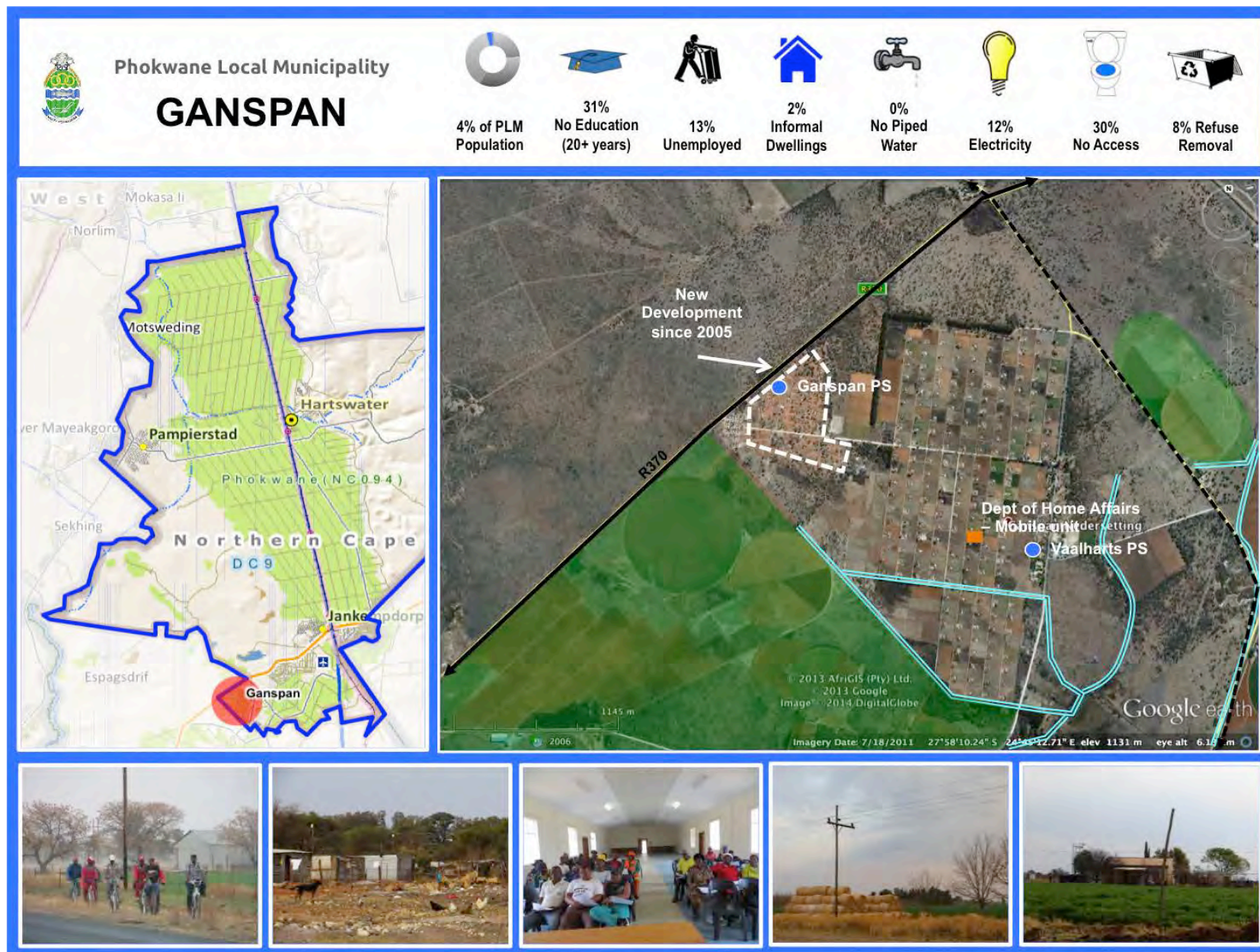
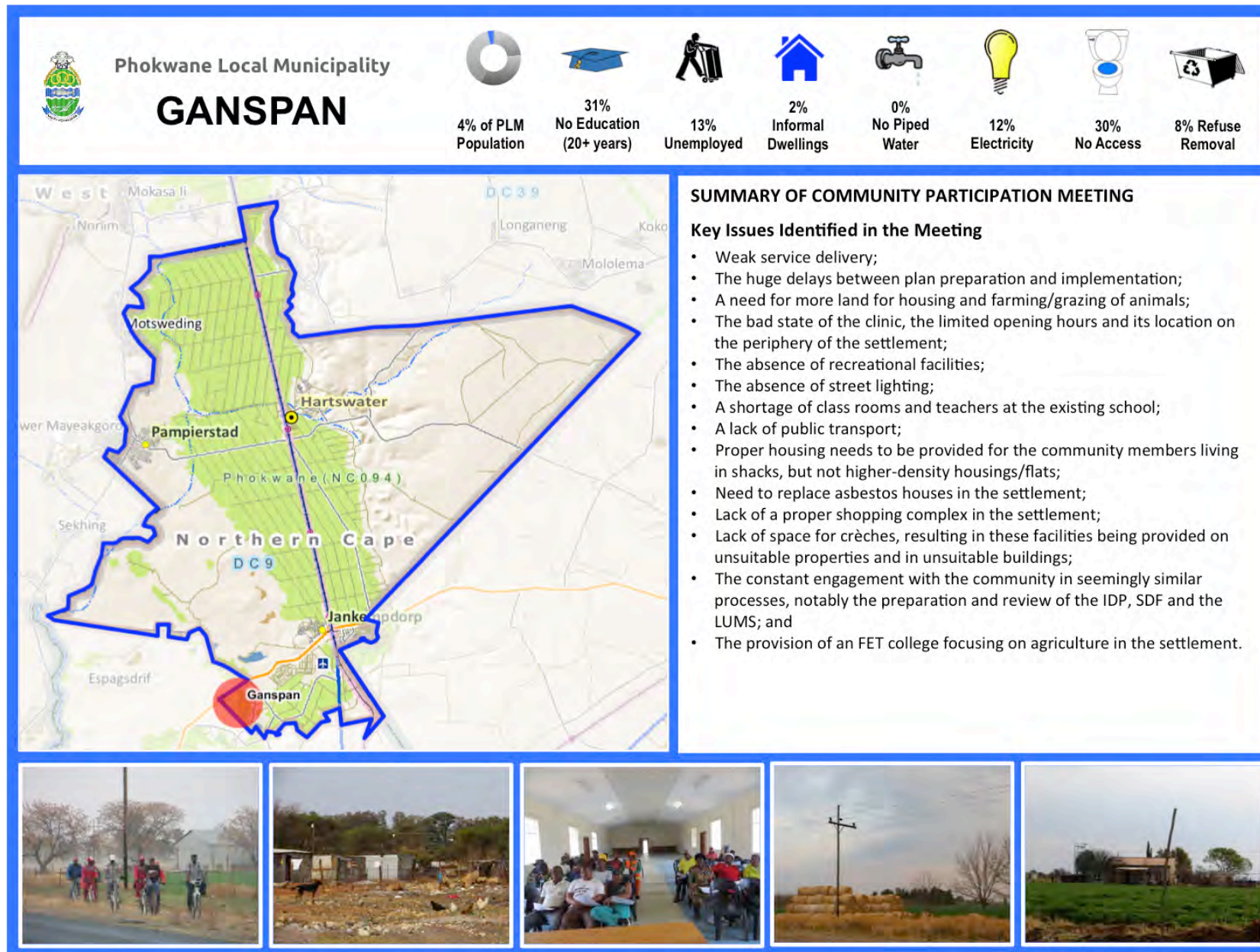


Figure 15: Ganspan Community Participation Summary



3.7.3 Summary of SWOT Analysis

Strengths

- Strong agricultural economy
- Vaalharts Irrigation Scheme
- Beauty of natural and agricultural environment
- High level of accessibility on a regional scale

Opportunities

- Development of tourism based economy
- Expansion of agri-processing industry
- Development of research and training facilities related to agriculture and agri-processing
- Extension of existing irrigation scheme
- Re-opening of railway line and proximity to Kimberley airport

Threats

- Single sector economy (agriculture)
- Whole economy dependent on water catchments under strain
- Frustration of communities in Pampierstad, Valspan and Ganspan due to lack of services and economic opportunities
- Limited and inadequate management of current landfill sites and illegal dumping threatens health of population and natural environment
- Salination of soils due to intensive irrigation activities
- Expansion of settlements from the NWO into PLM places pressure on already limited land for housing and agriculture

Weaknesses

- Only Hartswater and Jan Kempdorp has an active, productive economic base
- Pampierstad, Valspan and Ganspan characterised by high levels of unemployment, deep poverty, high levels of grant dependency and harsh living conditions
- Semi-desert conditions characterised by high summer temperatures and low rainfall
- Limited service provision in areas of most need
- Lack of connectivity and ease of movement in Pampierstad, Valspan and Ganspan
- Limited access (cost and availability) of internet facilities
- No tertiary education facilities in the area

CHAPTER 4: THE FUTURE



4.1 POPULATION PROJECTIONS

Below a number of projections are made regarding the exponential population growth in the various settlements. These projections are based on (1) the growth rate of each settlement between 2001 and 2011; (2) the growth rate of PLM between 2001 and 2011; (3) the growth rate of the FBDM between 2001 and 2011; and (4) the growth rate of the Northern Cape Province between 2001 and 2011. It is evident from this growth rate (between 2001 and 2011) that Hartswater and Jan Kempdorp are experiencing a considerable amount of in-migration, most probably from the surrounding rural areas in order to access services and in search of employment opportunities. This growth rate is considerably higher than the local, district and provincial growth rate. Whether the population will continue to grow at such a rate is unclear. However, if this trend continues, Hartswater and Jan Kempdorp will experience serious service delivery problems, exasperating the already limited services available in these areas.

Table 46: Exponential Growth for each Settlement in PLM

	2001	2011	GROWTH RATE 2001 TO 2011	2020	% INCREASE FROM 2011	2030	% INCREASE FROM 2011
Hartswater	5262	10465	0,069	16963	62,1	33819	223,2
Pampierstad	21125	21707	0,0027	22121	1,9	22727	4,7
Jan Kempdorp	17907	24220	0,03	29880	23,4	40333	66,5
PLM	61321	63000	0,0027	64202	1,9	65959	4,7
FBDM	323563	382086	0,017	430370	12,6	510120	33,5
Northern Cape	991919	1145861	0,014	1263842	10,3	1453764	26,9

Figure 16: Exponential growth based on the individual settlement growth rates

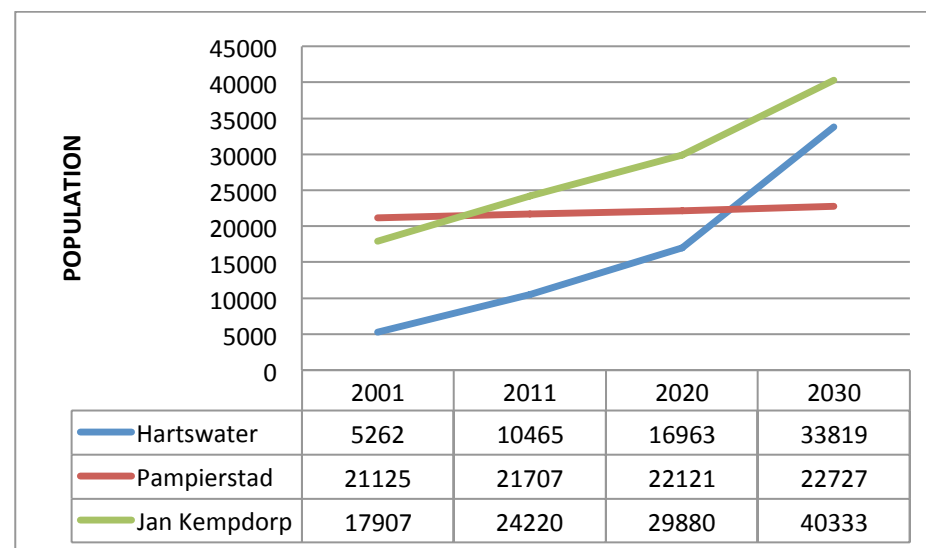


Figure 17: Exponential growth for each settlement based on the PLM growth rate

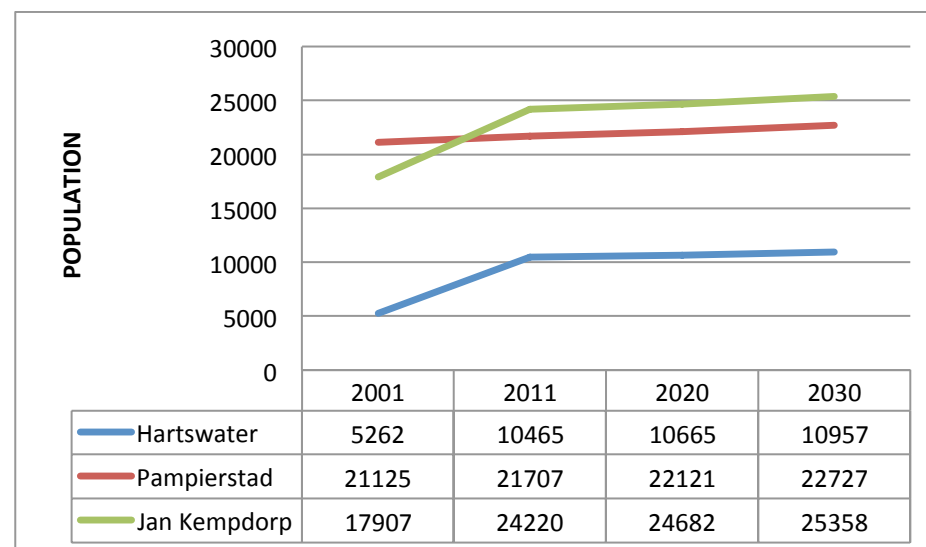


Figure 18: Exponential growth for each settlement based on the FBDM growth rate

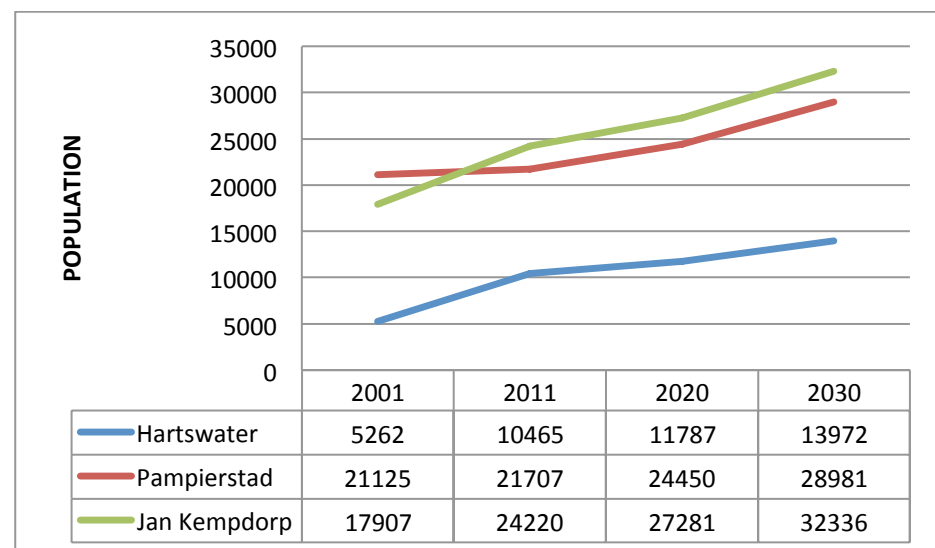
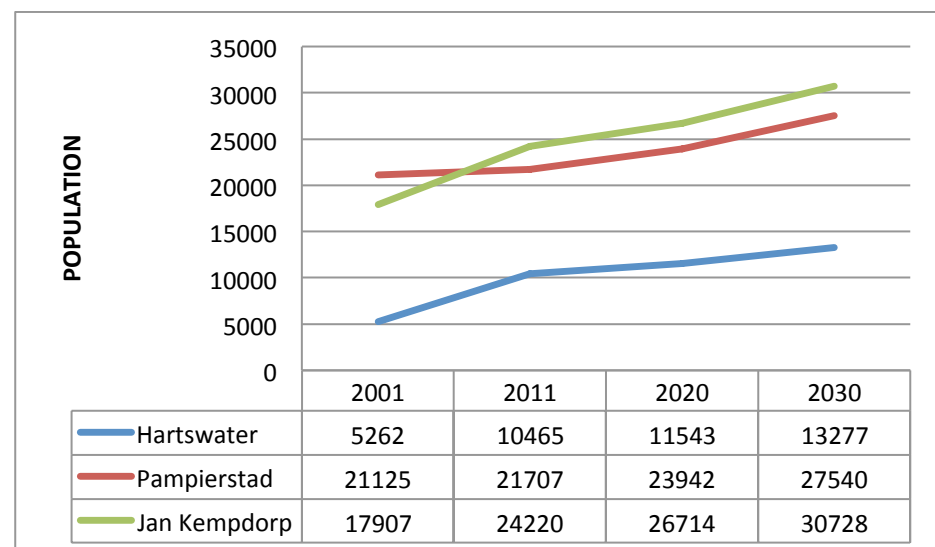


Figure 19: Exponential growth for each settlement based on the NCP growth rate



4.2 PHOKWANE LOCAL MUNICIPALITY SCENARIOS

4.2.1 Introducing Scenario Development

Scenarios first appeared in the 1960s. Since then they have become a key feature in futures research. Scenarios have been defined as “*hypothetical sequences of events constructed for the purpose of focusing attention on causal processes and decision points*”¹. As such, scenarios do not seek to present accurate future predictions, but rather to highlight key drivers/trends shaping the future. In doing so, they endeavour to:

- Steer individuals, groups and organisations away from actions that could lead to undesirable futures; and/or
- Prepare them for futures very different from the present and the past.

Essentially, they seek to propose alternative images/maps of the future and to direct and guide individuals, groups and organisations towards more desirable futures and away from less desirable ones. This they do by:

- Reminding individuals, groups and organisations of what is possible and “what can be”, if (1) they change their ways for the better, (2) local frame conditions improve, and (3) conditions and forces in the external arena take a favourable turn; and
- Warning individuals, groups and organisations of what could happen, if (1) they continue along set, detrimental, damaging, destructive ways, (2) local frame conditions remain the same, and (3) external conditions take a turn for the worse.

In this section, *three possible scenarios* are presented, based on past trends and patterns and local frame and external contextual conditions, internal and

¹ Kahn and Weiner (1967: 6), as quoted in Meyer, Engela, (2005). *Possibilities, probabilities and prospects: Finding the future in planning*. Unpublished Masters in Town and Regional Planning Dissertation, University of Pretoria.

external drivers and the experience of other places and people finding themselves with similar initial conditions and profiles and being impacts upon by similar drivers/trends. These scenarios are labelled based on their most prominent features.

4.2.2 Scenario 1: The Worst Just Got Worse - A Painful End to a Promising Start

The sun that always was the friend of the farms in the Scheme did what concerned scientists, lay observers and models on climate change predicted and even more – it just got warmer and warmer. Heat, evaporation and subsequent demands on water kept on rising, outstripping the quota that was available for farming. In conjunction with this, the amount of water available on the Scheme kept on shrinking, as similar harsh climatic conditions led to the upper reaches of the Vaal River system coming under severe pressure and increasingly less and less water making its way to the Harts River. Lack of environmental management also saw the quality of the water in the Vaal River take such a turn for the worse that the river became equated more with a poisonous snake than the precious lifeblood it once was. Locally, lack of management and maintenance has seen the Scheme fall foul of severe water loss and even more pollution, further limiting the use of the water it carries.

The pollution and reduction in quantity mean that very few crops are still possible on the Scheme, i.e. very hardy desert-type trees, resulting in many farmers having moved to goat, sheep and game farming. For many of those farming on the Scheme, i.e. emerging farmers who received their land through a well-intended and extensive, but hastily and badly implemented land restitution programme due to delays and lack of leadership, these haggard conditions have been hugely detrimental. While some farmers buy feed for their animals from producers outside the Scheme, lack of funds and barely any

State support means that many are left with no choice but to try and cultivate their own. In most cases, the lack of water and the climatic conditions means this is not a success, resulting in further soil degradation and erosion and declining farm incomes and job opportunities in the area. These conditions aggravate what is already an increasingly difficult socio-economic and socio-political situation in the area, with those without land, animals and jobs venting their frustration on those that still have some of these, and are perceived to live a much better life. Crime, once lauded in the area as ‘low’, has become a major problem, which is worsened by an inability of the State to fight it through a lack of resources and having to fight frequent uprisings and similar and worse conditions throughout most of the country. Vigilante groups and militias are frequent features in the area, and are key determinants in the distribution and ownership of power in the area.



With the agricultural economy having shrunk to a fraction of what it once was, the towns of Hartswater and Jan Kempdorp, to which many residents from Pampierstad, Valspan and Ganspan have relocated, have lost most of their formal retail and private service functions. The State grant system, cut back over the years due to lack of funds, has provided little support for the beleaguered local economy. Informal activities are all that have remained and expanded. The municipality exists only in name, with a lack of national government transfers and close to no local tax income and income from the sale of services, having meant that it has had to shed most of its employees

and cut back further its few remaining services. Regional agencies provide some services such as water and electricity services, but strictly on a pay-for-service basis. As is the case in so many other rural towns in the country, these settlements have become concentrations of the destitute, with those that could leave, having done so long ago.

Over time the harsh climatic conditions, the dangerous living conditions and the hopelessness lead to the area experiencing severe depopulation. Many farmers also cut their losses and leave the land, fuelling further out-movement. Without access to Scheme water and with no alternative livelihood, there is no reason to remain in the area. Very soon the settlements in the area become ghost towns with a small scattering of nomadic farmers eking out a life herding a few goats occasionally stopping over in the ruins of the towns for protection from the now far-worse-than-ever sand storms. What once was a highly productive irrigation farming area has returned to the desert it once was.

4.2.3 Scenario 2: A Far Brighter Future – A Place of Peace, Unity and Prosperity

Focused research into the development of desert-resistant crops, water capture, purification and re-use, novel irrigation and agricultural production techniques, and beneficiation opportunities, coupled with an incisive and focused regional rural development programme, has seen the dawning of a new era in the PLM. Huge advances in crop production have not only seen a far greater series of products being made available for local and regional consumption, but also provided a huge array of products for beneficiation in a large number of factories located along the re-opened Kimberley-Zimbabwe railway line. In addition to the beneficiation of locally-produced agricultural products the railway line is used to import and export raw and semi-beneficiated products to and from a variety of destinations in the SADC region.

The international airports at Kimberley and Bloemfontein and the new IDZ and international airport at Mahikeng provide import and export services to a wider, more global market.



A key driver of the development in the area was the coming together of community leaders, farmers and representatives from the local, district and provincial government to debate and agree on a way forward in which there would be something for everyone. This resulted in the signing of a local peace, unity and progress accord and the preparation of a five-page strategic action plan that has framed and guided all subsequent planning, budgeting and implementation in the area. Emanating from this, has been a land reform and rural investment and support programme in which the focus is on ensuring transformation, redress and job growth, and to which existing farmers, the emerging farmers and the State all contributed and are all actively involved.

The improvement in the economy and livelihoods of communities in the municipality has also meant more income for the municipality and assisted it in performing its functions. This has resulted in service protests becoming a thing of the past, a steady stream of investors setting up factories, shops, offices and restaurants in the area. With the improvement in the local economy and the huge improvements in education and health services in the area, youth were given both a much better start to life and a dream to work towards, leading to far more youth finding employment within the area, and a growing number

starting new businesses. These opportunities have also expanded with the introduction of wider regional development plans spanning national borders and in which tourism, mining, energy generation, agriculture and beneficiation have been key drivers. With the growing amount of research undertaken in the pursuit of new economic sectors and the preparation of regional development action plans, the area has become a hive of research activities. This has led to establishment of a number of research and development centres with researchers from around the world undertaking their work in the area, and in doing so, both boosting and benefiting the local economy.

Spatially the PLM has become a tightly interconnected micro-region, with a range of smartly designed housing types and developments, the maximum retention of agricultural land, public rail transit, a bus system and dedicated bicycle routes the most notable and core features of the system. Through a focus on developing the area in such a way that it is attractive both for local residents and tourists, a unique local character has been developed, which has proved to be very popular with tourists, including those passing through the area on the train holidays either starting in Cape Town and ending further north in the SADC region or vice versa. A number of tourists have also returned to undertake research in the area, start up their own businesses and buy land and holiday homes in the lush area.

In demonstrating true leadership, tackling challenges head-on, and using human ingenuity in this pursuit, it has been possible for the people in the PLM to transform the economy, the place and the institutions so as to serve all its inhabitants. In doing so, the area with its novel irrigation scheme, brought about through hard work and persistence in the 1930s, was given a new lease of life and continued along the established and deeply embedded course of vision-led, decisive, individual and collective action for the common good. Through embodying something of the pioneering spirit of its past, the future of the PLM looks brighter than ever.

4.2.4 Scenario 3: More of the Same – An Angry, Anxious and Hostile Life on a Knife Edge

While there were many warnings, proposals for positive change and improvement and ample time to still make a decisive change for the better, this was never done. Piecemeal and limited maintenance of the Scheme was chosen above radical upgrading and continued maintenance. Caution and inertia won over from calculated risk-taking and vision-inspired decisive action. Calls from those excluded from the farming activities on the Scheme for land for grazing went largely unanswered. Land reform was not undertaken with the necessary attention, energy and care. While a limited transfer of land took place, this was done but without the necessary support and real commitment on the side of the State and established farmers to make a success of it. The urgently required job creation ventures consisted of low-impact, futile LED projects. Serious investment in and development of the secondary/manufacturing sector was not actively pursued.

The already dualistic economy is only strengthened with those ‘who have’ concentrated on a few farms on the Scheme, or living primarily Hartswater, and those who do not, in Pampierstad, Ganspan and Valspan, and the expanding informal settlements grows increasingly more, and not less so. Housing conditions remain a bone of serious contention, with small-scale interventions washed away by a growing population and rapid household formation. Health, education and welfare services do not improve, and in many cases gradually get worse. Overburdened and over-staffed and lacking civil-minded, strong and caring leadership, the municipality struggles to provide basic services, let alone take on the many tasks communities expect it to undertake. With intergovernmental development planning, collaboration, cooperation and integrated implementation remaining an ideal on paper, communities see and feel their lives not getting better, and even getting

worse. This leads to ever more frequent service protests and civil instability, vandalism and crime. This situation is worsened by a growing inability of the State to maintain its grant systems, both to the municipality and for the people that live in it. With youth unemployment growing, gangs and related serious acts of violence, armed robbery and general disturbances continually on the rise, and a police force unable to manage it, the SA Defence Force are frequently called upon and deployed to contain the anger and regular uprisings.

Given the troubled state of the local economy, the harsh living conditions and the serious crime in the area, out-migration of the area by those who can 'escape', is constantly on the rise. Over time, this results in the middle class all but having disappeared from the area. With global warming leading to climatic conditions not favouring the agricultural activities in the area, the growth of highly productive mega-farming activities elsewhere in Africa, the Americas and South-East Asia, more and more farmers also leave the area. While there are enough willing and aspiring farmers to take over from those that have left, a lack of technical support, financing, new seeds and technologies and equipment, sees these emerging farmers never producing the kind of output that is required to make a decent life and to provide enough of an input for the already fragile downstream local manufacturing/beneficiation sector economy. Increasingly so, the area hovers on the edge of a cliff from where there is a sharp drop into very hard and troubled times. How long it will remain such, is an open question, but ever less-so one focused on 'if', and ever more so on 'when'.



CHAPTER 5:

SPATIAL DEVELOPMENT VISION, MISSION, OBJECTIVES AND STRATEGIES



5.1 VISION AND MISSION

The *vision* of the 2013 Phokwane Local Municipality Spatial Development Framework, as derived from, and in support of the municipal vision, as set out in its 2013/14 IDP, is:

‘To become a place in which all our citizens can sustainably and equally enjoy from the unique opportunities and rewards it offers’.

The accompanying *mission statement* is:

‘To plan for, put in place and maintain the facilities, services and infrastructure that will create and sustain real opportunities for all the citizens of our municipality to produce goods and offer their services in an environment where there is no exploitation, everyone is respected and no-one’s dignity is compromised.’

5.2 SPATIAL DEVELOPMENT OBJECTIVES

The following Spatial Development Objectives for PLM are based on the spatial vision and mission statement, issues raised by stakeholders and the findings of the spatial analysis:

- Objective 1:** To protect and sustainably manage the limited agricultural land and water resources
- Objective 2:** To expand the existing Vaalharts Irrigation Scheme
- Objective 3:** To further develop tourism in PLM based on the beauty of the natural and agricultural environment
- Objective 4:** To improve connectivity in PLM (1) locally in and between settlements, (2) provincially, (3) nationally, and (4) internationally
- Objective 5:** To revive and expand manufacturing, agro-processing

and beneficiation in PLM

- Objective 6:** To expand and exploit existing research and training facilities related to agriculture and agri-processing
- Objective 7:** To develop sustainable settlements that provide the environment and services needed for its inhabitants to live healthy, dignified and productive lives

5.3 OVERARCHING SPATIAL DEVELOPMENT STRATEGIES

To simply try to fix the massive challenges facing the municipality with lame, old-style, piecemeal, small-scale interventions while not growing the cake, i.e. the local economy, is a recipe for failure and revolution. Instead, long-term, viable large-scale spatial-economic interventions that will grow a resilient, robust local economy are required. The following four *overarching strategies*, based on real opportunities in the municipality, aim to do just that:

1. *Vastly expanding the existing irrigation scheme* through more efficient use of water, the building of further reservoirs and the placing of more land under irrigation. While this may seem like a huge, long-term project, it is these kinds of initiatives that are needed, as government have done both locally and abroad in times (1) of great uncertainty about the future, (2) when economies were flat and populations in despair, and (3) when resentment and social frustration were deeply embedded.
2. *Reviving and expanding manufacturing and beneficiation*, which will initially tap into the local agricultural economy, but which could also develop further based on the import of raw products via the re-opened railway line from as far afield as Zimbabwe. This will require sizeable investments and a lot of research into value chains and an understanding of agricultural products that would have the most significant local beneficiation opportunities. Satellite research and training facilities involved in these initiatives, and tied to universities and research

institutes, not only locally, but also abroad, could not only grow local competencies, but also bring researchers and academics from around the world into the area with the accompanying injection into the local economy. This would not only be in the form of retail and short-term accommodation, but also in the shape of opening up new opportunities for residential development.

3. *Improving local connectivity, enhancing intra-settlement trade and sharing facilities and resources.* This is an intervention that makes the most of what there is, and builds on what is working, expands on it, maximises it, and makes sure that more people, and eventually everyone living in the municipality can benefit from it. This also requires the active involvement of all the communities living in the municipality, and requires that the spirit of future-focused hard work and collective endeavour, which built the original Scheme, is reintroduced. To make it a success, it will require nodal developments with higher densities to conserve farming land and bring more people closer to schools, the building and staffing of FETs and research centres, the building and maintenance of bicycle routes for cheap, mass transport, the establishment of local economic value chains and connections, the re-opening of the railway line to assist with enhancing local connectivity and communities taking ownership and care of their immediate and the wider region. Crucially though, the economics of the model must work, which means that it must be built on rapid economic growth that is inclusive and shared, and that benefits everyone that lives in the Phokwane municipality.
4. *Tourism and eco-residential estate development,* which largely capitalises on the beauty and tranquillity of the green irrigation-based agricultural economy. The re-opening of the railway line and the closeness to Kimberley airport are cornerstones of this venture. In its smallest form, it would see the development of a much larger than currently exists, local weekend and short-stay tourism sector. In its more extreme form, it could

see the development of agricultural estates that would see their wealthy, primarily urban and even internationally-based inhabitants spend weekends, weeks, autumn and spring holidays and even longer periods in the area, injecting huge amounts of cash into the local economy and creating significant numbers of jobs in the process. Both forms (the smaller and the more elaborate versions) will require the upgrading and beautification of the area, which is in any case urgently required to improve the living conditions of the residents of Pampierstad, Valspan and Ganspan.

5.4 UNPACKING OF THE SPATIAL DEVELOPMENT STRATEGIES

5.4.1 Introduction

In this section the four Spatial Development Strategies are unpacked into smaller projects that need to be completed in order to achieve each Overarching Strategy.

5.4.2 SPATIAL DEVELOPMENT STRATEGY 1: Vastly expanding the existing irrigation scheme and agricultural economy

Overview

Vastly expanding the existing irrigation scheme through more efficient use of water, the building of further reservoirs, and the placing of more land under irrigation: While this may seem like a huge, long-term project, it is these kinds of initiatives that are needed, as government have done both locally and abroad in times (notably the 1930s) (1) of great uncertainty about the future, (2) when economies were flat and populations in despair, and (3) when resentment and social frustration were deeply embedded.

What is required for the implementation of this strategy?

Table 47: Spatial Development Strategy One-Projects

SDS 1	PROJECT DESCRIPTION
SDS 1.1	Expansion of the Vaalharts Irrigation Scheme Expansion Plan.
SDS 1.2	Allocation of water-rights.
SDS 1.3	Management of soil salination due to intensive irrigation (connected to expansion of research related to agriculture – see Spatial Development Strategy Two).
SDS 1.4	Stop the degradation of land on the PLM borders with the North West Province.

Spatial Development Objectives addressed

The following Spatial Development Objectives will be addressed by this overarching strategy:

- Objective 1:** To protect and sustainably manage the limited agricultural land and water resources
- Objective 2:** To expand the existing Vaalharts Irrigation Scheme
- Objective 6:** To expand and exploit existing research and training facilities related to agriculture and agri-processing

5.4.3 SPATIAL DEVELOPMENT STRATEGY 2: Reviving and expanding manufacturing and beneficiation

Overview

Reviving and expanding manufacturing and beneficiation, which will initially tap into the local agricultural economy, but which could also develop further based on the import of raw products via the re-opened railway line from as far afield as Zimbabwe: This will require sizeable investments and a significant

amount of research into value chains and an understanding of agricultural products that would have the most significant local beneficiation opportunities. Satellite research and training facilities involved in these initiatives, and tied to universities and research institutes, not only locally, but also abroad, could not only grow local competencies, but also bring researchers and academics from around the world into the area with the accompanying injection into the local economy. This would not only be in the form of retail and short-term accommodation, but also in the shape of opening up new opportunities for residential development.

What is required for the implementation of this strategy?

Table 48: Spatial Development Strategy Two-Projects

SDS 2	PROJECT DESCRIPTION
SDS 2.1	Undertake an in-depth study on the local agricultural economy and value-chain that will give direction to the type of beneficiation to undertake and the form that it will take.
SDS 2.2	Revive/Restore/Re-use abandoned and unused infrastructure for agriculture and agri-processing purposes (such as the closed railway line, abandoned benefaction infrastructure along the railway line and the ammunition airport).
SDS 2.3	Provision of adequate and reliable basic services, such as electricity and water, to support the development of the agri-processing industries.
SDS 2.4	Development of Agriculture and Agri-processing Research and Product Development facilities linked to the current research facilities/initiatives in PLM, the proposed university in Kimberley, and national and international research institutions.

Spatial Development Objectives addressed

The following Spatial Development Objectives will be addressed by this overarching strategy:

- Objective 4:** To improve connectivity in PLM (1) locally in and between settlements, (2) provincially, (3) nationally, and (4) internationally
- Objective 5:** To revive and expand manufacturing, agro-processing and beneficiation in PLM
- Objective 6:** To expand and exploit existing research and training facilities related to agriculture and agri-processing

5.4.4 SPATIAL DEVELOPMENT STRATEGY 3: Improving local connectivity, enhancing intra-settlement trade and sharing facilities and resources

Overview

Improving local connectivity, enhancing intra-settlement trade and sharing facilities and resources: This is an intervention that makes the most of what there is, and builds on what is working, expands on it, maximises it, and makes sure that more people, and eventually everyone living in the municipality can benefit from it. This also requires the active involvement of all the communities living in the municipality, and requires that the spirit of future-focused hard work and collective endeavour, which built the original Scheme, is reintroduced. To make it a success, it will require nodal developments with higher densities to conserve farming land and bring more people closer to schools, the building and staffing of FETs and research centres, the building and maintenance of bicycle routes for cheap, mass transport, the establishment of local economic value chains and connections, the re-opening of the railway line to assist with enhancing local connectivity and communities taking ownership and care of their immediate and the wider region. Crucially

though, the economics of the model must work, which means that it must be built on rapid economic growth that is inclusive and shared, and that benefits everyone that lives in the Phokwane municipality.

What is required for the implementation of this strategy?

Table 49: Spatial Development Strategy Three-Projects

SDS 3	PROJECT DESCRIPTION
See SDS 2.2	Revive/Restore/Re-use abandoned and unused infrastructure for agriculture and agri-processing purposes (such as the closed railway line, abandoned benefaction infrastructure along the railway line and the ammunition airport.
SDS 3.1	Upgrading of local transport routes in all the PLM settlements.
SDS 3.2	Development of a Public Transport Plan informed by the proposed FBDM 'Study on Public Transport Facilities in Rural and Urban Settlements'.
SDS 3.3	Development of Hartswater as an Agri-processing Node and Jan Kempdorp as a Manufacturing, Storage and Transport Node.
SDS 3.4	Development of detailed Urban Design Frameworks for Hartswater, Pampierstad and Jan Kempdorp (making use of Neighbourhood Development Nodes).
SDS 3.5	Development of Neighbourhood Nodes.
SDS 3.6	Building and staffing of FETs and research centres (linked to SDS 2.4).

Spatial Development Objectives addressed

The following Spatial Development Objectives will be addressed by this overarching strategy:

- Objective 1:** To protect and sustainably manage the limited agricultural land and other natural resources
- Objective 4:** To improve connectivity in PLM (1) locally in and between settlements, (2) provincially, (3) nationally, and (4) internationally
- Objective 5:** To revive and expand manufacturing, agro-processing and beneficiation in PLM
- Objective 6:** To expand and exploit existing research and training facilities related to agriculture and agri-processing
- Objective 7:** To develop sustainable settlements that provide the environment and services needed for its inhabitants to live healthy, dignified and productive lives

5.4.5 SPATIAL DEVELOPMENT STRATEGY 4: Tourism and eco-residential estate development

Overview

Tourism and eco-residential estate development, which largely capitalises on the beauty and tranquillity of the green irrigation-based agricultural economy: The re-opening of the railway line and the closeness to Kimberley airport are cornerstones of this venture. In its smallest form, it would see the development of a much larger than currently exists, local weekend and short-stay tourism sector. In its more extreme form, it could see the development of agricultural estates that would see their wealthy, primarily urban and even internationally-based inhabitants spend weekends, weeks, autumn and spring holidays and even longer periods in the area, injecting huge amounts of cash into the local economy and creating significant numbers of jobs in the process.

Both forms (the smaller and the more elaborate versions) will require the upgrading and beautification of the area, which is in any case urgently required to improve the living conditions of the residents of Pampierstad, Valspan and Ganspan.

What is required for the implementation of this strategy?

Table 50: Spatial Development Strategy Four-Projects

SDS 4	PROJECT DESCRIPTION
See SDS 2.1	Revive/Restore/Re-use abandoned and unused infrastructure for agriculture and agri-processing purposes (such as the closed railway line, abandoned benefaction infrastructure along the railway line and the ammunition airport.
See SDS 3.2	Upgrading of local transport routes in settlements.
SDS 4.1	Upgrading and beautification of the PLM.
SDS 4.2	Development of a Tourism Development Strategy for PLM which is to be aligned with the proposed FBDM Tourism Development Plan (FBDM SDF 2014). Support and expand on current tourism activities. Link tourism industry with beneficiation activities such as agri-processing tours.
SDS 4.3	Establishment of a Tourism Development Office in PLM where the local population can receive information and assistance on or with the development of tourism in PLM.
SDS 4.4	Eco-residential estate development.

Spatial Development Objectives Addressed

The following Spatial Development Objectives will be addressed by this overarching strategy:

- Objective 1:** To protect and sustainably manage the limited agricultural land and other natural resources
- Objective 3:** To further develop tourism in PLM based on the beauty of the natural and agricultural environment
- Objective 4:** To improve connectivity in PLM (1) locally in and between settlements, (2) provincially, (3) nationally, and (4) internationally
- Objective 7:** To develop sustainable settlements that provide the environment and services needed for its inhabitants to live healthy, dignified and productive lives

CHAPTER 6:

PHOKWANE LOCAL MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK



6.1 INTRODUCTION

A Spatial Development Framework guides and informs all decisions relating to the use, development and planning of land in a specified area, and thus indicates the desired patterns of land use, directions of growth, urban edges, special development areas and conservation areas in that area. However, not all components of the Spatial Development Strategies are spatial in nature, thus in this section the spatial components of the PLM SDF are discussed while the non-spatial components are outlined in **Chapter 8 Implementation Framework**.

6.2 MAJOR STRUCTURING ELEMENTS

6.2.1 Introduction

The base of the spatial structure is made up of the existing structuring elements that largely dictate the location of development and the direction of growth. In order to align the SDF with the bioregional planning approach of the NCPSDF (2012), bioregions need to be identified on a district municipal level and local municipalities need to identify Neighbourhood Areas as fine-grained planning units to ensure constructive community participation and action.

6.2.2 Bioregional Structuring Element

Bioregions

PLM falls within an *Area of Co-operation* according to the provincial conceptual bioregional boundaries (NCPSDF 2012). In these areas, where municipal boundaries do not correspond with bioregional parameters, the municipality needs to cooperate with its neighbouring areas. In the case of PLM it is the Dr Ruth Segomotsi Mompati DM located in the North-West Province.

While the District Municipalities are supposed to define the bioregions in their areas, at the date of production of this report, there was as yet no evidence of such demarcation on a district level. It is therefore crucial that (1) this SDF takes the interaction between PLM and Dr Ruth Segomotsi Mompati DM into consideration when making proposals and (2) the PLM sets up lines of communication and cooperation with the DM and the North West Province.

Neighbourhood Areas

According to the NCPSDF (2012), local municipalities are responsible for the delimitation of neighbourhood areas as fine-grained planning units ensuring constructive community participation. These neighbourhood areas are supposed to 'fit-into' the detailed delimitation of bioregions demarcated by the district municipality. According to the NCPSDF (2012:212-213), the following criteria are to be used when delimiting these neighbourhood areas:

- Local municipal jurisdiction areas;
- Property boundaries;
- Boundaries of ecosystems;
- Natural and man-made barriers;
- Common character;
- Manageable size;
- Central places;
- Functional areas;
- Cohesiveness of communities; and
- Neighbourhood area precincts.

Hartswater Neighbourhood Areas

Map 61 below identifies the three Neighbourhood Areas identified in Hartswater:

- Neighbourhood Area 1**
- Divided from the main section of Hartwater by an green buffer strip
 - According to Stats-SA this area has medium to high levels of unemployment
 - Although the ridge system running through the middle of the area might be seen as a barrier on closer inspection multiple footpaths can be seen criss-crossing the landscape indicating some level of interdependence. These crossings also need to be managed holistically as they might pose a threat to the safety of its users

- Neighbourhood Area 2**
- Composed of the main business area and its surrounding suburbs
 - Stats-SA indicates a relative homogenous low level of unemployment

- Neighbourhood Area 3**
- Composed of the industrial area of Hartswater

Jan Kempdorp Neighbourhood Areas

Map 62 below identifies the three Neighbourhood Areas identified in Jan Kempdorp:

- Neighbourhood Area 1**
- Comprised of Valspan and although it is divided in two by a canal running through the settlement it is important to plan the areas as one in order to integrate the two section of the settlement as they are dependent on one another

- Neighbourhood Area 2**
- Composed of the manufacturing related business

area

- Neighbourhood Area 3**
- Composed of Jan Kempdorp
 - Stats-SA indicates a relative homogenous low level of unemployment

Pampierstad and Ganspan

Due to their general residential character Pampierstad and Ganspan are not divided into smaller neighbourhood areas.

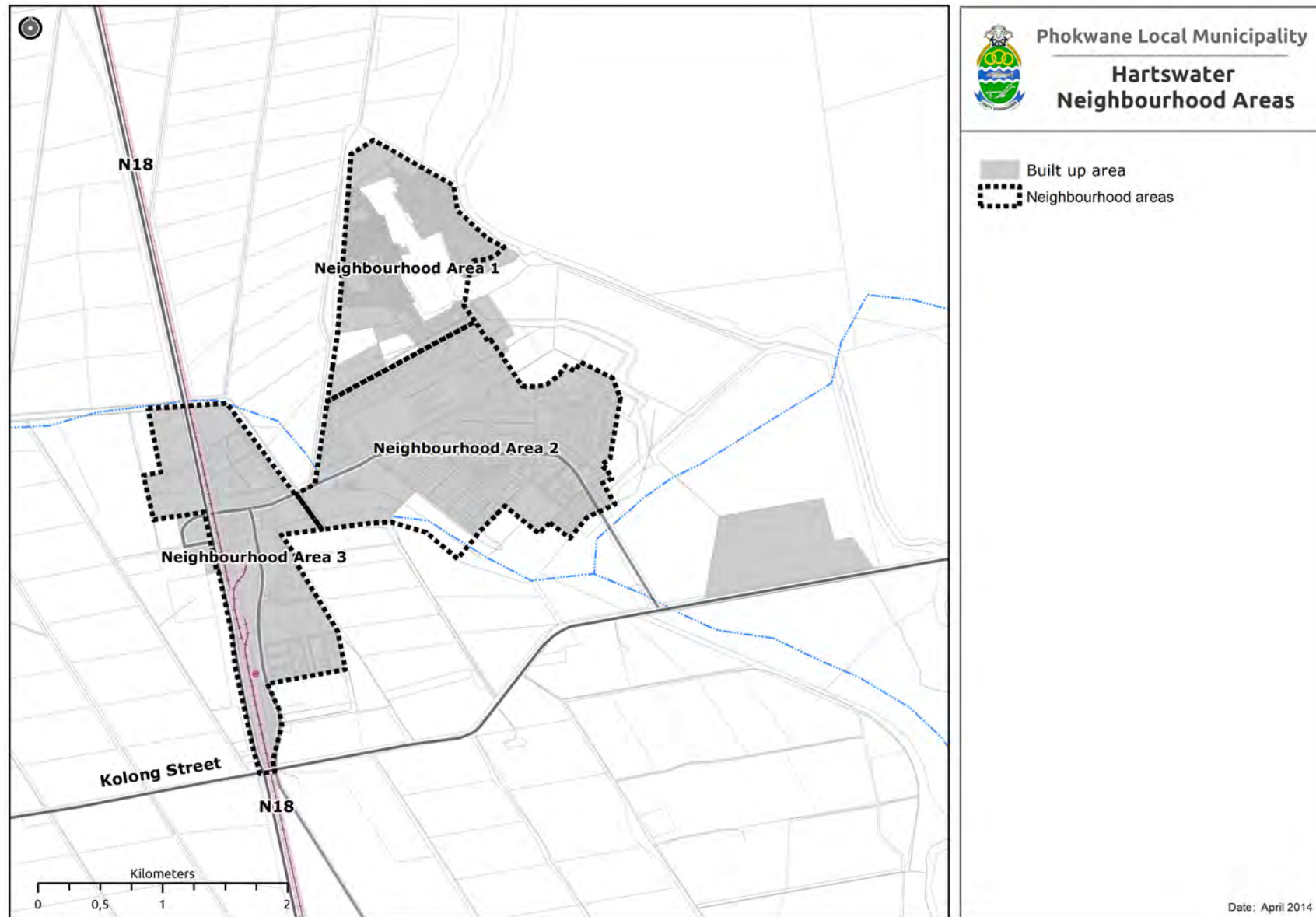
6.2.3 Major Physical Structuring Elements

The physical major structuring elements present in PLM are:

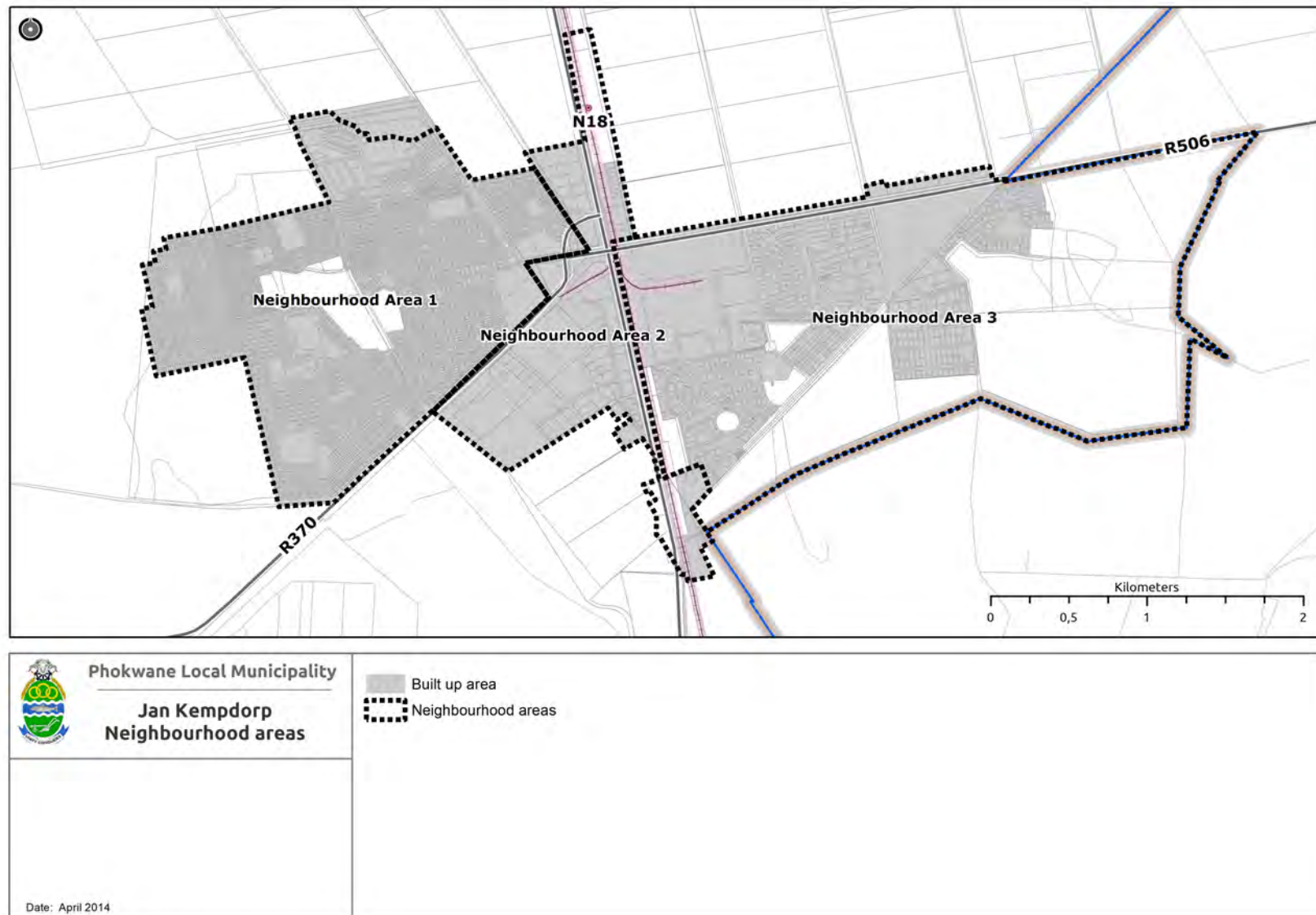
- The N18 running through Hartswater and Jan Kempdorp;
- The R506 running through Jan Kempdorp;
- The closed railway running through Hartswater and Jan Kempdorp and accompanying railway stations;
- The ammunition depot-airport close to Jan Kempdorp;
- The Vaalharts Irrigation Scheme;
- The towns of Hartswater, Jan Kempdorp, Pampierstad and Ganspan; and
- The Harts River.

Map 63 indicates the major structuring elements.

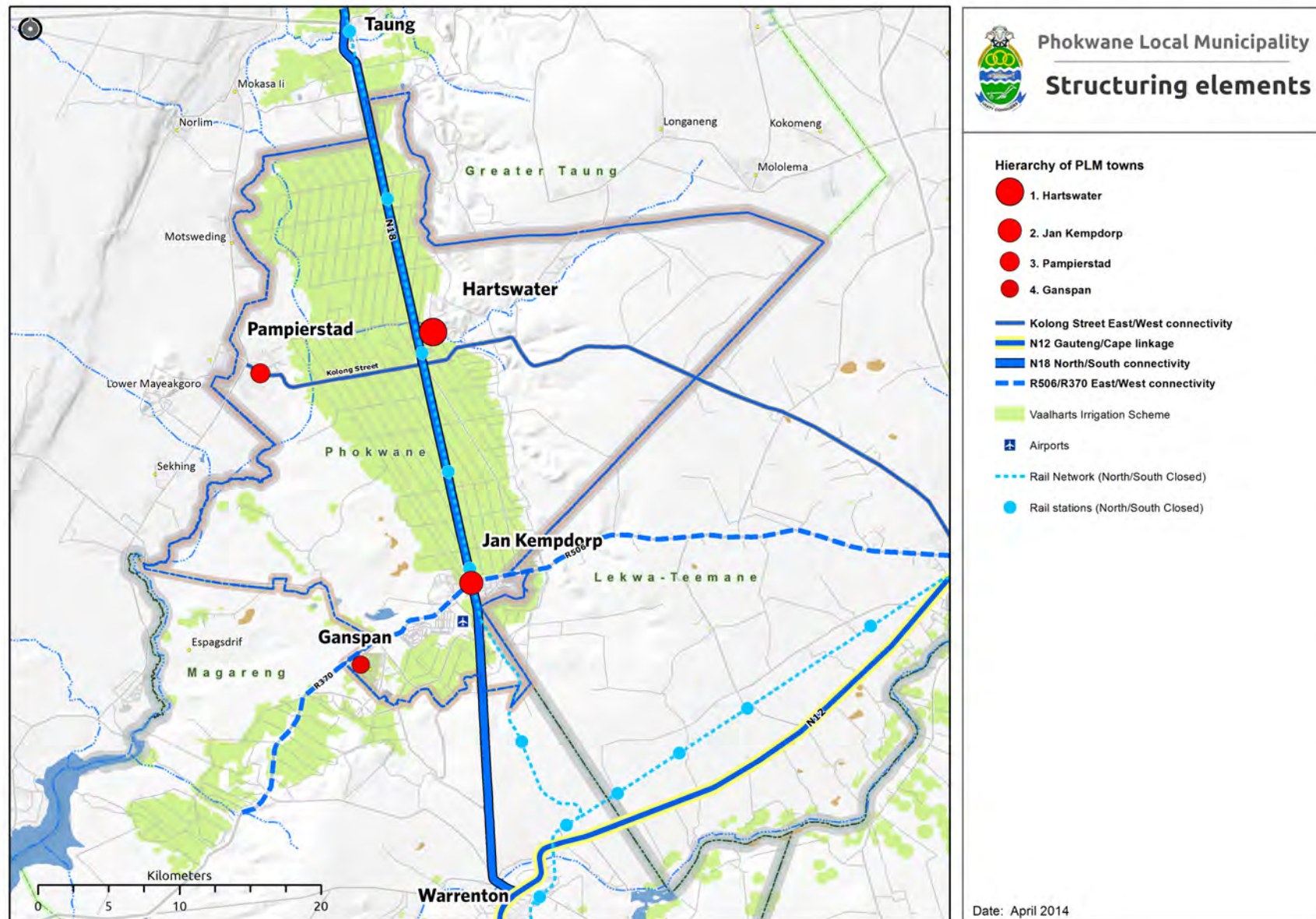
Map 61: Hartswater Neighbourhood Area



Map 62: Jan Kempdorp Neighbourhood Area



Map 63: Main Physical Structuring Elements in the PLM



6.3 MUNICIPAL NODES, CORRIDORS AND LINKAGES

6.3.1 Local Municipal Nodes

Although the towns in PLM have not been identified as major nodes on a provincial level, on a municipal level the different towns play important and very particular roles, and *local nodes* with specific characteristics can be identified. The GVA and the settlement categories developed for the NCPsDF (2012) were used to identify these nodes. The majority of the GVA in the PLM is generated in Hartswater and Jan Kempdorp, with each specialising in the following economic sectors:

Hartswater:

- Agriculture
- Community, social and personal services
- Wholesale and retail
- Electricity, gas and water supply
- Infrastructure services (SIC 6 – SIC 8)

Jan Kempdorp:

- Community, social and personal services
- Agriculture (to a lesser extent than Hartswater)
- Financial intermediation, insurance, real estate and business services
- Transport, storage and communication
- Manufacturing
- Infrastructure services (SIC – SIC 8) (to a lesser extent than Hartswater)

The NCPsDF (2012) developed settlement profiles based on human need and economic potential with the aim of guiding investment in the settlements. The main settlements in PLM are categorised as follows (NCPsDF, 2012: 130-131)

Table 51: Integrated Settlement Profiles

Settlement	Population	Economic Base	Development Potential & Need	Investment Type
Hartswater	Medium	Agriculture	High development potential /Low need	Infrastructural Capital and Basic Services
Jan Kempdorp	Large	Agriculture	High development potential / High Need	Infrastructural & social capital
Pampierstad	Large	Residential	High development Potential /High Need	Infrastructural & social capital

Based on the above information and the vision, mission, objectives and spatial strategies proposed for PLM, the towns have been classified as follows:

1. Hartswater (administrative, retail, agri-processing and services node);
2. Jan Kempdorp (manufacturing, storage and transport node); and
3. Pampierstad (residential node).

The classification of the PLM towns as specific nodes does not only indicate current trends, but also the desired future function of these settlements. The following roles are envisaged for the above towns:

Hartswater:

- Agri-processing related to local produce
- Agriculture related services such as repair and servicing of farm equipment
- Wholesale and retail
- Administrative centre

- Jan Kempdorp:**
- Beneficiation (light and medium industrial) of local, provincial and national produce and material
 - Storage and transport centre due to its advantageous position at the intersection of the N18, R506, airport (if opened to public) and railway (if opened)
- Pampierstad:**
- Residential node

For these nodes to be strengthened it is crucial that public investment be directed to these nodes. However, nodes do not function in isolation, and it is important to strengthen the linkages between them through the development of corridors and the upgrading of transport infrastructure (**Map 64** indicates the main nodes, corridors and linkages in PLM).

6.3.2 Development Corridors and Linkages

A development corridor is an extensive and complex linear development system at regional or municipal scale. It comprises a central movement axis with supporting movement infrastructure and high intensity land development.

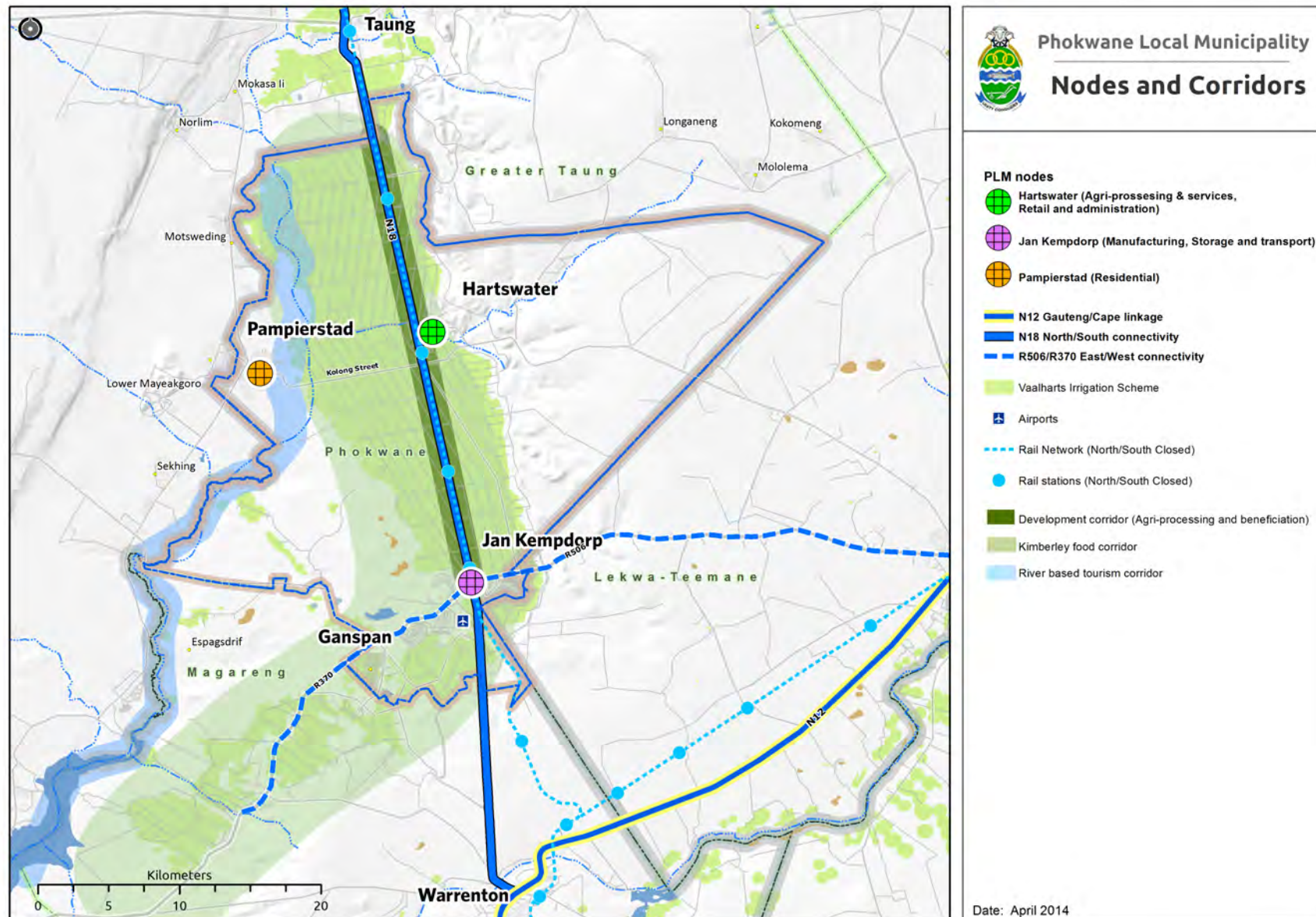
On provincial level, Hartswater and Jan Kempdorp are located on the provincial Kimberley Food Corridor running along the N18, which is also a regional linkage to the North-West and Western Cape Provinces (NCPSDF, 2012). On district level, a *river-based tourism corridor* is proposed running along the Harts River (FBDM SDF, 2014).

On a local level, the PLM it is will reinforce the Kimberley Food Corridor through the development of a *development corridor* between the Hartswater and Jan Kempdorp nodes with a focus on agri-processing, beneficiation and transport. This will be facilitated by the re-opening and revitalisation of the

railway and accompanying railway stations along the N18, strengthening the PLM's links to the surrounding provinces, and facilitating the movement of food and other produce locally, nationally and internationally.

A *Mobility Road* is proposed between Hartswater and Pampierstad which will focus on pedestrian and bicycle movement, rather than just vehicular movement, in order to facilitate the movement of the workforce to and from places of (1) residence and (2) work.

Map 64: PLM Nodes and Corridors



6.4 PROTECTED AND DEVELOPMENT RESTRICTED AREAS

6.4.1 Introduction

Due to the general agricultural character of PLM, the protection of land runs hand in hand with the development of nodes and the infill and densification of urban settlements. It is thus not solely about restricting development in certain areas, but also about promoting development in others. As long as sustainable settlements with adequate housings and services are not created, protected areas will always be in danger of being degraded/transformed.

6.4.2 Municipal Open Space System

The PLM does not comprise of any formally protected nature or conservation areas. According to the FBDM Environmental Management Framework, (1) there is not sufficient information to effectively demarcate sensitive areas for fauna and flora in the area and, (2) there is no indication of any species being under threat. Due to the agricultural and predominantly non-urban nature of PLM, and the lack of formally protected areas, no official Open Space System is proposed. Instead, the natural environment will be protected through (1) the use of urban edges around the main towns, and (2) the strict management of land use. It is, however, crucial that the PLM implement the proposed River Corridor Protection Plan (FBDM SDF, 2014) in order to protect the lifeblood of PLM.

6.4.3 Tourism-related Conservation Elements

The following tourist attractions need to be protected:

- The Poplar Avenue between Jan Kempdorp and Hartswater;
- The Burial Sites of historical value; and
- The Ganspan Waterfowl.

6.5 SETTLEMENT DEVELOPMENT FRAMEWORKS

6.5.1 Introduction

This section provides (1) a short description of the key spatial challenges in each settlement, (2) a rationale for the proposed development framework, and (3) an illustrated development framework. For a more detailed description and discussion of the spatial structuring elements and development guidelines, please refer to **Chapter Seven**.

6.5.2 Hartswater Development Framework

Key Spatial Challenges

The following key spatial challenges were identified in Hartswater:

- Lack of housing in general, but also a lack in the variety of available housing;
- High level of population growth (62% between 2001 and 2011) contributing the large percentage (18%) of informal settlements;
- Unhygienic environment due to illegal dumping and free roaming livestock;
- Lack of access roads into the informal settlements hindering access for ambulances, fire engines, police cars and refuse trucks;
- General low quality of living environment in the northern suburbs;
- Unsafe environment created by a lack of lighting and informal path created due to a lack of accessibility between the northern suburbs and central Hartswater; and
- Absence of a coherent spatial structure to the location of public facilities.

Rationale for the Hartswater Development Framework

The economy of the PLM is based on agriculture, and it is thus crucial that agricultural land be protected from encroaching settlements. The designated Hartswater Urban Edge (as identified in the FBDM SDF 2014) is illustrated in **Map 65**, and makes provision for an adequate supply of vacant land that can be efficiently serviced, and which can cater for the predicted population growth rate of 62% by 2020, if current population growth rates in the area continue as they have over the last decade.

Hartswater was identified as a *Local Municipal Node* focused on (1) Wholesale and retail; (2) Agri-processing; (3) Agriculture related services; and (4) Administrative centre based on two smaller nodes:

- A retail/commercial centre in central Hartswater, and
- A light industrial node along the western border of the town running along the N18.

To strengthen these nodes two precincts are demarcated: (1) a *Central Business District* and (2) an *Agri-Industrial Precinct*. The aim is to direct any new development linked to either one of these economic activities into these precincts, in order to strengthen these nodes.

An *Activity Spine* is proposed between the two precincts with a focus on reinforcing and supporting the current nodes and the linear development between them. Such linear development should allow for land use and transportation to support each other, and improve the efficiency of the public transport system and the infrastructure network.

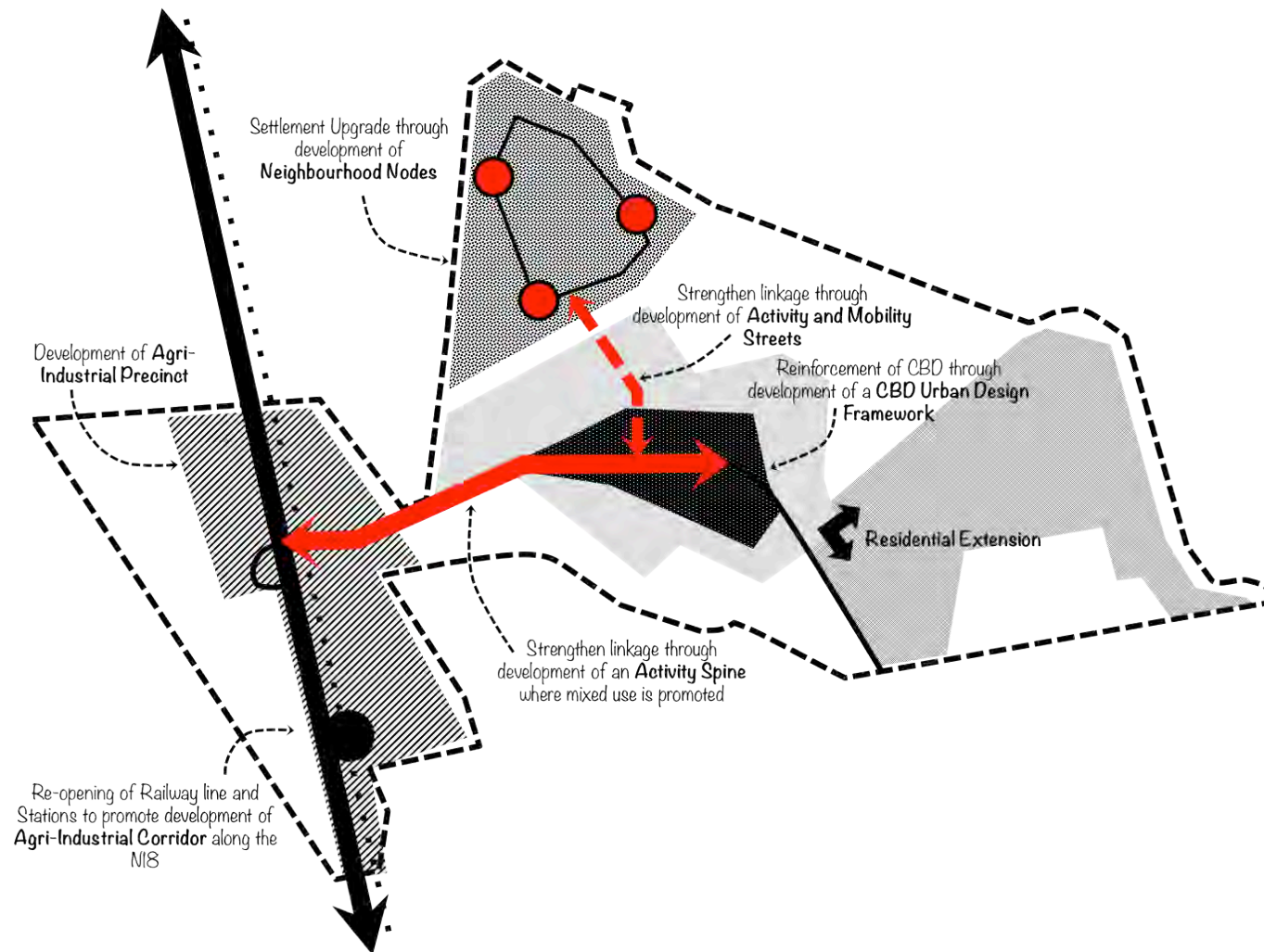
In order to address the general lack of housing, as well as the lack in the diversity of available housing the municipality, an area for *densification* was demarcated around the *Central Business District*, and new land was identified to the east of the current settlements for medium and low-density housing.

The northern settlements in the Hartswater node, which include informal settlements, need to be formalised and upgraded. Key elements to be addressed are:

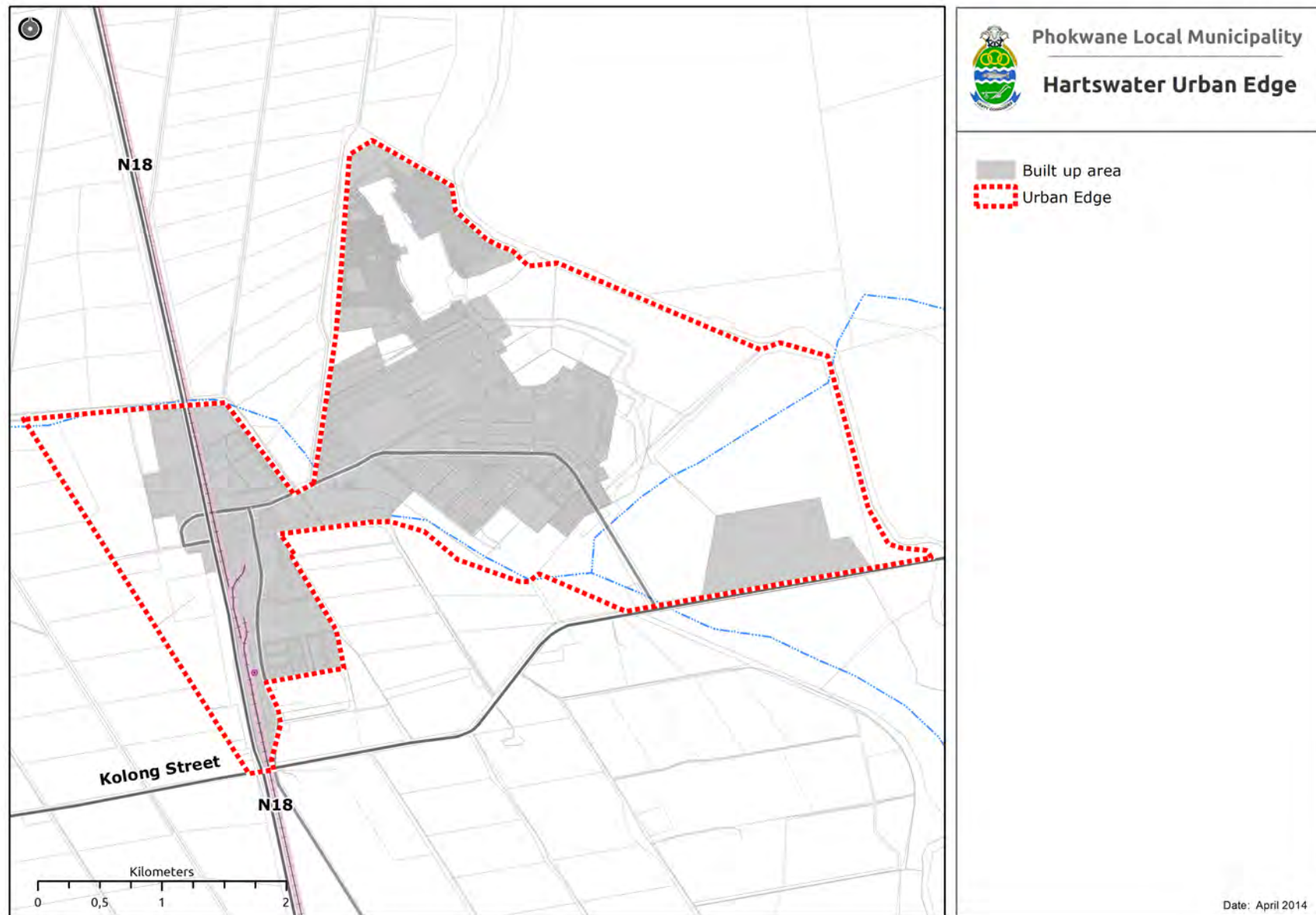
- Formalisation or relocation of informal settlements;
- Restructuring of the settlements through the development of *Neighbourhood Nodes* where community services will be centralised, and connecting these nodes through *Mobility and Activity Streets*;
- Improving access inside the suburbs and access to the wider urban environment through (1) the creation of safe pedestrian pathways crossing the green buffer that divides the northern settlements from central Hartswater as well as the ridge system that separates eastern and western settlements, and (2) the creation of bicycle routes; and
- Transformation of the dumpsite into a park with other recreational facilities linked it to the proposed neighbourhood node.

Figure 20 and Map 66 provides a graphic illustration of the proposed Hartswater Development Framework.

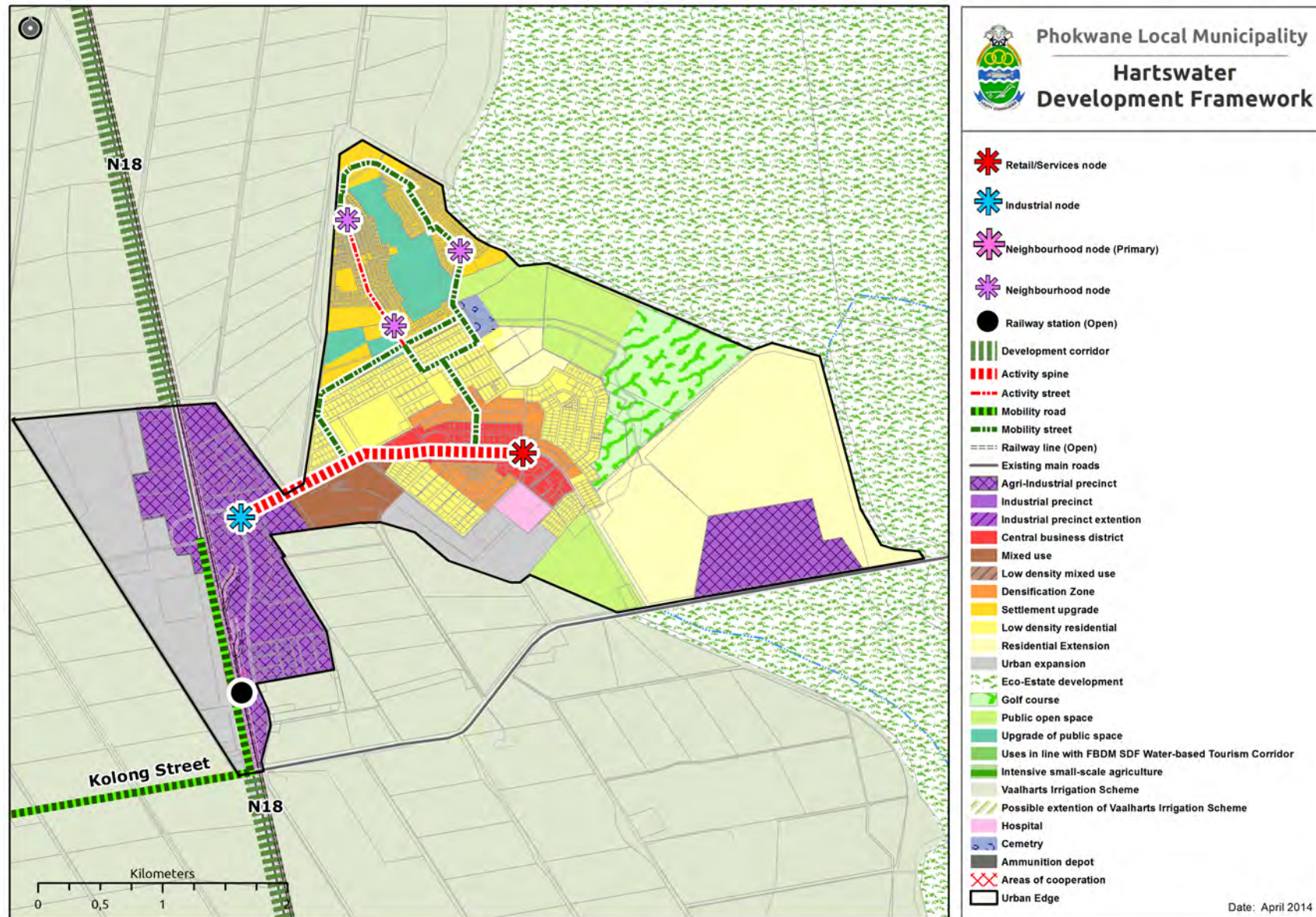
Figure 20: Hartswater Spatial Logic



Map 65: Hartswater Urban Edge



Map 66: Hartswater Development Framework



6.5.3 Jan Kempdorp Development Framework

Key Spatial Challenges

The following key spatial challenges were identified in the settlement:

- 23% informal dwellings;
- Lack in diversity of housing;
- Lack of shopping facilities;
- Lack of land for housing and establishing businesses;
- Lack of parks and recreational facilities;
- Lack of coherent structure to the location of public facilities;
- General low quality of living environment in Valspan;
- Unsafe environment created by a lack of lighting and informal path created due to a lack of accessibility between suburbs; and
- The separation of the settlement in two by the canal.

Rationale for the Jan Kempdorp Development Framework

The economy of PLM is based on agriculture and it is thus crucial that agricultural land be protected from encroaching settlements. The designated Jan Kempdorp Urban Edge (as identified in the FBDM SDF 2014) is illustrated in **Map 67**, and makes provision for an adequate supply of vacant land that can be efficiently serviced, and which can cater for the predicted population growth rate of 35% by 2020, if current growth rates over the last decade continue.

Jan Kempdorp was identified as a *Local Municipal Node* focused on (1) Beneficiation (light and medium industrial), and (2) Storage and transport. In order to take advantage of Jan Kempdorp's advantageous location at the crossing of the R506, the N18 and the railway line, an *Industrial Precinct* is proposed at the intersection. As Jan Kempdorp has a small, but ineffectively structured retail node, the development of *Central Business District Precincts* is

proposed, with *Activity Streets* linking it to the R506. The aim is to direct any new development linked to either one of these economies into these precincts in order to strengthen the current nodes.

An *Activity Spine* is proposed between the two precincts with a focus on reinforcing and supporting the current nodes and the linear development between. Such linear development should allow for land use and transportation to support each other, and ensure that the use of public transport and the existing infrastructure becomes more efficient.

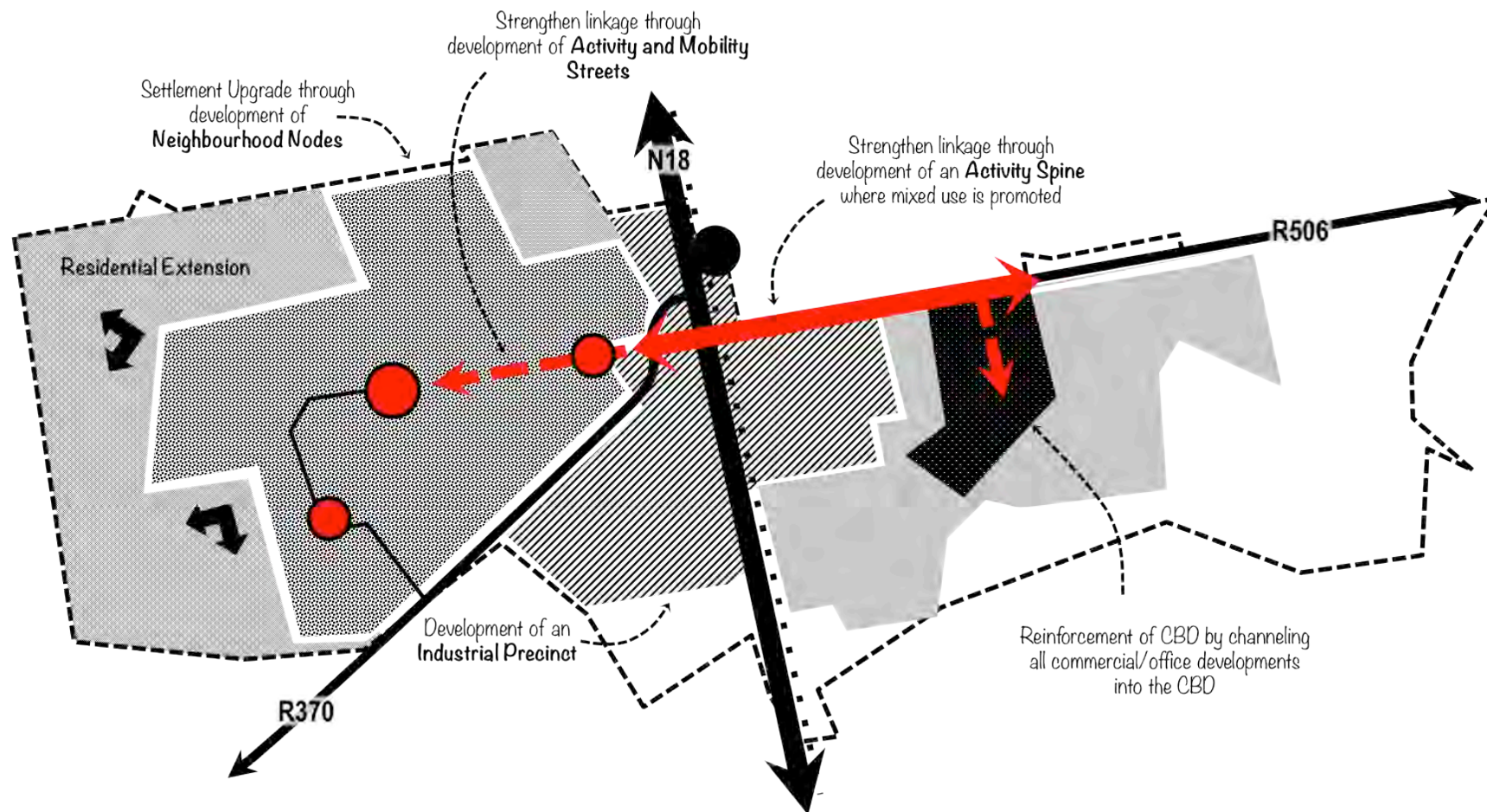
In order to address the general lack in the diversity of available housing in the PLM, an area for *densification* was demarcated around the *Central Business District*, and new land was identified to the west and north of the current settlements for medium and low-density housing.

Valspan, characterised by a low quality living environment, needs to be formalised and upgraded. Key elements to be addressed are:

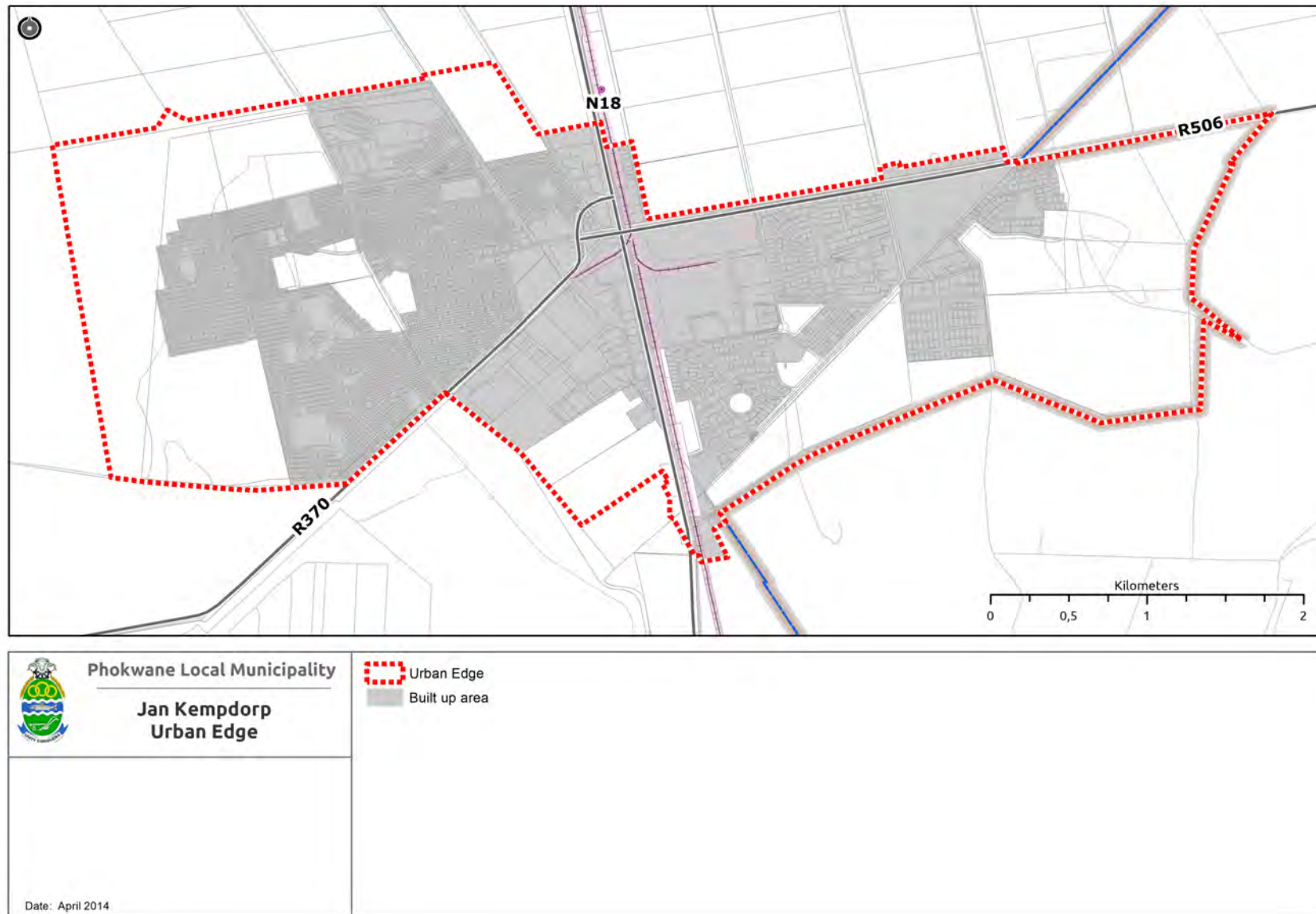
- Restructuring of the settlements through the development of *Neighbourhood Nodes* where community services will be centralised and linking these nodes through *Mobility and Activity Streets*;
- The development of a primary *Neighbourhood Node* in the centre of Valspan which will, in combination with the development of community sports fields and parks, function as a link between the eastern and western settlements separated by a canal; and
- The development of a *Thusong Centre* at the primary Neighbourhood Node, which is justified by the population size of Jan Kempdorp (24 220 inhabitants).

Figure 21 and Map 68 provides a graphic illustration of the proposed Hartswater Development Framework:

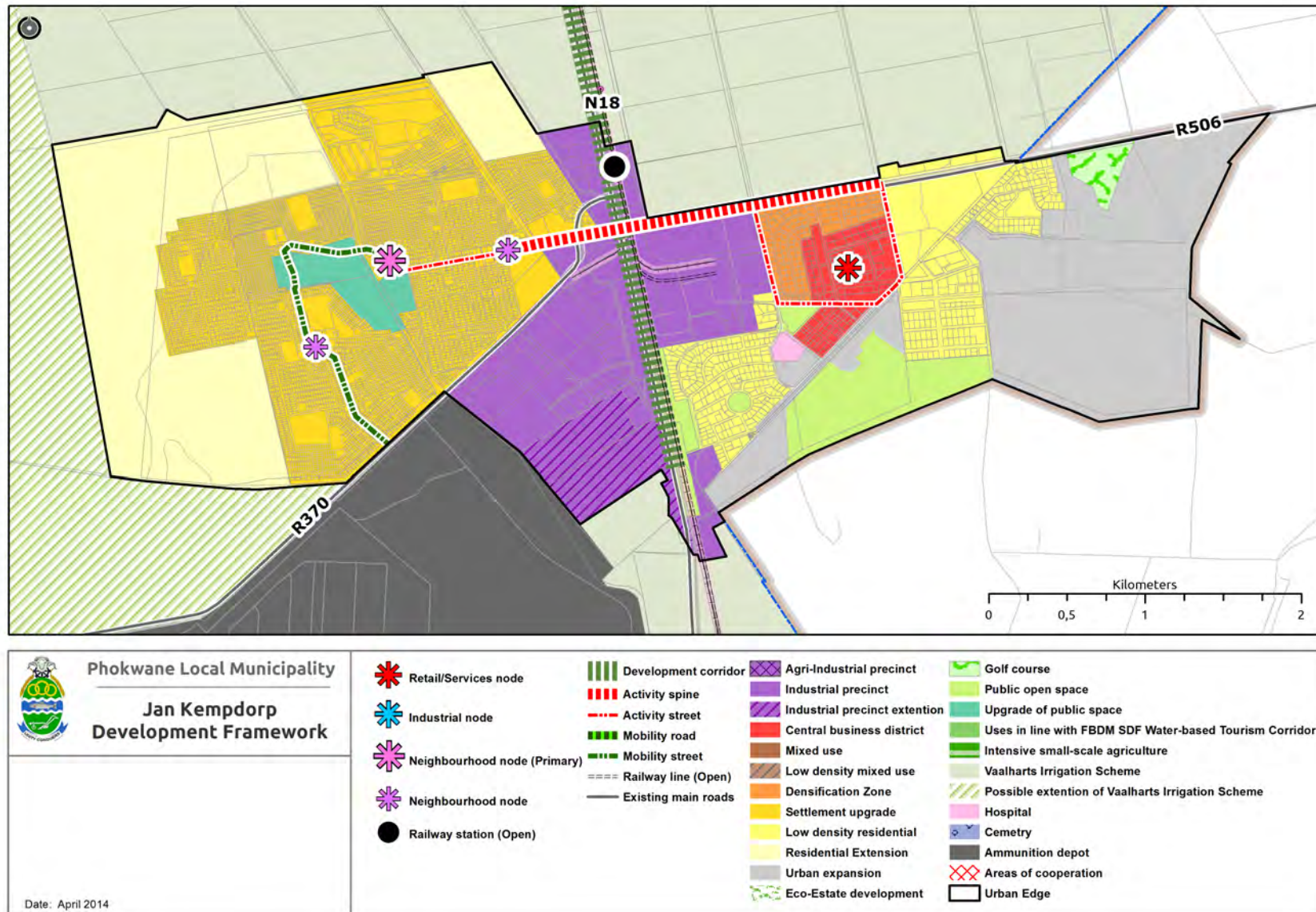
Figure 21: Jan Kempdorp Spatial Logic



Map 67: Jan Kempdorp Urban Edge



Map 68: Jan Kempdorp Development Framework



6.5.4 Pampierstad Development Framework

Key Spatial Challenges

The following key spatial challenges were identified in Pampierstad:

- Land shortage for housing, grazing of animals, business and graves;
- Illegal dumping sites creates an unhealthy environment;
- Unsafe environment created by a lack of lighting;
- Lack of coherent structure to the location of public facilities;
- General low quality of living environment; and
- Long walking distances to clinics.

Rationale for the Pampierstad Development Framework

The economy of the PLM is based on agriculture and it is thus crucial that agricultural land be protected from encroaching settlements. The designated Pampierstad Urban Edge (as identified in the FBDM SDF, 2014) is illustrated on **Map 69** and makes provision for an adequate supply of vacant land that can be efficiently serviced and which can cater for the predicted population growth rate of 2.8% by 2020 if growth rates as recorded over the last decade continues.

Pampierstad was identified as a *Residential Node* and as such it is crucial that the settlement is effectively linked to the rest of the municipal area. In order to improve Pampierstad's connectivity to the wider PLM, a *Mobility Road* (Kolong Street) is proposed between Pampierstad and Hartswater. Although the main role of a *Mobility Road* is to serve as a link between settlements, it does not limit the development of pockets of mixed use along its spine. This *Mobility Road* does not only aim to facilitate vehicular transport (public and private), but also aims to provide safe pedestrian and bicycle routes, allowing the Pampierstad community to access job opportunities in a safe and efficient manner. If, as proposed in the FBDM SDF (2014) a river-based tourism corridor

is developed along the Harts River the *Mobility Road* will facilitate the attraction of tourists and the development of tourist attractions (curio-shops, agri-beneficiation, accommodation) along the spine.

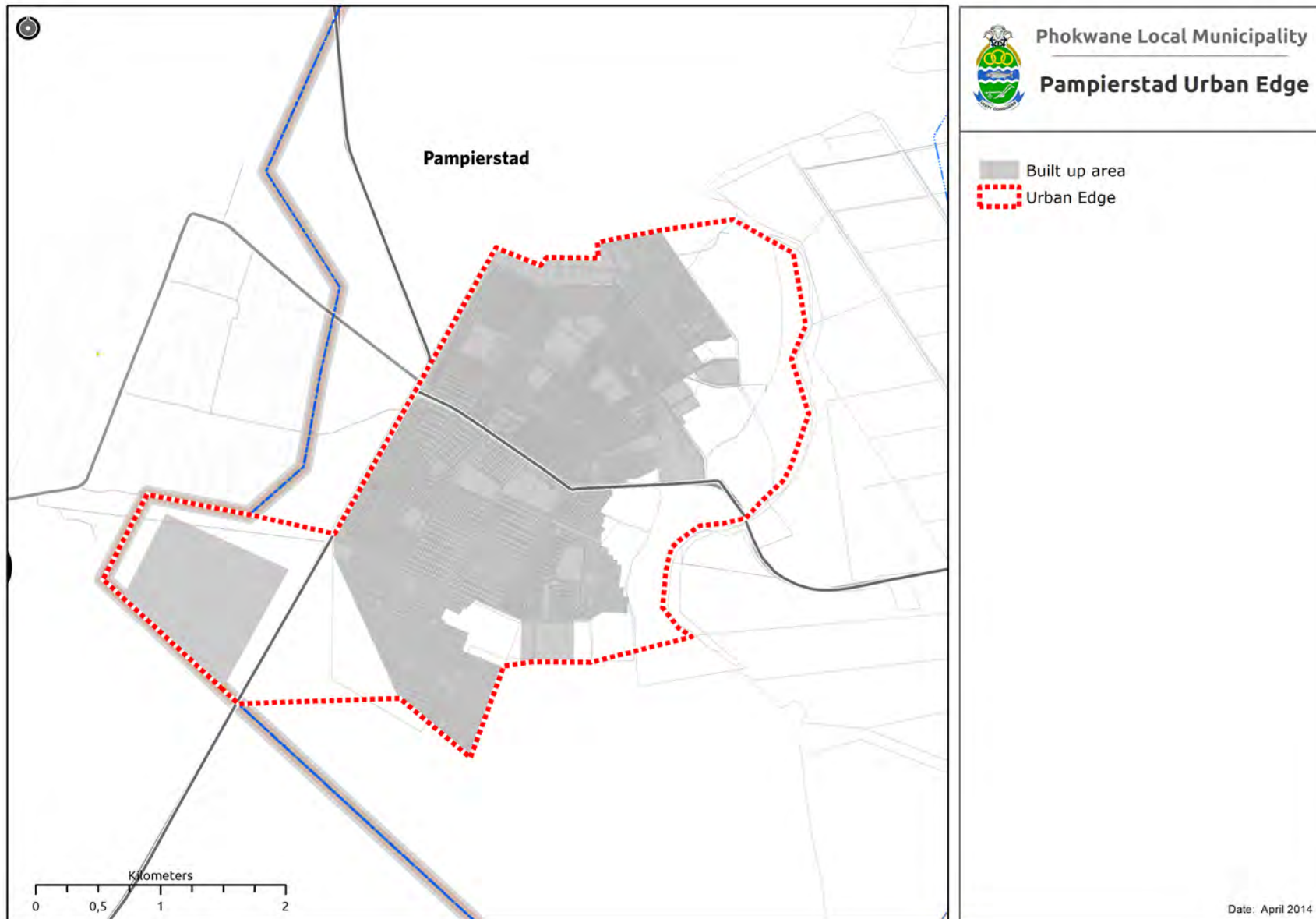
As a *Residential Node* (it currently houses 34% of PLM's population), it is crucial that the settlement is restructured, upgraded, and where needed, formalised. The restructuring of settlements in the municipality is to be done through the development of *Neighbourhood Nodes* where community services will be centralised and by linking these nodes through *Mobility and Activity Streets*. A primary *Neighbourhood Node*, centrally linked to the *Mobility Road*, is proposed. The *Activity Street* in the north of Pampierstad aims to strengthen the current mixed uses in that section of the settlement. New land for residential development is identified, linking the section of Pampierstad located on the western side of D201, to central Pampierstad.

The land between Pampierstad and the Harts River is demarcated to be developed in line with the proposed river-based tourism corridor, as proposed in the FBDM SDF (2014).

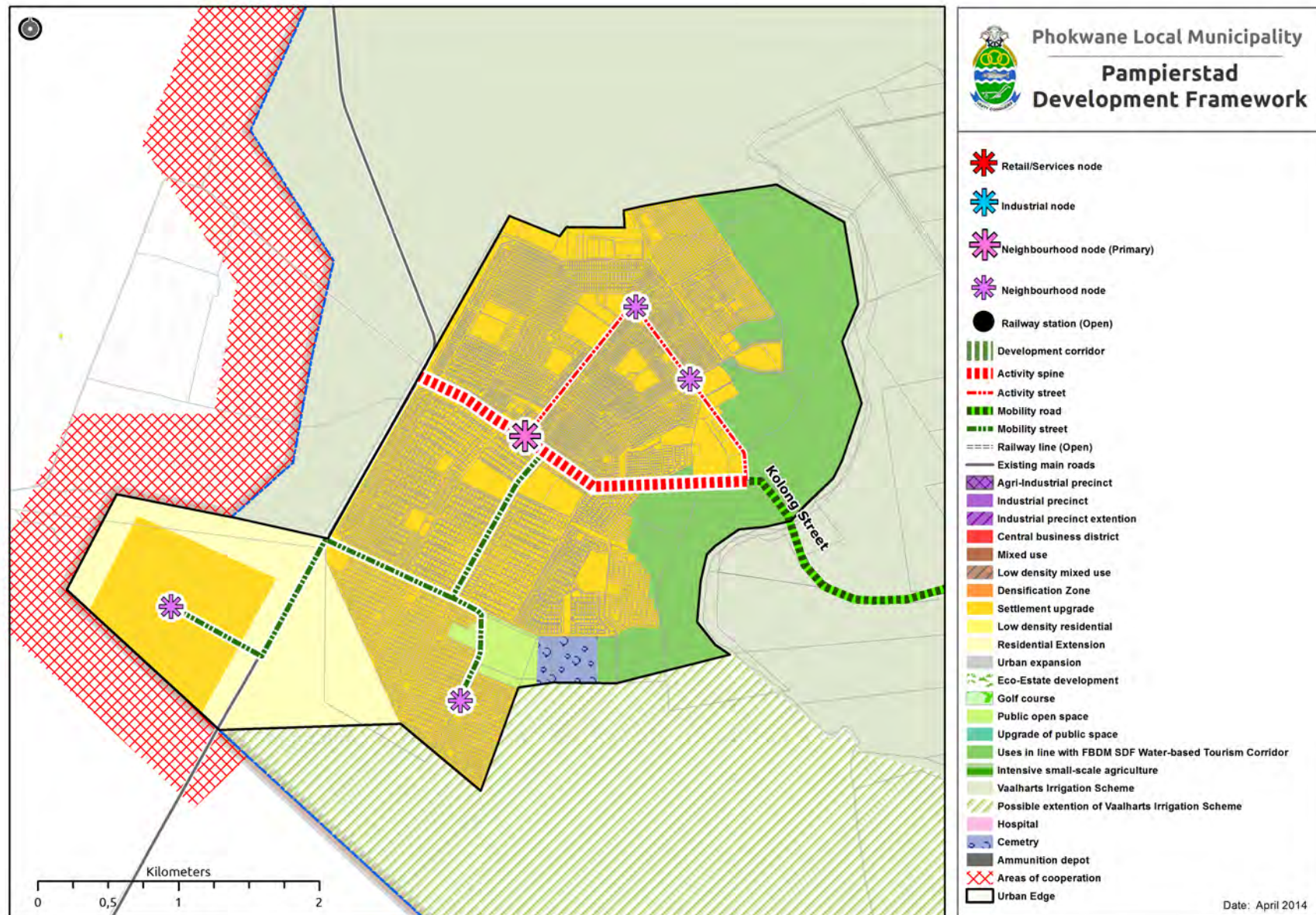
In addition to the other actions, the municipality will have to reach an agreement with the North West Province regarding the management of Lower Majeakgoro and its link to Pampierstad.

Map 70 provides a graphic illustration of the proposed Pampierstad Development Framework:

Map 69: Pampierstad Urban Edge



Map 70: Pampierstad Development Framework



6.5.5 Ganspan Development Framework

Key Spatial Challenges

The following key spatial challenges were identified in Hartswater:

- Lack of land for housing, farming, grazing;
- Low levels of service deliver;
- Lack of shopping facilities;
- Access to the settlement is limited due to a lack of buses and taxis; and
- Low quality of the living environment.

Rationale for the Ganspan Development Framework

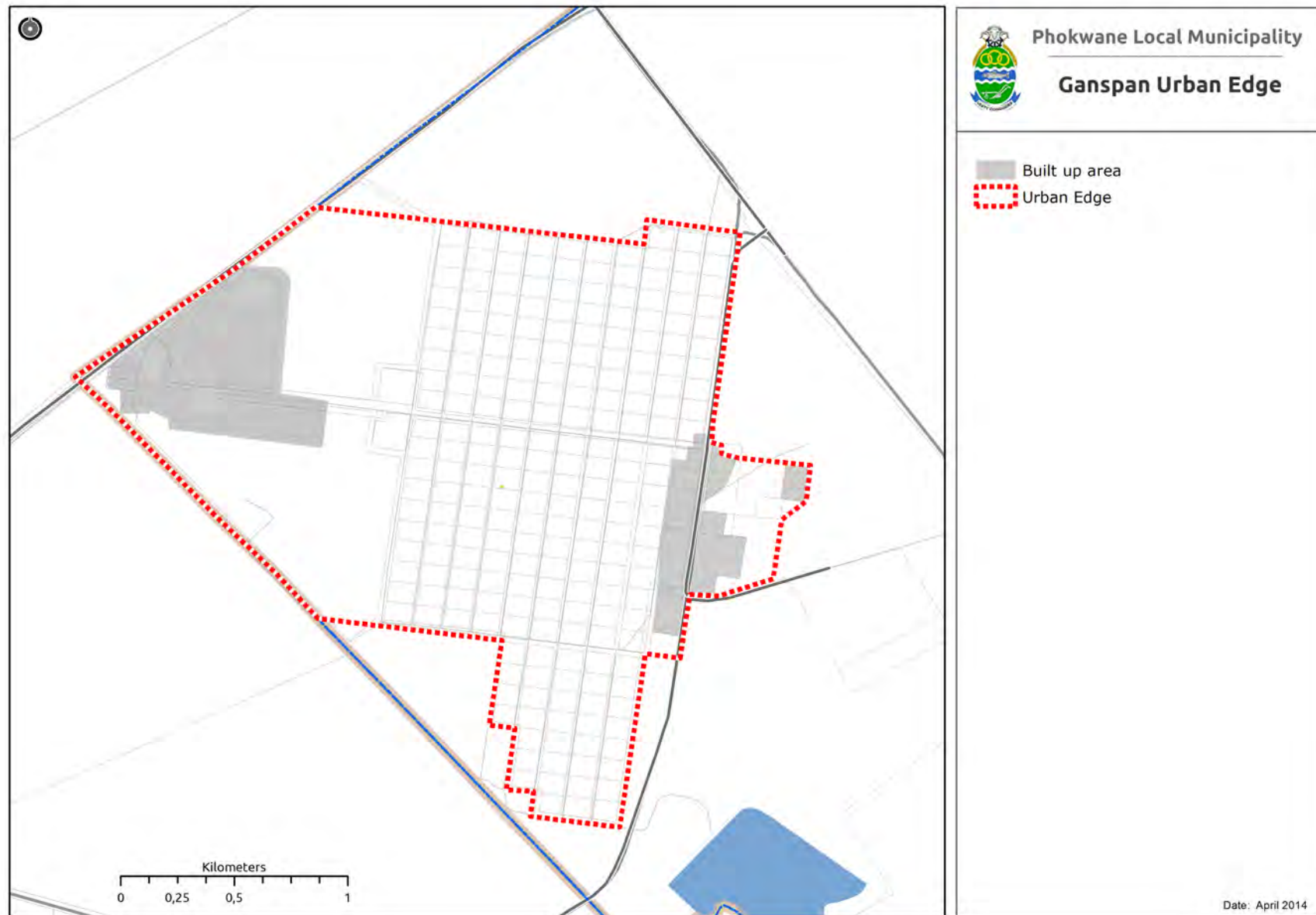
The economy of the PLM is based on agriculture and it is thus crucial that agricultural land be protected from encroaching settlements. The designated Ganspan Urban Edge (as identified in the FBDM SDF, 2014) is illustrated by **Map 71** and makes provision for an adequate supply of vacant land that can be efficiently serviced.

A large section of Ganspan is made up of farm holdings of just smaller than one hectare. This area also separates the residential section of Ganspan in the west from the social facilities in the east of Ganspan. Restructuring of the settlement is proposed through the development of *Neighbourhood Nodes* where community services will be centralised and by linking these nodes through a *Mobility Street*, which also links up with the R370 and the D203.

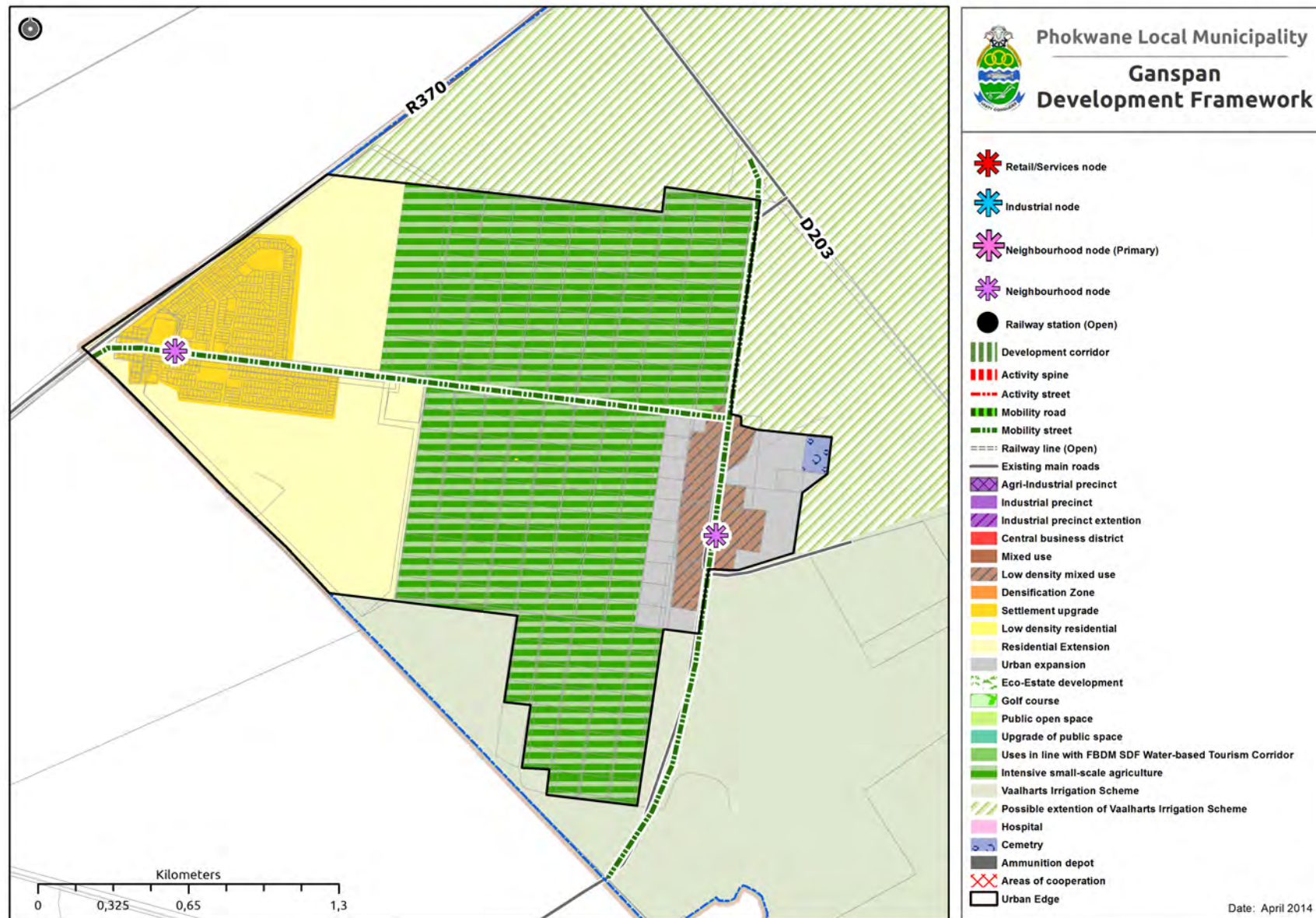
It is proposed that the farm holdings be used more effectively for intensive small-scale agriculture, which will require government assistance with regard to training, finance and infrastructure.

Map 72 provides a graphic illustration of the proposed Ganspan Development Framework.

Map 71: Ganspan Urban Edge



Map 72: Ganspan Development Framework



6.5 BROAD SPATIAL PLANNING CATEGORIES

A fundamental phase of bioregional planning is to undertake appropriate land-use classification throughout the planning of the area in accordance with a classification system that is based on a structure of interrelated cores, corridors and matrices. In order to give effect to this, the NCPSDF 2012 identified the following six ‘Spatial Planning Categories’ (SPCs):

Table 52: NCPSDF Spatial Planning Categories



The PLM SDF makes use of these SPCs as far as possible in the depiction and classification of the SDF. According to the NCPSDF (2012), the PLM is to undertake detailed land-use planning in accordance with the guidelines put forward in NCPSDF and to update the PLM Town Planning Scheme accordingly. Below, in **Table 7**, an overview of the SPCs, sub-categories, types of development allowed and the conditions under which such uses are allowed, are provided. **Table 9** in **Chapter Three** provides development guidelines for the different land-use zones proposed in the PLM SDF, and aligns these with the NCPSDF SPCs, as and where possible.

Table 53: NCPSDF Spatial Planning Categories and Sub-Categories

SPATIAL PLANNING CATEGORY	CODE	SPATIAL PLANNING SUB-CATEGORIES	TYPE OF DEVELOPMENT	CONDITION
Core	A.a	Statutory Protected Areas	No development allowed	
Buffer	B.a	Non-Statutory Conservation Areas	a) Resort development b) Infrastructure required for research	a) To be changed to SPC D, depending on the proposed type of development b) Must be undertaken in accordance with site-specific design and planning guidelines
	B.b	Ecological Corridors		
	B.c	Urban Green Areas		
Agricultural Areas	C.a	Extensive Agricultural Areas	a) Agricultural development and infrastructure for extensive and intensive agricultural land-uses b) Resort development on game farms c) Agricultural industry	a) To be changed to SPC D, depending on the proposed type of development b) Must be undertaken in accordance with site-specific design and planning guidelines
	C.b	Intensive Agricultural Areas		
Urban Related	D.a	Main Towns	All urban-related developments	Must be undertaken in accordance with site-specific design and planning guidelines
	D.b	Local Towns		
	D.c	Rural Settlements		
	D.d	Tribal Authority		
	D.e	Communal Settlements		
	D.f	Institutional Areas		
	D.g	Authority Areas		
	D.h	Residential Areas		
	D.i	Business Areas		
	D.j	Service Related Business		
	D.k	Special Business		
	D.l	SMME Incubators		
	D.m	Mixed Use Development Areas		
	D.n	Cemeteries		
	D.o	Sportsfields & Infrastructure		
	D.p	Airport and Infrastructure		
	D.q	Resort and Tourism Related		
	D.r	Farmsteads and Outbuildings		

Industrial Areas	E.a	Agricultural Industry	Full spectrum of industrial developments required by the economic sector	a) Must be undertaken in accordance with site-specific design and planning guidelines b) All industrial activities must be regulated and managed in accordance with sustainability standards (e.g. ISO 14001)
	E.b	Industrial Development Zone		
	E.c	Light Industry		
	E.d	Heavy Industry		
	E.e	Extractive Industry		
Surface Infrastructure & Buildings	F.a	National Roads	All surface infrastructure and buildings that are required for sustainable socio-economic development and resource use	a) Must be undertaken in accordance with site-specific design and planning guidelines b) All industrial activities must be regulated and managed in accordance with sustainability standards (e.g. ISO 14001)
	F.b	Main Roads		
	F.c	Minor Roads		
	F.d	Public Streets		
	F.e	Heavy Vehicle Overnight Facilities		
	F.f	Railway Lines		
	F.g	Power Lines		
	F.h	Telecommunication Infrastructure		
	F.i	Renewable Energy Structures		
	F.j	Dams and Reservoirs		
	F.k	Canals		
	F.l	Sewerage Plans and Refuse Areas		

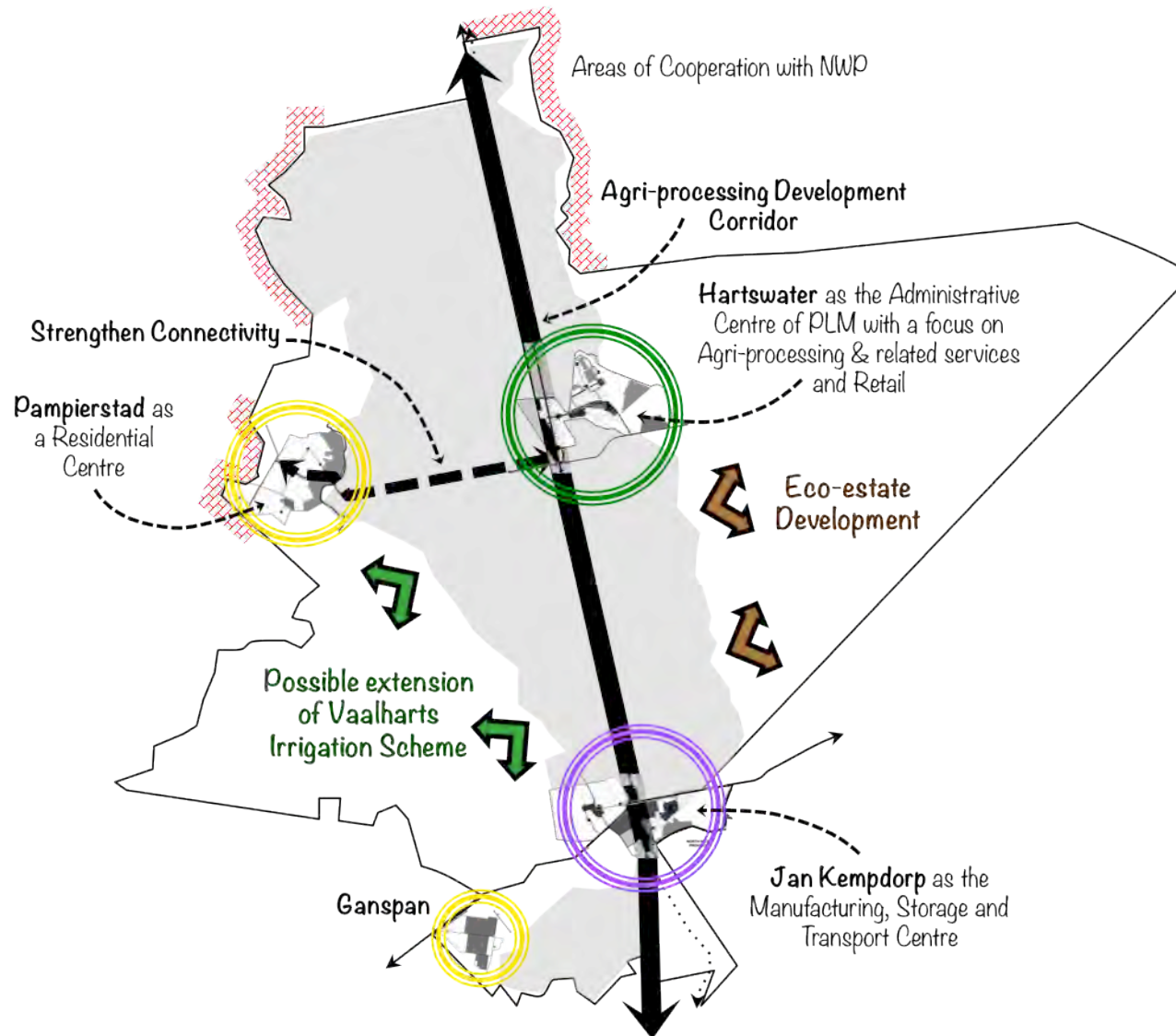
6.6 VERTICAL AND HORIZONTAL ALIGNMENT

The PLM SDF has, as far as is possible, been aligned horizontally and vertically by (1) aligning it with the NCP SDF and the FBDM SDF, and (2) taking note of proposed developments in the North West Province.

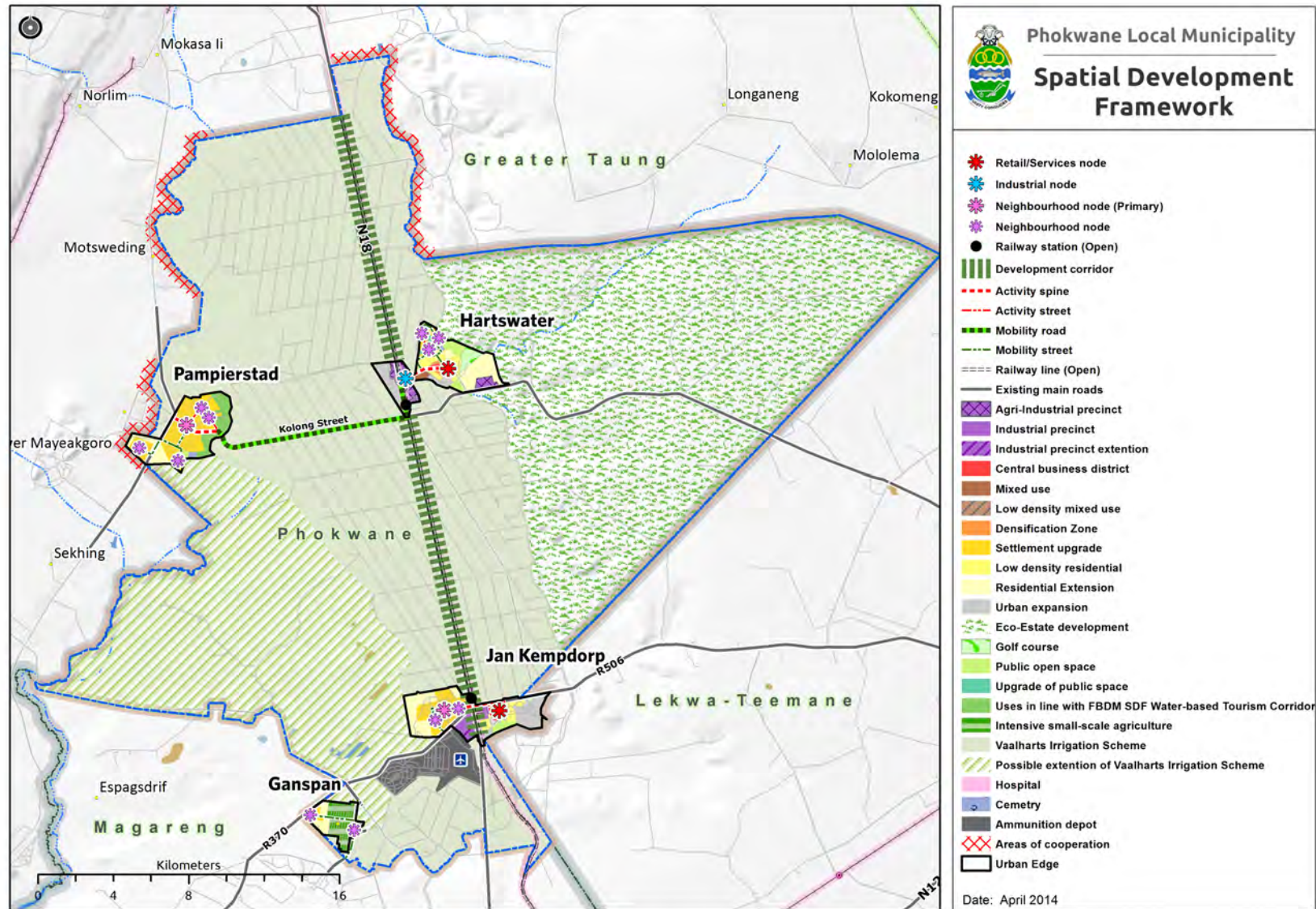
6.7 CONSOLIDATED PLM SDF

Figure 22 and **Map 73** provide the final consolidated PLM SDF.

Figure 22: Spatial Planning Logic of the PLM SDF



Map 73: Consolidated PLM SDF



CHAPTER 7:

SPATIAL STRUCTURING ELEMENTS AND DESIGN GUIDELINES



7.1 SPATIAL STRUCTURING ELEMENT DESIGN GUIDELINES

The NCPSDF (2012) identifies six 'Spatial Structuring Elements' to guide renewal and future development throughout the Northern Cape:

- Urban Edge
- Precinct
- Node
- Activity Corridor
- Activity Street
- Municipal Open Space System

The key functions of the Structuring Elements are to facilitate the following (NCPSDF, 2012):

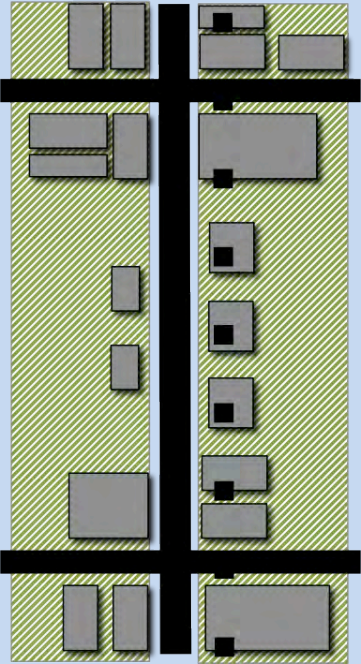
- *Containment of urban sprawl* (urban sprawl implies higher per capita cost when providing essential services and loss of valuable agricultural or natural land);
- *Promotion of urban and social integration* by creating compact urban areas (these are areas where the mixing of compatible land-uses and a wide range of urban activities/facilities are accommodated within walking distance of living areas, which contributes to the accessibility of economic, social and recreational opportunities to the community);
- *Promotion of acceptable higher densities* (higher densities imply more efficient use of available urban land, natural resources and service infrastructure);
- *Creation of quality urban environments* through urban renewal and landscaping (priority should be given to the conservation and reuse of buildings, infrastructure and materials and the beautification of the urban environment through intensive landscaping);

- *Reduction of the need for traffic movement and promotion of pedestrian and non-motorized movement patterns* (the price signals of transport, such as construction costs and cost of petrol given by the transport market, because they ignore environmental costs, mislead the users into believing that personal mobility is cheaper than it really is); and
- *Restoration and maintenance of a defined sense of place* (urban areas must reflect the culture-historical character of the area and its people and unique local land uses).

Table 54 below provides short descriptions of each Spatial Structuring Element, as well Design Guidelines for the implementation of these guidelines in the PLM.

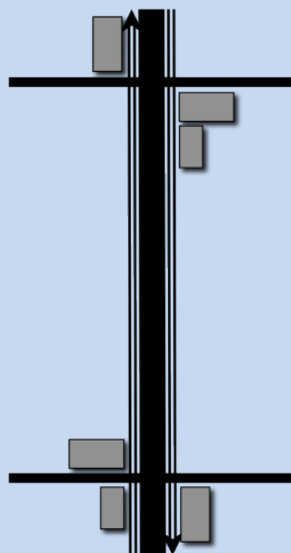
Table 54: Spatial Structuring Elements and Development Guidelines

SPATIAL STRUCTURING ELEMENT	LOCATION	DEVELOPMENT GUIDELINES
MUNICIPAL NODE These are the primary nodes in a municipality and are towns of significance in terms of scale, location, impact, diversity and agglomeration of functions.	Hartswater (Administrative, retail, agri-processing and services)	All new developments linked to administrative and personal services, retail and agri-processing should be directed to Hartswater.
	Jan Kempdorp (Manufacturing, transport and storage node)	All new developments linked to manufacturing, transport and storage should be directed to Jan Kempdorp.
	Pampierstad (Residential)	Focus on social development and the upgrading of the settlement.
DEVELOPMENT CORRIDOR A development corridor is an extensive and complex linear development system of regional or municipal significance. It comprises a central movement axis with supporting movement infrastructure and high intensity land development. Direct access to land uses is usually not possible along the central movement axis (but high visibility is a major feature) and the corridor therefore also comprises linear activity spines that provide access to development. The width of the corridor is usually restricted to walking distance on either side of the central axis (e.g. 600m on either side).	Agri-processing and Beneficiation Corridor along the N18	The aim of the Agri-processing and Beneficiation Corridor is to not only strengthen the local agricultural economy but to expand it from predominantly primary to the secondary economy. In order for this initiative to be successful the following need to be in place: <ul style="list-style-type: none"> ▪ Re-opening of the railway line and stations; ▪ Restore and redevelop existing agri-processing facilities along the N18; ▪ Promote new agri-processing initiatives along the N18; ▪ The opening up of the ammunition depot airport to the public sector; ▪ Development of bicycle lanes along the N18 to facilitate the movement of the workforce; and ▪ Improve public transport along the N18.

SPATIAL STRUCTURING ELEMENT	LOCATION	DEVELOPMENT GUIDELINES
<p>Development corridors can either accommodate specialised activities (e.g. industrial corridor) or mixed uses (retail, businesses, offices, high density residential etc.).</p>  <p>The diagram illustrates a development corridor as a vertical green hatched strip. A thick black vertical line runs through the center of the strip, representing the corridor's spine. Two thick black horizontal lines cross the vertical line, one near the top and one near the bottom. Various grey rectangular shapes of different sizes are placed along the corridor, representing buildings or land parcels. Some shapes are located directly on the corridor, while others are adjacent to it. The corridor is flanked by light blue areas, representing the surrounding urban or rural landscape.</p>		

MOBILITY ROAD

Mobility roads primary serves intra-municipal traffic. While this route is characterised by through traffic, trends indicate pockets of mixed use development located alongside. It serves as an important linkage between urban activity areas.



Between Pampierstad and Hartswater

The aim of the development of a Mobility Road between Hartswater and Pampierstad is to facilitate the movement of the residents of Pampierstad to and from their places of work and play. The following guidelines need to be applied in order to achieve this:

- Pedestrian/cyclist-oriented environment with traffic calming for cars where possible and appropriate;
- Nodal development with a mixed use character (development at intersections) along the route;
- Limited direct access; and
- Improve public transport along the Mobility Road.

URBAN EDGE

The Urban Edge is the demarcated outer boundary of urban areas and marks the transition between urban and rural land-uses. The Urban Edge is demarcated to manage, direct and control the outer limits of development and protect valuable natural environments and resources. It is also an important tool to contain urban sprawl and *ad*

Hartswater Jan Kempdorp Pampierstad Ganspan

The key objectives of the urban edges are to prevent the transformation and fragmentation of high potential agricultural land. For PLM to consider non-agricultural development to be undertaken on agricultural land, applicants have to provide assurance that such development would not fragment high potential agricultural land. The proposed development must, therefore, imply a direct, or indirect, positive impact on, for example, regional tourism, agriculture, environmental conservation and the interest of previously disadvantaged people. The urban edges identified in **Maps 7, 9 and 11** will be applicable for a ten-year period (2014 to 2024) but subject to evaluation together with the PLM SDF on a five-year cycle.

<p><i>hoc</i> low-density development, which adds to the life cycle costs of urban areas and places an unnecessary heavy burden on communities. The urban edge consists of the following components:</p> <p><u>Urban Edge Line:</u> The Urban Edge Line is the demarcated outer boundary within which urban expansion can be accommodated within a defined period of time.</p> <p><u>Built Edge Line:</u> The Built Line defines the outer boundary of the existing built up area and will always be contained by, or coincide with, the Urban Edge Line.</p> <p><u>Urban Fringe:</u> The Urban Fringe is the area located between the Urban Edge Line and the Built Edge Line. The Urban Edge is significant because it is the area in which urban expansion must be accommodated.</p>		
<p>PRECINCTS</p> <p>Precincts are special use areas, which are dominated by a primary activity with an appropriate diversity of land-uses closely associated with the primary activity.</p>	<p>Hartswater Agri-Industrial Precincts</p> <p>Hartswater Central Business District</p>	<p>The Agri-Industrial Precinct has been established to concentrate industrial activities related to the local agricultural industry and agricultural service industry in Hartswater. The development of an Agri-Industrial Precinct Development Plan is crucial for the effective development of this Precinct.</p> <p>Hartswater poses a relatively well-structured central business area and it is crucial that none the intensity of use is lost through the development of retail or commercial activities outside of the proposed CBD Precinct. In order to guide the development of the CBD, a CBD Design Framework should be developed for Hartswater. Until a Design Framework is developed all developments should follow the following guidelines:</p> <ul style="list-style-type: none"> ▪ All developments must contribute to high quality public environment; ▪ Large parking lots adjacent to streets should not be permitted;

		<ul style="list-style-type: none"> ▪ Buildings should be placed as close to street boundaries as possible to facilitate pedestrian movement and to define and shape the public space; ▪ Land uses on the ground floor of buildings must have an extroverted public façade (e.g. shops, restaurants etc.); and ▪ Site layout and building designs must take cognisance of and support public transport, cyclist and pedestrian movement.
	Jan Kempdorp Industrial Precinct	The Industrial Precinct has been established to concentrate industrial activities related to beneficiation, storage and transport in Jan Kempdorp. The development of an Industrial Precinct Development Plan is crucial for the effective development of this Precinct
	Jan Kempdorp Central Business District	<p>Jan Kempdorp has a small central business area that is not structured optimally and not well connected to the Activity Spine along the R506. In order to guide the development of the CBD, a CBD Design Framework should be developed for Jan Kempdorp focussing on strengthening its link to the Activity Spine. Until a Design Framework is developed all developments should follow the following guidelines:</p> <ul style="list-style-type: none"> ▪ All developments must contribute to high quality public environment; ▪ Large parking lots adjacent to streets should not be permitted; ▪ Buildings should be placed as close to street boundaries as possible to facilitate pedestrian movement and to define and shape the public space; ▪ Land uses on the ground floor of buildings must have an extroverted public façade (e.g. shops, restaurants etc.); and ▪ Site layout and building designs must take cognisance of and support public transport, cyclist and pedestrian movement.
<p>SETTLEMENT UPGRADE ZONES</p> <p>Settlement Upgrade Zones are areas in a settlement where there is little coherent structure and a low-quality urban environment. In these zones, Neighbourhood Nodes, Activity Streets and Mobility Streets are used to restructure the settlement in combination with improved service provision and beautification of the settlement.</p>	<p>Hartswater Valspan (Jan Kempdorp) Pampierstad Ganspan</p>	Apply the Development Guidelines of the individual components in combination with the guidelines provided Toolkit D12 of the NCPSDF (2012).

NEIGHBOURHOOD NODES

Nodes are characterised by a concentration of mixed-use activities around a central core. Nodes, public transport and the public spaces in and between nodes are important urban elements which can be used to restructure areas where economic activities have been dispersed and where there is no sense of place, legibility or special focus.



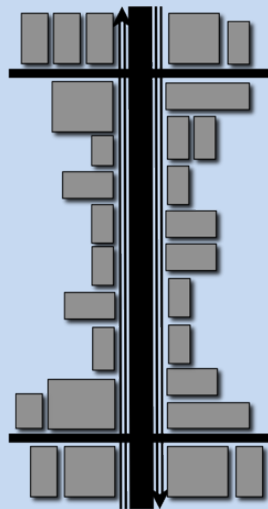
Hartswater
Jan Kempdorp
Pampierstad
Ganspan

Many of the settlements in the PLM, especially in the low-income and informal areas, have no sense of place, legibility or special focus. The aim of the Neighbourhood Nodes is to concentrate compatible and supporting uses in specific areas, creating a concentration of users that make other economic functions more sustainable. In order to ensure the set objectives, the following guidelines should be applied:

- Concentrate public facilities;
- Promote the development of mixed use;
- Create safe and interesting public settings; and
- Ensure that the interfaces with adjoining lower intensity residential developments are treated sensitively.

ACTIVITY SPINE

An activity spine is an urban, linear development area made up of a single central movement axis with intense activity along it. Linear development allows for land use and transportation to support each other. With the higher intensity of development, more people and business will be located next to the activity spine, which means that the use of public transport and existing movement infrastructure becomes more efficient. The movement axis is usually a higher order road of city-wide importance, but it must achieve a balance between promoting access, creating pedestrian-friendly environments and accommodating traffic mobility.



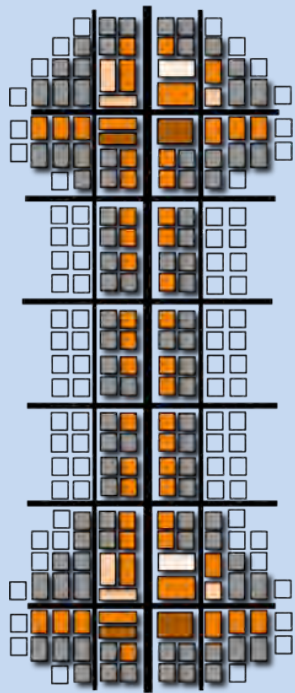
Hartswater Jan Kempdorp

Both Hartswater and Jan Kempdorp have two nodal areas, business and industrial, connected to each other by higher order roads that are not used optimally, even though they possess high levels of accessibility and visibility. The development of an Activity Spine along these roads will allow for (1) a concentration of uses along the spine, and (2) a more efficient movement infrastructure. The following guidelines for the development Activity Spines are proposed:

- Mixed land-uses along the spine;
- Interface with adjoining lower-intensity residential developments to be treated sensitively;
- Urban design guidelines to be used to guide the development along the spine;
- Pedestrian/cyclist-oriented environment to be created, with traffic-calming for cars as and where appropriate;
- High accessibility to land-uses;
- High density development with mixed uses to be promoted in suitable locations along these routes; and
- On-street parking to be provided as and where appropriate.

ACTIVITY STREET

Activity streets are linear development areas along smaller, local streets. The focus in this type of development is predominantly on the land-use mix and on enhancing pedestrian movement. Traffic mobility is not an important consideration and fast moving traffic on activity streets is avoided. Land-uses tend to be retail and service-oriented.



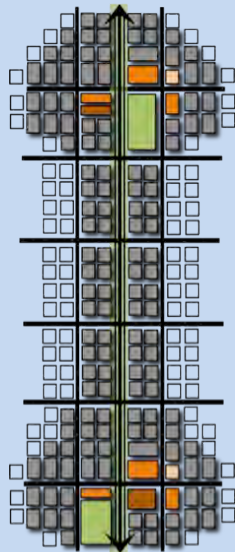
Hartswater Jan Kempdorp Pampierstad

The development of Activity Streets in the PLM settlements will allow for a concentration of land-uses along prominent spines inside local neighbourhoods, providing structure to the general dispersed nature of public facilities and retail opportunities in the PLM. The following guidelines for the development of Activity Streets are proposed:

- Low-intensity mixed land-uses with a focus on community services and economic opportunities;
- A focus on low to medium-density residential developments;
- The interface with adjoining lower intensity residential developments to be treated sensitively;
- A focus on pursuing a pedestrian/cyclist-oriented environment; and
- 'Good urban design-guidelines' need to be used to guide the development along the street.

MOBILITY STREET

Mobility streets are proposed as structuring elements focussed on facilitating safe pedestrian and bicycle movement in the Settlement Upgrade Zones, through the provision of sidewalks along roads or pedestrian routes through public open space, vacant land and buffers. These Mobility Streets in combination with Activity Streets link up all the Neighbourhood Nodes, and through the provision of street lighting, street furniture and trees, create high intensity use streets that are not only safer for the communities, but may in time allow for the development of mixed land-uses along the spines.



Hartswater
Jan Kempdorp
Pampierstad
Ganspan

The development of Mobility Streets in the PLM settlements aim to provide focus with regard to the upgrading of the public environment and development of pedestrian and bicycle-friendly environments. The following guidelines for the development of Mobility Streets are proposed:

- Sidewalks and bicycles lanes;
- Street lighting;
- Public furniture;
- Link up public open spaces;
- Planting of trees; and
- Public transport.

7.2 ALIGNMENT OF THE PLM SDF WITH THE NCPSDF SPCs

In order to assist PLM with aligning the PLM SDF with the NCPSDF SPCs the major proposed land-use zones in the PLM SDF are categorised according to (1) the proposed SPCs, and (2) the policy guidelines provided for the management of these zones.

Table 55: Land Use Zone Policy Guidelines

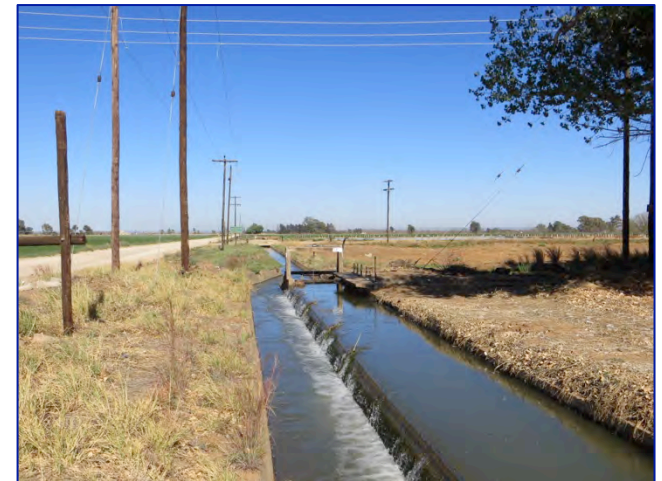
LAND USE ZONE	LAND USE PERMITTED	POLICY GUIDELINES
Outside the Urban Edge Vaalharts Irrigation Scheme (C.b)	<ul style="list-style-type: none"> Intensive agriculture New farmer settlements Small farming units Sustainable agriculture-related practices e.g. hydroponics and nurseries Agricultural industry (E.a) Resort and Tourism related (D.q) 	<ul style="list-style-type: none"> Agricultural Industry and Resort and Tourism-related developments may not be undertaken that would result in the complete loss intensive agricultural land Where development applications are inconsistent with the PLM SDF, the onus is on the applicant to prove, through a Strategic Environmental Assessment (SEA) and Environmental Impact Assessment (EIA), that the relevant application is consistent with the overarching objectives and directives of the SDF New development must be undertaken with design guidelines provided in Toolkit 12 of the NCPSDF (2012) Subdivided unit must be capable of sustaining productive/economic farming Must be self-sufficient with regard to provision of services, or appropriate municipal services contribution must be determined by the Municipality
Outside the Urban Edge Eco-Estate Development (D.q)	<ul style="list-style-type: none"> Extensive agriculture (C.a) Resort and Tourism related (D.q) Agricultural Industry (E.a) 	<ul style="list-style-type: none"> Where development applications are inconsistent with the PLM SDF, the onus is on the applicant to prove, through a Strategic Environmental Assessment (SEA) and Environmental Impact Assessment (EIA), that the relevant application is consistent with the overarching objectives and directives of the SDF. New development must be undertaken with design guidelines provided in Toolkit 12 of the NCPSDF (2012) Must be self-sufficient with regard to provision of services, or appropriate municipal services contribution must be determined by the Municipality
Agri- Industry Precinct (E.a)	<ul style="list-style-type: none"> Industrial activities related agri-processing Industrial activities that provide support to the agri-processing and the agricultural community Service centres for agricultural industry 	<ul style="list-style-type: none"> Must be undertaken in accordance with site-specific design and planning guidelines All industrial activities must be regulated and managed in accordance with sustainability standards (e.g. ISO 14001) Where development applications are inconsistent with the prescribed uses, the onus is on the applicant to prove, through the undertaking of an Impact Study, that the relevant application is consistent with the overarching objectives of the SDF New development must be undertaken in line with the Agri-Industry Precinct Development Plan
Industrial Precinct (E.c)	<ul style="list-style-type: none"> Industrial activities related beneficiation, storage and transport 	<ul style="list-style-type: none"> New development must be in line with the Industrial Precinct Development Plan New developments must be undertaken in accordance with site-specific design and

	<ul style="list-style-type: none"> Light industrial 	<p>planning guidelines</p> <ul style="list-style-type: none"> All industrial activities must be regulated and managed in accordance with sustainability standards (e.g. ISO 14001) Where development applications are inconsistent with the prescribed uses, the onus is on the applicant to prove, through the undertaking of an Impact Study, that the relevant application is consistent with the overarching objectives of the SDF
Central Business District (D.m)	<ul style="list-style-type: none"> High intensity, mixed land uses including business, community facilities and social services High density residential development 	<ul style="list-style-type: none"> New developments must be in line with the CBD Precinct Development Plan If the CBD Precinct Development Plan has not yet been developed new developments must be in line with the following guidelines: <ul style="list-style-type: none"> All developments must contribute to high quality public environment Large parking lots adjacent to streets should not be permitted Buildings should be placed as close to street boundaries as possible to facilitate pedestrian movement and to define and shape the public space Land uses on the ground floor of buildings must have an extroverted public façade (e.g. shops, restaurants etc.) Site layout and building designs must take cognisance of and support public transport, cyclist and pedestrian movement Where development applications are inconsistent with the prescribed uses, the onus is on the applicant to prove, through the undertaking of an Impact Study, that the relevant application is consistent with the overarching objectives of the SDF
Mixed Use (D.m)	<ul style="list-style-type: none"> Business Offices Community facilities High density residential 	<ul style="list-style-type: none"> New developments must be undertaken in line with the following design guidelines: <ul style="list-style-type: none"> All developments must contribute to high quality public environment Large parking lots adjacent to streets should not be permitted Buildings should be placed as close to street boundaries as possible to facilitate pedestrian movement and to define and shape the public space Land uses on the ground floor of buildings must have an extroverted public façade (e.g. shops, restaurants etc.) Site layout and building designs must take cognisance of and support public transport, cyclist and pedestrian movement Where development applications are inconsistent with the prescribed uses, the onus is on the applicant to prove, through the undertaking of an Impact Study, that the relevant application is consistent with the overarching objectives of the SDF
Densification Zone (D.k)	<ul style="list-style-type: none"> Infill and densification Between 10 to 30 dwelling units per hectare Limited amount of mixed land uses 	<ul style="list-style-type: none"> Must be undertaken in accordance with site-specific design and planning guidelines Where development applications are inconsistent with the prescribed uses, the onus is on the applicant to prove, through the undertaking of an Impact Study, that the relevant application is consistent with the overarching objectives of the SDF The following principles need to be applied in the development of the Densification Zone: <ul style="list-style-type: none"> Buildings should respond creatively to their existing context and to agreed aspirations for the future development of the area The height of new development should respond to the existing urban context

		<ul style="list-style-type: none"> and neighbourhood character of the area ○ The new development should be appropriate to the scale of nearby streets, other public spaces and buildings ○ The new development should maximise informal or passive surveillance of streets and other public open spaces whilst also protecting the privacy of properties ○ Create walkable areas with safe and interesting public settings ○ Avoid creating inactive frontages as a result of fencing private open spaces ○ Provide a range of dwelling sizes and types ○ Promote buildings of high architectural quality and visual interest ○ Ensure access to adequate functional and attractive open space for all residents
Low Density Residential (D.h)	<ul style="list-style-type: none"> ▪ One dwelling per erf ▪ Other uses supporting residential areas such as schools, churches and other community facilities 	<ul style="list-style-type: none"> ▪ New developments must be undertaken with design guidelines provided in Toolkit 12 of the NCPsDF (2012) ▪ Where development applications are inconsistent with the prescribed uses, the onus is on the applicant to prove, through the undertaking of an Impact Study, that the relevant application is consistent with the overarching objectives of the SDF
New Residential Extension	<ul style="list-style-type: none"> ▪ Low and medium-density ▪ Other uses supporting residential areas such as schools, churches and other community facilities 	<ul style="list-style-type: none"> ▪ New developments must be undertaken with design guidelines provided in Toolkit 12 of the NCPsDF (2012) ▪ Where development applications are inconsistent with the prescribed uses, the onus is on the applicant to prove, through the undertaking of an Impact Study, that the relevant application is consistent with the overarching objectives of the SDF

CHAPTER 8:

IMPLEMENTATION FRAMEWORK



8.1 INTRODUCTION

The Implementation Framework consists of two sections: (1) The unpacking of each spatial development strategy project; and (2) the Priority Matrix as outlined by the DRDLR.

8.2 SPATIAL DEVELOPMENT STRATEGY 1: Vastly expanding the existing irrigation scheme and agricultural economy

Indicators for Achievement:

- Expansion of Vaalharts Irrigation Scheme;
- Expansion of the agricultural economy;
- Access to the irrigation scheme by new and developing farmers;
- Provision of water to land reform projects;
- Clarity regarding the water-rights;
- All relevant plans aligned with the Vaalharts Irrigation Scheme expansion;
- Curbing of land degradation the border to the North West Province;
- Limiting the negative effect of soil salination; and
- Widespread knowledge and understanding of the need for, and support for addressing soil salination.

Table 56: Spatial Development Strategy 1 Projects

SDS 1	PROJECT DESCRIPTION
SDS 1.1	Expansion of the Vaalharts Irrigation Scheme Expansion Plan.
SDS 1.2	Allocation of water-rights.
SDS 1.3	Management of soil salination due to intensive irrigation (connected to expansion of research related to agriculture – see Spatial Development Strategy Two).
SDS 1.4	Stop the degradation of land on the PLM borders with the North West Province.

Table 57: SDS 1.1 Implementation Framework: Expansion of the Vaalharts Irrigation Scheme Outline

SDS 1.1: EXPANSION OF THE VAALHARTS IRRIGATION SCHEME		
OBJECTIVES	TARGET GROUPS	LOCATION
<ul style="list-style-type: none"> Expansion of Vaalharts Irrigation Scheme through the more efficient use of water, the building of further reservoirs and the placing of more land under irrigation. 	<ul style="list-style-type: none"> Established, large-scale farmers and new entrants into this group Subsistence farmers Land reform recipients 	<ul style="list-style-type: none"> Most likely: South-western section of the PLM (see PLM SDF Map)
OUTPUTS	PROJECT TIMELINE	RESPONSIBLE AGENCIES
<ul style="list-style-type: none"> Established Vaalharts Irrigation Scheme Task Team Developed Vaalharts Irrigation Scheme Expansion Plan Expanded Vaalharts Irrigation Scheme 	2015 to 2019	<ul style="list-style-type: none"> PLM NCP Department of Economic Development, Tourism and Environmental Affairs DRDLR (NC) NCP Department of Public Works
MAJOR ACTIVITIES	COST/BUDGET	SOURCE OF FUNDING
<ul style="list-style-type: none"> Establishment of a Vaalharts Irrigation Scheme Task Team Sourcing of funds Status Quo Report on current irrigation system to establish current state of irrigation infrastructure Coordination and alignment of proposed River Corridor Protection Plan, Agriculture Development Plan and Water Management Plan proposed in the FBDM SDF (2014) Development of the Vaalharts Irrigation Scheme Expansion Plan Implementation of the Vaalharts Irrigation Scheme Expansion Plan 	To be determined by the Department of Water Affairs (DWA)	<ul style="list-style-type: none"> DWA DRDLR (NC)

Table 58: SDS 1.2 Implementation Framework: Finalisation of Water-rights

SDS 1.2: ALLOCATION OF WATER-RIGHTS		
OBJECTIVES	TARGET GROUPS	LOCATION
<ul style="list-style-type: none"> To explore the allocation of water-rights for new economic activities in the area, notably ones that will enhance the participation of previously excluded groups in the municipality 	<ul style="list-style-type: none"> Newly emerging farmers and cooperatives Established farmers and cooperatives Established and emerging individuals and companies involved in agro-processing and manufacturing 	PLM-wide
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
<ul style="list-style-type: none"> Water rights allocated/transferred to primarily emerging farmers and cooperatives, and emerging individuals and companies involved in agro-processing and manufacturing Water rights being used/utilised in farming and production by emerging farmers and cooperatives, and emerging individuals and companies involved in agro-processing and manufacturing 	2015-2017	<ul style="list-style-type: none"> PLM FBDM DWA NCP Department of Economic Development, Tourism and Environmental Affairs
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
<ul style="list-style-type: none"> Prepare ToR and publish for service provider to undertake assignment Appoint suitable service provider Put out call for emerging individuals, companies and cooperatives seeking water rights to register on a database Undertake study Prepare proposals for allocation of water rights and initiate discussions with relevant entities to secure the rights Finalise allocations of water rights 	To be determined by the Department of Water Affairs (DWA)	<ul style="list-style-type: none"> DWA DRDLR (NC) Emerging individuals, companies and cooperatives

Table 59: SDS 1.3 Implementation Framework: Management of Soil Salination

SDS 1.3: MANAGEMENT OF SOIL SALINATION		
OBJECTIVES	TARGET GROUPS	LOCATION
<ul style="list-style-type: none"> Management of soil salination due to intensive irrigation (connected to expansion of research related to agriculture – see Spatial Development Strategy 2) 	<ul style="list-style-type: none"> New and established farmers 	<ul style="list-style-type: none"> Irrigated farms throughout the PLM
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
<ul style="list-style-type: none"> Widely accepted plan for management of soil salination Sustainable, affordable, effective and efficient management of soil salination in the PLM 	Continuous, after beginning in 2015	<ul style="list-style-type: none"> DWA PLM NCP Department of Environmental Affairs and Nature Conservation DRDLR (NC)
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
<ul style="list-style-type: none"> Establishment of soil salination task team Establishment of research network consisting of researchers in the area of soil salination, especially so in the PLM area Initiate and undertake research projects regarding soil salination in the area Development of information packages regarding affordable, effective and efficient methods to address soil salination Information sessions/packages about methods to address salination of soil Provision of assistance to emerging farmers to address soil salination 	To be determined by the Department of Water Affairs (DWA)	<ul style="list-style-type: none"> DWA NCP Department of Economic Development, Tourism and Environmental Affairs

Table 60: SDS 1.4: Implementation Framework: Stop the degradation of land on the border to the North West Province

SDS 1.4: STOP THE DEGRADATION OF LAND ON THE BORDER TO THE NORTH WEST PROVINCE		
OBJECTIVES	TARGET GROUPS	LOCATION
<ul style="list-style-type: none"> Preventing the encroachment of settlements from across the border of the North West Province onto valuable agricultural land in the PLM 	<ul style="list-style-type: none"> North West Province (NWP) and Northern Cape Province (NCP) Traditional leaders Community leaders Dr Ruth Segomotsi Mompati District Municipality Greater Taung Local Municipality Taung-Lekwa Teema Local Municipality FBDM PLM 	North-western, northern and north-eastern borders of the PLM
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
<ul style="list-style-type: none"> Shared understanding between all stakeholders, including the NWP, NCP, traditional leaders, all relevant municipalities in the NWP, the FBDM and the PLM, of the issues and ways to deal with them Established cooperation agreement between all stakeholders, including the NWP, NCP, traditional leaders, all relevant municipalities in the NWP, the FBDM and the PLM, as to how to deal with the issues 	Continuous, from 2014 onwards	<ul style="list-style-type: none"> PLM FBDM Northern Cape Province North West Province Dr Ruth Segomotsi Mompati District Municipality Greater Taung Local Municipality Taung-Lekwa Teema Local Municipality
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
<ul style="list-style-type: none"> Organise meeting with all provincial, district and local municipalities involved Reach agreement between PLM and the NWP municipalities on how to manage the urban expansion over the border to PLM. as well as the how to address the soil degradation Set in place institutional structures to manage the 'Areas of Cooperation' 	To be financed by the various organs of state involved	<ul style="list-style-type: none"> PLM FBDM Northern Cape Province North West Province Dr Ruth Segomotsi Mompati District Municipality Greater Taung Local Municipality Taung-Lekwa Teema Local Municipality

8.3 SPATIAL DEVELOPMENT STRATEGY 2: Reviving and expanding manufacturing and beneficiation

Indicators for Achievement:

- Better understanding of the agricultural and agri-processing value chain;
- Development of agri-processing and beneficiation industries;
- Use of abandoned and unused infrastructure for agri-processing and beneficiation;
- Increased employment opportunities;
- Improved connectivity locally, provincially, nationally and internationally;
- Establishment of agri-processing research and product development facilities;
- Improved access to adequate services to support agri-processing and industrial development;
- Increase in number of researchers and academics from around the world visiting and living in PLM;
- Diversification of residential options;
- Diversification of the local economy; and
- Strengthening of the local economy.

Table 61: Spatial Development Strategy 2 Projects

SDS 2	PROJECT DESCRIPTION
SDS 2.1	Undertake an in-depth study on the local agricultural economy and value-chain that will give direction to the type of beneficiation to undertake and the form that it will take.
SDS 2.2	Revive/Restore/Re-use abandoned and unused infrastructure for agriculture and agri-processing purposes (such as the closed railway line, abandoned benefaction infrastructure along the railway line and the ammunition airport).
SDS 2.3	Provision of adequate and reliable basic services, such as electricity and water, to support the development of the agri-processing industries.
SDS 2.4	Development of Agriculture and Agri-processing Research and Product Development facilities linked to the current research facilities/initiatives in PLM, the proposed university in Kimberley, and national and international research institutions.

Table 62: SDS 2.1 Implementation Framework: In-depth study on the local agricultural economy and value chains

SDS 2.1: IN-DEPTH STUDY ON THE LOCAL AGRICULTURAL ECONOMY AND VALUE-CHAINS		
OBJECTIVES	TARGET GROUPS	LOCATION
<ul style="list-style-type: none"> ▪ To understand the local agricultural economy and its value chains ▪ To determine what agricultural products hold the most significant local beneficiation opportunities 	<ul style="list-style-type: none"> ▪ Farmers, from established large-scale to small-holder emerging ▪ Individuals and companies involved in the agri-processing, beneficiation and manufacturing industries 	<ul style="list-style-type: none"> ▪ PLM-wide
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
<ul style="list-style-type: none"> ▪ A completed study on the agricultural economy and value chains in PLM ▪ Planning, budgeting and implementation by all organs of state involved in the PLM 	2014 to 2015	<ul style="list-style-type: none"> ▪ PLM ▪ NCP Department of Economic Development, Tourism and Environmental Affairs ▪ DRDLR (NC) ▪ Department of Trade and Industry (DTI) ▪ Industrial Development Corporation (IDC)
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
<ul style="list-style-type: none"> ▪ Draw up a terms of reference for the study, taking into consideration the proposed FBDM Agriculture Development Plan and FBDM Feasibility Study to Reinforce the Economic Base of the Settlement Areas into consideration (FBDM SDF 2014) ▪ Publish the ToR and appoint a service provider ▪ Appoint project and steering committee ▪ Service provider undertakes study ▪ Findings of study are widely disseminated and used to inform strategy, planning and funding in the PLM by all organs of state involved 	R1.2million	<ul style="list-style-type: none"> ▪ Industrial Development Corporation (IDC) ▪ NCP Department of Economic Development, Tourism and Environmental Affairs

Table 63: SDS 2.2 Implementation Framework: Restore abandoned and unused infrastructure for agriculture and agri-processing purposes

SDS 2.2: REVIVE/RESTORE/RE-USE ABANDONED AND UNUSED INFRASTRUCTURE FOR AGRICULTURE AND AGRI-PROCESSING PURPOSES		
OBJECTIVES	TARGET GROUPS	LOCATION
<ul style="list-style-type: none"> ▪ To revive/restore and re-use abandoned and unused infrastructure for agriculture and agri-processing purposes, such as the closed railway line, abandoned benefaction infrastructure along the railway line and the ammunition depot and airport ▪ To utilise unused land for agricultural activities ▪ To expand the secondary economy in the PLM and diversify the local economy ▪ To increase participation of previously disadvantaged groups in the regional and local economy 	<ul style="list-style-type: none"> ▪ Farmers, from established large-scale to small-holder emerging ▪ Individuals and companies involved in the agri-processing, beneficiation and manufacturing industries ▪ Unemployed members from previously disadvantaged groups 	<p>PLM-wide, with an emphasis on land in and around the Hartswater and Jan Kempdorp settlements, notably:</p> <ul style="list-style-type: none"> ▪ The closed railway line and stations running between Hartswater and Jan Kempdorp ▪ Abandoned and underutilised industrial sites ▪ The Ammunition Depot and Airport
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
<ul style="list-style-type: none"> ▪ A study on the <i>status quo</i> of land and infrastructure in the PLM that can be utilised for beneficiation and agro-processing purposes ▪ A Redevelopment Plan to utilise and capitalise on the opportunities identified in the Plan 	2015 to 2017	<ul style="list-style-type: none"> ▪ PLM ▪ NCP Department of Economic Development, Tourism and Environmental Affairs ▪ Passenger Rail Agency of South Africa (PRASA) ▪ DRDLR (NC) ▪ Department of Trade and Industry (DTI) ▪ Industrial Development Corporation (IDC) ▪ NCP Department of Police, Roads and Transport ▪ NCP Department of Public Works
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
<ul style="list-style-type: none"> ▪ Set up a task team composed of relevant stakeholders ▪ Undertake status quo study of current infrastructure in PLM to identify what can be utilised for beneficiation and agro-processing purposes 	R950k	<ul style="list-style-type: none"> ▪ Industrial Development Corporation (IDC) ▪ NCP Department of Economic

<ul style="list-style-type: none"> ▪ Development of Re-development Plan taking the Agricultural Economy and Value Chain Study (SDS 2.1) into consideration ▪ Source funding for redevelopment proposals ▪ Undertake the redevelopment proposals as required to support agriculture, agri-processing, beneficiation and manufacturing 		<p>Development, Tourism and Environmental Affairs</p> <ul style="list-style-type: none"> ▪ DTI
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Table 64: SDS 2.3 Implementation Framework: Provision of adequate and reliable basic services

SDS 2.3: PROVISION OF ADEQUATE AND RELIABLE BASIC SERVICES		
OBJECTIVES	TARGET GROUPS	LOCATION
<ul style="list-style-type: none"> To ensure the availability of adequate and reliable basic services such as water and electricity to support the development of productive, job-creating agriculture and agri-processing industries in the PLM 	<ul style="list-style-type: none"> All PLM residents but more specifically individuals, companies and cooperatives involved in agriculture, agri-processing, beneficiation, manufacturing, retail and tourism 	PLM-wide
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
<ul style="list-style-type: none"> A Municipal Service Provision Master plan that provides for existing users and activities and addresses the proposed expansion in the PLM agriculture, agri-processing, beneficiation, manufacturing, retail and tourism industries 	2015 to 2016	<ul style="list-style-type: none"> PLM FBDM ESCOM DWA Sedibeng water
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
<ul style="list-style-type: none"> Set up a task team composed of relevant stakeholders Undertake status quo study of current and required basic service needs in the PLM, as well as the infrastructure available, under construction and required to meet the needs Development of Infrastructure Development Plan taking the Agricultural Economy and Value Chain Study (SDS 2.1) and Redevelopment Plan (SDS 2.2) into consideration Source funding for large-scale infrastructure development Undertake the redevelopment of PLM infrastructure to ensure the provision of affordable and reliable basic service provision 	R2.8million	<ul style="list-style-type: none"> DBSA IDC

Table 65: SDS 2.4 Implementation Framework: Development of agriculture and agri-processing research and product development facilities

SDS 2.4: DEVELOPMENT OF AGRICULTURE AND AGRI-PROCESSING RESEARCH AND PRODUCT DEVELOPMENT FACILITIES		
OBJECTIVES	TARGET GROUPS	LOCATION
<ul style="list-style-type: none"> To increase the output of agricultural products (1) produced and (2) benefited in the PLM in a sustainable way To diversify/expand the range of agricultural products produced and benefited in the PLM 	<ul style="list-style-type: none"> Researchers at agencies like the Agricultural Research Council, the CSIR and local and international universities Farmers, from established large-scale to small-holder emerging Individuals and companies involved in the agri-processing, beneficiation and manufacturing industries 	PLM-wide
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
<ul style="list-style-type: none"> A continuous output of research offerings on ways and products in which the objectives can be met An active interest in the research opportunities offered by the PLM A steady flow of researchers to the PLM 	<ul style="list-style-type: none"> Continuous, from 2014 onwards 	<ul style="list-style-type: none"> PLM FBDM ARC Researchers NCP Department of Agriculture and Rural Development DRDLR (NC) DWA
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
<ul style="list-style-type: none"> Set up local/provincial task team consisting of ARC, PLM, FBDM, the NCP Department of Agriculture, DWA and local farming and business groups to prepare document/‘advertisement’ for circulation to target groups Disseminate document Use local/provincial task team to disseminate findings and explore ways of ensuring greater research interest and utilisation of findings for product development 	N/A: Part of operational activities of officials from various organs of state	<ul style="list-style-type: none"> Provided by organs of state Researchers and their institutions provide their own funds

8.4 SPATIAL DEVELOPMENT STRATEGY 3: Improving local connectivity, enhancing intra-settlement trade and sharing facilities and resources

Indicators for Achievement:

- Improved connectivity;
- Improved public transport options/facilities;
- Nodal development;
- Higher density development;
- Improved access to tertiary education; and
- Development of specialised nodes.

Table 66: Spatial Development Strategy 3 Projects

SDS 3	PROJECT DESCRIPTION
See SDS 2.2	Revive/Restore/Re-use abandoned and unused infrastructure for agriculture and agri-processing purposes (such as the closed railway line, abandoned benefaction infrastructure along the railway line and the ammunition airport.
SDS 3.1	Upgrading of local transport routes in all the PLM settlements.
SDS 3.2	Development of a Public Transport Plan informed by the proposed FBDM 'Study on Public Transport Facilities in Rural and Urban Settlements'.
SDS 3.3	Development of Hartswater as an Agri-processing Node and Jan Kempdorp as a Manufacturing, Storage and Transport Node.
SDS 3.4	Development of detailed Urban Design Frameworks for Hartswater, Pampierstad and Jan Kempdorp (making use of Neighbourhood Development Nodes).
SDS 3.5	Development of Neighbourhood Nodes.
SDS 3.6	Building and staffing of FETs and research centres (linked to SDS 2.4).

Table 67: SDS 3.1 Implementation Framework: Upgrading of local transport routes in all the PLM settlements

SDS 3.1: UPGRADING OF LOCAL TRANSPORT ROUTES IN PLM SETTLEMENTS		
OBJECTIVES	TARGET GROUPS	LOCATION
<ul style="list-style-type: none"> To ensure enhanced connectivity in, and movement between settlements in the municipality To ensure improved intra-settlement economic activity/trade in the municipality 	<ul style="list-style-type: none"> All the inhabitants of the PLM Tourists and visitors to the PLM Businesses in the PLM, notably small-scale operators 	PLM-wide
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
<ul style="list-style-type: none"> Greater ease of movement in and between the settlements in the PLM Greater trade between inhabitants of the settlements in the PLM Greater number of small-scale economic activities as a result of enhanced access and mobility in the PLM 	2015 to 2019	<ul style="list-style-type: none"> PLM FBDM NCP Department of Police, Roads and Transport NCP Department of Public Works
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
<ul style="list-style-type: none"> Draw up a terms of reference for the preparation of an 'Internal Roads Masters Plan' for the upgrading and maintenance of the internal road network in the PLM Publish the ToR and appoint a service provider Appoint project and steering committee Service provider undertakes study Preparation of the 'Internal Roads Masters Plan' Upgrading and maintenance of key roads in and between settlements in the municipality in accordance with the plan 	<ul style="list-style-type: none"> Plan preparation: R1.2million Plan implementation: To be determined in accordance with the plan 	<ul style="list-style-type: none"> NCP Department of Police, Roads and Transport NCP Department of Public Works

Table 68: SDS 3.2 Implementation Framework: Development of a Public Transport Plan

SDS 3.2: DEVELOPMENT OF A PUBLIC TRANSPORT PLAN		
OBJECTIVES	TARGET GROUPS	LOCATION
<ul style="list-style-type: none"> To ensure greater access to and use of public transport in the PLM To reduce reliance on the private motor car for movement in the PLM 	<ul style="list-style-type: none"> All the inhabitants of the PLM Tourists and visitors to the PLM Businesses in the PLM, notably small-scale operators 	PLM-wide
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
<ul style="list-style-type: none"> Safer and more reliable public transport services in the PLM Accessible taxi and bus ranks, facilities and furniture Greater use of public transport in the PLM Greater and more affordable access to economic activities in the PLM and the wider region 	2015 to 2017	<ul style="list-style-type: none"> PLM FBDM NCP Department of Police, Roads and Transport NCP Department of Public Works
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
<ul style="list-style-type: none"> Draw up a terms of reference for the preparation of an 'Internal Roads Masters Plan' for the upgrading and maintenance of the internal road network in the PLM, informed by the proposed FBDM 'Study on Public Transport Facilities in Rural and Urban Settlements' Publish the ToR and appoint a service provider Appoint project and steering committee Service provider undertakes study Preparation of the 'Internal Roads Masters Plan' Upgrading and maintenance of key roads in and between settlements in the municipality in accordance with the plan 	<ul style="list-style-type: none"> Plan preparation: R850k Plan implementation: To be determined by the proposals contained in the plan 	<ul style="list-style-type: none"> NCP Department of Police, Roads and Transport NCP Department of Public Works

Table 69: SDS 3.3 Implementation Framework: Development of Hartswater as an agri-processing and Jan Kempdorp as a manufacturing, storage and transport node

SDS 3.3: DEVELOPMENT OF HARTSWATER AS AN AGRI-PROCESSING NODE AND JAN KEMPDORP AS A MANUFACTURING, STORAGE AND TRANSPORT NODE		
OBJECTIVES	TARGET GROUPS	LOCATION
<ul style="list-style-type: none"> ▪ To develop Hartswater into an agri-processing node ▪ To develop Jan Kempdorp into a manufacturing, storage and transport node ▪ To ensure (1) the attraction of new businesses and (2) the retention and expansion of existing businesses in Hartswater and Jan Kempdorp 	<ul style="list-style-type: none"> ▪ All the Residents in the PLM ▪ Businesses in the Hartswater and Jan Kempdorp nodes ▪ Farmers and Farming Associations in the PLM ▪ Organised Business associations in the PLM 	Hartswater and Jan Kempdorp
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
<ul style="list-style-type: none"> ▪ Higher economic growth rates in the Hartswater and Jan Kempdorp nodes ▪ Growth in the number of new businesses in the two nodes ▪ Increased number of job opportunities for persons from previously disadvantaged groups, especially women, youth and persons with disabilities in the tow nodes 	2015 to 2018	<ul style="list-style-type: none"> ▪ PLM ▪ FBDM ▪ NCP Department of Economic Development, Tourism and Environmental Affairs ▪ Passenger Rail Agency of South Africa (PRASA) ▪ Department of Trade and Industry (DTI) ▪ Industrial Development Corporation (IDC) ▪ NCP Department of Police, Roads and Transport ▪ NCP Department of Public Works
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
<ul style="list-style-type: none"> ▪ Establish a task team consisting of government, community, farming and business stakeholders ▪ Prepare a nodal development plan for the two nodes ▪ Undertake actions as set out in the plan, including the redevelopment of industrial sites in Hartswater and Jan Kempdorp 	<ul style="list-style-type: none"> ▪ Plan preparation: N/A, part of the work of the organs of state ▪ Plan implementation: To be determined by the proposals contained in the plan 	<ul style="list-style-type: none"> ▪ IDC ▪ DTI ▪ NCP Department of Police, Roads and Transport ▪ NCP Department of Public Works

Table 70: SDS 3.4 Implementation Framework: Development of Urban Design Frameworks for Hartswater, Pampierstad and Jan Kempdorp

SDS 3.4: DEVELOPMENT OF DETAILED URBAN DESIGN FRAMEWORKS FOR HARTSWATER, PAMPIERSTAD AND JAN KEMPDORP		
OBJECTIVES	TARGET GROUPS	LOCATION
<ul style="list-style-type: none"> To develop the nodes of Hartswater, Pampierstad and Jan Kempdorp into attractive settlements for new and existing businesses and inhabitants To prepare urban design frameworks that will enable the sustainable development of Hartswater, Pampierstad and Jan Kempdorp To ensure the development of clusters of government services and vibrant agri-processing and manufacturing economies in the three nodes To enable the creation of jobs in close proximity to the residents of the three nodes To provide public spaces for markets in the three nodes 	<ul style="list-style-type: none"> All the residents of the three nodes Businesses in the three nodes Organised Business associations in the PLM 	The towns of Hartswater, Pampierstad and Jan Kempdorp
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
<ul style="list-style-type: none"> Hartswater, Pampierstad and Jan Kempdorp Urban Design Frameworks Creation of an enabling spatial structure that supports sustainable spatial, economic and social development Attraction of new businesses and creation of jobs 	2015-2016	<ul style="list-style-type: none"> PLM FBDM DRDLR (NC)
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
<ul style="list-style-type: none"> Draw up a ToR that takes the proposals as made in this SDF into consideration Publish the ToR and identify and appoint an appropriate service provider Appoint a project and steering committee Preparation of Urban Design Frameworks for the three towns/nodes Ensuring stakeholder buy-in and support to proposals as contained in the framework 	<ul style="list-style-type: none"> Plan preparation: R900k for the three Urban Design Frameworks Plan implementation: To be determined by the proposals contained in the plan 	<ul style="list-style-type: none"> PLM FBDM DRDLR (NC)

Table 71: SDS 3.5 Implementation Framework: Development of Neighbourhood Nodes

SDS 3.5: DEVELOPMENT OF NEIGHBOURHOOD NODES		
OBJECTIVES	TARGET GROUPS	LOCATION
<ul style="list-style-type: none"> ▪ To develop nodes in Hartswater, Pampierstad and Jan Kempdorp that will attract new business and inhabitants and retain existing businesses and inhabitants ▪ To use the development of clusters of government services and vibrant agri-processing and manufacturing economies in the three nodes ▪ To use the formation of nodes in the three towns to create jobs in close proximity to the residents of these towns ▪ To develop public spaces for markets in the nodes in the towns 	<ul style="list-style-type: none"> ▪ All the residents of the three nodes ▪ Existing and emerging businesses in the three nodes ▪ Organised Business associations in the PLM 	The towns of Hartswater, Pampierstad and Jan Kempdorp
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
<ul style="list-style-type: none"> ▪ Hartswater, Pampierstad and Jan Kempdorp Urban Design Frameworks ▪ Creation of an enabling spatial structure that support sustainable spatial, economic and social development of the three towns ▪ Attraction of new businesses and creation of jobs 	2016-2018	<ul style="list-style-type: none"> ▪ PLM ▪ FBDM ▪ DRDLR (NC)
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
<ul style="list-style-type: none"> • Draw up ToRs for nodal development in the three towns that take the Urban Design Frameworks for the three towns into consideration • Publish the ToRs and identify and appoint appropriate service providers • Appoint a project and steering committee • Preparation of Urban Design Frameworks for the three towns • Ensuring stakeholder buy-in and support to proposals as contained in the framework 	<ul style="list-style-type: none"> ▪ Plan preparation: R300k for a nodal plan ▪ Plan implementation: To be determined by the proposals contained in the plan 	<ul style="list-style-type: none"> ▪ PLM ▪ FBDM ▪ DRDLR (NC)

Table 72: SDS 3.6 Implementation Framework: Building and Staffing of FETs and Research Centres

SDS 3.6: BUILDING AND STAFFING OF FETs AND RESEARCH CENTRES		
OBJECTIVES	TARGET GROUPS	LOCATION
<ul style="list-style-type: none"> To build and staff FETs focused on agricultural production, agri-processing and beneficiation To establish research centres focused on product development based on the produce from the area 	<ul style="list-style-type: none"> Youth especially in the PLM, but also in the wider region Local and International researchers Local building contractors 	Nodes in the towns of Hartswater, Pampierstad and Jan Kempdorp
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
<ul style="list-style-type: none"> FETs that develop skills of the youth of the PLM and the wider region in the areas of agricultural production, agri-processing and beneficiation Research outputs that assists product development based on the produce from the area Enterprise establishment and expansion based on the research generated by the research centres Enterprise establishment by local youth trained in the FET sector 	Continuous, from 2014 onwards	<ul style="list-style-type: none"> PLM FBDM DET Department of Higher Education National Research Foundation Universities
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
<ul style="list-style-type: none"> Establish a task team consisting of government, community, farming and business stakeholders Prepare a plan for the building of the FETs and the research centres Undertake the actions as set out in the plan 	<ul style="list-style-type: none"> Plan preparation: N/A, part of the work of the organs of state Plan implementation: To be determined by the proposals contained in the plan 	<ul style="list-style-type: none"> Department of Higher Education National Research Foundation DTI IDC

8.5 SPATIAL DEVELOPMENT STRATEGY 4: Tourism and eco-residential estate development

Indicators for Achievement

- Increase in tourism in the area;
- Increase in employment opportunities;
- More informed and knowledgeable community;
- Improved living conditions; and
- Increase in local tax base.

Table 73: Spatial Development Strategy 4 Projects

SDS 4	PROJECT DESCRIPTION
See SDS 2.1	Revive/Restore/Re-use abandoned and unused infrastructure for agriculture and agri-processing purposes (such as the closed railway line, abandoned benefaction infrastructure along the railway line and the ammunition airport.
See SDS 3.2	Upgrading of local transport routes in settlements.
SDS 4.1	Upgrading and beautification of the PLM.
SDS 4.2	Development of a Tourism Development Strategy for PLM which is to be aligned with the proposed FBDM Tourism Development Plan (FBDM SDF 2014). Support and expand on current tourism activities. Link tourism industry with beneficiation activities such as agri-processing tours.
SDS 4.3	Establishment of a Tourism Development Office in PLM where the local population can receive information and assistance on or with the development of tourism in PLM.
SDS 4.4	Eco-residential estate development.

Table 74: SDS 4.2 Implementation Framework: Upgrading and Beautification of the PLM

SDS 4.1: UPGRADING AND BEAUTIFICATION OF THE PLM		
OBJECTIVES	TARGET GROUPS	LOCATION
<ul style="list-style-type: none"> ▪ To maintain the beauty of the PLM and upgrade those parts of the municipality that have become degraded ▪ To use the attractiveness of the PLM to attract and retain investors, inhabitants and tourists ▪ To implement pollution management throughout the PLM ▪ To upgrade the quality of residential areas, especially so informal areas ▪ To create jobs in the upgrading and beautification activities and the recycling industry 	<ul style="list-style-type: none"> ▪ All the inhabitants of the PLM ▪ Farmers and Farming Associations ▪ Business operators in the recycling industry, especially so emerging businesses in the sector 	<ul style="list-style-type: none"> ▪ PLM-wide, but with a specific emphasis on informal areas ▪ Waterways, i.e. rivers and canals
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
<ul style="list-style-type: none"> ▪ Improvement in living conditions in all the informal areas in the PLM ▪ Reduction in water, soil and scenic pollution in the municipality ▪ Refuse removal services undertaken throughout the municipality ▪ Increase in tourists to the area ▪ Increase in businesses and expansion of businesses in the area ▪ Beautification of public spaces throughout the PLM 	2015-2018	<ul style="list-style-type: none"> ▪ PLM ▪ FBDM ▪ NCP Department of Economic Development, Tourism and Environmental Affairs ▪ DWA
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
<ul style="list-style-type: none"> ▪ Establish a task team consisting of government, community, farming and business stakeholders ▪ Prepare a plan for the upgrading and beautification of the PLM ▪ Undertake the actions as set out in the plan 	<ul style="list-style-type: none"> ▪ Plan preparation: N/A, part of the work of the organs of state ▪ Plan implementation: To be determined by the proposals contained in the plan 	<ul style="list-style-type: none"> ▪ PLM ▪ FBDM ▪ NCP Department of Economic Development, Tourism and Environmental Affairs ▪ DWA

Table 75: SDS 4.2 Implementation Framework: Development of a Tourism Development Strategy for the PLM

SDS 4.2: DEVELOPMENT OF A TOURISM DEVELOPMENT STRATEGY FOR THE PLM		
OBJECTIVES	TARGET GROUPS	LOCATION
<ul style="list-style-type: none"> ▪ To capitalise on the substantial opportunities the PLM offers for tourism in a sustainable way ▪ To develop the tourism industry in the PLM in such a way that it primarily benefits previously disadvantaged groups in the PLM, notably women, youth and persons with disabilities 	<ul style="list-style-type: none"> ▪ All the inhabitants of the PLM ▪ Tourism operators, especially so emerging businesses in the sector ▪ Organised tourism sector in the PLM ▪ Farmers and Farming Associations 	PLM-wide, but with a specific emphasis on the farming areas, hill, and waterways, i.e. rivers and canals
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
<ul style="list-style-type: none"> ▪ A Tourism Development Strategy for the PLM that meets the set criteria ▪ An increase in the number of tourists to the PLM ▪ An increase in the number of tourist establishments in the municipality ▪ An increase in the economic benefits from tourism derived by previously disadvantaged groups in the PLM, notably women, youth and persons with disabilities 	2015-2016	<ul style="list-style-type: none"> ▪ PLM ▪ FBDM ▪ NCP Department of Economic Development, Tourism and Environmental Affairs
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
<ul style="list-style-type: none"> ▪ Draw up a terms of reference for the preparation of the strategy taking into consideration the proposals for tourism development by the FBDM ▪ Publish the ToR and appoint a service provider ▪ Appoint project and steering committee ▪ Service provider undertakes study ▪ Preparation of the Tourism Development Strategy 	R550k	<ul style="list-style-type: none"> ▪ FBDM ▪ NCP Department of Economic Development, Tourism and Environmental Affairs

Table 76: SDS 4.3 Implementation Framework: Establishment of a Tourism Development Office in PLM

SDS 4.3: ESTABLISHMENT OF A TOURISM DEVELOPMENT OFFICE IN THE PLM		
OBJECTIVES	TARGET GROUPS	LOCATION
<ul style="list-style-type: none"> To establish a Tourism Development Office in the PLM that can assist with the planning for, investing in and coordination of the tourism sector in the PLM To ensure that the PLM capitalises on the substantial opportunities the municipality offers for tourism in a sustainable way To assist with the development of the tourism industry in the PLM in such a way that it primarily benefits previously disadvantaged groups in the PLM, notably women, youth and persons with disabilities 	<ul style="list-style-type: none"> The PLM Organised tourism sector in the PLM Tourism operators, especially so emerging businesses in the sector 	The PLM as organisation
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
<ul style="list-style-type: none"> The establishment of a Tourism Development Office in the PLM An increase in the number of tourists to the PLM An increase in the number of tourist establishments in the municipality An increase in the economic benefits from tourism derived by previously disadvantaged groups in the PLM, notably women, youth and persons with disabilities 	Continuous, from 2015 onwards	PLM
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
<ul style="list-style-type: none"> Establish mission, objectives, task description and measurable outcomes of the Tourism Development Office Place advertisement for post in the Office in the media Shortlist candidates, conduct interviews and appoint successful candidate Manage outputs of the Office in accordance with mission, objectives and desired outcomes 	<ul style="list-style-type: none"> Capital budget: R150k in first year, thereafter R40k per annum Operational budget: R780k per annum 	PLM

Table 77: SDS 4.4 Implementation Framework: Eco-Residential estate development

SDS 4.4: ECO-RESIDENTIAL ESTATE DEVELOPMENT		
OBJECTIVES	TARGET GROUPS	LOCATION
<ul style="list-style-type: none"> ▪ To develop housing estates that will draw high-income residents into the area and in doing so, support local businesses, grow the local tax base and assist in ensuring new business development in the area ▪ To ensure local job creation in the development of the estates and the provision of goods and services to those living in the estates 	<ul style="list-style-type: none"> ▪ New residents and businesses in the PLM ▪ Emerging businesses and farmers in the PLM 	The irrigated agricultural areas in the PLM and areas along the Harts River
OUTPUTS	PROJECT TIMEFRAME	RESPONSIBLE AGENCIES
<ul style="list-style-type: none"> ▪ The development of eco-residential estates that are in harmony with the carrying capacity of the area, and that will not result in a loss of agricultural production in the region ▪ Development of existing and establishment of new businesses in the area as a result of the estates ▪ Job creation as a result of the development (construction, servicing and maintenance) of the estates 	2015-2019	<ul style="list-style-type: none"> ▪ PLM ▪ FBDM ▪ DRDLR (NC)
MAJOR ACTIVITIES	BUDGET	SOURCE OF FUNDING
<ul style="list-style-type: none"> ▪ Draw up a ToR for service provider to prepare a Marketing Plan ▪ Publish the ToR and identify and appoint an appropriate service provider ▪ Appoint a project and steering committee ▪ Preparation and roll-out of Marketing Plan ▪ Management of applications for eco-residential estate development in the municipality 	<ul style="list-style-type: none"> ▪ Marketing Plan: R350k ▪ Infrastructure provision and construction: Private sector 	<ul style="list-style-type: none"> ▪ PLM ▪ Private sector: Property developers

8.6 PLM SDF PRIORITY MATRIX

A Priority Matrix (see **Table 78** below) was developed by the DRDLR in order to standardise the prioritisation process undertaken in all the SDF preparation and review processes in the Northern Cape. The matrix makes use of a scoring method which consists of (1) spatial fundamentals for which the PLM SDF uses the SDF Objectives, as outlined below; (2) alignment with the provincial and district SDFs; and (3) benefit to the community. This matrix was used for scoring the seventeen projects included in this SDF (see **Table 80**).

It is proposed that in future all projects and programmes proposed by any organ of state (be it municipal IDP projects, municipal sector department projects, or provincial/national sector department programmes), be put through this matrix, to establish (1) their alignment with the PLM SDF objectives, and (2) their priority for the development of the municipality. Given the legal obligation Chapter 4 of the SPLUMA, which deals with SDFs, places on all organs of state to ensure:

- Integration, coordination and alignment, and the shared pursuit of spatial, economic and social development objectives in the country in all their endeavours, and
- That their development plans, projects and programmes are aligned with provincial, and hence also municipal SDFs, as municipal and provincial SDFs have to be aligned with and be consistent with each other (see Sections 12, 17 and 22 of the Act),

This tool should become a very useful instrument in (1) achieving intergovernmental collaboration, and (2) ensuring legal compliance in terms of the provisions of this Act.

The seven **Spatial Development Objectives** as included in the SDF were used in the matrix, viz:

- Objective 1:** To protect and sustainably manage the limited agricultural land and water resources;
- Objective 2:** To expand the existing Vaalharts Irrigation Scheme;
- Objective 3:** To further develop tourism in the PLM based on the beauty of the natural and agricultural environment;
- Objective 4:** To improve connectivity in the PLM (1) locally in and between settlements, (2) provincially, (3) nationally, and (4) internationally;
- Objective 5:** To revive and expand manufacturing, agro-processing and beneficiation in the PLM;
- Objective 6:** To expand and exploit existing research and training facilities related to agriculture and agri-processing; and
- Objective 7:** To develop sustainable settlements that provide the environment and services needed for its inhabitants to live healthy, dignified and productive lives.

The following scoring method is provided by the DRDLR:

Table 78: Priority Matrix Scoring Method

Low			Medium			High		
Low-Low	Low-Medium	Low-High	Medium-Low	Medium-Medium	Medium-High	High-Low	High-Medium	High-High
1	3	5	6	8	10	11	13	15
	Maintaining status quo			Ensure a moderate improvement			Enable the Municipality to fulfil its mandate	

The DRDLR specifies that (1) points awarded to projects should be justified in terms of the rating per project; and (2) the proposed method of scoring is the Odd-Even-Odd number method, as indicated above.

Table 79: PLM SDF Priority Matrix

Project list			Scoring										Project Timeframe	Responsible Department	Funds		Total Score	Rating
			Spatial Fundamentals							Alignment		Bene- fits to the Commu- -nity						
Prj. Nr.	Project Name	Description	1	2	3	4	5	6	7	NC PSDF	FB DM SDF				Amount/ Project Budget	Source		
SDS 1.1	Expansion Vaalharts Irrigation Expansion Scheme	Expansion of Vaalharts Irrigation Scheme through the more efficient use of water, the building of further reservoirs and the placing of more land under irrigation	10	15	5	1	8	8	6	10	10	15	2015 - 2019	PLM; NCDEDTEA; NCDRDLR; NCDRP	TBD by DWA	DWA; NCDRDLR	88	1
SDS 1.2	Finalise Water rights	To finalise the water-right issue with the aim of ensuring sustainable access to water for agricultural purposes	11	13	6	1	6	6	6	8	8	10	2015 - 2017	PLM; FBDM; DWA; NCDEDTEA	TBD by DWA	DWA; NCDRDLR; NCDEDTEA	75	10
SDS 1.3	Management of Soil Salination	Management of soil salination due to intensive irrigation (connected to expansion of research related to agriculture – see Spatial Development Strategy 2)	15	8	3	1	8	11	3	6	6	10	Cont. from 2015 onwards	DWA; PLM; NCDEDTEA; NCDRDLR	TBD by DWA	DWA; NCDEDTEA	71	11
SDS 1.4	Stop degradation of land on border to North West Province	Prevent encroachment of settlements from across the border with the North West Province, which is threatening valuable agricultural land in the PLM	15	8	5	1	1	1	10	10	8	6	Cont. from 2014 onwards	PLM ; FBDM; NCP; DRSMDM; TLWLM	Finances by various organs of state involved	PLM; FBDM; NCP; DRSMDM; TLWLM	66	13
SDS 2.1	Agricultural Economy and Value-chain study	A study on the agricultural economy and value chains in PLM in order to better understand the local economy and determine what agricultural products will have the most significant local beneficiation opportunities	8	5	3	1	15	11	6	10	13	10	2014 - 2015	PLM; NCDEDTEA; NCDRDLR; DTI; IDC	R1.2 million	IDC; NCDEDTEA;	82	6
SDS 2.2	Restore/ Revive abandoned and unused infrastructure	Revive/Restore/Re-use abandoned and unused infrastructure for agriculture and agri-processing purposes such as the closed railway line, abandoned 'benefaction infrastructure' along the railway line, and the ammunition depot airport	2	6	8	11	15	8	8	8	10	11	2015 - 2017	PLM; NCDEDTEA; PRASA; NCDRDLR; DTI; IDC; NCDPRT; NCDPW	R950k	IDC; NCDEDTEA DTI	87	2
SDS 2.3	Provision of adequate and consistent services	Ensure the availability of adequate and consistent services such as water and electricity to support the development of agriculture and agri-processing industries	1	6	6	1	10	6	10	10	10	10	2015 - 2016	PLM; FBDM; ESCOM; DWA;	R2.8 million	PLM; FBDM; ESCOM; DWA; Sedibeng water	70	12

SDS 2.4	Development of agriculture and agri-processing research and product development facilities	Development of an Agriculture and Agri-processing Research and Product Development facilities linked to the current research facilities/initiatives in PLM, the proposed university in Kimberley, and national and international research institutions	11	8	8	3	10	15	6	10	8	8	Cont. from 2014 onwards	PLM; FBDM; ARC; Researchers; NCDARD; NCDRDLR; DWA	NA	Organs of state Researchers and other institutions provide own funds	86	3
SDS 3.1	Upgrade local transport routes in settlements	Upgrade the road system inside the settlements of PLM in order to facilitate connectivity to the wider environment and improve the access to ambulances and emergency vehicles	1	5	10	15	6	6	13	8	10	11	2015 - 2019	PLM; FBDM; NCDPRT; NCDPW	Plan Prep: R1.2 million; Plan Impl: TBD	NCDPRT; NCDPW	85	4
SDS 3.2	Public Transport Plan	Development of a Public Transport Plan informed by the proposed FBDM 'Study on Public Transport Facilities in Rural and Urban Settlements'.	1	1	6	13	11	6	13	6	11	11	2015 - 2017	PLM; FBDM; NCDPRT; NCDPW	Plan Prep: R850k; Plan Impl: TBD	NCDPRT; NCDPW	79	8
SDS 3.3	Hartswater and Jan Kempdorp Nodal development	Development of Hartswater as an Agri-processing Node and Jan Kempdorp as a Manufacturing, Storage and Transport Node	8	5	5	6	13	8	8	10	11	11	2015 - 2018	PLM; FBDM; NCDETEA; PRASA; DTI; IDC; NCDPRT; NCDPW	Plan Prep: NA; Plan Impl: TBD	IDC; DTI; NCDPRT; NCDPW	83	5
SDS 3.4	Hartswater, Jan Kempdorp and Pampierstad Urban Design Frameworks	Development of detailed Urban Design Frameworks for Hartswater, Pampierstad and Jan Kempdorp (making use of Neighbourhood Development Nodes)	8	1	10	6	6	5	15	10	11	15	2015 - 2016	PLM; FBDM; NCDRDLR	Plan Prep: R900k; Plan Impl: TBD	PLM; FBDM; NCDRDLR	87	2
SDS 3.5	Development of Neighbourhood Nodes	Develop guidelines and institutional agreements that will ensure the development of neighbourhood nodes	8	1	6	3	3	3	15	11	11	15	2016 - 2018	PLM; FBDM; NCDRDLR	Plan Prep: R300k; Plan Impl: TBD	PLM; FBDM; NCDRDLR	76	9
SDS 3.6	FETs and Research Centres	Building and staffing of FETs and research centres (linked to SDS 2.4)	6	5	3	1	10	15	10	10	10	11	Cont. from 2014 onwards	PLM; FBDM; DET; DHE; NRF; Universities	Plan Prep: NA; Plan Impl: TBD	DHE; NRF; DTI; IDC	81	7
SDS 4.1	Upgrading and beautification of PLM	Upgrade and beautify the PLM in order to improve the living conditions of the residents of Pampierstad, Valspan and Ganspan as well as attract more tourists to the municipality	3	1	13	1	5	3	10	6	8	11	2015 – 2018	PLM; FBDM; NCDETEA; DWA	Plan Prep: NA; Plan Impl: TBD	PLM; FBDM; NCDETEA; DWA	61	14
SDS 4.2	Tourism Development Strategy	Development of a Tourism Development Strategy for PLM which is to be aligned with the proposed FBDM Tourism Development Plan (FBDM SDF 2014)	11	1	15	1	6	6	6	8	8	8	2015 - 2016	PLM; FBDM; NCDETEA	R550k	FBDM; NCDETEA	70	12
SDS 4.3	Tourism Development Office	Establishment of a Tourism Development Office in PLM where the local population can receive information and assistance on or with the development of tourism in PLM	8	1	15	3	8	5	5	6	10	10	Cont. from 2015 onwards	PLM	Capital budget: R150k in 1 st year; afterwards	PLM	71	11

															R40k/annum; Operational budget: R780k/annum			
SDS 4.4	Eco-residential estate development	Development of housing estates that will draw high-income residents into the area and in doing so, support local businesses, grow the local tax base and assist in ensuring new business development in the area	5	8	15	3	8	6	10	10	8	8	2015 - 2019	PLM; FBDM; NCDRLR	Marketing Plan: R350k; Infrastructure provision & construction: Private sector	PLM; Private sector: Property developers	81	7

It is proposed that the municipal official/s responsible for the PLM SDF enter into engagements with the relevant provincial sector departments to (1) popularise the SDF, and (2) ensure that all future public and private infrastructure investment, development spending and property development and redevelopment is done within the spatial framework as provided.

It is proposed that the PLM establish a Phokwane Spatial Development Committee, consisting of (1) relevant officials and councillors, (2) FBDM officials, (3) officials from relevant provincial departments, and (4) civil society representatives, to:

- Discuss spatial development issues in the Phokwane municipal area;
- Discuss the implementation of the PLM SDF;
- Discuss challenges with the PLM SDF, and in ensuring compliance with its provisions; and
- Identify novel ways by which the implementation of, and adherence to the PLM SDF can be enhanced.

8.7 MONITORING AND REVIEW

It is the duty of the PLM and specifically so, those officials tasked with this duty, to do everything in their power to (1) pursue progress with the implementation of the framework, and (2) ensure that all land development

and land use takes place within the parameters as set. In this, they should be well supported by the proposed Phokwane Spatial Development Committee.

Given that the PLM Municipal Council has adopted this SDF, it is also the duty of the Council to (1) monitor progress with its implementation, and (2) take the necessary steps to address lack of progress in this regard. A process of regular reporting on 'the implementation of and adherence to the PLM SDF' to Council, preferably more than once a year, should also be established to ensure that Council is fully aware of the situation on the ground, and can deliberate and take the necessary remedial steps.

Just like any other plan, framework or strategy, an SDF also becomes out-dated as time passes and needs to be reviewed. The current legal framework provides for SDFs to be reviewed and updated on a five-year cycle. It is hence proposed that such a review is planned for (in terms of finances, time and human resources) well in advance of its 'due date' in 2019.