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CAPE WINELANDS DISTRICT
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Cape Winelands District Spatial Development Framework

2009/2010



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1. Executive summary

The Cape Winelands district is situated next to the Cape Metropolitan area and encloses 22 309 km². It is a landlocked area in-between the West Coast and Overberg coastal regions. The district includes five local municipalities, namely Drakenstein, Stellenbosch, Witzenberg, Breede Valley and Langeberg (formally known as Breede River / Winelands) and a District Management Area.

The area is one of the “pearls” of South Africa’s rural and small-town sub-regions, but disparate with a relatively high and diverse level of development.

Purpose

The purpose of the Cape Winelands District Spatial Development Framework (CWDSDF) is to lay down a ‘set of guidelines’ to:

- Interpret and apply higher-order spatial policy within the Cape Winelands district
- Guide regional and local policy interventions
- Act as a strategic forward-planning tool to guide planning and decisions on land use and land development
- Consider a spatial rationale to the development vision of the district that is clear enough to allow decision-makers to deal with unanticipated/unplanned situations
- Develop a spatial logic that guides public and private-sector investment
- Ensure the social, economic, built and environmental sustainability of the area
- Formulate proposals to redress the spatial legacy of apartheid, and
- Propose (spatial) indicators to measure outcome.

Planning requirement

Section 26 of the Local Government Municipal Systems Act, 2000 (Act 32 of 2000) stipulates that every municipality must prepare a Spatial Development Framework (SDF) as core component of its **Integrated Development Plan**. Even so, spatial planning is still regarded by decision-makers as of lesser importance owing to probably the cobweb-like, uncertain and “unproductive” nature of planning legislation. Notwithstanding this, the Cape Winelands District Municipality (CWDM) advocates that the framework, once approved in terms of Act 32, be used by all as a directive with a legally-binding effect on certain decisions.

The approval of a credible CWDSDF by the Provincial Government Western Cape (PGWC), in terms of the Land Use Planning Ordinance, 1985 (Ordinance 15 of 1985), would imply even wider influence. Such approval will, inter alia, facilitate more rapid consultation and approval processes regarding land-use management and NEMA-related legislation and processes.

Strategic context

The CWDSDF conforms to, inter alia, the provincially-endorsed bioregional planning **principles**, but adds the principles of consistency and vertical equity. The latter assumes that the disadvantaged should be favoured above more advantaged people and refers to the distribution of impacts (who receives benefits or bears costs). This is particularly relevant in the provision of housing and infrastructure and implementation of land reform.

Strong emphasis is placed on cohesiveness and the democratization of spatial planning. Hence, one planning imperative is to counter-balance the compartmentalisation of the so-called pillars of **sustainable development**, viz. economic, social and environmental. This invariably amplifies the implementation of the **bioregional planning** approach with which, we believe, only moderate outcomes have been achieved. We

also believe that areas of bioregional homogeneity should not be broken up between different planning initiatives. However, the mismatch between (existing) statutory administrative boundaries and the domains people regard as their home territory, as well as ecosystem boundaries, is synonymous with heterogeneity. In this regard we identified the need for reconsidering the existing municipal boundary alignment at identified 'hot spots', viz. Faure, Klipmuts, the Dwarsrivier Valley (Franschhoek area) and the area in Drakenstein Municipality to the north of Wellington. At a more macro scale, this planning predicament required homogeneous planning areas to be determined and used. Pragmatically, we demarcated three planning clusters. This is based on the footprint of the four catchment areas covering the district. In line with this approach, geographic differentiation of strategies is achieved through spatial referencing. This is best illustrated by the decision tool — developed to assist in land use management — that, on a line graph, place land use, by type, according to cluster-specific preference.

It is proposed that efforts to “improve, strengthen or restructure” the **local development process** have to focus on the spatial, racial and social-class spread of development and the safeguarding of sustainability — rather than the “creation” of new growth sectors, nodes or initiatives. In support of this development approach, the CWDSDF **objectives** centre on a principle-led response, collective recognition, functional efficacy and integrated planning.

On a macro (district) scale, the rationale behind any **spatial argument** is underpinned by the closeness to the Cape Metropolitan area and the Breede River Valley as the possible primary linear settlement able to absorb much of the Province's population growth in the near future. We believe that the latter should be subject to an investment focus on Worcester as the only major service centre in the easterly district — includes the Breede Valley, Witzenberg and Langeberg municipal areas.

Probably the two most important outcomes of this spatial intervention are, firstly, the introduction of (basic) **spatial indicators** to measure, over time, the ability of long-term comprehensive planning meeting its

objectives. Secondly, we developed a user-friendly **decision tool** to assist in decision taking regarding the appropriate use of land.

The space economy and spatial challenges

Over the past decade(s), **Stellenbosch** has seen growth in a number of economic sectors, e.g. higher education and research, agriculture and agri-processing, tourism, corporate headquarters and business services. In this area the challenge is to watch carefully how growth impacts on the environment, on transport capacity, on its “urban edge” and on the competition between different land uses.

In sharp contrast to Stellenbosch, industry is the largest sector of the Paarl / Wellington economy (**Drakenstein Municipality**), with agriculture a strong second and transport (services) another significant sector. Notwithstanding dampening factors on the economy, such as the impact of the global recession on local industries, the current sector structure of this urban area should be viewed in a positive light. The town of Worcester fulfils a multiple role in the **Breede Valley** municipal area, with the smaller places along the N1 corridor either directly linked to the transport sector or agricultural activities in the more immediate vicinity. The challenge in these smaller towns is to ensure improvement of service delivery to existing enterprises and households, in order to prevent them from moving elsewhere even faster or running into a profitability crisis.

The challenge in the **Witzenberg** municipal area is to be aware of the need for the reconciliation between a stagnant, if not declining population and the need and demand for improved residential infrastructure facilities, in the context of a decreasing local revenue base. For the **Langeberg** municipal area, it is projected that the current population will be maintained, notwithstanding normal rural-urban migration and the rationalisation of agriculture and industry. Here, it is important to be aware of the opportunities arising out of the complementarity of economic growth sectors.

Development imperatives

Mapping out expected or feasible developments in the **district's space economy** needs to consider the following critical factors:

- Population growth in the different municipalities
- The changing economic base and sector structure of the towns and hamlets
- Longer-run evolution of town centres (in the light of changing retail patterns)
- Diversification, consolidation and racial integration of urban areas inside and between the towns and smaller settlements
- Land-use changes and land-reform opportunities inside and around the settlement areas and the respective urban edges
- Expected rural-area development patterns in the different local municipal areas and around the towns
- The impact of water-supply limitations (accelerated by longer-run climate change) and of new energy sources on evolving local economic activities
- Housing supply and demand trends and how these fit in with spatial development guidelines
- Existing structural deficiencies within all urban and rural configurations
- Strengthening of existing development corridors (e.g. Mbekweni / Paarl / Wellington), and
- Facilitation of growth opportunities along transport corridors (e.g. along the N1 — Paarl / Klapmuts / Cape Town)

Spatial profile and guidelines

The average annual **population growth** between 2001 and 2007 for the Cape Winelands district is estimated to be 2,1%, which is well above the national average. This growth is, however, not evenly shared between the five local municipalities. The municipal areas of Stellenbosch and Drakenstein, will, by 2015, have a significantly larger joint share,

viz. 65% of the district population than the current 59%. It is important that the CWDM begin planning now for a more diverse and needs-intensive population. We anticipate that it will become increasingly difficult for all municipalities to sustain even current service levels as their **capital budgets**, except for Drakenstein, indicate a general downward trajectory for the following two budget periods.

There is also, as expected, a huge difference between the budget totals of the three more rural municipalities compared with the two urbanised municipalities. The **per capita municipal spending** in the Stellenbosch and Drakenstein municipalities is above R1 300 compared to the Breede Valley municipality's R731.

It is not surprising that the majority, i.e. 77%, of **building activity** — a critical source of local government revenue — that occurred within the district, was completed within the Stellenbosch and Drakenstein municipalities. These two municipalities accounted for 81% of the total square meterage for residential space and almost 70% of industrial space. However, they are also home to 60% of all informal dwellings in the district and 18 of the 27 **informal settlements**, with a high vulnerability index. The fact is that some of the higher-order towns, i.e. Stellenbosch and Paarl, have sizeable numbers of unemployed people.

It is expected that the district will probably combine relatively higher **economic growth rates**, in Stellenbosch / Paarl (5 – 6%), with slower growth in the rural areas (3 - 4%), where the population is stagnant if not declining. These growth expectations will compound the ability of Government to effectively provide services and ensure sustainable development. Current **infrastructure backlogs** indicate no residual capacity to meet future demand. Particularly severe is the lack of suitable solid waste disposal sites. In this regard, the CWDSDF included a positive/negative mapping study to determine the most suitable locations for solid waste disposal sites within the district. We propose the regionalisation of landfill and priority spending on infrastructure backlogs in higher order towns. The provision of **basic (infrastructure) services** in all towns must be a Government priority.

For structural reasons, we believe that there will not be a drastic surge in demand over the short to medium term for **office, retail and industrial space**. The demand for new (formal) **residential space** — excluding current backlogs and in-migration — is estimated to average roughly 63.000 m² or 300 units p.a. for the next 6-year period. This is well below the previous 6-year (2003-2008) average, which is to be expected, given the phase we expect the house-price cycle to be in. This demand for space will in all probability be satisfied within delineated medium-term urban edges.

We, however, believe that by enforcing spatial containment through **urban edges** — as an urban management tool — the urban morphology will not be changed for the better, at least not in those towns with little or no building activity, huge housing and infrastructure backlogs and high unemployment. Specifically in lower-order towns one should also consider the town's (socio) economic growth goal. As it is a challenge to reconcile these two sets of goals, which in the case of smaller settlements may easily be in conflict with each other, we propose that an urban edge only be delineated for higher, first and second order towns. Even so, the implementation of an urban edge should be informed by local development dynamics and thresholds — emphasising the importance of more localised planning. To this end we developed an urban edge model to assist in determining the relative desirability of a land parcel as part of the urban area.

The average gross **residential density** for all the towns is a rather 'low' 7,7 dwelling units per hectare. This spatial pattern typifies the apartheid town structure, with the highest densities in the outlying residential areas, viz. townships. As we know, the residential differentiation between neighbourhoods was based on race rather than planning theory. This legacy of **urban inefficiency** is still portrayed by, amongst others, mean distances between urban functional areas, strategically located unused vacant or underutilised land, centralised economic opportunities and small standard deviation in house prices per neighbourhood. Hence, we propose, contrary to the blanket approach to densification, that each

municipality develops own density targets, considering, inter alia, expected population growth/decline.

The CWDSDF includes a number of strategies to facilitate **integrated human settlements**, with none more important than ensuring informed decision-making and investment through essential and tailor-made structures, systems and processes. We designed a number of strategies and actions to address **urban management challenges**, e.g. urban restructuring, urban edge delineation, densification and land conversion.

We used the provincial **hierarchical order of towns**, but adjusted the district's ranking slightly. However, still in line with the provincial classification, we proposed that the bulk of government resources be invested in the Stellenbosch and Drakenstein municipal areas (excluding the area north of Wellington) and the town of Worcester. This classification and growth indicators, e.g. building activity, informed proposals regarding the identification of priority areas for the provision of **housing**. These priority areas are higher, first- and second-order towns and high-risk informal settlements. We propose that the provision of housing should be demand-driven and supply-negotiated. Mass-scale developments are to be considered (only) in higher order towns, whereas small-scale developments are appropriate in first- and second-order towns. We believe that decisions on housing delivery must also protect community heritage and values.

The potential role of the CWDM in addressing **socio-economic challenges**, in line with the other levels of government, should not be underrated. As an example, and according to the principle of vertical equity and supporting black economic empowerment, pragmatism and flexibility is needed in the application of zoning regulations. This is in line with our belief that up-to-date land use management systems (LUMS) must accommodate measures that strengthen (local) economic growth momentum.

We proposed a number of interventions to ensure better performance on the three functions of a **biosphere reserve**. These include the alignment of existing land use management guidelines with bioregional planning principles. We also recommend a feasibility study for a second biosphere reserve in the district, viz. in the upper Breede River Valley region.

In the **rural context**, it is necessary to deal specifically with natural-resource-management issues, land-rights issues and tenure arrangements, land capability, subdivision and consolidation of farms and the protection of prime agricultural land. Rural activities are dependent on the domicile natural resources. These resources determine the intensity of land use, which increases exponentially towards the more moderate climates in the western part of the district. This spatial composition actually increases the vulnerability of the district's rural areas with regard to current transformations (economic, climate and land), relative to its urban areas. In addition, the present arrangement of service delivery and infrastructure in these areas is below an acceptable standard which compounds the dire need for appropriate government intervention. But this is probably only possible in partnership with non-governmental role-players. We believe that increased **mobility** will create opportunities for, especially, rural communities and propose that the ability to commute between higher order and lower order towns be strengthened.

We used **spatial planning categories** (SPCs) to determine the inherent land-use suitability of different landscapes. It is important to note that the provincial guidelines provided the benchmark for this (high-level) assessment. By using the decision tool, it will now be possible to differentiate between land-use suitability by SPC by homogeneous area. Furthermore, conserving biodiversity and maintaining ecosystem functioning through SPCs is important, as well as the social and economic value of landscapes. We propose that spatial planning categories be mapped at the smallest scale possible.

Limited progress has been made with **land reform**. We propose 'supply-driven' land reform, where land is pro-actively identified, e.g. in

the Elsenburg area and around towns. The use of the decision tool will support land reform, as a land-use, in areas where, under 'normal' circumstances, it probably would not have been allowed.

The Cape Winelands district holds sufficient **water resources** to maintain sustainable delivery for growth and development. This is, however, dependent on the ability to increase storage capacity, the future agricultural consumption and requirements of the Cape Metropolitan area. We foresee increased competition for these water resources as a result of **climate change**. The competition for water resources would bring developed areas in direct conflict with natural systems, such as rivers and other wetlands, through water extraction. To protect wetlands effectively, the ecological reserve needs to be maintained.

In the context of **biodiversity conservation**, our selection of strategies and actions was influenced by critical concerns regarding the following:

- Degradation of freshwater ecosystems
- Absence of any protected status for these ecosystems
- Intense development pressure on many vegetation types
- Poor water quality, and
- Absence of adequate buffers to protect core areas, larger conservation areas and critical biodiversity areas.

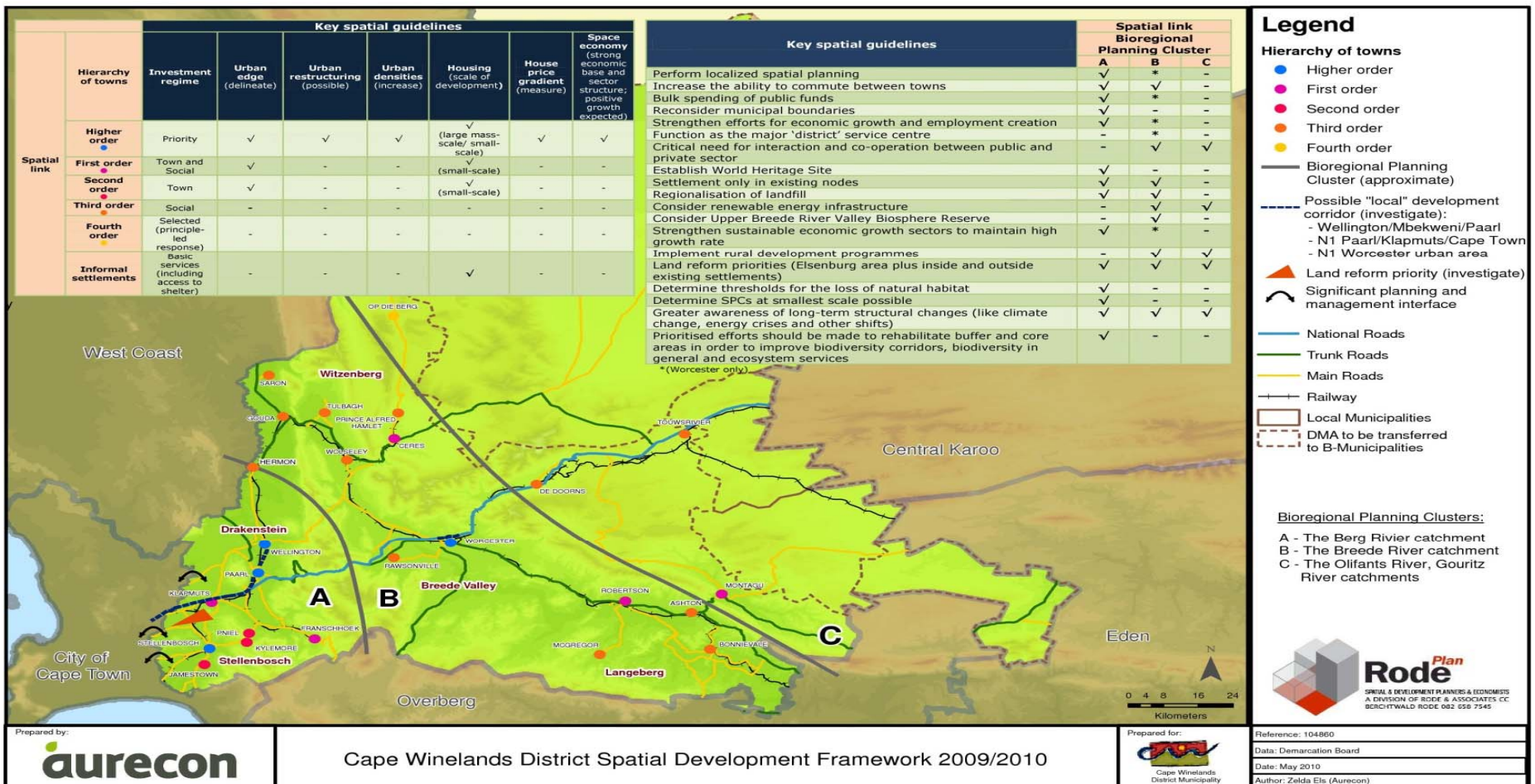
Implementation

We proposed **implementation guidelines** based on a co-ordinated approach that includes the following directives:

- Unbiased approval: the CWDSDF is "unconditionally" endorsed and applied by all spheres of government
- High-impact conversation: involve the right people at the right time regarding the right elements
- Political tolerance: acceptance of sometimes prolonged outcomes-based timeframes

- Champion: institutionalise responsibility and accountability with a particular authority
- Change management: where systems, structures and tools must be re-evaluated, and
- Monitoring: the monitoring of outcomes through the tracking of indicators.

This approach should include the public and private sectors.



2. Abbreviations

ABP:	Area Based Plan
AR:	Asset Register
BEBS:	Breede River Basin Study
BEE:	Black economic empowerment
BNG:	Breaking New Ground
CAPEX:	Capital expenditure
CBA:	Critical Biodiversity Area
CRDP:	Comprehensive Rural Development Programme
CWDM:	Cape Winelands District Municipality
CWDSDF:	Cape Winelands District Spatial Development Framework, 2009/2010
CWIDP:	Cape Winelands Integrated Development Plan, 2009/2010
DPSIR:	Driving force, pressures, state, impacts, response reporting framework
DSR:	Driving force, state indicators, response indicators reporting framework
DWAF:	Department of Water Affairs and Forestry
EIA:	Environmental Impact Assessment
EMF:	Environmental Management Framework
ESA:	Ecological Support Area
GDP:	Gross Domestic Product
GDS:	Growth and Development Strategy
GVA:	Gross Value Added
HAD:	Housing Development Agency
HWC:	Heritage Western Cape
HIA:	Heritage Impact Assessment
IDP:	Integrated Development Plan
IGR:	Integrated Governmental Relations
IHSS:	Integrated Human Settlement Strategy
ITP:	Integrated Transport Plan
LASS:	Land Acquisition for Sustainable Settlement

LED:	Local Economic Development
LRAD:	Land Redistribution Agriculture Development
LUM:	Land-use management
LUMS:	Land use management system
LUPO:	Land Use Planning Ordinance, 1985 (Ord. 15 of 1985)
MHI:	Major hazardous installations
MIG:	Municipal Infrastructure Grant
MRF:	Materials Recovery Facility
NGO:	Non Governmental Organisation
NSDP:	National Spatial Development Perspective
PGWC:	Provincial Government Western Cape
PSDF:	Provincial Spatial Development Framework
SAHRA:	South African Heritage Resource Agency
SEA:	Strategic Environmental Assessment
SG:	Spatial guideline
SD link:	Sustainable development link
SDP:	Spatial Development Plan
SPC:	Spatial Planning Category
SPLAG:	Settlement Production Land Acquisition Grant
Stats SA:	Statistics South Africa
UNESCO:	United Nations Educational, Scientific and Cultural Organization
WCSHSS:	Western Cape Sustainable Human Settlement Strategy
WC/DM:	Water conservation and demand management)
WHS:	World Heritage Site
WMA:	Water Management Areas
WSDP:	Water Services Development Plan
WWTW:	Waste Water Treatment Works

3. Introduction

3.1 Spatial orientation

The Cape Winelands district is situated next to the Cape Metropolitan area and encloses 22 309.47 km². It is a landlocked area in-between the West Coast and Overberg coastal regions (see **Map 1**).

Map 1: Cape Winelands district (DC2)

The district includes five local municipalities, namely Drakenstein, Stellenbosch, Witzenberg, Breede Valley and Langeberg (formally known as Breede River/Winelands) and a District Management Area; the admini-

stration of the latter area is to be apportioned, according to locality, between four local municipalities (of which one is located in the Overberg district).

3.2 Requirement for the framework

Section 26 of the Local Government Municipal Systems Act, 2000 (Act 32 of 2000) stipulates that every municipality must prepare a Spatial Development Framework (SDF) as core component of its Integrated Development Plan. In response, the Cape Winelands District Municipality (CWDM) commissioned Rode & Associates in January 2009, to draft the **Cape Winelands District Spatial Development Framework** (CWDSDF). The informed scale of this planning intervention (see **Map 1**) is determined by political jurisdictions and is known as the Cape Winelands District Municipality (DC2).

Figure 1 is a graphic illustration of the scale-informed planning hierarchy within which the CWDSDF is prepared. The CWDSDF is a specific **scale-informed interlocking spatial planning framework**¹ within a planning system.

Figure 1: Scale-informed planning hierarchy

¹ A framework with a specific geographic representation but of intermediate nature in application i.e. between provincial and local plans/frameworks.

According to the PGWC² all SDFs must be credible and aligned with all national, provincial and municipal policies and guidelines. The CWDSDF is first and foremost a district (spatial) policy document approved by the Cape Winelands District Municipality in terms of the Local Government Municipal Systems Act, 2000 (Act 32 of 2000)³ as a core component of the Cape Winelands Integrated Development Plan (CWIDP). Apart from this approval the 'credible' SDF can also be approved in terms of the Land Use Planning Ordinance, 1985 (Ordinance 15 of 1985) – subject to approval by the PGWC of the process and content of the relevant SDF.⁴ The latter approval will facilitate more rapid consultation and approval processes regarding land use management; especially as far as NEMA related legislation and processes are concerned.⁵

The CWDSDF does not substitute any current legislative planning policy other than the incumbent Cape Winelands Spatial Development Framework that was completed in 2006.

3.3 Project deliverables

The CWDSDF consists of three deliverables namely:

- Spatial and Development Index
- Situational Analysis, and
- Spatial Development Framework,

of which the aggregate must direct future spatial interventions, within the Cape Winelands district, as a result of growth, development and policy.

Table 1: Dates of deliverables provided to CWDM

Product	Date of delivery
Spatial and Development Index	May 2009
Situational Analysis	October 2009
CWDSDF (draft)	March 2010
CWDSDF	June 2010

The Spatial and Development Index lists existing policies and articulated principles, goals, objectives and strategies (and in some cases provides data/information) associated with the management of growth and development in the district; whereas the Situational Analysis represents the factual information and the analytic base for the formulation of spatial guidelines. The Situational Analysis also 'sets the scene' as it:

- Determines common spatial language
- Describes the formulation process and methodology
- Spells out the planning intention, -statement and -context
- Describes the conceptual approach
- Articulate the challenges (problem statement)
- Refers to relevant policy directives
- Defines the spatial argument, and
- Refers to spatial indicators.

The Cape Winelands District Spatial Development Framework, as final deliverable, includes the proposed spatial guidelines, an executive summary, policy statements and an indicator tool. The spatial guidelines were created by using the Spatial and Development Index to prepare a synopsis of current policy (see **Chapter 6**) and considering the Situational Analysis as primary informant for possible reassessment and realignment of existing policy and formulating spatial guidelines.

The indicator tool is to assist in decision-making regarding land use management and was considered as important in that the CWDSDF does not include a Land Use Management System.

² PGWC, Department of Environmental Affairs and Development Planning, Circular 14/2009, December 2009.

³ *ibid.*

⁴ *ibid.*

⁵ *ibid.*

The three deliverables must be read as a collective.

The intention with this up-to-date Spatial Development Framework is to not disregard or discredit existing policy, but to add value through reassessment, realignment and considering “new” data, information and realities and econometric modelling.

It is important to note that the process to formulate this planning framework, all-in-all an 18-month period, was reiterative owing to transformation of particularly the social, economic and political elements requiring additional analysis and “policy yield” from other concurrent policy-formulation processes. A number of “disconnected” processes are conducted by various authorities to formulate “issue-specific” policy on aspects **interrelated with the output of the CWDSDF** e.g. District Integrated Transport Plan, District Integrated Human Settlement Strategy.

3.4 Purpose of the framework

The role of a district municipality is to achieve the integrated, sustainable, and equitable social and economic development of their area as a whole by:

- Ensuring integrated development planning for the district as a whole
- Promoting bulk infrastructural development and services for the district as a whole
- Building the capacity of local municipalities in the area to perform their functions and exercise their powers where such capacity is lacking, and
- Promoting the equitable distribution of resources between the local municipalities in the area to ensure appropriate levels of municipal services within the area.

The present state of inter-governmental relations, however, does create a challenge regarding “integrated development planning for the district as a whole”. Such relations are supposed to be guided by the Section 27

framework⁶ that includes guidelines for the formulation of a Spatial Development Framework. The incumbent Cape Winelands District Integrated Development Plan should, furthermore provide the common framework for (public and private) investment within the district as it represents the “single, inclusive and strategic plan for the development of the municipality”.⁷ This plan must be the principal directive for growth and development and primary source of information to be used in drafting (any) policy.⁸ There is, however, still a chasm between the planning and implementation of programmes and projects by role-players, especially national departments and municipalities, e.g. poverty alleviation interventions⁹ by national departments in the Witzenberg municipal area.

Evenly so, the functional field regarding spatial planning, land use management and land development is somewhat cobweb-like, uncertain and “unproductive”. The latter owing to the (in)ability of long-term comprehensive planning to meet its objectives and the former owing to:

- Inconclusiveness regarding the legal status of national and provincial policy (also referred to as policy haziness regarding government functions¹⁰)
- The multitude of legislative requirements and
- The lack of coherence between role-players

This inevitably leads to the current ignorance by decision makers of the multi-level and cross-sectoral character and general importance of spatial planning. In the process the interconnectivity and dependency between spatial planning and land use management is negated and strongly influenced by nonspatial legislation e.g. National Environmental

⁶ Local Government Municipal Systems Act, 2000 (Act 32 of 2000).

⁷ Local Government Municipal Systems Act, 2000 (Act 32 of 2000), Section 25(1).

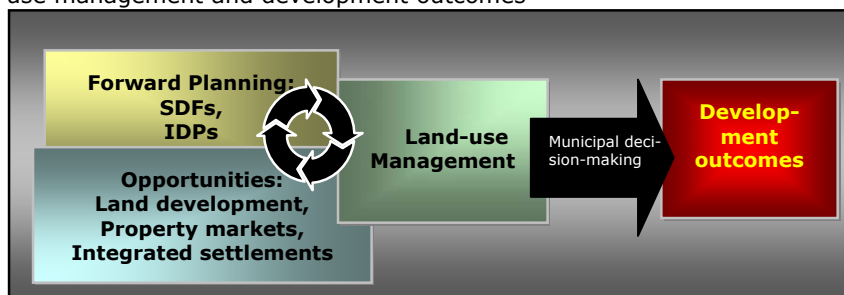
⁸ National Spatial Development Perspective, 2005.

⁹ The Presidency and the Department of Water Affairs and Forestry programmes: “Harvesting for rainwater” and “War on poverty”.

¹⁰ PGWC, SDF Guideline Manual, April 2009.

Management Act. The issue at hand is the degree to which, if at all, existing spatial policy influences decision-making.

Figure 2: The “book-end” relationship between spatial planning, land-use management and development outcomes



Notwithstanding clear (national, provincial, **district** and local) spatial objectives public investment programmes and service delivery, in general, remain disjointed with stated (political and developmental) intentions e.g. **low-cost housing is still being built on the outskirts of towns as in Zolani (Ashton)**. The CWDSDF should address these challenges.

In this context, the recently published guidelines for rural land use planning and management by the PGWC¹¹ does aim to foster, amongst others, coherence between municipalities, alignment of ‘own’ plans with plans prepared by other institutions and uniformity in how municipalities manage the pressures for rural land use change. For urban growth and development, the PSDF gives guidance with a further two supplementary “manuals” regarding inclusionary housing and settlement restructuring recently published for comment.

The PSDF clearly outlines the role of a district SDF as of a more coordinating nature than prescriptive.

In response the CWDSDF must place emphasis on strategic issues affecting spatial planning, land use management and land development in the municipal area that includes:

- Conforming to higher-order spatial policy and providing guidance to (local) spatial interventions
- Facilitating better performance by the state and broadening the economic base
- Promoting sustainable development through, *inter alia*:
 - Provision of infrastructure
 - Socio-economic development
 - Mainstreaming biodiversity, and
 - Integrated human settlements
- Considering the above through spatial planning concepts such as land use, urban ranking, urban edges, corridors and nodes.

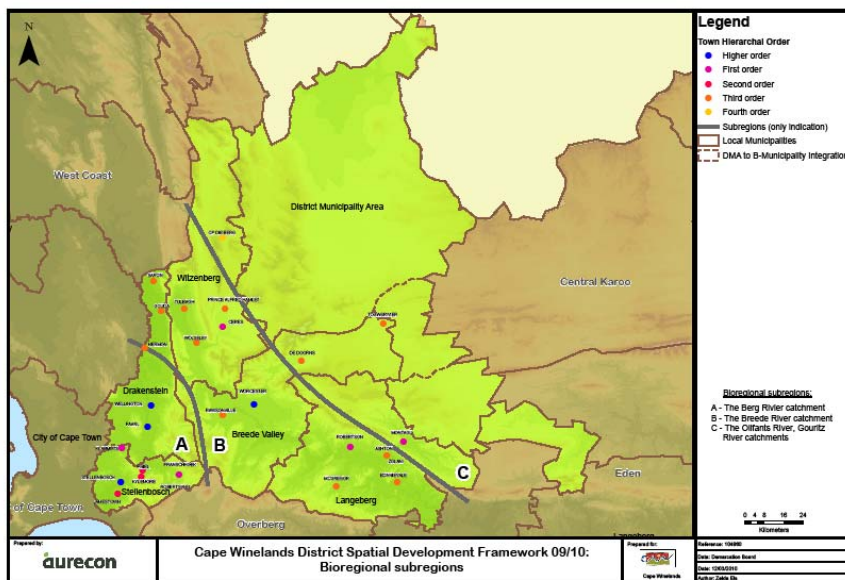
As an imperative for being instrumental in fostering (more) efficient government policy, any ‘**reconstructive’ spatial planning paradigm** must be sensitive towards the built, social, political, economic and environmental elements that underpin present-day society. Hence, it is highly unlikely that any planning paradigm can be universally implemented throughout the Cape Winelands district due to immense disparities between areas. This planning approach corresponds with **bioregional planning**¹² of which the building blocks (read: bioregions) are areas of bioregional homogeneity and should not be broken up between different planning initiatives. Consequently, it was imperative to determine planning areas (read: clusters and/or bioregional subregions) within the Cape Winelands district.

¹¹ Western Cape Provincial Spatial Development Framework, Rural Land Use Planning and Management Guidelines, May 2009.

¹² PGWC, Department of Environmental Affairs and Development Planning, Circular 14/2009, December 2009.

The intention is to develop a **set of spatial guidelines** that differentiate between these planning clusters; of which the boundaries do not coincide with the administrative boundaries of local municipalities (see **Map 2**). Hence, an imperative for future planning (note: not only spatial) should be to differentiate even further between “heterogeneous” areas **within a particular B Municipality** and to disaggregate the ‘set of guidelines’ for more localised interpretation and application. Also relevant is the existence of homogeneous areas within different administrative jurisdictions that further emphasise the need for more localised planning and decision-making.

Map 2: The planning clusters as bioregional subregions



The purpose of the CWDSDF is developing a ‘set of guidelines’ to:

- Interpret and apply higher-order spatial policy within the Cape Winelands district
- Guide regional and local policy interventions
- Act as a strategic forward-planning tool to guide planning and decisions on land use and land development
- Consider a spatial rationale to the development vision of the district that is clear enough to allow decision-makers to deal with unanticipated/unplanned situations
- Develop a spatial logic that guides public and private sector investment
- Ensure the social, economic, built and environmental sustainability of the area
- Formulate proposals to redress the spatial legacy of *apartheid*, and
- Propose (spatial) indicators to measure outcome

This then qualifies the CWDSDF to be a proposal of spatial guidelines to take effect within the district in order to direct future (spatial) interventions as a result of growth, development and policy and to reduce developmental disparities.

The CWDSDF establishes the geographic context of the development process regarding the form, structure and location of future development and evolving socio-economic, environmental and heritage/cultural landscapes. This geographic context also includes traversing the district boundaries with many programmes and projects (e.g. the ‘functional’ interface with the Cape Metropolitan area) impacting beyond the immediate ‘implementation’ area.

The CWDSDF must also operationalize sustainable development but not as it is often described as consisting of three pillars “economy”, “envi-

ronment” and “society” but as consisting of four dimensions¹³ – the social, economic, environmental and institutional – with critical interlinkages of which targets and indicators should not fail to give information on the character and effect of these linkages (see **Chapter 6**).

It is important to not create another layer of authorisation with the approval of the CWDSDF, but to direct spatial interventions (public and private investment) at local level through well-informed guidelines (see **Chapter 7**) within a common development agenda – the latter portrayed in municipal IDPs.

3.5 Timescale for review

It is recommended that the CWDSDF be reviewed every five years as a core component of the district Integrated Development Plan. Notwithstanding the longer ‘shelf-life’ of spatial guidelines, it is important for ongoing evaluation of the guidelines in the context of changed policy (viz. the to-be-formulated national vision), needs and/or circumstances.

This review must be informed by measuring (spatial) indicators – through a DPSIR (driving force, pressures, state, impacts, response) reporting framework¹⁴ or the DSR (driving force, state indicators, response indicators) framework¹⁵ – to simplify, clarify and make aggregate information available about progress on attainment of (spatial) policy objectives.

¹³ Spangenberg, J. Valentin, A Guide to community sustainability indicators, Environmental Assessment Review, 20 (2000), p. 381-392.

¹⁴ Provincial Government Western Cape, State of the Environment Report, 2005.

¹⁵ Commission on Sustainable Development of the United Nations, Indicators for sustainable development, International Conference, Bremerhaven, 2000.

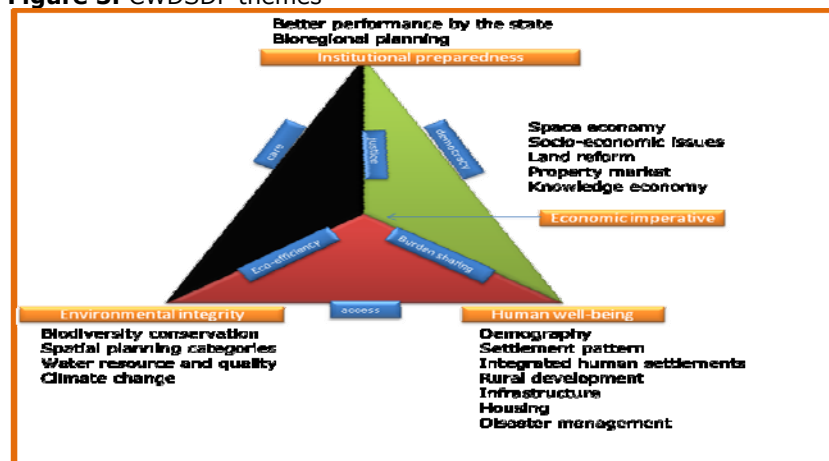
4. Report arrangement

4.1 Report structure

An Executive Summary, as summarised version of the three project deliverables, precedes a glossary of terms and an introduction that highlights the requirement for and purpose of the Cape Winelands District Spatial Development Framework. The subsequent chapter explains the layout of this report. Chapters 5 and 6 are a synopsis of the hitherto CWDSDF deliverables as primary informants in the formulation of spatial guidelines. Chapter 6, in particular, reflects on the strategic context described in the Situational Analysis. Chapter 7 contains the core proposals that, as a collective, embody the spatial guidelines.

The four dimensions of sustainable development are used to cluster the spatial guidelines under the respective CWDSDF themes (see **Figure 3**).

Figure 3: CWDSDF themes



Chapter 8 presents decision-making tools. Chapter 9 includes key spatial proposals and Chapter 10 proposes some implementation guidelines.

BOX 1

It is important to note that the PSDF has three main areas of action, nine objectives further subdivided into 33 strategies and 94 policy statements — addressing aspects related to various functional fields. The CWDSDF captures spatial guidelines as a collective (including those mentioned in the PSDF) and differentiate between 'areas' through identifying a spatial link to emphasise the diversity and disparateness of the district.

4.2 Definitions

The following definitions explain the template used that, as a collective, represent the **spatial guidelines**:

- **Theme:** a key element of a dimension of sustainable development (see **Figure 3**)
- **Sustainable Development Link (SD link):** indicating the critical inter-linkages between the four dimensions of sustainable development (see **Figure 6**)
- **Objective:** refer to CWDSDF objectives or the desired outcome to be achieved relevant to a specific theme (see **Chapter 6**).
- **Strategy:** carefully devised (spatial) intervention(s) to achieve an objective in the context of a particular theme and component,
- **Action:** key element(s) of (spatial) intervention(s) including, but not limited to, implementing agent and priority
- **Spatial Indicator:** is a measurement to give information about the (spatial) change of something over time and expresses a large quantity of data or complex information in a simple way
- **Spatial link:** the space to which the strategy (positively) relates; reducing the cross-cutting nature of before-mentioned subjects
- **Policy imperative:** spatial considerations in the context of the Cape Winelands

The following table serves as an illustration of the format used to configure the spatial guidelines:

Table 2: An illustration of the format used to structure the spatial guidelines

Subject	Num-bering	Description
Theme	SG1	Better performance by the state
Component	SG1.1	Spatial planning cohesion
SD link		Care, justice and democracy
Objective		To improve the quality of life for the people of the region by ensuring principle-led responses
Strategy	SG1.1	1. Create coherence in government's work through a common understanding in enough detail of the long-term objectives and direction of our society 2. etc
Action		3. Reviewing all provincial spatial planning legislation with the aim of consolidating all of it into one Act that simplifies and clarifies roles and responsibilities regarding land use planning 4. etc
Spatial Indicator		5. Operational and representative regional (district) and local (Breede Valley, Langeberg and Witzenberg Municipalities) planning forums 6. etc
Spatial link		District-wide
Policy imperatives		The rationale for a regional planning forum is to ensure spatial planning cohesion beyond local municipal (spatial) planning officials — to include the City of Cape Town and neighbouring municipalities as well as other functional sectors; etc

4.3 Methodology

The methodology applied in the formulation of the CWDSDF was structured around the completion of the three deliverables (see **Chapter 3**). This included a comprehensive analysis of the current policy environment and quantitative and qualitative data/information.

In addition, the following general requirements of a basic planning process were used:

- Principles – A basic rule or concept used for decision-making
- Vision – A general description of the desired result of the planning process
- Challenges – An undesirable condition to be mitigated (solved, reduced or compensated)
- Objective – A general desirable condition to be achieved
- Strategy – Specific ways to achieve objective
- Actions – A specific thing to be accomplished and by whom, when, where, etc and
- Indicators – Practical ways to measure progress towards objectives

These requirements were supplemented by the following definitions: theme, sustainable development link, spatial link and policy imperative; primarily to ensure geographic referencing of proposed guidelines.

As a prerequisite for a credible SDF the PGWC¹⁶ stipulates a 'process principle of planning' viz. drafting a spatial perspective, a report containing analysis, goals, objectives, principles and strategies, a first draft and then a final plan.

This report represents the first draft CWDSDF with the hitherto process and deliverables in line with PGWC requirements.

A key consideration in the formulation of spatial guidelines was to ensure that the vision, principles, challenges and objectives were pulled through the 'body of text' to guarantee a principle-led response.

¹⁶ PGWC, Department of Environmental Affairs and Development Planning, Circular 14/2009, December 2009.

5. Situational analysis

5.1 Key findings

1. The Cape Winelands is **disparate** with a relatively high and diverse level of development that is not only an asset for future growth, but also creates significant challenges
2. The PSDF clearly states that the **current development path** is not sustainable with resultant consequences on amongst others, the quality of life of communities and the urban and rural morphology
3. The current approach to spatial planning in the district as represented by planning principles, goals and objectives and reflected in Spatial Development Frameworks, should and could be instrumental in altering the existing *apartheid* spatial structure and urban functionality, albeit seemingly at a rather slow rate
4. **Spatial restructuring** is only possible through building activity viz. the construction of structures and/or infrastructure; Using the demand for (economic) space as a proxy for growth, the Witzenberg municipality experienced a mere 2.5% take-up of the total demand in the Cape Winelands, compared to the 42% in Drakenstein, 35% in the Stellenbosch municipality, 7.5% in Breede River/Winelands and 13 % in the Breede Valley municipality
5. On a macro (district) scale the rationale behind any **spatial argument** regarding the district, is underpinned by the closeness to the Cape Metropolitan area and the Breede River valley as the possible "primary linear settlement able to absorb much of the Province's population growth in the near future
6. Much of the momentum of economic growth in the Cape Winelands is shaped by the proximity of the area to **metropolitan Cape Town** and its 3,5 million inhabitants
7. The city directly or indirectly employs a significant proportion of the district's population, whilst **exerting pressure** on *inter alia* the district's ecosystem services, to sustain its functioning and appeal – e.g. water demand, energy, biodiversity and landscape quality
8. The district (also at intermediate planning level) is a more **suitable planning entity** for mustering synergies between the interrelated systems which recognise that activities in the Province occur as a multi-layered matrix in a single space
9. **Sustainable development** requires increased capacity for reflection and an adaptive framework for making instrument choices as many policies have led to undesirable outcomes
10. **Community-based planning** is an essential part of ensuring sustainable development; more localized spatial planning be performed within smaller geographic areas (neighbourhoods/wards) than what is done at present
11. Given the **fundamentals of sustainable development** as maintaining the integrity of biophysical systems and reducing poverty and risks, and these still very critical challenges throughout the district, the emphasis, for now at least, must be on ensuring sustainable development as primary goal
12. The establishment and registration of the **Cape Winelands Biosphere Reserve** creates the vehicle by which government, in consultation with communities, can aspire to ensuring sustainable development within the demarcated "soft" boundaries.
13. The CWDSDF adds the dimensions of consistency and vertical equity as **planning principles** as the former support the rationale for a desired spatial order and the latter a policy-led response
14. Most of the decisions taken regarding "improved planning for growth and development" still frustrate local government operational ability e.g. **planning capacity** at all three levels of government"
15. There are varying degrees of recognition of the spatial planning and land-use-management unit(s) as **strategic components** of

- the respective municipalities, most notable in decisions regarding housing projects
16. Present-day Spatial Development Frameworks (SDFs) and/or Integrated Development Plans (IDPs) do not formulate guidelines that can be interpreted and applied in the **assessment of town-planning applications**
 17. The **capital budgets** of the municipalities, except for Drakenstein, indicate a general downward trajectory for the following two budget periods, with as expected, a drastic variation between the totals of the three more densely-populated municipalities compared with the two "urbanised" municipalities
 18. Present-day land use management and land development compounds the continued unacceptable composition and functioning of the Cape Winelands towns regarding **spatial, social and economic inequalities**
 19. Current **rural development patterns** in the Western Cape are of serious concern to the provincial authorities
 20. The (in)ability of **long-term comprehensive planning** to meet its objectives also needs to be measured and considered within the Cape Winelands district
 21. Using the number of **land-use applications** as a proxy for development pressure, three of the leader towns with the notable exception of Wellington, experience much higher absolute numbers than the remaining towns
 22. The town of Worcester can be classified as the only "**major service centre of the district**" due to easy accessibility and partial seclusion from the overpowering effect of the functional metro-economy of Cape Town. Intermediate-size cities seem to be the most promising for promotion as a growth centre in terms of spatial opportunity costs — Worcester — it offers more potential than smaller places and fewer diseconomies than the larger centres, and was normally much closer to the impacted region. Out-migration to these cities could be undertaken much more easily and with less social disruption than to more distant metropolitan centres – also relocation may not be necessary as it is close to impacted areas.
 23. The forecast number of **dwelling units demanded** throughout the district over the next 6 years would be on average approximately 300 units *per annum* (note – eradication of backlogs and in-migration not considered)
 24. About 60% of all **informal dwellings** are situated within the Stellenbosch and Drakenstein municipalities with a further 23% in the Breede Valley Municipality; there are 27 informal settlements with a high vulnerability index of which 18 are situated within the Stellenbosch and Drakenstein municipalities
 25. The major towns in the Cape Winelands district have delineated medium-term **urban edges** as part of the respective Local Spatial Development Frameworks from which urban densities can be derived with an average gross residential density of 7.7 dwelling units per hectare
 26. Protection of (parts of) the **Cape Winelands Cultural Landscape** is accomplished through an incremental approach
 27. Limited progress has been made with **land reform** in the Cape Winelands while the most success has been achieved in Witzenberg
 28. The Cape Winelands district will probably combine relatively higher **economic growth rates** in Stellenbosch/Paarl and slower growth in the rural areas, where the population is stagnant if not declining
 29. The whole of the Stellenbosch municipal area as well as the southern part of Drakenstein contributes the major **share of the districts' total gross value added (GVA)**
 30. Residential space accounts for 68% of the total square meterage of **buildings completed** in the Cape Winelands between 2002 and 2006
 31. For structural reasons no drastic surge for **office, retail and industrial space** in the Cape Winelands is foreseen
 32. The "**knowledge generation**" can be viewed as a growth sector in the Cape Winelands economy
 33. The average **annual population growth** of 2.1% between 2001 and 2007 is well above the national average which is currently just above 1 per cent

34. The main places closest to Cape Town have the least **poverty**
35. The Stellenbosch municipality, Paarl and Wellington, Worcester and Ceres have the highest **standard of living** of the CWDM
36. The Cape Winelands district holds sufficient **water resources** to maintain sustainable delivery for growth and development subject to increased storage capacity, agricultural consumption and future requirements for the Cape Metropolitan area
37. The impacts of **climate change** are likely to be greatest where they co-occur with a range of other stresses, including unequal access to resources, enhanced food insecurity and poor health management systems; adaptation strategies need to consider these dynamic interactions in seeking ways of mitigating these impacts; the agricultural sector is an important area to consider in terms of climate change adaptation efforts
38. The management of **waste disposal** is generally poor and with the exception of the Stellenbosch, Wellington and Wolseley landfills
39. It is imperative for long-term sustainable development that the natural resources are protected as these resources supply essential **ecological services** that sustain development; some of the more generic constraints to biodiversity conservation pertaining to the CWDMA include, loss of natural habitat, fragmentation and population growth
40. **Stellenbosch** doesn't lack opportunities for growth but rather needs to watch carefully how this growth impacts on the environment, on its "urban edge" and on the competition between different land uses
41. **Drakenstein**, although less dynamic than Stellenbosch, the current sector structure of this urban area should be viewed in a positive light. The population is likely to increase further, the sector base is broad and the different growth sectors complement each other well
42. The challenge in the **Breede Valley municipal area** seems to lie in the improvement of service delivery to existing enterprises and households to prevent them from moving elsewhere even faster or getting into profitability crises. This is in sharp contrast to (i.e.) Stellenbosch, where the growth potential is high, but the environment has to be protected. As far as the CWDSDF is concerned, it calls for pragmatism, flexibility and the closest possible interaction and co-operation between the public and the private sector. As far as poverty and unemployment pockets are concerned, facilitating the movement of households to larger urban areas may be as relevant as *ad hoc* social support and improvements in the most basic infrastructure services.
43. The main challenge facing the **Witzenberg municipal area** is the reconciliation between a stagnant, if not declining population and the need and demand for improved residential infrastructure facilities, in the context of a decreasing local revenue base. This is particularly difficult for small places like Hermon, Gouda, Saron, Prince Alfred Hamlet and Op-die-Berg, where diseconomies of small scale make it almost impossible to maintain personal services. Even with the best of intentions, local authorities will not be able to address all these issues in the small places, given own staff and resource limitations. It will thus be very much left to local community, corporate or small enterprise initiatives – *encouraged, facilitated and monitored by municipalities and other public support agents* – to address the needs.
44. It is projected that the **Langeberg municipal area** will maintain its current population, notwithstanding normal rural-urban migration and the rationalisation of agriculture and industry. The CWDSDF should be flexible enough and should be applied in a sufficiently pragmatic way to encourage such initiatives

5.2 Challenges

The PSDF clearly states that the current development path is not sustainable with resultant consequences on amongst others, the quality of life of communities and the urban and rural morphology. The following issues identified in the PSDF are significant to the Cape Winelands district:

- Increasing income, asset and spatial inequalities between rich and poor with increasing concentration of wealth among a small minority
- Perpetuating *apartheid* spatial planning patterns entrenching race and class divisions in the Province's urban settlements
- Deteriorating urban functioning and with the poorest living furthest from areas of opportunities, without viable public transport systems
- Limited access to social services for the poor (especially in the rural areas); and
- Collapse of ecological functioning as biodiversity is lost through destruction of natural habitat and alien invasive species, leading to loss of ecosystem services such as natural purification of water supplies and creation of drainage systems, moderation of floods, droughts and temperature extremes, generation and renewal of soil fertility, and prevention of soil erosion and nutrient cycling.

The current approach to spatial planning in the district as represented by planning principles, goals and objectives and reflected in Spatial Development Frameworks, should and could be instrumental in altering the existing *apartheid* spatial structure and urban functionality, albeit seemingly at a rather slow rate.

We ascribe this apparent slow transition to the following key factors:

- The tenacious form-giving and remaining dominant structural expression of *apartheid* spatial planning in the built environment

- The ever-increasing and remaining backlogs in the provision of housing (with subsequent urgent need for 'land' expansion), municipal services and infrastructure
- The continued provision of low-cost housing opportunities on the periphery of towns/townships
- The readiness or inability of all spheres of government to take hold and (comprehensively and collectively) plan for urbanization
- The inability of government to measure the extent of urban development and growth universally – with specific reference to the property market
- The dysfunctional location and consequent ineffective linkages of urban functions (also read economic opportunities) in relation to one another
- The rather cumbersome development-application systems in place
- The overly-regulated development environment
- The much more vigorous growth of the tertiary sector of the economy in locations far from low-income areas, and the inability of the tertiary sector to offer job opportunities to the unskilled, and
- The higher land prices close to tertiary job opportunities, which make development of low-cost housing in these areas impractical.

Present-day spatial planning outcomes, land use management and land development thus compounds the continued unacceptable composition and functioning of the Cape Winelands towns regarding spatial, social and economic inequalities. Two examples of social (spatially-induced) inequality are the clustering of residential neighbourhoods based on socio-economic class – the so-called **price gradient** and the principle of a **socio-economic gradient**¹⁷ where people of different levels of income and kinship ties can live far closer to one another than is the case in most urban settlements.

With the spatial challenges known, we also consider critical issues impacting on the economic-development process in the district. These are the following:

¹⁷ PGWC, Provincial Spatial Development Framework, May 2009.

- **Water supply** in the region and in each of the different towns and settlements, taking into account concerns about long-term water supply trends and climate-change processes
- The local development and utilisation of **alternative energy** sources, including in particular wind and solar energy
- Facilitating the **land-reform** process inside and around urban settlement areas, including a widening of scope for urban and small-holding agriculture
- The location and structuring of local as well as regional **shopping centres** in a way that is conducive to BEE, local informal-trading upgrading and LED in general
- Dampening **urban sprawl**, while at the same time encouraging settlement densification as well as the integration of formerly segregated urban segments
- Allocating appropriately located land for **low-cost housing** with sufficient (nearby) scope for (in)formal business activities
- Accommodating low-density (**upmarket**) **housing** in urban developments
- Introducing steps that might encourage the attraction of **education and training** facilities to smaller district towns
- Addressing the need, scope and preconditions for local **incubator developments** in Cape Winelands towns, and
- Incorporating **nature-conservation** efforts into LED thrusts.

The following table is a composite list of identified key challenges portrayed in previous planning interventions undertaken within the geographic area of the Cape Winelands district; supplemented by the response from community consultations as part of the 2009/2010 and 2010/2011 Cape Winelands IDPs. The latter engagements were conducted in November and December 2009.

Table 3: Composite list of identified key challenges

Previous	<ul style="list-style-type: none"> • Lack of a shared vision between municipalities • Alignment of SDFs with higher-order policy
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(spatial) planning policy	<ul style="list-style-type: none"> • Legal status and implementation of policy documents • Scale of planning units remains "large" • Insufficient engagement across sectors • No monitoring or evaluation of existing spatial proposals • Policy proposals unrealistic regarding institutional capacity and mandate • Implementation of functions/activities with a physical spatial dimension tends to maintain (and even strengthen) current form and function • SDFs, in general, not integrated in functional performance of municipalities • Inclined to ignore influences on growth and development beyond administrative boundaries • Multiple guidelines without mandatory compliance procedures
Institutional	<ul style="list-style-type: none"> • Availability of funding and financial resources • Capacity constraints • Administrative divisions • Poor internal and external communication • Relatively long distances between the main towns in the areas
Land	<ul style="list-style-type: none"> • Land availability • Security of tenure and permanency of settlement
Urban	<ul style="list-style-type: none"> • Racially separated areas • Non-responsive urban environments • Availability of social and community facilities • Availability of infrastructure to support development / economic land use • Integration of uses – mixed land use • Settlement patterns • Basic services, infrastructure and transportation • Urbanization • Create urban centres where the quality of life of all inhabitants is enhanced • Urban sprawl • Urban design guidelines for historic precincts • Heritage resources – identification and protection
Rural	<ul style="list-style-type: none"> • Farm evictions • Rural poverty and employment levels • Illegal development on farms • Commercial development along roads

	<ul style="list-style-type: none"> • Architecture and visual impact • Rural landscape – cultural and heritage asset • Access to intensive farming and land reform on commonage • Community, health care and recreation facilities
Housing	<ul style="list-style-type: none"> • Increased housing needs and demand • Current and planned housing projects (blocked) • Review of policy environment and housing informants • Farm-worker housing • Population growth and related housing requirement
Social	<ul style="list-style-type: none"> • Demographics and HIV/Aids impact • Crime, safety and security • Sustainable income-generating opportunities • Unemployment and poverty • Health and Safety • Education and Skills Development
Environmental	<ul style="list-style-type: none"> • Conservation of biodiversity • Conservation use • Degradation of natural resources • Alien vegetation control • Distribution of nature reserves and conservation areas • River corridor management • Identification and management of conservation-worthy natural areas • Environmental sustainability • Seismic activities • Climate change • Water demand management • Renewable energy • Regulation and monitoring of air quality • Soil and land degradation
Economic	<ul style="list-style-type: none"> • Limited public transport • Access to opportunities • Job creation • Tourism potential of area not efficiently utilized • Needs of the tourism sector

6. Strategic content

6.1 Policy directives

In his "State of the Nation"¹⁸ address the President of South Africa announced the following (mention is of only related issues to this intervention):

- Making a commitment that working together we will speed up **economic growth** and transform the economy to create decent work and sustainable livelihoods
- Introducing a massive programme to **build economic and social infrastructure**
- Developing and implementing a comprehensive **rural development strategy** linked to land and agrarian reform and food security
- Strengthening the **skills and human resource base**
- That the newly-formed Infrastructure Development Cluster of government will ensure that the planned R787 billion **infrastructure expenditure** as provided for in the budget earlier this year is properly planned for and executed; this funding includes allocations for the school-building programme, public transport including the bus rapid transit system, housing, water and sanitation
- As part of social infrastructure development, providing **suitably located and affordable housing and decent human settlements**, proceeding from the understanding that human settlement is not just about building houses – that it is about **transforming our cities and towns** and building cohesive, sustainable and caring communities with closer access to work and social amenities, including sports and recreation facilities, and
- Speeding up the processing of the **Land Use Management Bill**.

The "State of the Nation" address by the President of South Africa on 11 February 2010 outlined the main elements of government's plans for 2010 as its collective commitment to the people of South Africa. Some of the key statements related to this intervention, are the following:

- Implementing a **number of programmes** e.g. long-term infrastructure, education and skills, rural development and capital investment, to ensure "stronger growth going forward, and for growth that gives rise to more jobs"
- To build a strong **developmental and performance-orientated state** by, *inter alia*, improved planning and performance monitoring and evaluation and a **public service development programme**
- Education and skills development is placed at the centre of government's policies
- Upgrading of well-located **informal settlements** and to provide proper service and land tenure
- To set aside well-located **public land** for low-income and affordable housing
- Develop new products e.g. incentivised funding models to meet the **housing demand** – especially those people whose salaries are too high to get government subsidies, but who earn too little to qualify for a normal bank mortgage
- To better integrate **land reform and agricultural support programmes** with emphasis on small scale farmers
- To continually protect and enhance **environmental assets and natural resources**, and
- A commitment to specific emission targets, and working on a long term **climate change mitigation strategy**.

Government has identified 10 priority areas, to set the country on a higher and sustainable growth trajectory by the end of 2014.¹⁹ These are:

¹⁸ South African Government Information webpage, 25 June 2009.

¹⁹ The Presidency, Government's Programme of Action, July 2009.

- Speeding up economic growth and transforming the economy to create decent work and sustainable livelihoods
- Introducing a massive programme to build economic and social infrastructure
- Developing and implement a comprehensive rural development strategy linked to land and agrarian reform and food security
- Strengthening the skills and human resource base
- Improving the health profile of all South Africans
- Intensifying the fight against crime and corruption
- Building cohesive, caring and sustainable communities
- Pursuing African advancement and enhanced international cooperation
- Ensuring sustainable resource management and use
- Building a developmental state, improve public services and strengthen democratic institutions.

The Premier of the Western Cape, raised the following issues (mention is of only related issues to the CWDSDF), in her 2009 "State of the Province" address, namely:

- The overriding objective to be: **combating poverty and promoting opportunities for all**, through policies that encourage sustained economic growth; that attract, develop and retain skills and capital; and that drive infrastructure development
- Key to growth and development is identifying which **roles are best fulfilled by the state**, and which should be left to the private sector and civil society - achieving most things in partnerships with other key stakeholders
- Introducing the thrust towards **"infrastructure-led economic growth"**
- Aiming to **improve the global competitiveness of the Western Cape** region by identifying and tackling constraints to investment, marketing the destination, cutting red tape, encouraging a fair business environment, and promoting the participation of citizens in the economy, particularly small and emerging enterprises

- Improving the **sustainability of housing projects**, and giving communities more options for housing, increasing funding for the People's Housing Process. This allows beneficiaries on the housing waiting lists to add their own funds to subsidized housing projects, thereby increasing the quality of their houses.
- Addressing the critical conditions in **informal settlements** in developing a Province-wide plan for in-situ upgrading.
- Strengthening **agriculture and related rural industries**
- Improving **rural infrastructure and services** in order to facilitate farming logistics
- **Reviewing outdated legislation**, especially the Land Use Planning Ordinance, 1985 (LUPO), in order to streamline planning processes in the various municipalities
- Planning for **sustainable human and rural settlements**, and
- **Balancing the natural environment and the needs of economic growth.**

The Premier of the Western Cape emphasised the mandate to build an open, opportunity society for all in the Western Cape in the recent "State of the Province" address.²⁰ The following are a number of the strategic objectives/ policy programmes/ interventions that were outlined:

- Maximising economic growth, job creation and sustainability
- Shielding farmers and farm workers from the negative impact of climate change by investigating ways to mitigate its effects
- Reviewing the regulatory environment and the cost of doing business in the province
- Marketing the city and province as a value-for-money, exciting and reliable destination for tourism, trade and investment
- Attracting, retaining and developing skills
- Increasing access to safe and efficient transport
- Improving social cohesion

²⁰ Cape Gateway webpage, February 2010.

- Doubling the opportunities for learners, particularly in rural areas, to participate in after-school sports and other activities
- Developing a comprehensive range of services aimed at strengthening families
- Developing integrated human settlements looking at a number of innovative ways to provide more people with access to shelter and basic services
- Finding a range of ways to deliver sustainable housing opportunities; increase our focus on the provision of serviced sites
- Making land available for human settlement development
- Tripling the average density of housing projects on well-located land to 90 units per hectare
- Reviewing all provincial spatial planning legislation with the aim of consolidating all of it into one Act that simplifies and clarifies roles and responsibilities regarding land use planning
- Exploring the viability of alternative building materials and methods for house construction
- Optimising resource efficiency and sustainability
- Encouraging renewable energy programmes including the harnessing of wind and solar power as well as generating energy from alternative sources such as sewerage sludge, biogas and agricultural waste
- Making water management a special focus area, and
- Alleviating poverty.

In addition to these 'political' imperatives the following graph depicts the main policy informants as directives for the CWDSDF.

Figure 4: Main (spatial) policy informants

6.2 Spatial argument

The Cape Winelands is one of the "pearls" of South Africa's rural and small-town sub-regions but disparate with a relatively high and diverse level of development that is not only an asset for future growth, but also creates significant challenges. This heterogeneous area has been demarcated as a **single administrative (political) unit for purposes of district governance**. This is probably contradictory to the principles of bioregional planning²¹ of which, as mentioned, the building blocks are areas of bioregional homogeneity and should not be broken up between different planning initiatives. The present situation is that the district incorporates vastly different urban configurations, spatial arrangements,

²¹ PGWC, Department of Environmental Affairs and Development Planning, Circular 14/2009, December 2009.

economic connectivity, biophysical sensitivities and resource capacity. These aspects determine human behaviour, needs and perceptions as well as economic realities and represent different spatial-development challenges, opportunities and trends. All this contribute to the need for **specialised 'governance' instruments** e.g. regional planning forum, centralised spatial data system, etc. to facilitate coherence and relevance.

On a macro (district) scale the rationale behind any spatial argument is underpinned by the **closeness to the Cape Metropolitan area** and the **Breede River Valley** as the possible "primary linear settlement able to absorb much of the Province's population growth in the near future".

Furthermore, in the context of urban and rural settlement structures, the Cape Winelands is in some ways rather unique, combining within its boundaries:

- The Stellenbosch and Paarl towns located at the edge of the Cape Metropolitan area, i.e. being virtually within the functional metro-economy (with many local residents commuting daily into Cape Town and vice versa),
- Thinly populated, "mountainous" towns or villages in the hinterland of the different municipal areas, making them valuable towns and retirement locations, but also raising strong demands for environmental protection to safeguard unique fauna and flora,
- The Southern "end" of the Gauteng-Cape Town national road (N1) and rail corridor, accommodating heavy transit transport with demand for related service activities,
- A wealth of historical landmarks, which add to the tourist attraction of the area, and
- A diversity of high value agricultural activities dominated by wine farming, but including a wide range of other niche products.

This diversity of agriculture, tourism, metropolitan edge and natural as well as cultural attractions, together with the well-developed infrastruc-

ture across the region, shape the current high level of development of the region and also determine its significant potential for future economic development.

The relatively high and diverse level of development in the district is not only an asset for future growth, but also creates significant challenges. To give some examples:

- "Unique attractions" have to be protected against environmental and other hazards,
- The diversity of local environments and town structures demands more sophisticated planning and spatial development strategies and programmes,
- Local municipalities have to cater for the full spectrum of metropolitan, "small-town" and rural inhabitants, with often quite diverging preferences and needs.

Mapping out expected or feasible developments in the districts' space economy needs to consider the following critical factors:

- Population growth in the different municipalities
- The changing economic base and sector structure of the towns and hamlets
- Longer-run evolution of town centres (in the light of changing retail patterns)
- Diversification, consolidation and racial integration of urban areas inside and between the towns and smaller settlements
- Land-use changes and land-reform opportunities inside and around the settlement areas and the respective urban edges
- Expected rural-area development patterns in the different local municipal areas and around the towns
- The impact of water-supply limitations (accelerated by longer-run climate change) and new energy sources on evolving local economic activities

- Housing supply and demand trends and how these fit in with spatial development guidelines
- Existing structural deficiencies within all urban and rural configurations
- Strengthening of existing development corridors (e.g. Mbekweni / Paarl / Wellington), and
- facilitation of growth opportunities along transport corridors (e.g. along the N1 – Paarl / Klapmuts / Cape Town)

The district also present a distinct hierarchy of towns as portrayed in the Growth Potential study.²² The development of the vast majority of towns is rooted in their role as service centers for the surrounding agricultural environment as rural communities need a centrally located core town for religious, health, educational and services/shopping facilities, as well as a market for their products.²³ Apart from the economics that drive the growth and development of these urban centers, aspects regarding technological innovation, the environment, the particular spatial location, cultural patterns and management systems also play a role.²⁴ Three of the four *leader towns*²⁵ (Stellenbosch, Paarl and Wellington), being virtually within the functional metro-economy of Cape Town, function more as an extension of the metropolitan area rather than being significant centres of services and goods to the surrounding countryside.

The town of Worcester can be classified as the only **“major” service centre of the district** due to easy accessibility (see **Map 3**) and partial seclusion from the overpowering effect of the functional metro-economy of Cape Town. Other contributing factors are the following:

- It is the centre of the “inland-N1 stretch” (i.e. on the inland side of Du Toitskloof) all the way up to Beaufort West.
- It is in the centre of the R43/R60 “North-South” linkages between the Robertson/Montagu cluster and the Tulbagh/Ceres Cluster.

²² PGWC, Growth potential of towns in the Western Cape, 2004.

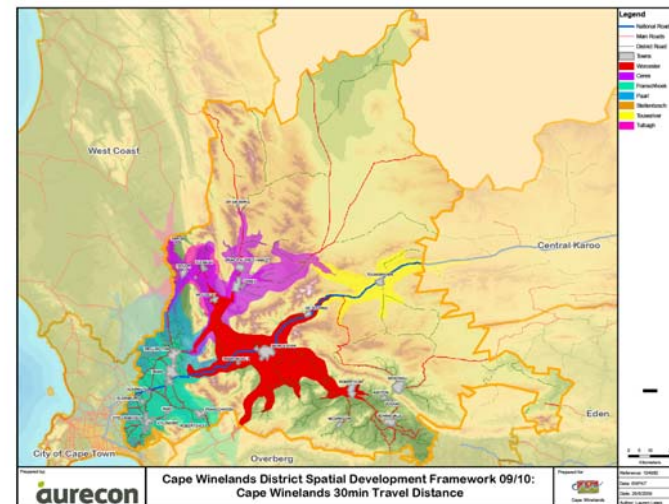
²³ *ibid.*

²⁴ *ibid.*

²⁵ *ibid.*

- It is itself a sizeable and sectorally diversified town, with industrial, tourism and agricultural bases.
- The transport links in this corridor include (national) roads (i.e. bus, truck, taxi, sedans), rail and light aircraft (although no coastal shipping).

Map 3: District’s 30-minute travel distance



In recent times some “smaller” towns have transformed their output of services and goods with subsequent change to the spatial fabric as a consequential (albeit economic-based) occurrence. This has introduced a dual function in that services and goods are still provided but include specific items, mainly tourism-related, to satisfy external demand. The spatial fabric now complements this duality in that the focal point of economic activities has moved away from the established CBD e.g. Robertson. In the event of retarded town growth it may be attributed to

technological, economic and human behavioral transformation as well as management capacity, leadership, inherent growth potential and lack of sufficient resources.²⁶

6.3 Planning level

The PSDF clearly outlines the role of a district SDF as of a more **co-ordinating nature than prescriptive**. This is to be supported given the diversity and disparateness of the district as the rationale for **a set of spatial guidelines** that differentiates between planning clusters and bioregional subregions.

BOX 2

TASKS	PROVINCE	DISTRICT	LOCAL
Spatial Planning Categories	Principles Broad Mapping	Co-ordination and broad map- ping	Detailed alignment
Urban re-structuring	Principles	Co-ordination	Detailed plans
Facilities Location	Principles	Co-ordination	Detailed plans
Sense of Place	Principles; Scenic quality General policy, e.g. dis- courage copying of for- eign architectural styles	Broad mapping	Detailed mapping Urban design and architectural guide- lines

PGWC, Provincial Spatial Development Framework, 2005, p6-4

The PSDF²⁷ has developed an overall vision for the province through three core strategies, namely, **resource conservation** of the natural and rural environment, restructuring and integration of the **urban settlements**, and **human resource development** to address problematic socio-economic trends; with four main components:

- Protection of biodiversity and agricultural resources
- To establish and consolidate a network of regional corridors as the priority spatial basis for investment in regional economic and social capital
- The need for restructuring the urban settlements, and
- To be sensitive towards the principle of co-operative governance.

In accordance with Section 26(e)²⁸ the CWDSDF needs to comply with and give effect to this vision – within the district demarcated as a single administrative (political) unit for purposes of governance – as a **scale-informed interlocking spatial planning framework**.

6.4 Planning principles

The PSDF is based on the **bioregional planning principles** and other guiding principles are provided by the National Environmental Management Act and the Development Facilitation Act, with the previous Cape Winelands Spatial Development Framework based on the principles of **sustainability, equality, efficiency and integration**.

In an attempt to draw key principles together, it was proposed at the Steering Committee meeting on 9 June 2009 that the principles of the previous Cape Winelands SDF be consolidated owing to it being used as primary informant to the present development agenda. The CWDSDF however adds the **dimensions of consistency and vertical equity**²⁹ to this set of principles as the former support the rationale for a desired spatial order and the latter a policy-led response – this was confirmed at the third steering committee meeting on 28 August 2009 and discussed at the public participation meetings in October/November 2009.

A concise explanation of each of these descriptive terms is as follows:

Sustainability

²⁶ PGWC, Growth potential of towns in the Western Cape, 2004.

²⁷ PGWC, Provincial Spatial Development Framework, 2005, p 6-13.

²⁸ Local Government Municipal Systems Act, 2000 (Act 32 of 2000).

²⁹ Litman, T; Victoria Transport Policy Institute, November 2008.

- The sustainable management and use of the resources making up the natural and built environment in a manner that ensures that the needs of the present generation are met without compromising the ability of future generations to meet their respective needs

Efficiency

- That the desired spatial order as a result of land-use and land development should be achieved with the minimum expenditure of resources

Integration

- That the separate and diverse components of spatial planning, land-use management and land development be aligned and combined into a unified entity

Consistency

- That there is uniformity in the relations between spatial development frameworks and plans in the hierarchy of spatial development frameworks and plans, but within consideration of local circumstances

Equity (vertical)

- *Vertical equity* assumes that the disadvantaged should be favored above more advantaged people and refers to the distribution of impacts (who receives benefits or bears costs) and the degree to which a specific policy or programme achieves equity objectives.

The contrasting nature of equality and vertical equity needs to be managed until a “normalized” or desired spatial order has been achieved. Certain policies e.g. land reform - which, in its current format is not making a significant impact on improving the plight of the poor and landless in our country³⁰ - need to be promoted (at all costs) whereas horizontal equity³¹ assumes that everybody should be treated equally, assuming that they have similar needs and abilities.

³⁰ CWD, Area Based Land Sector Plan, Cape Winelands District, September 2008.

³¹ Litman, T; Victoria Transport Policy Institute, November 2008.

Figure 5: Planning principles for the CWDSDF

The consistency principle is applied throughout the hierarchy of spatial development frameworks and plans. The proposed spatial guidelines in the CWDSDF should be consistent with the designation, policy statements and requirements of, in particular, the Provincial Spatial Development Framework; which on its part is consistent with higher order policy.

The principles underpinning the Western Cape’s rural land use management guidelines are:³²

- Decisions on rural development applications should be based on the following sustainable land use principles:
 - Social inclusion
 - Effective protection and enhancement of the environment
 - Prudent use of natural resources, and

³² Western Cape Provincial Spatial Development Framework, Rural Land Use Planning and Management Guidelines, May 2009.

- Maintaining high and stable levels of economic growth
- Good quality and carefully sited development should be encouraged in existing settlements
- Accessibility should be a key consideration in all development decisions
- New building development in the open countryside away from existing settlements should be strictly controlled regarding scale, height, colour, roof profile, etc
- Priority should be given to the re-use of previously developed sites in preference to greenfields sites
- All development in rural areas should be well-developed and inclusive, in keeping and scale with its location, and sensitive to the character of the rural landscape and local distinctiveness.

6.5 Sustainable development

“Sustainable development is development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs” (Brundtland Commission)³³

To operationalize sustainable development it is often described as consisting of three pillars “economy”, “environment” and “society” but this creates compartmentalisation, ignores overlaps or interdependencies and promotes a tendency to facilitate continued separation of societal, economic and environmental analysis.³⁴ The PRISM model³⁵ defines sustainability as consisting of four dimensions – the social, economic, environmental and institutional – with critical interlinkages of which targets and indicators should not fail to give information on the character and effect of these linkages.

The PRISM model (see **Figure 6**) includes the following linkages:

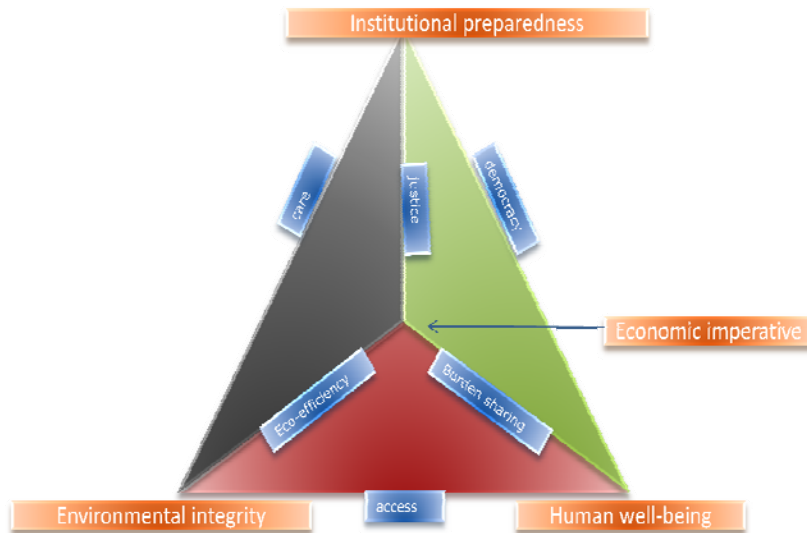
- Environmental integrity – human well-being: The level of equity in the distribution of **access** to limited resources - constitutes a kind of “human right to resource use”
- Institutional preparedness – human well-being: **democracy** as a condition for a society of more tolerance and solidarity
- Economic imperative – human well-being: **burden sharing** where the creation of material welfare (often) comes with a social price to be paid if the burden as well as the benefits are to be distributed equally
- Environmental integrity – institutional preparedness: **care** means a combination of dedication and action (societies’ caring capacity will probably be as essential as those of nature’s carrying capacity) – this represents the more emphatic (as opposed to the technocratic) system of values needed for sustainable development
- Economic imperative – environmental integrity: **eco-efficiency** (total material required) is a physical measure characterizing the resource use for the totality of economic activities in the reference area.
- Economic imperative – Institutional preparedness: **Justice** represents fairness in decision-making

³³ CWDM, Winelands Integrated Spatial Framework, consultative draft, November 2000.

³⁴ Kemp, R Martens, P Sustainable development: how to manage something that is subjective and never can be achieved, 2007, p 2.

³⁵ Spangenberg, J Valentin, A A guide to community sustainability indicators, Environmental Assessment Review, 20 (2000) p. 381-392.

Figure 6: PRISM model of sustainable development



Ecocentered approaches dominated the sustainability discussion, but they have been increasingly criticized for being elitist and insufficiently democratic.³⁶ This notwithstanding, it is stated that the requirements for sustainable development are multiple and interconnected with the **main dimensions** to consist of maintaining the integrity of biophysical systems; offering better services for more people; reducing poverty and risks; and providing freedom from hunger, nuisance and deprivation.³⁷ To these one may add choice, opportunity and access to decision-making.

³⁶ Kemp, R. Martens, P. Sustainable development: how to manage something that is subjective and never can be achieved, 2007, p 2.
³⁷ *ibid.*

Sustainable development requires increased capacity for reflection and an adaptive framework for making instrument choices as many policies have led to undesirable outcomes e.g. town planning that has created inhospitable places for humans to live and interact — this necessitates an inbuilt capacity for assessment and adaptation.³⁸ We need to consider new business models and how existing systems of governance can be made more reflexive — in the Netherlands the “Transition management” model is used to effect sustainable development (that is to achieve systematic change through small steps in strategically chosen directions).³⁹

BOX 3

Bioregional planning can be defined as land-use planning and management that promotes sustainable development

PGWC, Provincial Spatial Development Framework, 2005

The PGWC advocates bioregional planning as the preferred planning approach to land-use planning and management as it promotes sustainable development by recognising the relationship between, and giving practical effect to, environmental integrity, human-well-being and economic efficiency within a defined geographical space, the boundaries of which were determined in accordance with environmental and social criteria.⁴⁰ This geographical space represents a biosphere reserve within which government and civil society should work together in order to ensure sustainable development — if necessary, by taking small steps in strategically chosen directions.

A Cape Winelands Biosphere Reserve, whereof the geographic space is demarcated as “soft” boundaries, has been established and registered at UNESCO on 18 September 2007. This area now represents an informed scale of planning and requires planning and management systems that

³⁸ Kemp, R. Martens, P. Sustainable development: how to manage something that is subjective and never can be achieved, 2007, p 6.

³⁹ *ibid.*

⁴⁰ CWDM, Draft Cape Winelands Biosphere Reserve Spatial Development Plan, May 2008.

would facilitate a balanced integration of conservation and development interests in land use and settlement planning.⁴¹ Hitherto, this large (spatial) planning scale has dominated planning output and along with the relative newness of the concept frustrated community participation and the development of an adaptive framework. This, in contrast to the accepted observation of bioregional planning to be 'an organised process that enables people to work together, think carefully about the potential and problems of their region, set goals and objectives, define activities, implement projects, take actions agreed upon by the communities, evaluate progress and refine their approach'⁴²; confirming the importance of **community-based planning** and engagement.

The application of the bioregional planning approach within the remainder of the district demands specially-crafted management structures and systems that first and foremost establish linkages and co-ordination within the respective municipal administrations and secondly between the various role-players (including municipalities) to ensure multi-disciplinary and cross-sectoral alignment and integration.

6.6 Development approach

The Cape Winelands Integrated Development Plan is the primary (spatially-defined) instrument prepared and used by government to facilitate service delivery and intergovernmental co-ordination. In the case of the Cape Winelands district this plan includes the Cape Winelands district development agenda (see **Table 4**) as articulated in the Growth and Development Strategy 2006 – 2014 as **"roadmap" for all activities performed within the district.**

As referred to earlier the district incorporates huge disparities in human and natural processes that demand extraordinary interventions within a

specific developmental approach which is described as 'a new way of doing business'.⁴³

The dilemma is that it is unclear as to what truly represents a sustainable development path and the compartmentalised nature of government's service delivery within a framework of interrelated systems. Given the **fundamentals** of sustainable development as maintaining the integrity of biophysical systems and reducing poverty and risks⁴⁴, and these still very **critical challenges throughout the district**, the emphasis, for now at least, must be on ensuring sustainable development as primary goal — as opposed to sustainability⁴⁵.

The following table serves as a summary of the main developmental directives as stated in the strategy and the Cape Winelands Integrated Development Plan 2009/2010.

Table 4: Summarised Cape Winelands development agenda

Development agenda	<p>Grow the economy through emphasis on the development of the following key sectors:</p> <ul style="list-style-type: none"> • Agriculture: through expanding niche market agricultural production • Extend the agri-processing business and linkage back to "niche" markets • Further development of the tourism sector with more strategic marketing and facilitation of multi activity and longer stay tourism • Construction through developments within a framework that does not destroy the long-term potential of the natural environment • Finance sector linked to the expanding economy of the district and as a service centre to Cape Town • Broadening access to economic opportunities through: <ul style="list-style-type: none"> • Programmes to permit movement from 2nd to 1st economy
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⁴¹ CWDM, Draft Cape Winelands Biosphere Reserve Spatial Development Plan, May 2008.

⁴² *ibid.*

⁴³ CWDM, Cape Winelands Growth and Development Strategy, 2006.

⁴⁴ Kemp, R Martens, P Sustainable development: how to manage something that is subjective and never can be achieved, 2007, p 3.

⁴⁵ Where the term "sustainability" is used to describe a value change or lifestyle change.

	<ul style="list-style-type: none"> Skills development that can fast-track training in key semi-skilled e.g. welding and artisan training Supporting transformation in key sectors of the economy through BEE Improving the framework and procedures for protection of land assets while facilitating land development where appropriate Strengthening the co-operation mechanism between the private sector and government for the facilitation of appropriate economic development Achieve greater balance through strategic prioritisation of spending on new infrastructure and maintenance of existing infrastructure including programmes to ensure that the quality of water standards does not compromise export products Accelerate the programmes on integrated human settlement in the areas of high economic potential
Collectively agreed-upon objectives ⁴⁶	<ul style="list-style-type: none"> Business co-operating together to achieve desired growth and secure the well-being of communities and individuals Clean and transparent governance Sustainable development Skills development and education for all Fair, rewarding and respectful workplace practices Safe and secure district for all Informed citizens actively participating in the economy and development Innovative, creative, competitive economic enterprises that meet needs and create opportunities Integrated, linked and productive human settlements Institutional networking, co-operation and communication
Strategies	<ul style="list-style-type: none"> Integrated environmental plan Promotion of cleaner technologies Promotion of waste minimisation practices Combat alien vegetation Land management/ disposal strategies Promote eco-building practices Use renewable energy resources Monitor & address water, air and ground pollution

	<ul style="list-style-type: none"> Co-operation of farmers/ firms to address seasonality Efficient municipal business operations Utilise ITC technologies to lower cost of business for government Revised and updated municipal policies and bylaws Citizen participation in decision-making Address insecurity of farm workers / stop illegal evictions Addressing housing backlog Provision of basic services to all Safe food and water for all Ensure food security Monitoring of social grants Entrepreneurs linked to market demand Efficient and equitable municipal services Bulk infrastructure for a growing economy Strong transport system/ effective public transport system Ongoing research and development Land reform and access to land Business understanding legislative requirements Solid policing of current legislation Informal sector support Proper zoning and integrated planning in all communities Land available for low-income and social housing Investigate agri-villages Land available for industrial areas and business hives Address logistical links to City and ports Recreational facilities for youth
Economic development strategy	A clear two-pronged strategy to grow the economy in order to create jobs and eradicate poverty by ensuring human security and promoting inclusive economic development (by facilitating the migration of individuals and firms from 2 nd to 1 st economy through supporting capital formation)
Catalytic projects	<ul style="list-style-type: none"> A partnership with Agri-SA partnership for land release Improved public transport e.g. shuttle services Women empowerment project re arts & crafts Establishing informal business nodes in central business district areas Establishing agricultural business support centres in towns Launching a tourist train in the Cape Winelands Developing the Industrial area in Klapmuts

⁴⁶ CWD, Cape Winelands Growth and Development Strategy, 2006

	<ul style="list-style-type: none"> • Developing the Nekkies Resort • Hosting a Customs Centre at Worcester • Leveraging N1 investments
Pro-programmes and projects	<ul style="list-style-type: none"> • N1 regional corridor • 2010 Heritage Towns and Public transport project • Wolwekloof Learning Academy • Integrated Infrastructure Programme • Sector-Based Incubator Programme • Public Transport • Drakenstein Mobility Corridor • Public Transport Interchanges • Transportation Precinct Plan for the Greater Worcester CBD • Completion of all Integrated Sustainable Human Settlement Plans (ISHSP), • The continuation of the Housing Consumer Education Roll-out strategy • Activities flowing from the land reform and rural housing summit • Planning and implementation of key rural housing projects • Small business support programme • Entrepreneurial seed fund programme • Small farmer support programme • Cape Winelands economic council • LED expo's

In addition, the Cape Winelands District Municipality adopted six strategic (institutional) objectives as key priorities and has structured its operational output accordingly.

The vision of the Cape Winelands District Municipality is formulated as **"Growing, Sharing, Delivering, Innovating Together"**. It is proposed that efforts to "improve, strengthen or restructure" the local development process have to focus on the spatial, racial and social class *spread of development* and the *safeguarding of sustainability* - rather than the "creation" of new growth sectors or initiatives.

Broad (spatial) considerations for this development approach are:

- Consolidate the existing rather than to 'frantically search for something new'
- Regulate, but with a receptive attitude towards local needs and perceptions
- Be in a position to facilitate a planned response to unplanned change
- Ensure capable and knowledgeable administrations with interconnected relations
- Focus on economic growth and employment creation in areas where this is most effective and sustainable
- Identify and consolidate growth momentum
- Sustain and protect natural resources and heritage/cultural landscapes
- Create places worthy of being called integrated human settlements, and
- Implement appropriate management guidelines to ensure sustainable development of rural areas and ensuring 'thriving livelihoods'.

Within this development approach the objectives of the CWDSDF should be supportive and supplementary to existing GDS programmes and projects. Similarly, the key objectives of the PSDF are to be considered as essential directives, which are the following:

1. Align the future settlement pattern of the province with economic potential and the location of environmental resources
2. Deliver human development and basic needs programmes wherever they may be required
3. Strategically invest scarce public resources where they will generate the highest socio-economic returns
4. Support land reform
5. Conserve and strengthen the sense of place of important natural, cultural and productive landscapes, artefacts and buildings
6. End the *apartheid* structure of urban settlements
7. Conveniently locate urban activities and promote public and non-motorised transport
8. Protect biodiversity and agricultural resources, and

9. Minimise the consumption of scarce environmental resources, particularly water, fuel, building materials, mineral resources, electricity and land.

As part of any development approach spatial planning needs to be a primary informant of developmental processes that include, *inter alia*, an inbuilt capacity for assessment and adaptation.⁴⁷ It needs to guide land use in order to avoid or minimize conflicts and to further spatial concentration of different activities where this leads to favourable and efficient results.⁴⁸ This in total contrast to the spatial configuration of urban areas in the Cape Winelands district that was shaped by the then form-giving ideology of *apartheid* spatial planning that located urban land-use (read: residential) with race as the differential — areas characterised by social apathy, economic inequality and urban dysfunction. The severity of the physical divide varied but in all instances created under-resourced, impoverished and marginalised urban areas (or neighbourhoods). This ideology manufactured the uneven distribution of facilities and opportunities in that the preferred location for economic activities was in previously advantaged areas.

The universal paradigm that prevailed pre-1994, was thus to separate and maintain the segregated residential neighbourhoods according to race and to promote and consolidate a single central business area. The post-1994 planning ideology advocates a **remedial approach** through different legislation with the government’s national spatial development vision formulated as:

BOX 4
 “South Africa will become a nation in which investment in infrastructure and development programmes support government’s growth and development objectives.

- By focussing economic growth and employment creation in areas where this is most effective and sustainable;
- By supporting restructuring where feasible to ensure greater competitiveness;
- By fostering development on the basis of local potential; and

By ensuring that development institutions are able to provide basic needs throughout the country
National Spatial Development Perspective, 2005

The challenge is now to create a **transformed spatial order** that would rectify the existing urban composition and foster equal opportunities for all. Decision-making on the investment of public funds and land development needs to be influential in fostering this objective with the measurement of outcome as an imperative for progress.

The CWDSDF objectives can now be formulated to read as follow:

Table 5: CWDSDF objectives

Obj1	To improve the quality of life for the people of the region by ensuring principle-led responses
Obj2	To ensure collective recognition of ensuing spatial guidelines
Obj3	To manage the impact and exposure of external and internal threats to growth and development (read: sustainable development)
Obj4	To restructure urban settlements (where feasible)
Obj5	To promote the concentration and intensification of human and economic activities within the current land footprint and in areas of high accessibility
Obj6	To promote sustainable resource use and responsible rural development
Obj7	To address housing backlogs within a settlement hierarchy and propose alternative settlement options
Obj8	To foster the inclusion of an economic perspective in land use management and land development
Obj9	To improve and conserve the district’s natural environment
Obj10	To consider the spatial rationale for the implementation of government policies within the Cape Winelands district

6.7 PSDF directives

The PSDF⁴⁹ has developed an overall vision for the province through three core strategies, namely, **resource conservation** of the natural and rural environment, restructuring and integration of the **urban settlements**, and **human resource development** to address problematic socio-economic trends; with four main components:

- Protection of biodiversity and agricultural resources
- To establish and consolidate a network of regional corridors as the priority spatial basis for investment in regional economic and social capital
- The need for restructuring the urban settlements, and
- To be sensitive towards the principle of co-operative governance.

The following mandatory directives – related to the Cape Winelands district – are contained in the statutorised Provincial Spatial Development Framework (2009 Report).

The policies are grouped according to prime objectives under three main areas of intervention:

1. Socio-economic development
2. Urban restructuring and,
3. Environmental sustainability.

Mandatory measures are defined as “policies that are regarded as being of sufficient social, economic or environmental importance as to demand that every effort possible should be made to effectively implement them as policies – and of which the implementation is directly attainable”. These measures are “supported by legislation”.⁵⁰

⁴⁹ PGWC, Provincial Spatial Development Framework, 2005.

⁵⁰ PGWC, Department of Environmental Affairs and Development Planning, Circular 14/2009, December 2009.

See **Annexure 11** for the tabulated directives.

6.8 Spatial indicators

Informed decisions rely on information about:

- What the current state of affairs is
- Developing trends, patterns and pressure points
- The outcome of interventions or policies
- Which adjustments to consider as a result of outcomes, and
- Milestones achieved or failures that frustrate progress.

Indicators can assist to simplify, clarify and make aggregate information available, formulate policy, measure progress on attainment of policy goals, indicate significant change and encourage accountability.

When identifying an indicator it needs to⁵¹:

- Be connected to a long-term goal
- Be representative
- Be easy to understand, and
- Be able to be updated on a yearly basis.

The (in)ability of long-term comprehensive planning to meet its objectives also needs to be measured and considered within the Cape Winelands district; limited monitoring interventions, at district and local level, have transpired with current measurement of performance largely restricted to evaluating government’s ability to perform functions and responsibilities.

It is envisaged that the DPSIR (driving force, pressures, state, impacts, response) reporting framework⁵² or the DSR (driving force, state indica-

⁵¹ Teager, U, from environmental indicators to indicators for sustainability, International Conference, October 2000, Bremerhaven.

⁵² Provincial Government Western Cape, State of the Environment Report, 2005.

tors, response indicators) framework⁵³ can be used once monitoring of **spatial indicators** occurs.

A critical dimension of an indicator is to be able to measure what is measurable and not allow overaggregation, overconfidence or incompleteness.⁵⁴ A template of methodology sheets needs to be developed by which measurement and reporting must take place.

The development of (spatial) indicators to be measured cross-sectionally (as at a point in time) and over time (time-series analysis) is essential. Through the application of a Geographic Information System, the aggregate of these indicators can determine the receptiveness of policies within the development agenda. The measurement and analysis of the above will however not be accommodated within this CWDSDF; this planning intervention only identifies “basic” spatial indicators for future use.

For the purpose of the CWDSDF we proposed (spatial) indicators with the following in mind⁵⁵

- What is a meaningful number of indicators to be part of an SDF
- What type of information should inform the measurement of an indicator – data or logic, and
- What are the most useful indicators to measure progress towards (multiple) objectives.

⁵³ Commission on Sustainable Development of the United Nations, Indicators for sustainable development, International Conference, Bremerhaven, 2000.

⁵⁴ *ibid.*

⁵⁵ Spangenberg, JH, Bonniot, O, Sustainability indicators – a compass on the road towards sustainability, February 1998, Wupperthal Institute.

7. Spatial guidelines

Figure 7: Step-by-step methodology

The proposed spatial guidelines (SG) will ensure a principle-led response and are pragmatic within the overall vision of the Cape Winelands district. The spatial guidelines are informed by 'higher order' directives and in the context of this framework the guidelines are the collective of the following (see **Figure 7**):

- Strategy
- Action
- Spatial Indicator
- Spatial link, and
- Policy imperative.

In this narrative a practical template based on the **four dimensions** of sustainable development viz. institutional preparedness, human well-being, economic imperative and environmental integrity is used to cluster the spatial guidelines under CWDSDF themes (see **Figure 3**). These **themes** are further disaggregated into **CWDSDF components** with spatial guidelines reflected for each component (see **Figure 7**). A summary of key information relevant to the component is provided. Also included under each component (as part of the practical template) is a reference to the CWDSDF objectives and sustainable development link (SD link) — as described in **Chapter 6** — to ensure that the spatial guidelines connect to the planning intent of the framework.

For each of the actions a rating of the importance to implement was done by using the following assessment scale:

- Very high: the action needs to be done without delay
- High: the action needs to be done but not critical, and
- Medium: the action needs to be done.

The rating also included the sequential implementation of actions.

a. Institutional preparedness

SG1 Better performance by the state

SG1.1 Spatial planning cohesion

The PSDF clearly states that the current development path is not sustainable with resultant consequences on amongst others, the quality of life of communities and the urban and rural morphology. However, the current approach to spatial planning in the district as represented by planning principles, goals and objectives and reflected in Spatial Development Frameworks, seems as if it could be instrumental in altering the existing *apartheid* spatial structure and urban functionality — albeit seemingly at a rather slow rate. A key concern with regard to this '**spatial agenda**' is that the disparateness and diversity of the district is not acknowledged thus disregarding reality, timeframes and even government's capacity — compounded by limited community participation and uncertainty in their understanding of governance.

Figure 8: Simplified illustration of the connectivity between the IDP and SDF

Spatial planning, as documented in this CWDSDF, informs the Cape Winelands Integrated Development Plan which should be the primary (spatially-defined) instrument prepared and used by government (see **Figure 8**). It is unfortunate that, concurrent with the compilation of the CWDSDF, a number of "disconnected" processes are conducted by various authorities to formulate "issue-specific" policy on aspects **interrelated with the output of the CWDSDF**.

The CWIDP as "**roadmap**" for all activities performed within the district includes the Cape Winelands district development agenda (see **Table 4**) articulated in the Growth and Development Strategy 2006 – 2014. The CWDSDF has two critical linkages with the output of the CWIDP in that most of the identified programmes and projects will have spatial implications (impacting on the district's spatial order and arrangement) and the spatially-defined measurement thereof (or at this stage only the setting of spatial indicators).

A further dilemma regarding spatial planning cohesion is uncertainty as to what truly represents a sustainable development path and the **compartmentalised nature of government’s service delivery within a framework of interrelated systems** – with government departments mostly not having the same interpretation of and strategies for ‘sustainable development’. We believe that given the fundamentals of sustainable development as maintaining the integrity of biophysical systems and reducing poverty and risks⁵⁶, and these still very much critical challenges throughout the district, the emphasis, for now at least, must be on ensuring sustainable development as primary goal – as opposed to sustainability⁵⁷.

Spatial planning cohesion is furthermore impeded by the current governance landscape within which government (also in the Western Cape) performs spatial planning, land use management and land development that is somewhat uncertain and “unproductive”. The latter owing to the **(in)ability of long-term comprehensive planning to meet its objectives** and the former owing to inconclusiveness regarding the legal status of national and provincial policy – also referred to as policy haziness regarding government functions⁵⁸ – the multitude of legislative requirements and the lack of coherence between role-players.

Table 7: Spatial planning cohesion: current situation at municipalities

Spatial component	Langeberg	Breede Valley	Witzenberg	Drakenstein	Stellenbosch
Participation in planning beyond municipality	None	Very limited; Cape Winelands LED did not “involve” local municipality;	Yes (in active committees) but limited beyond planning domain	Yes, but limited beyond planning domain; need urgent discussions with City of Cape Town;	Yes (in active committees) but limited beyond planning domain
Participation with CWDSDF	Participate on Steering Committee; local SDF also being prepared	Request that Steering Committee meet regularly; provide presentation for information; should not be “big brother”	Request that Steering Committee meet regularly	Request that Steering Committee meet regularly; provide presentation for information	-

Table 8: Spatial planning cohesion

Subject	Number	Description
Theme	SG1	Better performance by the state
Component	SG1.1	Spatial planning cohesion
SD link		Access, care, justice and democracy
Objectives		To improve the quality of life for the people of the region by ensuring principle-led responses To ensure collective recognition of ensuing spatial guidelines To consider the spatial rationale for the implementation of government policies within the Cape Winelands district
Strategy (ies)	SG1.1	1. Ensure spatial planning cohesion between role-players, policy output and decision-making 2. Create coherence in government’s work through a common understanding in enough detail of the long-term objectives and direction of our society 3. Establish the CWIDP as the single, inclusive and strategic document for the district as a whole to direct all activities performed by all

⁵⁶ Kemp, R. Martens, P. Sustainable development: how to manage something that is subjective and never can be achieved, 2007, p. 3.

⁵⁷ Where the term “sustainability” is used to describe a value change or lifestyle change.

⁵⁸ PGWC, SDF Guideline Manual, April 2009.

	<p>role-players within the district</p> <ol style="list-style-type: none"> 4. Ensure a co-ordinated approach to the implementation of the CWDSDF including the measurement of and reporting on spatial indicators 5. Ensure spatial planning goals and objectives to be target-driven, allocated timelines, measured over time and reviewed 6. Create product (or output) and process alignment between role-players to consider the interrelatedness between system components e.g. planning jurisdictions, funding regimes and performance management 7. Aim to ensure conformity between municipalities performing spatial planning and land use management mandates regarding capacity, level of interaction, internal composition and working relationships 8. Address the main constraints to the realisation of the development path viz. limited budget resources, current low level of inter-governmental support and integration, poor community participation, private sector involvement, political willpower⁵⁹ and limited measurement of and reaction to spatial indicators; allocate sufficient funds to conduct spatial planning initiatives 9. Create specially crafted management structures and systems to ensure multi-disciplinary and cross-sectoral alignment and integration outside the Cape Winelands Biosphere Reserve; use the management entity of the Cape Winelands Biosphere Reserve as representative local structure to ensure multi-disciplinary and cross-sectoral alignment 																				
Action(s)	<ol style="list-style-type: none"> 10. Reviewing all provincial spatial planning legislation with the aim of consolidating all of it into one Act that simplifies and clarifies roles and responsibilities regarding land use planning <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 15%;">Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>PGWC</td> </tr> </table> 11. Establish and sustain a regional planning forum (with actioned minutes); establish and sustain a local planning forum for the Breede Valley, Langeberg and Witzenberg Municipalities <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 15%;">Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>Regional planning forum – CWDM; local planning forum – respective municipalities (in association with CWDM)</td> </tr> </table> 12. Develop and approve credible IDPs and SDFs with incontestable linkages between products and processes <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 15%;">Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>PGWC, CWDM, Local Municipalities</td> </tr> </table> 13. Create standardised guidelines on products and processes to inform the formulation of 'other' (spatial) planning initiatives e.g. Integrated Human Settlement Strategy (IHSS), Area Based Plan (ABP) and Integrated Transport Plan (ITP) <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 15%;">Priority</td> <td>Medium</td> </tr> <tr> <td>Agent</td> <td>PGWC</td> </tr> </table> 14. Establish and operate an integrated and centralised spatial database (based on spatial indicators); manage the standard, frequency, quality and type of data <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <td style="width: 15%;">Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>PGWC, CWDM, Local Municipalities</td> </tr> </table> 	Priority	Very high	Agent	PGWC	Priority	Very high	Agent	Regional planning forum – CWDM; local planning forum – respective municipalities (in association with CWDM)	Priority	Very high	Agent	PGWC, CWDM, Local Municipalities	Priority	Medium	Agent	PGWC	Priority	Very high	Agent	PGWC, CWDM, Local Municipalities
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Agent	PGWC, CWDM, Local Municipalities																				
Priority	Medium																				
Agent	PGWC																				
Priority	Very high																				
Agent	PGWC, CWDM, Local Municipalities																				
Spatial indicator(s)	<ol style="list-style-type: none"> 15. Operational and representative regional (district) and local (Breede Valley, Langeberg and Witzenberg Municipalities) planning forums 16. An operational and representative Cape Winelands Biosphere Reserve management entity 17. Credible IDPs and SDFs for each municipality 18. An integrated and centralised spatial database 																				
Spatial link	District-wide																				

⁵⁹ PGWC, Provincial Spatial Development Framework, May 2009.

Policy im- perative	The rationale for a regional planning forum is to ensure spatial planning cohesion beyond local municipal (spatial) planning officials – to include the City of Cape Town and neighbouring municipalities as well as other functional sectors; whereas the rationale for the local planning forum is to achieve cohesion within areas of bioregional homogeneity. There is an urgent need to minimize, link and integrate the different government processes (community and/or intergovernmental) performed within a specific jurisdiction area; operations to become outcome-driven and not compliance-driven.
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SG1.2 Governance imperatives

Government’s visionary statements need to inform (spatial) policy formulation and how (spatial) mandates are performed. As probably the dominant custodian of the elements that underpin present-day society, all three spheres of government should be instrumental in creating an environment conducive to attaining the district’s vision of **‘Growing, Sharing, Delivering and Innovating Together’**.

With the 5-year Strategic Agenda for Local Government the following decisions **in respect of improving planning for growth and development** were taken and endorsed, namely

- Planning capacity at all three levels of government must be significantly improved;
- Municipal councils should include in their plans concrete and realistic localised service delivery and development targets that would inform performance contracts of senior municipal officials;
- Certainty in the development planning system is required in relation to the location of national responsibility for spatial and land-use planning;
- Regulations and/or legislative amendments must be introduced to transform District and Metro IDPs into local expressions of government-wide commitments; and
- The NSDP must gradually evolve into a stronger and more directional national development planning instrument.⁶⁰

This notwithstanding, **government’s capacity remains limited**. The department of Regional Development and Planning Services (CWDM) manages the formulation (and review) of the CWDSDF and employs one professional planner to perform spatial planning and land-use management. In all the B Municipalities there are differences between the unit(s) responsible for spatial planning and land-use management regarding capacity, level of interaction, internal composition and working relationships – three municipalities indicated sufficient capacity while all municipalities indicated low (to zero) available capacity to perform spatial planning. There are also varying degrees of recognition of the spatial planning and land-use-management unit(s) as strategic components of the respective municipalities, most notably in decisions regarding housing projects. This invariably leads to “inappropriate” decisions (or recommendations by municipal officials) whereof the outcome does not feature in **performance management results**.

As an imperative for being instrumental in fostering (more) efficient government policy, any ‘reconstructive’ spatial planning paradigm must be sensitive towards the built, social, political, economic and environmental elements that underpin present-day society – with the geographic context of these ele-

⁶⁰ CWDM, Cape Winelands Integrated Development Plan 2009/2010.

ments demarcated as **'political jurisdictions'**. Given the disparateness of the district and existence of homogeneous areas within different administrative jurisdictions, a concern would be the merit of the existing municipal boundary alignment; mention is made of the following identified uncertainties that need further investigation, namely

- The Faure area between Stellenbosch Municipality and the City of Cape Town
- The Klapmuts area between Stellenbosch Municipality and Drakenstein Municipality
- The Dwarsrivier Valley (Franschhoek area), and
- The area in Drakenstein Municipality to the north of Wellington bordering on Swartland Municipality.

Table 9: Governance imperatives: current situation at municipalities

Spatial component	Langeberg	Breede Valley	Witzenberg	Drakenstein	Stellenbosch
Regional issues	-	No - but a distinctly different area to Stellenbosch/Paarl; implementation of resort development policy needs to accommodate local context; receptive area for in-migration; urgent need for funding of services	"Hierarchy of towns" is important; heavy traffic of large vehicles from Touws River through Ceres; workers living in Witzenberg commute to Worcester	Inclusion of Franschhoek into Drakenstein Municipality needs to be investigated; N1 corridor between Paarl and City of Cape Town; CBD redevelopment	Realignment of municipal boundary at Faure; development of railway nodes (integrated town and track);

Table 10: Governance imperatives

Subject	Numbering	Description
Theme	SG1	Better performance by the state
Component	SG1.2	Governance imperatives
SD link		Justice and democracy
Objectives		To improve the quality of life for the people of the region by ensuring principle-led responses To consider the spatial rationale for the implementation of government policies within the Cape Winelands district
Strategy (ies)	SG1.2	<ol style="list-style-type: none"> 1. Leaders to pursue a common vision and mobilise constituencies around them to address fault-lines that have profound implications for social stability and social cohesion⁶¹ 2. Acknowledge and accommodate the dimensions of local politics to successfully advance particular development agendas⁶² 3. Be sensitive to the principle of co-operative governance and recognize that the detailed implementation of principles and policies must occur at the district (regional) and local level⁶³ 4. Recognise district and metro areas as the most suitable planning entities to facilitate intergovernmental co-ordination and use the (district) CWIDP as the primary instrument in this regard 5. Ensure that the (internal) functional boundaries of national and provincial departments correspond with districts 6. Entrench bioregional planning principles in spatial planning and governance; emphasis on not fragmenting areas of bioregional homo-

⁶¹ The Presidency, Green Paper on National Planning, Sept. 2009.

⁶² Consolidating Developmental Local Government, Lessons from the South African Experience, An Isandla Institute Book Project, 2008.

⁶³ PGWC, Provincial Spatial Development Framework, May 2009.

Action(s)	<p>geneity between different planning initiatives</p> <p>7. Consider the critical interlinkages between the four dimensions of sustainable development in planning based on the built, social, political, economic and environmental elements that underpin present-day society</p> <p>8. Place emphasis at District Municipalities on programme management (apply project management principles) to 'bring together' multidepartmental (large-scale) and multidimensional programmes and sectoral targets</p> <p>9. Consider system-wide institutional remodelling to optimise performance through trial and error⁶⁴</p> <p>10. Create intelligence instruments to monitor, track, evaluate, review and report on operational systems</p> <p>11. Create a capable and effective state, sound institutions, an effective electorate and strong partnerships between social actors⁶⁵</p> <p>12. Ensure capable and knowledgeable administrations with interconnected relations</p> <p>13. Create 'learning organisations' where the lower-tier units are exposed to policy-making and decisions</p> <p>14. Accredite the CWIDP as the single, inclusive and strategic document for the district and conduct a district assessment to determine credible IDPs with emphasis on measuring the (in)ability of long-term comprehensive planning to meet its objectives</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Priority</td><td>Very high</td></tr> <tr><td>Agent</td><td>CWDM, B Municipalities</td></tr> </table> <p>15. Conduct research on the cumulative effect of existing municipal areas (as areas of bioregional heterogeneity) on planning outcomes</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Priority</td><td>High</td></tr> <tr><td>Agent</td><td>CWDM</td></tr> </table> <p>16. Implement and maintain a clearly defined individual and organisational performance management system in all municipalities that include key performance indicators for all relevant personnel (with emphasis on Section 57-appointed directors) involved in spatial planning and the town-planning assessment process; incorporate the key performance areas in the municipal Service Delivery Budget Implementation Plans (SDBIP)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Priority</td><td>Very high</td></tr> <tr><td>Agent</td><td>CWDM, B Municipalities</td></tr> </table> <p>17. Conduct ongoing training and exposure, as 'learning organizations', for councillors and municipal officials regarding best practice in spatial planning, land use management and land development</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Priority</td><td>High</td></tr> <tr><td>Agent</td><td>CWDM, B Municipalities</td></tr> </table> <p>18. Fill vacant (budgeted) positions of planners in the lower-tier units of relevant departments as a matter of urgency; Create 'rules of thumb' to determine the acceptable number of town planners required to manage spatial planning and assess town-planning applications per municipality</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Priority</td><td>Very high</td></tr> <tr><td>Agent</td><td>CWDM, B Municipalities</td></tr> </table> <p>19. Conduct a demarcation study to determine the merits of the existing municipal boundary alignment at identified "hot spots"</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td>Priority</td><td>High</td></tr> <tr><td>Agent</td><td>Demarcation Board, CWDM, Local Municipalities</td></tr> </table> <p>20. Monitor progress (and impact) regarding the ten collectively agreed-upon objectives and associated strategies stipulated in the Growth</p>	Priority	Very high	Agent	CWDM, B Municipalities	Priority	High	Agent	CWDM	Priority	Very high	Agent	CWDM, B Municipalities	Priority	High	Agent	CWDM, B Municipalities	Priority	Very high	Agent	CWDM, B Municipalities	Priority	High	Agent	Demarcation Board, CWDM, Local Municipalities
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⁶⁴ Consolidating Developmental Local Government, Lessons from the South African Experience, An Isandla Institute Book Project, 2008.

⁶⁵ The Presidency, Green Paper on National Planning, Sept. 2009.

		and Development Strategy; monitor progress (and impact) with the flagship/catalytic projects ⁶⁶ ; Convene a Growth and Development Strategy Stakeholder Review Summit				
		<table border="1"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>CWDM</td> </tr> </table>	Priority	Very high	Agent	CWDM
Priority	Very high					
Agent	CWDM					
Spatial indicator(s)		21. The CWIDP used by all role-players as the single, inclusive and strategic document for the district 22. Effective and sufficient (spatial planning) staff complement at each municipality 23. Areas of bioregional homogeneity serve as boundaries for 'political jurisdictions'				
Spatial link		District-wide				
Policy imperative		The ' spatial agenda ' must acknowledge the disparateness and diversity of the district. In implementing the agreed-upon development approach the key (spatial) considerations need to be considered.				

SG1.3 Democratising spatial planning

The NSDP advocates a policy approach which itself should be differentiated and conducive to the requirements of any diverse and disparate spatial context⁶⁷; we can add to this the bioregional planning approach. Unequivocally, the Cape Winelands district constitutes such a diverse and disparate area — as one 'political jurisdiction' — and therefore demands that more **localized spatial planning** be performed within smaller geographic areas (neighbourhoods/wards) than what is done at present.

The existence of the **Cape Winelands Biosphere Reserve** (overlapping administrative boundaries) creates the optimum 'avenue' for higher-order policy (including the CWDSDF) to be cascaded downwards through consultation and deliberation within a collective agreement. In this context, where democratization is central to decision-making, the legal status of the CWDSDF, given current statutory ambiguity, should in fact not be a major concern. Whereas, beyond the boundaries of the Biosphere Reserve's regulatory mechanisms for spatial planning, land use and land development, legal status, attached to policy proposals, is vital.

Table 11: Democratising spatial planning

Subject	Number	Description				
Theme	SG1	Better performance by the state				
Component	SG1.3	Democratising spatial planning				
SD link		Care, justice and democracy				
Objectives	To ensure	collective recognition of ensuing spatial guidelines				
Strategy (ies)	SG1.3	1. Involve local communities and other key role-players in spatial planning and decisions on land use management and land development 2. Collate decisions of spatial planning, land development and land use management and provide to appropriate information 'destinations'				
Action(s)		3. Perform localised spatial planning within smaller geographic areas (neighbourhoods/wards)				
		<table border="1"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>PGWC, CWDM and Stellenbosch, Drakenstein and Breede Valley municipalities</td> </tr> </table>	Priority	Very high	Agent	PGWC, CWDM and Stellenbosch, Drakenstein and Breede Valley municipalities
Priority	Very high					
Agent	PGWC, CWDM and Stellenbosch, Drakenstein and Breede Valley municipalities					

⁶⁶ CWDM, Cape Winelands Integrated Development Plan, 2009/2010.

⁶⁷ National Spatial Development Perspective, 2006.

	<p>4. Make available spatial guidelines and information (note: as a sectoral input into a comprehensive dataset of information) to the public (including private investors); Incorporate planning decisions (read: spatial, land development and land use) in ward-based decision-making processes; Include and map of all these municipal and provincial decisions in the Integrated Development Plan of each B Municipality (District IDP to include a summary of all decisions</p> <table border="1"> <tr> <td>Priority</td> <td>High</td> </tr> <tr> <td>Agent</td> <td>CWDM (Department of Regional Development and Planning Services) and B Municipalities</td> </tr> </table> <p>5. Establish and formalise the envisaged Cape Winelands Biosphere Reserve Management Committee</p> <table border="1"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>CWDM</td> </tr> </table>	Priority	High	Agent	CWDM (Department of Regional Development and Planning Services) and B Municipalities	Priority	Very high	Agent	CWDM
Priority	High								
Agent	CWDM (Department of Regional Development and Planning Services) and B Municipalities								
Priority	Very high								
Agent	CWDM								
Spatial indicator(s)	<p>6. Localised spatial planning initiatives undertaken in the Stellenbosch, Drakenstein and Breede Valley municipalities</p> <p>7. Municipal and provincial decisions related to spatial planning, land development and land use management collated and provided to appropriate 'information destinations'</p>								
Spatial link	District-wide								
Policy imperative	Providing information to appropriate 'information destinations' will give impetus to recognising the district as the most suitable planning entity to facilitate intergovernmental co-ordination. The Cape Winelands Biosphere Reserve management entity must champion more 'localised' spatial planning within the Biosphere Reserve.								

SG1.4 Investment regime

Notwithstanding clear (national, provincial, **district** and local) spatial objectives, public investment programmes and service delivery, in general, remain disjointed with stated (political and developmental) intentions e.g. low-cost housing is still built on the outskirts of towns (see photos and map below)



The spatial distribution of the MIG (Municipal Infrastructure Grant) funds clearly demonstrates the need to clarify the distinction between areas where social capital investment and economic infrastructure funding should occur; and, until recently there does not appear to be any real sense of how and if investment spending is going to unblock potential and mobilize community, public or private multiplier spending or benefits.⁶⁸

The PGWC allocates funds to the Cape Winelands district through transfers to local municipalities and provincial payments. The following table provides the apportionment of PGWC funds.

Table 12: Apportionment of PGWC funds* in the Cape Winelands district over three budget periods (2009/2010, 2010/2011 and 2011/2012)

Vote	Stellenbosch			Drakenstein			Breede Valley			Witzenberg			Langeberg			CWDM			
	09/10	10/11	11/12	09/10	10/11	11/12	09/10	10/11	11/12	09/10	10/11	11/12	09/10	10/11	11/12	09/10	10/11	11/12	
Community safety																100			
Education		15			30			33				12		10				15	
Health		9			41			39				5		6				9	
Social development		-			-			-				-		-				100	
Local government and housing	21	21	15	35	35	26	20	20	15	10	10	7	14	14	37	21	21	15	
Transport and public works	20	14	9	68	34	35	5	32	28	5	20	22	1	1	6				-
Agriculture		93			6			1			1			1					-
Economic development and tourism	Allocation not indicated per municipal area																		
Cultural affairs and sport	28	17	17	31	27	27	15	20	20	8	11	11	18	24	24				-

* This table does not differentiate between the two types of allocation but rather between the recipient municipal areas. The table represents approximate percentages.

⁶⁸ PGWC, Provincial Spatial Development Framework, 2005.

Calculating (as a percentage) the average of the budget apportionment (per vote) to each municipal area over the budget period (2009/2010 to 2011/2012) and excluding outlier-votes (community safety, social development and agriculture), the Drakenstein municipal area receives the bulk of the funds (35%) followed by, surprisingly, the Breede Valley area (29%) and not Stellenbosch Municipality (13%); with the Langeberg Municipality also receiving 13% and the Witzenberg Municipality 10%. Ignoring specific amounts – that incidentally indicate a general decline of the funding available over the same budget period – the apportionment of available funds to the Drakenstein and Stellenbosch municipal areas decreases in relation to the more ‘rural’ municipalities.

Considering the housing and human settlement budget contribution, the provincial grant depicts a rigid funding-blueprint in that it represents a standard increase over the three-year MTEF period and apportioning between the respective municipalities – creating an inflexible top-down approach to housing delivery unable to accommodate possible change. (see **Table 13**).

Similarly, the MIG (2009/2010) of R 78,240 million – apportionment based on the number of indigent households, service backlogs and poverty levels – has been allocated as follows:

- Witzenberg Municipality: R 10,728m
- Drakenstein Municipality: R 20,704m
- Stellenbosch Municipality: R 15,051m
- Breede Valley Municipality: R 15,877m
- Langeberg Municipality: R 10,929m, and
- Cape Winelands District Municipality: R 4,951m.

with the further proviso that the funds be used according to provincial requirements.

Table 13: Integrated housing and human settlement grant⁶⁹

Municipality	Financial year; R'000						Sanitation backlog study, 2007
	2009/2010	%	2010/2011	%	2011/2012	%	
Witzenberg	13562	10	16125	10	19150	10	3827 – 10%
Drakenstein	47845	35	56885	35	67559	35	13501 – 35%
Stellenbosch	27890	21	33160	21	39381	21	7870 – 21 %
Breede Valley	27255	20	32405	20	38485	20	7691 – 20%
Langeberg	18651	14	22175	14	26336	14	5236 – 14%
Cape Winelands	-		-		-		(370- DMA)
TOTAL	135173		160750		190911		38522

⁶⁹ PGWC, Provincial Treasury, Budget Estimates of Provincial Expenditure 2009, Local Government and Housing, Vote 8.

The capital budgets of the municipalities, except for Drakenstein, indicate a **general downward trajectory** for the following two budget periods, with as expected, a drastic variation between the totals of the three more 'rural' municipalities compared with the two "urbanised" municipalities. A situation that needs to be closely monitored is the capital budget/population ratio of the Breede Valley municipality and the two larger municipalities, which reflect a "capital starvation" in the Breede Valley municipality (see **Table 14**).

Table 14: Capital budget/population ratio

Municipality	Population 2009/2010	Capital budget 2009/2010 (rand)	Municipal spending per capita 2009/2010
Breede Valley	134 271	98,238,363	R731,64
Drakenstein	217 089	321,309,330	R1480,08
Ratio	1:1.6	1:3.2	
Breede Valley	134 271	98,238,363	R731,64
Stellenbosch	200 524	269,218,212	R1342,75
Ratio	1:1.5	1:2.7	

Table 15: Better performance by the state

Subject	Number	Description								
Theme	SG1	Better performance by the state								
Component	SG1.4	Investment regime								
SD link		Care, justice and democracy								
Objectives		To consider the spatial rationale for the implementation of government policies within the Cape Winelands district								
Strategy (ies)	SG1.4	<ol style="list-style-type: none"> 1. Ensure the building of a strategic management institutional pyramid⁷⁰ (vision → goals → etc) with effective budgeting and implementation 2. Ensure that programmes and projects are principle-led responses to goals and objectives through the measurement and review of targets that are informed by benchmarks, thresholds, take-up rates, etc 3. Base the geographic apportionment of government funds on critical informants that include, but are not restricted to, need 4. Utilise space e.g. hierarchy of towns, as a common backdrop against which investment and spending decisions can be considered to maximise the social and economic returns on government development spending 5. Create a package of enabling instruments (e.g. incentives, rates rebates, density bonuses) to foster appropriate private investment; create and implement incentives for all role-players (to achieve spatial objectives); capture incentives in the rates policy 6. Prioritise funding allocations for higher order towns with severe infrastructure backlog 								
Action(s)		<ol style="list-style-type: none"> 7. Consult with provincial treasury about the 'formulas' applied in the allocation of funds viz. transfers to local municipalities and provincial payments; re-evaluate own programmes and projects against measured targets as informed by benchmarks, thresholds, take-up rates, etc <table border="1" style="width: 100%; margin-top: 5px;"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>CWDM (initially only the CWDM)</td> </tr> </table> 8. Monitor government spending (CAPEX) per capita within a geographic area as a proxy for sustainable delivery on constitutional mandates <table border="1" style="width: 100%; margin-top: 5px;"> <tr> <td>Priority</td> <td>High</td> </tr> <tr> <td>Agent</td> <td>PGWC and CWDM</td> </tr> </table> 	Priority	Very high	Agent	CWDM (initially only the CWDM)	Priority	High	Agent	PGWC and CWDM
Priority	Very high									
Agent	CWDM (initially only the CWDM)									
Priority	High									
Agent	PGWC and CWDM									

⁷⁰ Consolidating Developmental Local Government, Lessons from the South African Experience, An Isandla Institute Book Project, 2008.

	9. Create public investment business models to convert budgeting processes into <i>real</i> economic and social value				
	<table border="1"> <tr> <td>Priority</td> <td>Medium</td> </tr> <tr> <td>Agent</td> <td>CWDM</td> </tr> </table>	Priority	Medium	Agent	CWDM
Priority	Medium				
Agent	CWDM				
	10. Apply the hierarchy of towns in investment decisions on government development spending				
	<table border="1"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>CWDM and B Municipalities</td> </tr> </table>	Priority	Very high	Agent	CWDM and B Municipalities
Priority	Very high				
Agent	CWDM and B Municipalities				
Spatial indicator	11. The bulk of government funds is spent within the Stellenbosch and Drakenstein municipal areas and the town of Worcester				
Spatial link	District-wide				
Policy imperative	Efforts to "improve, strengthen or restructure" the local development process have to focus on the spatial, racial and social class <i>spread of development</i> and the <i>safeguarding of sustainability</i> - rather than the "creation" of new growth sectors or initiatives				

SG2 Bioregional planning

SG2.1 Biosphere Reserves

Bioregional planning refers to land-use planning and management that promotes sustainable development by recognising the **relationship** between, and giving practical effect to, environmental integrity, human-well-being and economic efficiency within a **defined geographical space** (known as a biosphere reserve), the boundaries of which were determined in accordance with environmental and social criteria.⁷¹ To ensure performance on the three functions of a biosphere reserve, it is imperative that there be **co-operative governance** between the relevant role-players.

On 2 September 2009, the Provincial Cabinet granted approval to the Department of Environmental Affairs and Development Planning to publish the Draft Bill on Western Cape Biosphere Reserves, 2009, for public comment.

Table 16: Biosphere Reserves

Subject	Number	Description
Theme	SG2	Bioregional planning
Component	SG2.1	Biosphere Reserves
SD link		Access, care, democracy, burden sharing, eco-efficiency and justice
Objectives		<ul style="list-style-type: none"> To improve the quality of life for the people of the region by ensuring principle-led responses To ensure collective recognition of ensuing spatial guidelines To manage the impact and exposure of external and internal threats to growth and development (read: sustainable development) To promote sustainable resource use and responsible rural development To foster the inclusion of an economic perspective in land use management and land development To improve and conserve the district's natural environment

⁷¹ CWDM, Draft Spatial Development Plan, Cape Winelands Biosphere Reserve, May 2008.

To consider the spatial rationale for the implementation of government policies within the Cape Winelands district						
Strategy	SG2.1	1. Establish bioregional planning — that recognises the relationships between, and gives practical effect to, the built, social, political, economic and environmental elements that underpin present-day society — as the planning approach to spatial planning, land-use management and land development in order to complement economic growth and development and deliver on the sustainable development agenda				
Action(s)		2. Comment on the Draft Bill on Western Cape Biosphere Reserves, 2009				
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>CWDM</td> </tr> </table>	Priority	Very high	Agent	CWDM
	Priority	Very high				
	Agent	CWDM				
	3. Consider the realignment of the “soft boundaries” of the Cape Winelands Biosphere Reserve to exclude areas not associated with the core Stellenbosch/Drakenstein bioregion					
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Priority</td> <td>High</td> </tr> <tr> <td>Agent</td> <td>CWDM</td> </tr> </table>	Priority	High	Agent	CWDM	
Priority	High					
Agent	CWDM					
		4. Initiate a study to determine the possible establishment and registration of an ‘Upper Breede River Valley’ Biosphere Reserve ; also outlining the programme of engagement with communities before and after registration				
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>CWDM</td> </tr> </table>	Priority	Very high	Agent	CWDM
Priority	Very high					
Agent	CWDM					
Spatial indicator(s)		5. The Cape Winelands Biosphere Reserve represents an area of bioregional homogeneity				
Spatial link		6. The ‘Upper Breede River Valley’ has been considered for registration as a Biosphere Reserve				
Policy imperative		District-wide Bioregional planning should also feature as the planning and development approach adopted and promoted by the Cape Winelands Integrated Development Plan				

SG2.2 Cape Winelands Biosphere Reserve

Map 4: The Cape Winelands Biosphere Reserve

The CWDSDF classifies the Cape Winelands Biosphere Reserve as a scale-informed value-adding management entity, operational within a sustainable development paradigm, to support existing roles and responsibilities through structured participation and (scientific and local) knowledgeable input that responds to local conditions, needs and perceptions.

On the regional and local level, the biosphere reserve is **to facilitate coherent planning and land-use management** in terms of the principles of sustainable development. The objectives in this regard are to facilitate the following:

- Optimise, in a place-specific manner, the implementation of the three global functions of biosphere reserves
- Align the existing land-use planning guidelines with the biosphere zoning principles and promote the adoption of these throughout the district
- Support the local municipalities in the updating of their IDPs and, in particular, their SDFs prepared in terms of the Local Government Municipal Systems Act, 2000 (Act 32 of 2000)
- Facilitate cross-boundary co-operation and co-ordination between the municipalities that form part of the biosphere reserve with regard to issues that are of mutual interest (refer to *inter alia* land-use management, biodiversity conservation, and resource utilisation)
- Provide a coherent framework for the sustainable use of natural resources (including productive agricultural soils, water, biodiversity products, etc.) in order to enhance the key economic sectors of the district, in particular, agriculture, development and tourism, as such, promoting the comparative and the competitive economic advantages of the area, and
- Provide a basis for the eradication of poverty and inequality as the core obstacle to a stable and prosperous future in the various areas.

In the context of this spatial intervention the following issues need to be stated as they relate to the eventual spatial policy-response, namely

- The Cape Winelands Biosphere Reserve was registered at UNESCO on 18 September 2007
- A Spatial Development Framework Plan (SDFP) is being drafted that will give statutory status for the biosphere reserve and its management; this will also provide the basis for the preparation of a supplementary and detailed management plan for the biosphere reserve
- The existence of the Biosphere Reserve is associated with coherent planning and land-use management strategies within Biosphere zoning principles – mainly as spatial planning categories
- These management guidelines are to be implemented alongside existing legal land-use parameters
- The establishment of a dedicated management entity to “oversee” the management of the Biosphere Reserve is to be completed
- The scale of planning remains large and does “not yet” include place-specific guidelines or neighbourhood planning; current spatial planning and land-use management guidelines do not specifically embrace biosphere zoning principles
- The bioregional planning approach intends to democratise spatial planning and land-use management but the provincial government (still) does implement a high degree of paternalism (read: decision-making) in relation to spatial planning and land-use management, and
- The remainder of the district, beyond the “soft” boundaries of the Cape Winelands Biosphere Reserve, needs – dependent on local specifics - special spatial interventions.

Table 17: Cape Winelands Biosphere Reserve

Subject	Number	Description				
Theme	SG2	Bioregional planning				
Component	SG2.2	Cape Winelands Biosphere Reserve				
SD link		Access, care, democracy, burden sharing, eco-efficiency and justice				
Objectives		Providing a framework for international recognition and support Providing a framework for coherent planning and land-use management				
Strategy	SG2.2	1. Establish and implement the Cape Winelands Biosphere Reserve as a scale-informed value-adding management approach, operational within a sustainable development paradigm, to support existing roles and responsibilities through structured participation and (scientific and local) knowledgeable input that responds to local conditions, needs and perceptions				
Action(s)		2. Complete the Spatial Development Framework Plan and Management Plan for the Biosphere Reserve				
		<table border="1" style="width: 100%;"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>CWMD (in association with B Municipalities)</td> </tr> </table>	Priority	Very high	Agent	CWMD (in association with B Municipalities)
Priority	Very high					
Agent	CWMD (in association with B Municipalities)					
		3. Re-sensitize local councillors and officials regarding the value and meaning of the Cape Winelands Biosphere Reserve				
		<table border="1" style="width: 100%;"> <tr> <td>Priority</td> <td>Medium</td> </tr> <tr> <td>Agent</td> <td>CWDM</td> </tr> </table>	Priority	Medium	Agent	CWDM
Priority	Medium					
Agent	CWDM					
		4. Establish and formalise the envisaged Cape Winelands Biosphere Reserve ‘Management’ Committee (also see SG1.3)				
		<table border="1" style="width: 100%;"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>CWDM</td> </tr> </table>	Priority	Very high	Agent	CWDM
Priority	Very high					
Agent	CWDM					
		5. Align the existing land-use management guidelines with the biosphere zoning principles and promote the adoption of these throughout the district				
		<table border="1" style="width: 100%;"> <tr> <td>Priority</td> <td>High</td> </tr> <tr> <td>Agent</td> <td>Cape Winelands Biosphere Reserve management entity</td> </tr> </table>	Priority	High	Agent	Cape Winelands Biosphere Reserve management entity
Priority	High					
Agent	Cape Winelands Biosphere Reserve management entity					
		6. Facilitate cross-boundary co-operation and co-ordination between the municipalities that form part of the Cape Winelands Biosphere				

		Reserve				
		<table border="1"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>Cape Winelands Biosphere Reserve management entity</td> </tr> </table>	Priority	Very high	Agent	Cape Winelands Biosphere Reserve management entity
Priority	Very high					
Agent	Cape Winelands Biosphere Reserve management entity					
Spatial indicator		7. The Cape Winelands Biosphere Reserve represents an area of bioregional homogeneity				
Spatial link		Cape Winelands Biosphere Reserve				
Policy imperative		The Cape Winelands Biosphere Reserve must represent a unique area within which a value-adding approach to land-use planning and management contributes to sustainable development; it must not be an additional layer of statutory regulations but build on voluntary associations				

b. Human well-being

SG3 Demography

SG3.1 Population growth and migration

Migration analysis confirms that the continuous growth of the Western Cape population is due to both inter-provincial and intra-district migration. The trend is towards stronger concentrations of population in urban areas. The province in general is thus showing high population growth rates, particularly along the coastal plains and mountain-valley landscapes which include towns situated within the Cape Winelands District.

Table 18 provides official population totals for the local municipal areas in 2001 (the latest census) and 2007 (the Community Survey 2007). It also shows average growth rates for the six years between 2001 and 2007 and projected growth rates for the eight years up to 2015.

Table 18: Population estimates

	2001	%	Growth p.a.	2007	%	Est growth p.a.	2015	%
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Witzenberg	83 567	13.3	-1.6	75 148	10.5	-1.5	65 000	8.4
Drakenstein	194 417	30.8	2.0%	217 089	30.5	1.8	250 000	32.5
Stellenbosch	118 709	18.8	9.2%	200 524	28.1	[2.5] 2.5	265 000 245 000	31.8
Breede Valley	146 028	23.2	-1.5%	134 271	18.8	[4.2] -1.0	278 000 125 000	16.2
Langeberg	81 271	12.9	-0.3	80 121	11.2	0.0	80 000	10.4
DMA	6 500	1.0	0	5 260	0.7	0	5 000	0.6
Total	630 493	100	2.1	712 413	100	1.0	770 000 [818 000]	100

The average annual population growth for the Cape Winelands district of 2.1% between 2001 and 2007 is well above the national average which is currently just above 1 percent with this rate to 'normalize' at 1% for the period 2007 to 2015.

The shares of the five local municipalities in the district's population are also changing significantly. Drakenstein and Stellenbosch are increasing from a 50% joint share in 2001 to a projected 65% share in 2015. In fact, these are the only local municipalities in the district with positive growth rates over the 15 years (2001–2015). In the case of the municipalities with negative growth over the past years, these trends have been taken as basis for projections, viz. a relatively modest negative growth of 1–1.5% p.a. This will usually indicate a distinct decline in some of the respective municipal settlements (hamlets) and a slight increase in some of the towns.

Regarding inflows into the Cape Winelands district it appears that much of the movement into this District has been indirect, and represents on-migration, arriving indirectly after some intermediate stop – that is for the Coloured and African population; whereas in the case of Whites, the population appears as one of the more stable in spite of the recorded widespread and fairly strong outflows. It appears that for the African population the pro-

portion of currently employed entering the District from the metro and provincial Districts has diminished whereas those entering from outside the province have picked up slightly.

When studying the profile of the in-migrant to the Cape Winelands District, Census 2001 figures show the majority of individuals to be 19 years or younger. These figures probably reflect the number of children that move with their parents/care-givers to the area and could possibly also be influenced by the large student population that makes its way to this district after 18. The data, however does not suggest a strong flow of migrants from one specific age group although migrant numbers do taper down as the age groups advance.

Revised estimates

Growth trends derived from the 2001 census and the 2007 community survey show a particular pattern, which fits in logically with broader urbanisation and migration trends. These have been taken as basis for projections for 2015–2020. They showed strong positive growth for Drakenstein and Stellenbosch (which are in fact extended suburbs of the greater Cape Town municipal area) and stagnation or slight decline in the population of Witzenberg, Breede Valley, Langeberg and the DMA. The total was projected at one per cent growth, which would be in line with South Africa’s overall (lower) population growth rate.

Through the discussions⁷² of the draft Cape Winelands Spatial Development Framework (2009/2010) and broader reflections on South Africa’s regional population growth trends, the following factors have been stressed:

- The 2007 survey may have understated the population across the country and in this district
- In-migration pressures from the Eastern Cape, other South African provinces and from foreign (African) countries may be stronger than initially projected
 - This in-migration may also reach the outlying municipal areas like Witzenberg and Breede Valley (though less forceful than Stellenbosch and Drakenstein), and
 - More effective control of HIV/Aids may push-up South Africa’s net population growth rate in future, countering other trends towards lower net population growth.

Municipality	2007 population share	Estimated growth p.a. from 2010 to 2020
Witzenberg	10.5%	0.3%
Drakenstein	30.5%	2.1%
Stellenbosch	28.1%	2.8%
Breede Valley	18.8%	0.4%
Langeberg	11.2%	0.1%
DMA	0.7%	0.1%
Total percentage per annum	100%	1.5% per annum

In the light of these considerations, the **revised estimates** (see table opposite) presents a relatively higher projected net population-growth rate for the six sub-regions and the overall total. These can be used for projections for 2010 to 2015 and (with some caution and the feedback of the 2011 census incorporated as soon as possible) even to 2020.

⁷² District workshop held on 30 November 2010 at Worcester to obtain buy-in from local municipalities.

Table 19: Population growth and migration

Subject	Number	Description								
Theme	SG3	Demography								
Component	SG3.1	Population growth and migration								
SD link		Access, burden sharing and eco-efficiency								
Objectives		To improve the quality of life for the people of the region by ensuring principle-led responses To manage the impact and exposure of external and internal threats to growth and development (read: sustainable development) To promote the concentration and intensification of human and economic activities within the current land footprint and in areas of high accessibility To address housing backlogs within a settlement hierarchy and propose alternative settlement options								
Strategy (ies)	SG3.1	<ol style="list-style-type: none"> 1. Incorporate regional, district and local population growth dynamics in municipal planning to accommodate a more diverse and needs-intensive population 2. Facilitate the movement of households to larger urban areas as it may be as relevant as ad hoc social support and improvements in the most basic infrastructure services 3. Address migration management as a developmental rather than a security concern 4. Consider formal and informal restrictions on and mismanagement of immigration – including laws, administrative practice and widespread xenophobia – that can impact negatively on the economic development⁷³ 5. Spread the facts and awareness of immigration 6. Manage the district settlement pattern with regard to where people live and the availability of resources, particularly water, land and future economic potential for growth⁷⁴ 								
Action(s)		<ol style="list-style-type: none"> 7. Ensure centralised, reliable and available migration data and consistent data gathering; track, measure and monitor the expected rural-urban shifts of persons; consider the household formation rate as informant to urban and rural management strategies <table border="1"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>CWDM (in association with B Municipalities and Academic Institutions)</td> </tr> </table> 8. Develop a migration policy to accommodate and manage new or relocated entrants <table border="1"> <tr> <td>Priority</td> <td>High</td> </tr> <tr> <td>Agent</td> <td>PGWC and CWDM</td> </tr> </table> 	Priority	Very high	Agent	CWDM (in association with B Municipalities and Academic Institutions)	Priority	High	Agent	PGWC and CWDM
Priority	Very high									
Agent	CWDM (in association with B Municipalities and Academic Institutions)									
Priority	High									
Agent	PGWC and CWDM									
Spatial indicator(s)		<ol style="list-style-type: none"> 9. Population, household size, and population density per town and municipality; as aggregate for the district 10. Relevant weight of the district and communities by population and composition 11. Population growth rates 								
Spatial link		District-wide								
Policy imperative		Accommodate future population growth owing to, amongst others, inter-provincial and intra-district migration with a high percentage of movement being indirect that represents on-migration, in municipal planning								

⁷³ Landau, L, Gindrey, V, Gauteng Provincial Government, Gauteng 2055 Trend Paper: Population & Migration, 2008.

⁷⁴ PGWC, Provincial Spatial Development Framework, May 2009.

SG4 Settlement pattern

SG4.1 Hierarchy of towns

The PSDF identified Worcester, Stellenbosch, Paarl and Wellington as four of the leader towns within the Province. These towns are thus placed as higher order towns within a district hierarchy with the remaining towns classified according to the “investment type” as identified in the Growth Potential Study.⁷⁵ Aligned with the National Spatial Development Perspective (NSDP) guidelines, two investment types ‘Town or Infrastructural investment’ and ‘Social or People investment’ are used⁷⁶:

- Low Need/High Development: *Town investment*;
- High Need/High Development: *Social and Town investment*;
- High Need/Low Development: *Social investment*; and
- Low Need/Low Development: *Minimal investment*.

Town or infrastructural investment can be defined as fixed investment that generally refers to the construction of plant and buildings in excess of R1 million⁷⁷ and social or people investment relates to investment in social and/ or human capital.

Table 20: CWDSDF town classification

Source	Description	CWDSDF Town Classification
PSDF	Leader town	Higher order
Growth potential study	Social and Town investment	First order
Growth potential study	Town investment	Second order
Growth potential study	Social investment	Third order
Growth potential study	Minimal investment	Fourth order

By using and analysing the composite indices as compiled in the Growth Potential Study a **town investment typology** for the Cape Winelands district was developed. **Table 20** indicates the (probable) town classifications that can be used in the CWDSDF based on the criteria of the Growth Potential Study and **Table 21** contains a CWDSDF hierarchal town order; promoting a town investment typology.

Table 21: CWDSDF town investment typology

Municipality	Higher order	First order	Second order	Third order	Fourth order
Langeberg		Robertson <i>Montagu</i>		McGregor, <i>Ashton, Bonnievale</i>	
Witzenberg		Ceres		Tulbagh, Wolseley, Prince Alfred Hamlet	Op-die-Berg

⁷⁵ PGWC, Growth potential of towns in the Western Cape, 2004.

⁷⁶ *ibid.*

⁷⁷ PGWC, Provincial Spatial Development Framework, May 2009.

Drakenstein	Paarl, Wellington			Gouda, Saron, Hermon	
Stellenbosch	Stellenbosch	Franschhoek, Klipmuts	Jamestown, Kylemore, Pniel		
Breede Valley	Worcester			De Doorns, Touws River, <i>Rawsonville</i>	

Town: indicates an amendment to the PSDF town investment typology⁷⁸

Three of the four *leader towns*⁷⁹ (Stellenbosch, Paarl and Wellington), being virtually within the functional metro-economy of Cape Town, function more as an extension of the metropolitan area rather than being significant centres of services and goods to the surrounding countryside. The town of Worcester can be classified as the only **"major" service centre of the district** due to easy accessibility and partial seclusion from the overpowering effect of the functional metro-economy of Cape Town. Intermediate-size cities (e.g. Worcester) seem to be the most promising for promotion as a growth centre in terms of spatial opportunity costs⁸⁰; it offers more potential than smaller places and fewer diseconomies than the larger centres, and was normally much closer to the impacted region. Out-migration to these cities could be undertaken much more easily and with less social disruption than to more distant metropolitan centres – also relocation may not be necessary as it is close to impacted areas.

Table 22: Hierarchy of towns: current situation at municipalities

Spatial component	Langeberg	Breede Valley	Witzenberg	Drakenstein	Stellenbosch
Demand for land/services	Yes, industrial; serviced sites not available; zoned sites available (considered for housing)	Yes; industrial; applications not allowed owing to insufficient services - no water and sewerage capacity (moratorium in place); limited land available in Worcester and Rawsonville	Yes, for residential and small scale farming; Ceres – industrial, not for business use; moratorium on development applications in certain towns viz. Wolseley, Tulbagh and Prince Alfred Hamlet; there is a shortage of water	High demand; 'new' land development opportunities limited (buyers of land do not develop); current infrastructure fine but minimum spare capacity – there was already two reports before council advocating a 'no development' option – however, there is no moratorium in place; Bulk Infrastructure Services Contributions tripled in last couple of years	Yes, Klipmuts area

Table 23: Hierarchy of towns

Subject	Number	Description
Theme	SG4	Settlement pattern
Component	SG4.1	Hierarchy of towns
SD link		Access, care, democracy, burden sharing, eco-efficiency and justice
Objectives		To manage the impact and exposure of external and internal threats to growth and development (read: sustainable development) To promote the concentration and intensification of human and economic activities within the current land footprint and in areas of high accessibility To address housing backlogs within a settlement hierarchy and propose alternative settlement options

⁷⁸ PGWC, Growth potential of towns in the Western Cape, 2004.

⁷⁹ *ibid.*

⁸⁰ Hartshorn, Truman H, Interpreting the city, 1980, p 50.

To consider the spatial rationale for the implementation of government policies within the Cape Winelands district													
Strategy (ies)	SG4.1												
Action(s)	<ol style="list-style-type: none"> 1. Ensure higher levels of sustainable growth through, <i>inter alia</i>, focusing investment and development on a number of significant urban areas (according to a hierarchal order), whilst maintaining rural integrity and ensuring biodiversity conservation; to use growth as a catalyst to address poverty alleviation, spatial restructuring and the safeguarding of sustainability 2. Consolidate a hierarchy of towns cognizant of the built, social, political, economic and environmental elements that underpin present-day society and mindful of the delivery of basic services to all and a principle-led (investment) response 3. Acknowledge, incorporate and identify the cumulative impact of rural activities and performance on the growth potential of towns 4. Consider and incorporate the growth and development of Cape Town as critical informant for district planning and implementation 5. Consider Stellenbosch, Drakenstein (excluding the area north of Wellington) municipal areas and Worcester as priority growth management areas (note: not the entire Breede River Valley) 6. Monitor government spending (CAPEX) per capita within a geographic area as a proxy for sustainable delivery on constitutional mandates (also see SG1.4) <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr><td style="width: 20%;">Priority</td><td>High</td></tr> <tr><td>Agent</td><td>PGWC and CWDM</td></tr> </table> 7. Ensure government spending correlates with the CWDSDF town investment typology (but mindful of the delivery of basic services to all and a principle-led investment response) <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr><td style="width: 20%;">Priority</td><td>Very high</td></tr> <tr><td>Agent</td><td>PGWC and CWDM</td></tr> </table> 8. Ensure sufficient public consultation and participation in the PGWC initiative to review a 'hierarchy of towns' for the district <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr><td style="width: 20%;">Priority</td><td>Very high</td></tr> <tr><td>Agent</td><td>PGWC</td></tr> </table> 	Priority	High	Agent	PGWC and CWDM	Priority	Very high	Agent	PGWC and CWDM	Priority	Very high	Agent	PGWC
Priority	High												
Agent	PGWC and CWDM												
Priority	Very high												
Agent	PGWC and CWDM												
Priority	Very high												
Agent	PGWC												
Spatial indicator	9. The bulk of government funds is spent within the Stellenbosch and Drakenstein municipal areas and the town of Worcester												
Spatial link	District-wide												
Policy imperative	It is especially the provision of housing and municipal infrastructure that should conform to a hierarchical order of towns based on a town investment typology. The general planning norms for urban land requirements should also be reconsidered in the context of the built, social, political, economic and environmental elements that underpin present-day society												

SG4.2 Spatial structure

The development of the vast majority of towns is rooted in their role as service centres for the surrounding agricultural environment as rural communities need a centrally located core town for religious, health, educational and services/shopping facilities, as well as a market for their products.⁸¹ Apart from the economics that drive the growth and development of these urban centers, aspects regarding technological innovation, the environment, the particular spatial location, cultural patterns and management systems also play a role.⁸² Thus, each 'planning cluster' (see **Chapter 3**) in the district has

⁸¹ PGWC, Growth Potential of Towns in the Western Cape, 2004.

⁸² *ibid.*

distinct growth forces and historically evolved relations between the towns, villages and neighbourhoods, which will shape the potential for future growth. It seems critical for pro-growth (and pro-poor) municipal strategies that these clusters and their development potential are taken into account.

Linked to the spatial argument for the Cape Winelands district, the CWDSDF prioritises three development corridors viz. N1 corridor between Paarl and Cape Town, R301 between Paarl and Wellington and the N1 traversing the Worcester urban area, for urgent planning of future growth options. In the case of the area between the eastern suburbs of Cape Town and Klapmuts, the possibility of industrial ventures along the N1 and rail corridor should be CAREFULLY considered, as the residential area can benefit from a broader employment base nearby. This area may, however, also be suitable for agricultural smallholdings.

Table 24: Spatial structure

Subject	Number	Description								
Theme	SG4	Settlement pattern								
Component	SG4.2	Spatial structure								
SD link		Access, care, democracy, burden sharing, eco-efficiency and justice								
Objectives		To improve the quality of life for the people of the region by ensuring principle-led responses To promote the concentration and intensification of human and economic activities within the current land footprint and in areas of high accessibility								
Strategy (ies)	SG4.2	<ol style="list-style-type: none"> 1. Identify and consider the growth forces and historically evolved relations between the towns, villages and neighbourhoods as informants of future growth potential and options 2. Ensure positive transformation within the current spatial structure (distribution of settlements) in the district 3. Consider the development of new urban and rural nodes according to the 'indicatory tool' by using it as an initial guideline (see Chapter 8) 4. Integrate disadvantaged communities into the urban fabric through infill development on strategically located vacant land and corridor development along the main linkages between these communities and the major concentrations of job opportunities (where possible) 								
Action(s)		<ol style="list-style-type: none"> 5. Credible SDFs to inform municipal decision-making concerning the current spatial structure and future growth potential <table border="1" style="width: 100%;"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>CWDM and B Municipalities</td> </tr> </table> 6. Conduct planning interventions to consider the development priority and options along identified corridors (study to also include visual, economic, social and environmental assessments, vacant and underutilized land audit, densification analysis and development edge delineation) <table border="1" style="width: 100%;"> <tr> <td>Priority</td> <td>High</td> </tr> <tr> <td>Agent</td> <td>CWDM and B Municipalities</td> </tr> </table> 	Priority	Very high	Agent	CWDM and B Municipalities	Priority	High	Agent	CWDM and B Municipalities
Priority	Very high									
Agent	CWDM and B Municipalities									
Priority	High									
Agent	CWDM and B Municipalities									
Spatial indicator		7. The current number of settlements in the district is not increased								
Spatial link		District-wide								
Policy imperative		Certain 'new' settlement options (linked to sustainable services delivery) can be considered in the Breede River and Olifants River / Gouritz River catchments but only as part of a CWDSDF principle-led response ; Prioritise three development corridors viz. N1 corridor between Paarl and Cape Town, R301 between Paarl and Wellington and the N1 traversing the Worcester urban area, for urgent planning of future growth options								

SG5 Integrated human settlements

SG5.1 Municipal decision-making

The tendency is for land-use management as a day-to-day function to receive priority attention above spatial planning. Regarding land-use management, three municipalities indicated sufficient capacity while all municipalities indicated low (to zero) available capacity to perform spatial planning. The general comment from town planners was that the SDF and zoning scheme regulations would be (come) aligned or integrated but limited funds and uncertainty on national and provincial legislation prevent this from happening.

The issue of consistency and alignment or integration between SDFs and higher-order policy on the one hand and SDFs and IDPs on the other, seems to indicate that there is **limited to poor connectivity between these components**. Connectivity between spatial (forward) planning and land-use management should exist and be underpinned by property information to ascertain some level of certainty on development outcomes.

The question also emerges whether present-day Spatial Development Frameworks and/or Integrated Development Plans formulate guidelines that can be interpreted and applied in the assessment of town-planning applications. Notwithstanding that the outcome of **municipal decisions should reflect a collective dependence** between land-use management, forward planning and development opportunities, the situation is one of largely separate existence that compromises sustainable development.

It seems that the management **information systems** (see **Figure 9**) implemented by the respective municipalities can be categorized as inadequate. These inadequate systems and datasets comprise written lists and Excel spreadsheets, they are issue-specific (e.g. town-planning applications), and unit-specific and exist in isolation from other municipal information systems. The elementary applications of tracking, warning and reporting abilities are lacking. An important component would be the development of an **information system** (read: LUM application system) for town planning applications that will not only quantify data, but will also provide the ability to generate reports dealing with performance over time.

Figure 9: Building blocks of a management information system

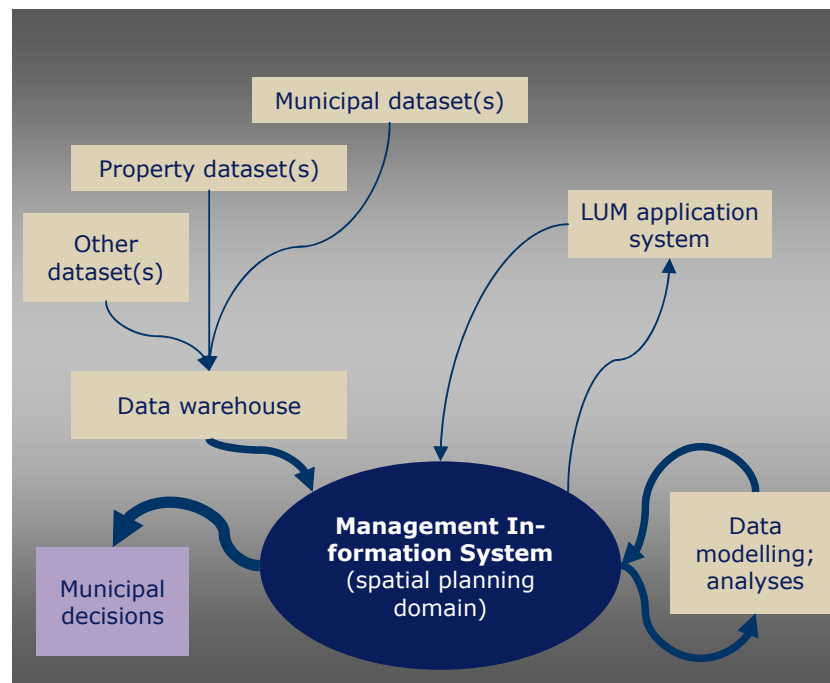


Table 25: Municipal decision-making: current situation at municipalities

Spatial component	Langeberg	Breede Valley	Witzenberg	Drakenstein	Stellenbosch
Spatial planning (general)	Non-existent	Poor	Poor	Poor	Non-existent
Spatial planning (IDP)	Fair	Fair	Fair	Fair	Fair
Higher order policy compliance	Poor	Poor	Poor	Poor	Non-existent
SDF	2003; in process of completing a SDF; personnel capacity low	2006; 3 (of 4) draft SDPs approved or in process; personnel capacity low	2006; need to be reviewed; personnel capacity almost zero	2004 (draft) to be considered in May 2009; personnel capacity low; Structure Plans exist; Industrial study to be completed; N1 corridor planning completed	2005 ("new" draft in middle 2009); Structure Plans: Koelenhof, Klapmuts)(demand driven not planning driven, Franschhoek, Rathby (draft), Jonkershoek Valley (draft), Jamestown (not approved); needs a Growth Management Strategy for Stellenbosch; personnel capacity low
Land use control; Scheme regulations	Integrated scheme (draft); capacity fine	Section 7 and 8 schemes (Zwelitemba different); capacity low	Section 7 and 8 schemes (Nduli different); capacity low	Integrated scheme (draft) – to be implemented (Mbekweni different) capacity fine	Integrated scheme (draft) – Section 7 and 8 still used (Kayamandi different); capacity fine
Adequate land-use application system	No; use Collaborator	No; use Collaborator	No; TRIM (document management system)	No; use Collaborator	No; use Collaborator

Table 26: Municipal decision-making

Subject	Number	Description
Theme	SG5	Integrated human settlements
Component	SG5.1	Municipal decision-making
SD link		Access, care, democracy, burden sharing, eco-efficiency and justice
Objectives		To improve the quality of life for the people of the region by ensuring principle-led responses To manage the impact and exposure of external and internal threats to growth and development (read: sustainable development) To promote sustainable resource use and responsible rural development To foster the inclusion of an economic perspective in land use management and land development
Strategy (ies)	SG5.1	<ol style="list-style-type: none"> Facilitate comparison and analysis of municipal capacity and interconnectedness between land use management / spatial planning and other municipal functions through a well-maintained document and knowledge management system, where data is collected and presented in a consistent manner over time Ensure informed municipal decisions through management information system(s) and datasets Greater public debate and attention to what works and where action may be needed (there needs to be greater disclosure of land use, land availability, tentative plans and (potential) partner bodies) Demystify the complexities of current spatial planning and land use legislation Acknowledge municipal authority in land use management and decision-making e.g. applications seeking to convert Intensive Agricultural land to other uses
Action(s)		<ol style="list-style-type: none"> Develop and implement management information system(s) and datasets with modular units of software, including a land-use management application system, for town planning applications; establish a dynamic database (data warehouse) of municipal and property information for the applicable municipal area; track new supply of land use through data modeling and analysis
	Priority	Very high

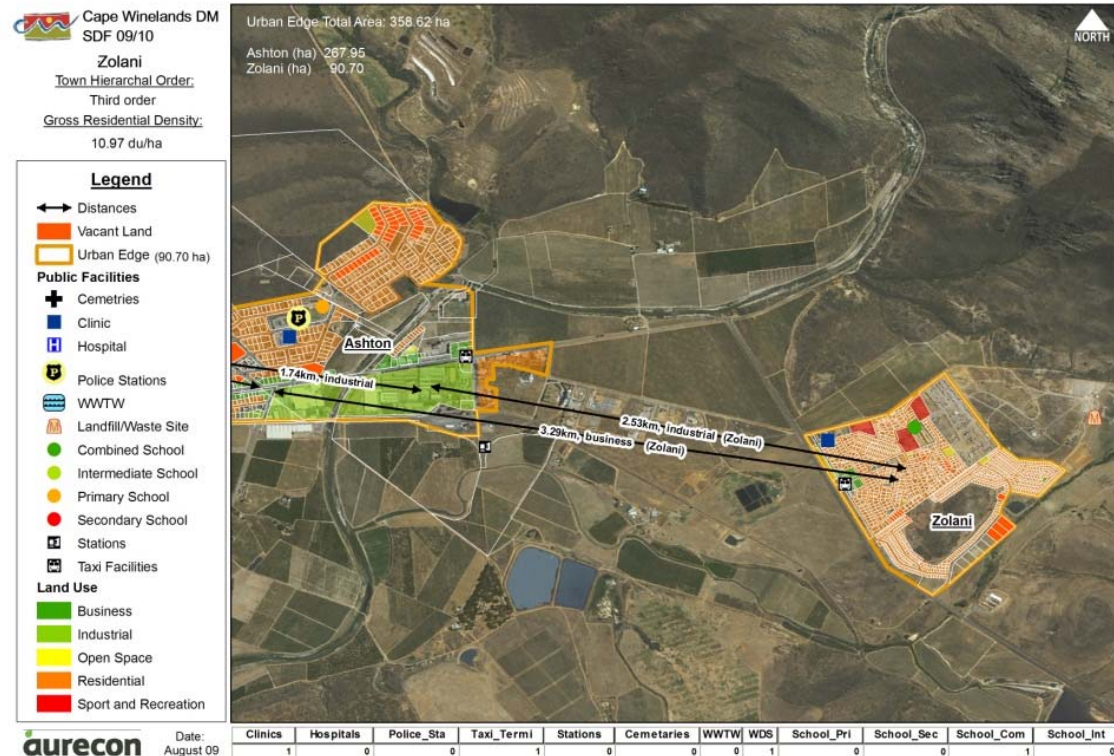
		Agent	CWDM
	7.	Municipal audits to be done in order to assess if municipal decisions correspond with approved policy frameworks	
		Priority	Medium
		Agent	CWDM
	8.	Municipalities to publish information about municipal decision-making processes and outcomes to local and district discussion groups	
		Priority	High
		Agent	CWDM and B Municipalities
Spatial indicator	9.	Each municipality has an adequate management information system with appropriate datasets.	
Spatial link		District-wide	
Policy imperative		To make use of standardised systems i.e. management information, consultation and participation and administrative processes.	

SG5.2 Urban efficiency

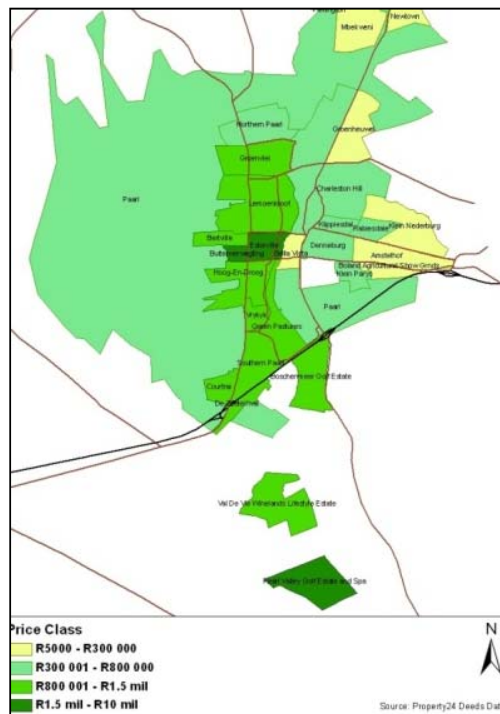
The spatial configuration of urban areas i.e. spatial, social and economic inequalities, has been shaped by the then form-giving ideology of *apartheid* spatial planning that located urban land-use (read: residential) with race as the differential. The severity of the physical divide varied but in all instances created under-resourced, impoverished and marginalised urban areas (or neighbourhoods). This ideology manufactured the uneven distribution of facilities and opportunities as the preferred location for economic activities was in previously advantaged areas. The post-1994 planning ideology advocates a **remedial approach** through different legislation but, also being applied in the Cape Winelands district, did not, as yet, manifest in real change to the urban structure or distribution of economic opportunities. Mean distances between 'opportunities' have not decreased (see **Map** opposite of Ashton).

Part of the problem is that this remedial approach does not consider all the drivers of the then *apartheid* ideology that also included a cost element. This can be explained as follows:

- Land prices further from the core of urban areas are cheaper, thereby reducing the **capital cost per opportunity** for the government of the day who provides the free or subsidised housing. Of course, the reduced capital cost per opportunity is short term in nature; in the longer term, external costs to the beneficiaries, especially travelling costs and time, would reduce this benefit for society in general and place an extra burden on the beneficiaries' income streams and lifestyle. This situation thus constitutes a classic trade-off between short and long term – **and under apartheid, the short-term option was chosen.**



- An alternative strategy would have been (and still is) to offer low-cost housing near the core. Note that the above analysis only applies to subsidised or free housing.



Disregarding ideology, in light of a high rate of unemployment and underemployment (and, therefore, its high proportion of low-cost housing stock), the above economic reasons would go a long way towards explaining the current spatial patterns in towns. Post 1994, the *apartheid* ideology has been taken out of the equation, **but the underlying economic and social drivers remain.**

An example of social (spatially-induced) inequality is the **clustering of residential neighbourhoods based on socio-economic class** – the so-called **price gradient**.⁸³ Class used to coincide to a very large degree with race group, even to the degree that it was enacted during the *apartheid* era. However, South Africa has since the 1990s been moving rapidly towards a situation where racial group is less of a discriminating factor because of the upward mobility of people of colour. The practical situation “on the ground” is that suburbs (and now even rural residential developments) are mainly formed around class. In practice, this is reflected in differential mean house prices of neighbourhoods, with relatively small standard deviations (variation of prices within homogeneous suburbs) – see **Map** opposite of Paarl; and all towns display the same pattern. These differentiated price classes have developed over time through a combination of the price mechanism (i.e. organically) and human intervention (town planning).

The application of **land development principles** as described in the Development Facilitation Act, 1995 viz. “to promote a diverse combination of land uses, also at the level of individual erven or subdivisions of land” and “to promote the integration of the social, economic, institutional and physical aspects of land development” would counter mentioned outcomes. This would, amongst others, facilitate integrated spatial solutions by which economic opportunities are

distributed more evenly – *care should be not to disregard economies of scale*. A recent example of non-conformity to land development principles is the construction of two regional shopping malls (in Worcester and Paarl) that are situated away, and without any interconnectivity, from areas that are (still) the resident areas of previously disadvantaged communities.



⁸³ The PSDF also mentions the principle of a **socio-economic gradient** where people of **different levels of income and kinship ties** can live far closer to one another than is the case in most urban settlements.

It is possible to improve on the spatial inequality, as a dimension of urban efficiency, through building activity viz. the construction of structures and/or infrastructure. These interventions are either public or private initiatives with government to focus *on investments that will have the maximum social and economic impact, and address spatial integration*. As mentioned, most towns, today, still remain spatially segregated which begs the question whether government investment (if indeed) addresses this problem and if not, **what are the forces/issues that constrain spatial integration**. Building activities normally occur where there are growth opportunities to validate investment and in the property market, there is a close **correlation between economic growth and the demand for space**. Using the demand for (economic) space as a proxy for growth, the Witzenberg municipality experienced a mere 2.5% take-up of the total demand in the Cape Winelands, compared to the 42% in Drakenstein, 35% in the Stellenbosch municipality, 7.5% in Langeberg and 13 % in the Breede Valley municipality.

Accessibility, along with the availability of infrastructure (within unrestrained economic circumstances and processes) are dominant determinants of the 'highest and best use' (*mees renderende gebruik*) of a site. The potential developments around the Gautrain stations⁸⁴ (within the regulatory framework created by government) and the Worcester mall (alongside the N1) are a case in point. This invariably points to the enormous **impact of infrastructure investment programmes** on future growth direction of urban areas.

Table 27: Urban efficiency

Subject	Number	Description
Theme	SG5	Integrated human settlements
Component	SG5.2	Urban efficiency
SD link		Access, care, democracy, burden sharing, eco-efficiency and justice
Objectives		To restructure urban settlements (where feasible) To promote the concentration and intensification of human and economic activities within the current land footprint and in areas of high accessibility
Strategy (ies)	SG5.2	<ol style="list-style-type: none"> 1. Facilitate the functional efficiency of and social confidence in the built environment; create places worthy of being called integrated human settlements; create urban centres where the quality of life of all inhabitants is enhanced 2. Locate the complete range of socio-economic groupings within an urban settlement within walking distance radius according to the principle of a Socio-Economic Gradient; urban settlements should be restructured so as to break down the spatial barriers created by <i>apartheid</i> and make them more convenient and pleasant to live in while creating economic opportunities close (within walking distance) to where people live 3. Ensure compaction, managing growth and clustering urban functions within the urban footprint; contain existing lower order settlements (including hamlets) within the current urban footprint except if extended or popular ventures can provide sustainable growth opportunities (e.g. Klappmuts); ensure that all new developments include a 'range of elements' that contribute to a more sustainable urban environment 4. Focus on improving functioning of settlements and achieving design standards; create and apply urban design guidelines for historic precincts within urban areas 5. Create sustainable and liveable urban environments⁸⁵ by ensuring access and choice to urban markets, -services, -amenities and -provisions 6. Create integration of urban areas through physical (if possible) and socio-economic integration 7. Create a functional and sustainable urban open space network 8. Integrate the disadvantaged communities into the urban fabric through infill development on strategically located vacant land and corridor

⁸⁴ City of Johannesburg, Commercial and Residential Property Sector Trends in the Johannesburg Metropolitan Area, May 2008.

⁸⁵ PGWC, Provincial Spatial Development Framework, May 2009.

	<p>development along the main linkages between these communities and the major concentrations of job opportunities (where possible); facilitate the social and functional integration of the urban area along the R301 between Paarl and Wellington and strengthen the potential for the establishment and growth of small and medium enterprises</p> <p>9. Consider the significance of infrastructure investment programmes on urban form and structure (developers of all types of property prefer locations where bulk services are available)</p> <p>10. Improve the service delivery to existing enterprises and households in Worcester to curb relocation</p> <p>11. Identify continuities and discontinuities with the past and present to inform urban planning</p> <p>12. Promote the location and structuring of local as well as regional shopping centres so as to benefit BEE, local informal-trading upgrading and LED in general</p> <p>13. Consider the existing structural deficiencies, a changing economic base, sector structure of towns and longer run evolution of town centres e.g. Stellenbosch</p> <p>14. Locate high density residential accommodation and business opportunities, from informal street trading to formal shops, offices and factories at the appropriate scale, around clusters of community facilities grouped at the appropriate scale⁸⁶</p> <p>15. 50% of the five major urban activities (public transport access points, residence, recreation, shopping and employment) should be accessible within walking distance (1000m) of residential dwellings⁸⁷</p> <p>16. Buildings that accommodate community activities, as well as education, health and entrepreneurial development and business and skills training, should be located at points of highest access in urban settlements⁸⁸</p> <p>17. Cluster together the three levels of hierarchy of urban nodes containing business and community facilities to provide satisfactory access and clustering of activities⁸⁹</p>												
Action(s)	<p>18. Compile neighbourhood plans for the higher-order towns in the district (to also consider the structure, function and purpose of neighbourhoods); complete community-based planning as a prerequisite for sustainable development</p> <table border="1" style="width: 100%;"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>PGWC and CWDM</td> </tr> </table> <p>19. Evaluate existing 'local' SDFs to assess urban transformation guidelines e.g. integration zones (macro and micro scale), and monitoring measures</p> <table border="1" style="width: 100%;"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>PGWC and CWDM</td> </tr> </table> <p>20. Evaluate existing policy directives e.g. IDPs, ITPs, IHSSs, etc to assess urban transformation guidelines and monitoring measures</p> <table border="1" style="width: 100%;"> <tr> <td>Priority</td> <td>High</td> </tr> <tr> <td>Agent</td> <td>PGWC and CWDM</td> </tr> </table>	Priority	Very high	Agent	PGWC and CWDM	Priority	Very high	Agent	PGWC and CWDM	Priority	High	Agent	PGWC and CWDM
Priority	Very high												
Agent	PGWC and CWDM												
Priority	Very high												
Agent	PGWC and CWDM												
Priority	High												
Agent	PGWC and CWDM												
Spatial indicator	21. Decrease in the absolute distance and/or time-consumed to access essential urban amenities												
Spatial link	All towns												
Policy imperative	Within the majority of towns in the Cape Winelands district, improved access to public (or subsidised) transport would be the (only) catalyst for more efficient urban areas												

⁸⁶ PGWC, Provincial Spatial Development Framework, May 2009

⁸⁷ ibid.

⁸⁸ ibid.

⁸⁹ ibid.

SG5.3 Urban edge

The relationship between a clearly determined urban edge and the economic-development dynamics of towns is both complex and highly significant.

From an urban-edge perspective the goals include:

- Protection of the environment against urban sprawl and other environmental risks,
- Strengthening the racial and social cohesion of the urban community,
- Keeping infrastructure costs down, and
- Encouraging cluster effects in local retail, industrial, services and other development spheres.

In the case of low-population settlements or towns, these goals would normally suggest fairly strong measures to prevent undue sprawl and encourage at least the stipulated residential and other densities. However, parallel to the goals related to spatial containment, we have the economic-growth goal which has to be based on the different factors determining local economic activities and the attraction of new investments, enterprises and activity clusters. It is a challenge to reconcile these **two sets of goals** which in the case of smaller settlements may easily be in conflict with each other. It is deemed, and correctly so, the intention of government and subsequent outcome of an urban edge, as one planning mechanism, to restructure the present-day **urban layout** (reconfigure *apartheid* spatial relations⁹⁰), to foster **social cohesion** as primary objective to a more cost-effective urban environment and the **protection** of sensitive ecological systems and high potential agricultural land from urban land consumption. The strong interconnectedness between the delineation of an urban edge associated with urban densities as entrenched in present-day spatial planning is, however, seen as a **sentimental** approach when enforced in “smaller” towns.

⁹⁰ National Spatial Development Perspective, 2004.

The eventual implementation of an urban edge should be measured through the consideration of **local development informants and thresholds**. These thresholds should be the outcome of measuring urban growth and considering issues that include the following,

- Land-release benchmarks
- Land take-up rate
- Vacant land audit
- Land-stock analysis
- Property market trends
- Population growth
- Housing backlogs, and
- Occupancy rate.

It is paramount that the delineation of the urban edge needs to be instrumental in creating a better urban environment for each of the towns in the Cape Winelands area. The attributes of each town as informants to the “desired” spatial order need to be considered in the delineation process in a manner that subscribes to the principles of this planning intervention. The importance of creating a balance in the delineation process between the goals and objectives of government and the local environment as supplemented by the unique selling point(s) of each of the respective towns cannot be over-emphasised.

The CWDSDF proposes a similar approach as the Provincial Urban Edge Guidelines to the delineation of the urban edge in that “the criteria and issues to be considered are so divergent, a typical “checklist approach” would have to be used in determining which of the factors and issues are of relevance to a specific urban area”⁹¹. The checklist provided in the Urban Edge Guidelines has been considered, revised and clustered

⁹¹ PGWC, Provincial Urban Edge Guidelines, 2005.

in order to incorporate, amongst others, the local sentiment. Additional criteria were created to foster a more representative approach tailored around the prevailing circumstances of the municipal area and to accommodate the social and economic impact. These are dimensions of urban development that were omitted from the Urban Edge Guidelines. **Annexure 4** contains a detailed description of each criteria and the model.

This evaluation model can assist with the measurement of the impact (positive or negative) of a land unit on the desired urban structure and function. The model determines the *relative* desirability of a land unit to be considered part of the urban area within a five-year planning time-frame. The criteria were designed to accommodate indicators of possible development potential and were subsequently weighted and measured on a scale from 1 to 10. The weight for each criteria was determined by its approximate impact on desirability with the socio-economic and economic contributions considered as most significant. The model operates as a unit within a multiple set of criteria that as a collective produce a score. **Note that the scores are purely relative, not absolute.**

The PSDF stipulates that between urban development and core, buffer and intensive agriculture areas an Interim Urban Edge shall be considered to be in place around all villages, towns and cities in the Province along the edge of actual urban (i.e. not urban fringe) development – to mediate the relationship between these provincial broad spatial planning categories, until a Medium Term Urban Edge has been approved. Such “medium term urban edges” have been delineated for all the towns in the Cape Winelands district (see **Table 28**). Notwithstanding, it appears that some confusion exists regarding the legitimacy of an urban edge once delineated, the decision-making and amendment processes.

Table 28: Urban edge enclosed area

Town	Outlying 'residential' area(s)	Total area within urban edge (ha)	Specific area within urban edge (ha)
Ashton	Ashton	358.62	267.95
	Zolani		90.7

Bonnievale	Bonnievale	249.02	122.99
	Happy Valley		126.03
Ceres	Ceres	1069.25	647.56
	Bella Vista		320.19
	Nduli		101.50
De Doorns		262.08	
Franschhoek	Franschhoek	221.95	137.79
	Groendal		84.16
Gouda		85.93	
Stellenbosch	Stellenbosch	2027.36	1972.64
	Jamestown		54.72
Klapmuts			89.99
Kylemore			67.9
Paarl	Paarl	5123.39	3143.94
	Mbekweni		467.02
	Wellington		1512.43
McGregor			113.53
Montagu			454.25
Op die Berg			59.94
Pniel			46.05
Prince Alfred Hamlet			203.11
Rawsonville			85.47
Robertson			727.39
Saron			231.42
Touws River			262.49
Tulbagh			288.05
Wolseley			445.84
Worcester			4384.85

Table 29: Urban edge: current situation at municipalities

Spatial component	Langeberg	Breede Valley	Witzenberg	Drakenstein	Stellenbosch
Urban edge	A study completed separate from the SDF	Only for Worcester; other towns have no-development zone	Need to be reconsidered	Study completed and urban edge approved – 13.12.07 ; differ from SDF proposal	Studies completed; pressure from Cape Metropolitan area at Faure and Somerset West

Table 30: Urban edge

Subject	Number	Description																				
Theme	SG5	Integrated human settlements																				
Component	SG5.3	Urban edge																				
SD link		Care, democracy and eco-efficiency																				
Objectives		To manage the impact and exposure of external and internal threats to growth and development (read: sustainable development) To restructure urban settlements (where feasible) To promote the concentration and intensification of human and economic activities within the current land footprint and in areas of high accessibility																				
Strategy (ies)	SG5.3	1. Ensure that the process to delineate an urban edge incorporates a principle-led response to urban development and growth; consider the land use changes and land reform opportunities inside and around the settlement areas and the respective urban edges 2. Ensure the steady expansion of the Paarl/Wellington centre and proactively manage the take-up of agricultural land for more urban-like land use (in Drakenstein Municipality)																				
Action(s)		3. Conduct high-level discussions with PGWC to obtain clarity regarding the status of the respective delineated urban edges of each B Municipality <table border="1"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>PGWC, CWDM and B Municipalities</td> </tr> </table> 4. Reconsider delineated urban edges through the implementation of the CWDSDF urban edge model ; particularly where political and planning edges differ and 'existing' urban edges are the product of outdated planning interventions; <table border="1"> <tr> <td>Priority</td> <td>High (very high for the higher order towns)</td> </tr> <tr> <td>Agent</td> <td>CWDM and B Municipalities</td> </tr> </table> 5. Complete critical studies as informants to the delineation of the urban edge – a default urban edge ⁹² exists until the completion of critical studies as informant to the delineation of the urban edge <table border="1"> <tr> <td>Priority</td> <td>High</td> </tr> <tr> <td>Agent</td> <td>CWDM and B Municipalities</td> </tr> </table> 6. Prepare urban edge management and interface guidelines ; determine and monitor clear 'targets' (as thresholds) informing policy towards urban edge amendments; highlight acceptable and unacceptable developments within the urban fringe <table border="1"> <tr> <td>Priority</td> <td>Medium</td> </tr> <tr> <td>Agent</td> <td>CWDM and B Municipalities</td> </tr> </table> 7. Develop and implement other urban growth management tools to be in unison with the implementation of an urban edge <table border="1"> <tr> <td>Priority</td> <td>Medium</td> </tr> <tr> <td>Agent</td> <td>CWDM and B Municipalities</td> </tr> </table> 8. Total area within the delineated urban edge 9. Extent(ha) of vacant land within the urban edge	Priority	Very high	Agent	PGWC, CWDM and B Municipalities	Priority	High (very high for the higher order towns)	Agent	CWDM and B Municipalities	Priority	High	Agent	CWDM and B Municipalities	Priority	Medium	Agent	CWDM and B Municipalities	Priority	Medium	Agent	CWDM and B Municipalities
Priority	Very high																					
Agent	PGWC, CWDM and B Municipalities																					
Priority	High (very high for the higher order towns)																					
Agent	CWDM and B Municipalities																					
Priority	High																					
Agent	CWDM and B Municipalities																					
Priority	Medium																					
Agent	CWDM and B Municipalities																					
Priority	Medium																					
Agent	CWDM and B Municipalities																					
Spatial indicator(s)		All towns																				
Spatial link		All towns																				
Policy imperative		Enforce the delineation of an urban edge only for higher, first and second order towns (see CWDSDF hierarchical order of towns) with the desirability for third and fourth order towns (including hamlets) to be determined by local development informants e.g. agriculturally and environmentally sensitive areas																				

⁹² PGWC, Provincial Spatial Development Framework, May 2009.

SG5.4 Urban densities

Many South African cities and towns (including towns in the Cape Winelands district) have higher population densities on the periphery of the urban areas (the medium-density townships) and lower densities closer to the core (the big-stand neighbourhood).

This phenomenon is described as the 'doughnut' or *apartheid* pattern, and it is contrary to what is accepted in the literature to be normal (the 'cup cake')⁹³. **It is government policy to reverse this situation over time.** There are postulated reasons why government would have such a policy, viz. to integrate communities racially (ideological) and to reduce travelling costs (including time) for the poor to work opportunities (economic) – but also, in effect, **to create sustainable urban areas.**

The major towns in the Cape Winelands district have delineated medium-term urban edges as part of the respective Local Spatial Development Frameworks from which urban densities can be derived with an average gross residential density of 7.7 dwelling units per hectare. These densities typify the *apartheid* town structure with the highest densities in the outlying residential areas (see **Table 31**).

Table 31: Gross urban residential densities

Town	Outlying 'residential' area(s)	Gross residential densities (du/ha)
Ashton	Ashton	4.78
	Zolani	10.79
Bonnievale	Bonnievale	3.07
	Happy Valley	9.41
Ceres	Ceres	3.56
	Bella Vista	7.42
	Nduli	11.17
De Doorns		2.67
Franschhoek	Franschhoek	7.08
	Groendal	33.04

⁹³ PGWC, Provincial Spatial Development Framework, 2005.

Gouda		5.88
Stellenbosch	Stellenbosch	8.8
	Jamestown	8.8
Klapmuts		12.75
Kylemore		5.26
Paarl	Paarl	4.49
	Mbekweni	10.46
	Wellington	4.16
McGregor		3.9
Montagu		6.45
Op die Berg		4.95
Pniel		22.49
Prince Alfred Hamlet		4.54
Rawsonville		4.5
Robertson		4.67
Saron		7.9
Touws River		6.05
Tulbagh		5.89
Wolseley		4.09
Worcester		2.64

Densification is the process whereby densities increase in a planned and sustainable manner without adversely affecting the quality of life of established communities within a defined area.⁹⁴ It is paramount that more specialised studies e.g. vacant and underutilised land, be conducted to guide land use management in urban areas to achieve desired densification and urban development objectives – keeping in mind the impact of population growth/decline and market dynamics.

The urban areas in the Cape Winelands have the highest population density while the 70/30 urban/rural split is made up of the more urbanised Stellenbosch/Drakenstein area and a very high ratio of rural occu-

⁹⁴ PGWC, Provincial Spatial Development Framework, Settlement restructuring: An explanatory manual, March 2009.

pants in the Breede River Valley and Karoo areas. In some municipalities there has been a negative population growth over the past years, viz. a relatively modest negative growth of 1–1.5% p.a. There will usually be a distinct decline in some of the respective municipal settlements (hamlets) and a slight increase in some of the towns.

It should be clear from these population trends that “increased settlement densities” as a precondition for better and more cost-effective infrastructure services” will not be easy to achieve in large parts of the district. It is possible in the Stellenbosch and Drakenstein municipal areas and part of Breede Valley (primarily Worcester), but may be very different in the other areas.

Table 32: Urban densities: current situation at municipalities

Spatial component	Langeberg	Breede Valley	Witzenberg	Drakenstein	Stellenbosch
Densification	Basic guidelines exist (also a policy on subdivision)	Addressed	No policy; (draft) land audit completed (not approved)	Completed; “new” bulk services contribution restricts densification; land audit completed	Yes (but not specifically for Franschhoek, Koelenhof and Klapmuts); Subdivision policy exists;

Table 33: Urban densities

Subject	Number	Description
Theme	SG5	Integrated human settlements
Component	SG5.4	Urban densities
SD link		Access, burden sharing and justice
Objectives		To restructure urban settlements (where feasible) To promote the concentration and intensification of human and economic activities within the current land footprint and in areas of high accessibility
Strategy (ies)	SG5.4	<ol style="list-style-type: none"> The average gross residential density in urban settlements experiencing urban growth must be encouraged to increase to 25du/ha before further extensions to the urban edge are considered — using the demand for (economic) space as a proxy for growth with only the higher order towns in the Cape Winelands district fall within this strategic approach viz. Stellenbosch, Paarl, Wellington and Worcester The density target should be achieved using a range of urban development tools and forms of densification; densification and diversification at appropriate places⁹⁵; densification of urban settlements should occur with due regard for ecological and heritage concerns as identified in EIAs/HIAs Ensure a negotiated process addressing the need for more intensive public debate at local level, spreading knowledge about the facts, goals, trends, opportunities and actual progress about densification Each municipality to develop own context-specific density targets considering expected population growth/decline Consider land development incentives e.g. special development zones, density bonuses, fast tracking of land development applications, waiver of building and application fees, bulk contributions waiver, etc to encourage Manage and monitor the implementation of densification/containment/infill targets; continuously monitor the effect of the urban edge; consider compacting urban areas to lower the unit cost of social and other services to the consumer
Action		<ol style="list-style-type: none"> Prepare and consolidate a densification framework and associated strategies for each of the higher order towns (for Paarl/Wellington to include Mbekweni); complete and approve a vacant and underutilised land audit including consideration of the market value of land (informing the price gradient)

⁹⁵ PGWC, Provincial Spatial Development Framework, May 2009.

	Priority	Very high
	Agent	Relevant B Municipalities
Spatial indicator	8. Increased gross residential densities in higher order towns	
Spatial link	Stellenbosch, Paarl, Wellington (including Mbekweni) and Worcester	
Policy imperative	All urban growth management tools and land use mechanisms should be harmonised according to local conditions and preferences	

SG5.5 Urban land use

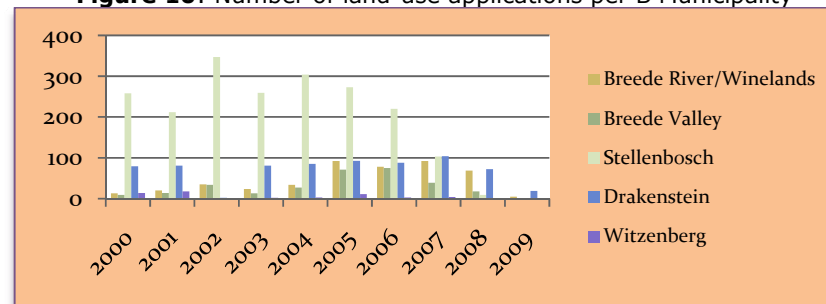
Land use management, as performed by the municipalities, is primarily guided by the Land Use Planning Ordinance, 1985 (Ord. 15 of 1985) – resulting in possible inconsistencies between the present-day planning paradigm and the pre-1994 spatial ideology.

Maybe, as a result of this situation, all municipalities still manage land-use and land development with ‘outdated’ zoning scheme regulations – Section 7 and 8 scheme regulations as well as additional regulations for Zwelitemba, Nduli, Mbekweni and Kayamandi, respectively. Two municipalities do have draft integrated zoning schemes with all the municipalities still in a process to establish a credible land use management database and/or e-application system.

As expected, from 2000, and spurred on by the South African economy’s longest upswing in history, there was a **general upsurge** in the number of applications submitted to local municipalities, up until 2005/2006 – note that a land-use application can be labelled as a leading activity of construction. The years 2005 and 2006 strikingly stand out, in that they account for about 33% of the applications submitted with one notable outlier, to the general trend, the number of applications in the Stellenbosch Municipality that peaked in 2004. A drastic decline in the number of applications after 2006 is notable with the years 2007 and 2008 accounting for less than 50% of the preceding two years.

The Cape Winelands District Municipality, as responsible municipal entity for the, now defunct, District Management Area, administered 26 town planning applications since 2005 of which the majority of applications were for subdivisions.

Figure 10: Number of land-use applications per B Municipality*



*the town-planning data received, from the respective municipalities in response to one-on-one meetings, was totally insufficient, viz. format, application type, geographic link, development extent and approval timeframe.

Table 34: Towns with the highest number of land-use application per B Municipality

According to the data received, on average, about two thirds of the applications originate from urban areas with the remainder representing a relatively high demand for rural land-use change. Regarding the referencing of the data, the bulk of applications originate from certain towns within each of the respective municipalities (see **Table 34**).

Municipality	Town
Langeberg	Robertson, Montagu
Breede Valley	Worcester
Stellenbosch	Stellenbosch
Drakenstein	Paarl
Witzenberg	Ceres

Using the number of land-use applications as a proxy for development pressure, three of the leader towns⁹⁶ with the notable exception of Wellington, experience much higher absolute numbers than in the remaining towns. In the Langeberg and Witzenberg municipalities the towns of Robertson, Montagu and Ceres emerge as having the highest demand for development.

Table 35: Urban land use: current situation at municipalities

Spatial component	Langeberg	Breede Valley	Witzenberg	Drakenstein	Stellenbosch
Land-use trends (urban)	Tourism business (along routes) and accommodation; small businesses; high-value/ luxury residential	Subdivisions;	Residential (high value/ Luxury) – Tulbagh, Ceres and Wolseley; shebeens (Nduli); home occupation (Nduli and Ceres); tourism (Tulbagh)	Paarl - mixture of applications (mostly residential); business; Wellington – flats; granny flats (student accommodation)	Stellenbosch (also Franschoek) - industrial to business, residential; tourism, densification but not subdivision, renovation and upgrading; Koelenhof – little; Klapmuts – residential development pressure;
Land-use trends (rural)	Tourism; manufacturing plants (agriculture); cellars (restaurants);	Tourism; additional dwelling units (northern region)	Subdivisions (throughout municipal area); agriculture II (chicken farms); add. Dwellings (tourism)	Development pressures concentrated south of Wellington; cellars and tourism accommodation; Estates – private infrastructure services	Development of Hamlets; golf courses (+ residential); transition of farmer dwellings for tourism;

Table 36: Urban land use

Subject	Number	Description
Theme	SG5	Integrated human settlements
Component	SG5.5	Urban land use
SD link		Access, care, burden sharing and eco-efficiency
Objectives		To restructure urban settlements (where feasible) To promote the concentration and intensification of human and economic activities within the current land footprint and in areas of high accessibility
Strategy (ies)	SG5.5	1. Ensure that an effective land use management system (LUMS) is developed for each municipal area that conforms to the built (including heritage areas to protect any place of environmental or cultural interest), social, political, economic and environmental elements that underpin present-day society and acknowledge areas of bioregional homogeneity; ensure the following: effective connectivity between the LUMS and

⁹⁶ PGWC, Provincial Spatial Development Framework, November 2005.

	<p>other spatial planning, land use management and land development components / planning and markets do not contradict each other⁹⁷ / pro-poor land use management outcomes e.g. alternative fee structures for land use applications in poorer and more affluent areas / receptive towards mixed income and mixed use developments at appropriate locations</p> <ol style="list-style-type: none"> 2. Promote the establishment of urban development zones⁹⁸ 3. Establish a clear structure of nodes and corridors to manage the concentration of activity 4. Protect urban agriculture and open space 5. Promote and facilitate mixed land-use in previously disadvantaged areas; Pro-actively identify and “open-up” market opportunities regarding vacant and underdeveloped land 6. Be receptive towards entrepreneurial spirit to avoid e.g. land banking owing to unrealistic growth management guidelines 7. Monitor trends in land-use to assess development dynamics of specific higher order towns e.g. Stellenbosch 8. An Operational Manual be created to facilitate standardized (but locally informed) structures, processes and procedures within municipalities regarding land-use management <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Priority</td> <td>Medium</td> </tr> <tr> <td>Agent</td> <td>PGWC</td> </tr> </table> <ol style="list-style-type: none"> 9. Develop an LUMS for each B Municipality: to include an Integrated Municipal Zoning Scheme, land-use management data system, etc <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>B Municipalities</td> </tr> </table>	Priority	Medium	Agent	PGWC	Priority	Very high	Agent	B Municipalities
Priority	Medium								
Agent	PGWC								
Priority	Very high								
Agent	B Municipalities								
Spatial indicator(s)	10. Each B Municipality does have a Land Use Management System								
Spatial link	11. Urban development zones declared along identified development corridors e.g. R301 between Wellington and Paarl (also see SG 7.5)								
Policy imperative	District-wide Land use management within the respective B Municipalities must differ, owing to disparateness and diversity that demands differentiation in decision-making.								

⁹⁷ The Presidency, Green Paper on National Planning, Sept. 2009.

⁹⁸ PGWC, Provincial Spatial Development Framework, May 2009.

SG5.6 Quality of the built environment

The Cape Winelands is one of the few areas in the country where a specific regional character has established itself over the past three centuries. This regional character is of immense value and must be conserved and recognized as the guiding tenet for planning and development.

To achieve this it is suggested that the principles pertaining to the protection, enhancement and integration of regional attributes, be recognized in development planning within the district. In this regard, *"critical regionalism"*⁹⁹ which recognizes the quality and attributes of regional characteristics and builds upon the development of regional idiosyncrasies and variations, must be considered with regard to spatial planning and design decisions. In addition, a distinction is made between the following four types of natural landscapes, namely romantic, cosmic, classic and complex.¹⁰⁰

a) Romantic Landscapes

This is the kind of landscape where the original forces of nature are still most strongly felt. For example some areas of the mountains of the Cape Winelands district.

b) Cosmic Landscapes

Cosmic landscapes are places where the complexities of the human world are reduced to a few simple phenomena.

c) Classic Landscapes

Classic landscapes are those places where an intelligible composition of distinct elements is found (e.g. hills and mountains or natural spaces). Such places appear as individual worlds. In the classic landscape, forms have a sculptural presence and *"dimensions"* are human and constitute a total, harmonised equilibrium.

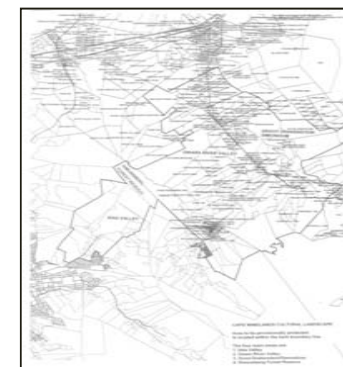
d) Complex Landscapes

Norberg-Schulz explains that the romantic, cosmic and classic landscapes are archetypes of natural places, which help us to understand the concrete properties of any concrete situation.



Protection of (parts of) the Cape Winelands Cultural Landscape is accomplished through an incremental approach and includes the following areas:

- Idas Valley, Dwars River Valley, Groot Drakenstein/Simondium and Simonsberg State Forest (see **Map** opposite) as provisionally protected areas, and
- The "listing" of the Cape Winelands Cultural Landscape as a World Heritage Site (WHS) at UNESCO.



⁹⁹ CWD, Winelands Integrated Development Framework, Nov. 2000.
¹⁰⁰ *ibid.*

The listing of the WHS does not represent a specific conservation area but merits further investigation to, *inter alia*, consolidate planning policy, map and layer the WHS and identify and “lift out” cultural landscapes. Cultural landscapes are highly sensitive to impacts that change the character and public memory of a place and include a landscape of high rarity value and scientific significance. Already in 2005, the areas of Stellenbosch, Franschhoek and Paarl were considered as National heritage sites i.t.o. Section 27 of Act 25 of 1999. Other areas that might be considered as provincial heritage sites include the towns of Tulbagh, Robertson, McGregor and Montagu.

The provisionally protected areas of Idas Valley, Dwars River Valley, Groot Drakenstein/Simondium and Simonsberg State Forest are managed according to a formal Conservation Management Plan that operates under the auspices of a local Heritage Committee. Ten of these committees exist in the Stellenbosch/Drakenstein municipal areas with a dire need to sensitize communities regarding the existence and value of cultural landscapes.

Heritage Western Cape (HWC) is responsible for the management and protection of all provincial heritage sites, generally protected heritage and structures in the Cape Winelands district. Based on discussions with SAHRA, the following steps will advance the recognition and protection of the cultural landscape,

- Photographic/historic surveys (to include a fundamental shift in focus from surveying monuments to rural landscapes)
 - To determine sensitivities
 - To update existing surveys
 - To include the cultural (rural) landscape in existing surveys
 - To determine grading of sites
- Compile Conservation Management Plans, and
- Complete Heritage Impact Assessments (only when development applications are submitted to relevant decision-making authorities).

Within the interdependencies of sustainable development the protection of cultural landscapes should feature in the ability of communities to impact on decision-making, the sharing of the burden and societies’ caring and protection of a system of values.

Table 37: Quality of the built environment

Subject	Number	Description
Theme	SG5	Integrated human settlements
Component	SG5.6	Quality of the built environment
SD link		Access and care
Objectives		To improve the quality of life for the people of the region by ensuring principle-led responses To manage the impact and exposure of external and internal threats to growth and development (read: sustainable development) To promote sustainable resource use and responsible rural development
Strategy (ies)	SG5.6	1. Recognise the principles pertaining to the protection, enhancement and integration of regional attributes in development planning 2. Consider “critical regionalism” which recognizes the quality and attributes of regional characteristics and builds upon the development of regional idiosyncrasies and variations with regard to spatial planning and design decisions 3. Changes proposed to landscapes and urban settlements whether they be for agricultural or urban and rural development purposes, should

Action(s)	consider any heritage resource policy that may be relevant including those which might be proposed, e.g. Proclaimed Urban Conservation Areas, SAHRA Regulations, World Heritage Site applications etc ¹⁰¹				
	4. Foreign or unsympathetic styles of site layout and buildings should be discouraged in urban settlements and rural areas so as to strengthen the local sense of place and minimise visual impact ¹⁰²				
	5. Urban design and architectural guidelines should be prepared to control the function and appearance of the main street or streets and squares in all of the urban settlements. These should control, among other things, building styles and heights, materials and colours, advertising, roadways and pavements, encourage colonnades and other devices to shelter pedestrians and landscaping and tree planting, and respect historic buildings and precincts ¹⁰³				
	6. Tree planting, including appropriate indigenous, ornamental and fruit trees, urban greening (landscaping) and food gardens should be encouraged along streets and in open spaces as part of urban restructuring programmes in villages and towns ¹⁰⁴				
	7. Conduct a systematic process , starting at the scale reminiscent of the proposed WHS (or Cape Winelands Biosphere Reserve), to identify and grade sites (and routes) and classify landscapes to protect the cultural landscape; use these findings for the compilation of an inventory of the heritage resources by the planning authority and submission of such inventory to the relevant provincial heritage resources authority				
	<table border="1"> <tr> <td>Priority</td> <td>High</td> </tr> <tr> <td>Agent</td> <td>SAHRA, HWC and CWDM</td> </tr> </table>	Priority	High	Agent	SAHRA, HWC and CWDM
	Priority	High			
	Agent	SAHRA, HWC and CWDM			
	8. Conduct the necessary steps to give effect to the registration of the WHS				
	<table border="1"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>SAHRA, HWC</td> </tr> </table>	Priority	Very high	Agent	SAHRA, HWC
	Priority	Very high			
	Agent	SAHRA, HWC			
	9. Responsible heritage resource authorities and local authorities to establish partnerships between themselves and with nongovernmental organisations, business, farmer unions, etc to effectively manage national heritage resources				
<table border="1"> <tr> <td>Priority</td> <td>Medium</td> </tr> <tr> <td>Agent</td> <td>SAHRA, HWC and CWDM</td> </tr> </table>	Priority	Medium	Agent	SAHRA, HWC and CWDM	
Priority	Medium				
Agent	SAHRA, HWC and CWDM				
10. Compile a visual resource management plan for the N1 route between the Hugenote Tunnel and Cape Town ¹⁰⁵ (also see SG4.2)					
<table border="1"> <tr> <td>Priority</td> <td>Medium</td> </tr> <tr> <td>Agent</td> <td>SAHRA, HWC and CWDM</td> </tr> </table>	Priority	Medium	Agent	SAHRA, HWC and CWDM	
Priority	Medium				
Agent	SAHRA, HWC and CWDM				
11. Include design and architectural guidelines (including reference to choice of building material) as a key component of localised planning (and SDFs of B Municipalities — see SG1.1)					
<table border="1"> <tr> <td>Priority</td> <td>Medium</td> </tr> <tr> <td>Agent</td> <td>B Municipalities</td> </tr> </table>	Priority	Medium	Agent	B Municipalities	
Priority	Medium				
Agent	B Municipalities				
12. Develop localised assessment criteria (as extension of the PGWC Rural guidelines, May 2009) for development applications and/ or building plans in areas of heritage significance					
<table border="1"> <tr> <td>Priority</td> <td>Medium</td> </tr> <tr> <td>Agent</td> <td>B Municipalities</td> </tr> </table>	Priority	Medium	Agent	B Municipalities	
Priority	Medium				
Agent	B Municipalities				
13. Ensure sufficient resources (personnel and funds) within SAHRA and HWC to perform legislative mandates					

¹⁰¹ PGWC, Provincial Spatial Development Framework, May 2009.

¹⁰² Ibid.

¹⁰³ Ibid.

¹⁰⁴ Ibid.

¹⁰⁵ PGWC, Department of Environmental Affairs and Development Planning, Circular 14/2009, December 2009.

		Priority	Medium
		Agent	B Municipalities
Spatial indicator	14. Sites with heritage significance graded		
Spatial link	District-wide		
Policy imperative	Consider the growth management areas (Stellenbosch and Drakenstein municipal areas and the town of Worcester) as priority areas for the grading of sites (and routes) to determine their heritage significance; acknowledge communities as the best protector of their own landscape		

SG6 Rural development

Rural Development is in general regarded as the actions and initiatives taken to improve the standard of living of communities in non-urban areas.¹⁰⁶ In May 2009, the national government mandated the Department of Rural Development and Land Reform to implement a Comprehensive Rural Development Programme (CRDP) under the vision of “working together we can do more by improving the quality of life for all our people living in rural areas”.¹⁰⁷ The “State of the Nation” address by the President of South Africa on 11 February 2010 outlines a number of programmes that, indeed, will have an impact on the standard of living of communities in non-urban areas.

This mandate involves the effective implementation of the land reform and agrarian reform programmes, strengthening partnerships, to provide improved economic and social infrastructure and to establish a Rural Development Agency. It is also envisaged to formulate Regional rural development plans to ultimately guide and improve the quality of life of rural people. The Department of Rural Development and Land Reform is to pilot the CRDP in the Limpopo province with two ‘additional’ programmes implemented by the Department of Water Affairs and Forestry and the Presidency, respectively, in particular wards in the Witzenberg municipal area. These additional programmes are known as “Harvesting of rainwater” and “War on Poverty” with the former implemented in wards 3 and 7 and the latter in wards 1, 4 and 6 - the selection criteria used is unknown to the writer.

The PGWC is of the opinion that local government, owing to limited rural revenue base and staff shortages, lacks capacity to plan for and manage its rural areas. Subsequently the PGWC focused attention on rural development through the development of guidelines that promote the following goals: sustainable development of its rural areas; conservation of their biological diversity; functionality of ecosystems; and safeguarding of rural heritage and culture.¹⁰⁸ In this context the following vision is aspired to:¹⁰⁹

- The province’s rural economic base, particularly agriculture and tourism, strengthens, offers opportunities for economic empowerment, and adopts sustainable business practices
- Rural amenities and economic opportunities are accessible to the province’s residents, particularly poor communities with limited mobility

¹⁰⁶ National Government, Strategic Plan 2009 – 2014.

¹⁰⁷ *ibid.*

¹⁰⁸ PGWC, Western Cape Provincial Spatial Development Framework, Rural Land Use Planning and Management Guidelines, May 2009.

¹⁰⁹ *ibid.*

- The province's varied and unique natural, cultural and agricultural landscapes enjoy adequate protection, and its blighted landscapes are being rehabilitated
- A clear distinction can be made between the province's urban and rural landscapes, and there is an eligible and logical structure of human settlements
- The province's core natural (i.e. untransformed) habitats are inter-connected and managed to sustain biodiversity
- The province's rural landscapes are maintained, either by a responsible party (e.g. statutory authority, land owner, user group, community) or by a partnership between interested parties, and
- National, provincial and local government collaborate and align their efforts to plan, manage and sustainably develop the Western Cape's rural areas.

The provincial government has also taken the initiative to provide objectives/guidance on land use planning and management outside the urban edge (i.e. in rural areas) by introducing rural land use planning and management guidelines.¹¹⁰ These objectives are:

- To promote sustainable development in appropriate rural locations throughout the Western Cape, and ensure that the poor share in the growth of the rural economy
- To safeguard the functionality of the province's life-supporting ecosystem services (i.e. environmental goods and services)
- To maintain the integrity, authenticity and accessibility of the Western Cape's significant farming, ecological, cultural and scenic rural landscapes, and natural resources
- To assist Western Cape municipalities to plan and manage their rural areas more effectively, and
- To provide clarity to the provincial government's social partners on what kind of development is appropriate beyond the urban edge, suitable locations where it could take place, and the desirable form and scale of such development.

In the Cape Winelands rural context it is necessary to deal specifically with natural resource management issues, land rights issues and tenure arrangements, land capability, subdivision and consolidation of farms and the protection of prime agricultural land. Rural activities are dependent on the domicile natural resources which determine the intensity of land-use, with this intensity increasing exponentially towards the more moderate climates in the western part of the district.

The urban/rural split in the population distribution of 70/30 is comparable to other districts within the Western Cape. However, the situation is that the Breede River Valley and Karoo areas of the district are less densely populated than the Stellenbosch/Drakenstein area. This spatial composition actually increases the vulnerability of the district's rural areas (and inhabitants thereof) to current transformations e.g. economic, climate and land, more so than that of urban areas within the district. In addition, the present arrangement of service delivery and infrastructure is below an acceptable standard which compounds the dire need for appropriate government intervention – probably only possible in partnership with non-governmental role-players.

Issues such as land-use management, participative structures, job-creation projects, disaster management, public transport, road infrastructure, settlement options, housing and basic services, recreation and sports facilities, education facilities, farm evictions, social development programmes, etc need

¹¹⁰ PGWC, Western Cape Provincial Spatial Development Framework, Rural Land Use Planning and Management Guidelines, May 2009

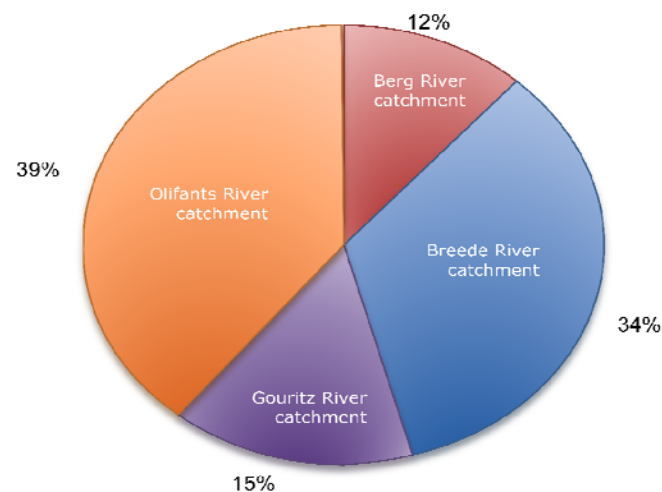
to be addressed in the context of current needs and deficiencies and future requirements and possibilities. Regarding farm evictions, a report on ESTA interventions¹¹¹ indicates that about 150 applicants (representing individuals and/or extended families) were listed at the Department, during 2008, as possible or actual farm evictions and about 131 during 2009.

The above mentioned mandate is imperative considering the principle of 'sense of justice' advocated by the provincial government in its approach to rural development.¹¹² This principle addresses the following aspects: meeting fundamental needs of rural communities, especially the poor / restitution and redistribution of land and natural resources / rights-based democratic governance and participatory rural planning processes — these are elements represented by the CWDSDF principles. However, in terms of economic potential it is estimated that, although the Western Cape may be able to remain at the upper end of aggregate GDP growth across South Africa, i.e. 4–5 per cent p.a, the Cape Winelands district will probably combine relatively higher growth rates in Stellenbosch/Paarl and slower growth in the rural areas, where the population is stagnant if not declining.

SG6.1 Rural land use

Figure 11: Catchment area land mass (as a percentage of the district area)

In accordance with bioregional planning (and at an appropriate scale relevant to this planning intervention) an effective way to map and interpret rural land use is by using spatial planning categories (SPCs) — geographically referenced as catchment areas rather than municipal areas. The Cape Winelands area straddles four Water Management Areas (WMA) *viz.* Gouritz River, Olifants River, Breede River and Berg Rivier WMAs. The relative size (as a percentage of the district area) of these catchments is given in **Figure 11**. Although there is now conformity (in mapping and interpretation) regarding the SPC classification¹¹³, it is likely that the occurrence, type, form and scale of a particular land use, associated with a specific category, will differ between the respective planning clusters, demanding differentiation in decision-making; owing to the district's disparateness and high and diverse level of development.

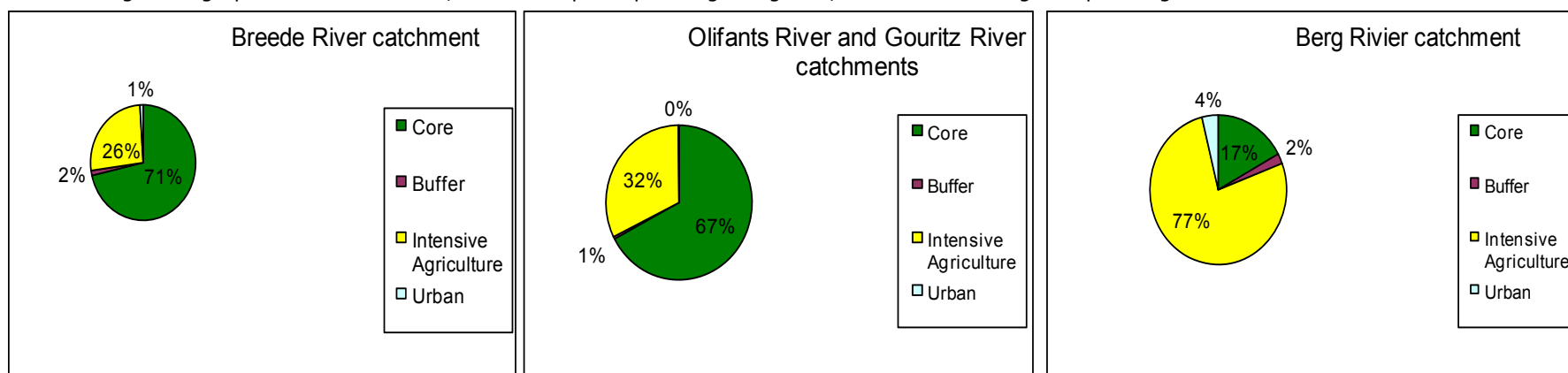


¹¹¹ Received from the Worcester office of the Department of Rural Development and Land Affairs on 16 September 2009.

¹¹² PGWC, Western Cape Provincial Spatial Development Framework, Rural land use planning & management guidelines, May 2009.

¹¹³ *ibid.*

The following three graphs indicate land use, shown as spatial planning categories, in the three bioregional planning clusters.



When considering the specific area covered by each SPC in the district, as illustrated in **Figure 12**, the proposed land-use management approach (see **Chapter 8**) is of particular importance to ensure sustainable land use — this approach is to be supported by target-setting and monitoring of outcomes.

Figure 12: Area covered by each SPC

On a macro (district) scale, the current situation regarding the extent (ha) of each land use within the categories of conservation area, buffer area and intensive agricultural area is depicted in the following tables:

Table 38: Conservation area

Type	Area (ha)
Mountain Catchment Areas	349,618
Provincial Reserves	158,771
Conservancies	138,886
Private Nature Reserves	61,600
SANParks	39,022
Local Nature Reserves	14,329
SA Heritage Sites	8,802

It is important to note that the conservation areas in the district have been severely fragmented and degraded in some parts, particularly in

the Stellenbosch, Drakenstein and Witzenberg Municipalities; thereby increasing the need for corridors linking those conservation areas in buffer areas that are isolated from the core area and each other, as well as isolated core areas.

Table 39: Buffer area

Land Use in Buffer Area	Area (ha)	Relative area
Conservation	92,990	5.0%
Cultivated land	179,008	9.0%
Forestry	16,157	1.0%
Vacant/Unspecified	1,704,489	85.0%
Residential	6,778	0.3%
Commercial/Industrial	216	0%
Mining	22	0%

Table 40: Intensive agricultural area (transition area)

Land use in Agricultural areas	Area (ha)	Relative Area
Conservation	96,640	5%
Cultivate land	328,658	15%
Forestry	19,485	1%
Residential	2,200	0%
Vacant/Unspecified	1,677,613	79%

All in all it seems as if there is limited scope for the expansion of agricultural areas in the Cape Winelands and that the urban expansion should also be approached with caution so as to avoid loss or impacts on biodiversity (but take note of **SG5.3**). Intensive agricultural areas transform the landscape substantially. There are usually minimal ecological processes evident and the agricultural practices tend to impact heavily on natural areas adjacent or in close proximity to these agricultural areas, especially if not properly managed (see **SG16**).

Table 41: Rural land use

Subject	Number	Description								
Theme	SG6	Rural development								
Component	SG6.1	Rural land use								
SD link		Access, care, democracy, burden sharing and eco-efficiency								
Objectives	To promote sustainable resource use and responsible rural development									
Strategy (ies)	SG6.1	<ol style="list-style-type: none"> 1. Ensure co-operation, cohesion and sustainability in actions and initiatives e.g. rural development programmes taken to improve the standard of living of communities in non-urban areas; articulate and consider the scope and aim of rural development programmes in the context of the elements, unique to the district (and areas of bioregional homogeneity), that underpin present-day society 2. Create a capable and effective state and sound institutions to facilitate rural development 3. Implement the general policy directives regarding land use in rural areas as stipulated in the PSDF and supplementary guidelines¹¹⁴ (with the proviso that new Integrated Municipal Zoning Schemes interpret provincial policy directives according to local informants and needs; also see SG5.3 and SG5.5) e.g. (1) development beyond current rights pertaining to agricultural or conservation activities outside the Interim or Medium Term Urban Edge may not be permitted except for bona-fide holiday/tourism accommodation; bona fide agricultural/forestry development; social agri/forestry-labour central-settlements, and social facilities and infrastructure necessary for rural development – all located and designed environmentally acceptable and only allowed when and where it can be demonstrated that there will be no harm to biodiversity conservation by successful compliance with the four stage test (2) development outside the urban edge, may not exceed densities of 1du/10ha and may be considerably lower in landscapes with low visual carrying capacity (3) resort development outside of the urban edge shall include no individually alienable units and should be subject to norms to be determined by Provincial Policy (4) alienation of individual units outside of urban edges may be considered under specific Rural Development policy (5) specific Rural Development, if approved on general land use and environmental grounds and in terms of strategic context, may be individually alienable under certain circumstances subject to norms as to be determined by Provincial Policy (6) while existing rights cannot be taken away, upgrading of rights for residential estates outside of existing urban settlements may not be permitted (7) any development complying with the norms for rural development should be integrated, providing opportunities for a full range of income groups, viable with respect to being able to support at least a tertiary range of facilities, for example a clinic, primary school and multi-purpose hall, and must be sustainable with regard to impact on natural resources 4. Include the “sense of justice” as a planning principle regarding rural development 5. Consider the existing rural configured structural deficiencies and expected rural area development patterns in the different local municipal areas and around the towns 								
Action(s)		<ol style="list-style-type: none"> 6. Formulate regional (district) rural development plans to ultimately guide and improve the quality of life of rural people (prioritise the Breede River Valley) <table border="1"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>Dept. Land Reform and Rural Development, PGWC and CWDM</td> </tr> </table> 7. Conduct a rural land use audit (GIS based) to determine the current ‘state of development’ as benchmark for research, development and monitoring interventions/actions and to serve as ‘basic’ inventory for an integrated and centralised spatial database <table border="1"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>CWDM</td> </tr> </table> 	Priority	Very high	Agent	Dept. Land Reform and Rural Development, PGWC and CWDM	Priority	Very high	Agent	CWDM
Priority	Very high									
Agent	Dept. Land Reform and Rural Development, PGWC and CWDM									
Priority	Very high									
Agent	CWDM									

¹¹⁴ PGWC, Provincial Spatial Development Framework, May 2009.

	8. Apply the Guidelines for assessing land use management applications in rural areas, January 2007 ¹¹⁵ ; as part of developing a LUMS for each B Municipality to review these guidelines in the context of the CWDSDF 2009/2010 spatial guidelines				
	<table border="1"> <tr> <td>Priority</td> <td>High</td> </tr> <tr> <td>Agent</td> <td>CWDM</td> </tr> </table>	Priority	High	Agent	CWDM
Priority	High				
Agent	CWDM				
Spatial indicator(s)	9. Rural development audit for the district completed 10. Rural development programmes implemented in areas with lowest standard of living 11. Decrease in the number of farm evictions				
Spatial link	District-wide				
Policy imperative	The pilot area for the rural land use audit can be the Cape Winelands Biosphere Reserve; the CWDSDF establishes the geographic context to the development process regarding the form, structure and location of future development to accommodate especially the restructuring of towns, rural development and evolving socio-economic, environmental and heritage/cultural landscapes; given the fundamentals of sustainable development as maintaining the integrity of biophysical systems and reducing poverty and risks, and these still very critical challenges throughout the district, the emphasis, for now at least, must be on ensuring sustainable development as primary goal				

¹¹⁵ CWDM, Guidelines for assessing land use management applications in rural areas, January 2007.

SG7 Infrastructure

The current situation regarding the provision of water, sanitation and electricity is that 96%, 93% and 85% respectively, of all people residing in the Cape Winelands does have access to these particular municipal infrastructure services. **Table 42** depicts the capacity and operational context of the municipal infrastructure. Also see **Tables** under **SG7.1 – SG7.5** for the spatial guidelines relevant to the respective (municipal) service infrastructure.

Table 42: Current situation regarding municipal infrastructure

Municipality	Municipal service	Is the existing service capacity in towns sufficient?	Is there capacity for new development/growth in demand?	If not, what is being done to increase the capacity of existing infrastructure and/or bulk supply?	What other measures are being undertaken to improve service availability?	Recommendation
Langeberg	Water	Yes	Yes	Upgrade of network and/or water treatment works necessary; maintenance cost of R1.1 mil (include all towns)	Water Master Plan, Asset Register (AR), Water Service Development Plan (WSDP), public water weeks.	Implement Asset management strategies
	Sewerage	Yes, except Montagu	Yes, except for Montagu and Robertson	Maintenance at R 1 mil/annum (all towns)	Sewer Master Plan, Asset Register	Implement Asset management strategies
	Electricity	Yes, except Robertson	No	Put pressure on Eskom to increase bulk supply, upgrading at cost of Ro.7 mil/annum, maintenance cost at R1.5 mil/annum (all towns)	Labour factor improvement, electricity saving methods (i.e. energy savers, street lights, solar panels).	Implemented Asset management strategies. Require electricity master plan
	Roads	Yes	Yes	Gravel roads being upgraded at R3.5 Mil (All Towns), Maintenance for stormwater and roads of R1.2 mil/annum (for all towns)	Asset Register, Pavement management plan	Implement Asset management strategies
	Storm water	No	No	Maintenance for stormwater and roads of R1.2 mil/annum (for all towns)	Asset Register	Implement Asset management strategies
	Solid waste				See SG 7.3	
Breede Valley	Water	Yes, except for Touws River	Bulk supply: yes, except for Rawsonville and Touws River Reticulation: yes	Maintenance R2.5 mil/annum (for all towns). Pipe Jacking / Pipe replacement of R0.9 mil/annum; possible additional water sourced from Settynskloof and/or Kleinberg dams	Water Master Plan, Asset Register (AR), water reduction articles and public water weeks, "Safe Water" tips in contracts, training of process controllers to increase awareness of the importance of O&M in the works	Implement Asset management strategies, Water source studies, Management of infrastructure and optimizing operation of the works will ensure minimum water losses at all water works and pipelines
	Sewerage	Bulk supply: no, except for De Doorns Reticulation: yes	Bulk supply: no, except for De Doorns Reticulation: yes	Daily measurement of water quantity at sewage works. Increased maintenance plans for the optimization of the works to increase purification capacity. Future upgrade of sewage treatment works already planned, waiting for financial assistance. Planning to implement "pipe jacking" / pipe replacement. Current maintenance cost at R3 mil (for all towns)	Sewer Master Plan, Asset Register, training of process controllers to increase awareness of the importance of O&M in the works	Implement Asset management strategies, funds for upgrading must be increased.
	Electricity	Yes	No	To ensure sufficient capacity for future growth, 2x20 MVA firm 66/11 kV substations at an estimated cost of R120 000 are required in Worcester	Demand Side Management project has been implemented, electricity saving methods (i.e. energy savers, street lights,	Implemented Asset management strategies. Require electricity master plan

	Roads	No	No	Maintenance at R15 mil /annum (for all towns), Reseal of roads at R1.4 mil/annum (all towns)	solar panels). Expanded public works program, Asset register, Pavement management system	Implement Asset management strategies, update of pavement management system
	Storm water	No	No	Maintenance costs at R0.5 mil/annum (all capital spent on Worcester)		Stormwater Master Plan, Implement Asset management strategies
	Solid waste	See SG 7.3				
Stellenbosch	Water	No	No	Idas Valley WTW treatment capacity increased at cost of R1.5Mil. Paradyskloof WTW treatment capacity will be doubled at cost of R50 Mil. The poor water infrastructure is being replaced at rate of R1 Mil per annum (R9 Mil required); Bulk supply from City of Cape Town will have to be increased. The Du Toits River bulk supply also needs improvement at a cost of R2 Mil.	Water Master Plan, Asset Register (AR), water reduction articles and public water weeks	Implement Asset management strategies
	Sewerage	No	No	Pniel WWTW will be upgraded to accommodate growth in the area. Estimated cost R5 Mil. Stellenbosch's WWTW is being upgraded with a further R12 Mil. R2 Mil per annum is spent on upgrading the sanitation network. Franschhoek: New WWTW will be constructed in 2010 at an estimated cost of R70 Mil. Klapmuts: New WWTW will be constructed in the next two years, estimated cost R50 Mil	Sewer Master Plan, Asset Register and Asset Management	Funds for upgrading must be increased. Implement Asset management strategies
	Electricity	No	No	Major new feeders are in the process of being installed. Total cost R30 Mil, Substation renewal cost R10 Mil. Maintenance budget (for upgrades), estimated cost of R30 Mil per Annum	Electricity Master Plan, electricity saving methods (i.e. energy savers, street lights, solar panels).	Implemented Asset management strategies. Bulk supply needs to be increased
	Roads	No	No	R2 Mil per annum are being spent on reseal and R4-6 Mil per annum on maintenance. Rehabilitation was R25 Mil for the past 4 years. "Through" road (Helshoogte road) upgraded.	Pavement Management Plans (must be updated), Studies on reducing cars in CBD (to make CBD more pedestrian) and public transport studies.	Implement Asset Management Strategies
	Storm water	Yes, except Franschhoek	Yes, except Franschhoek	Maintenance cost R5 Mil per annum in Stellenbosch town	Floodline Studies and River Management Plans	Stormwater Master Plan. All new developments must construct retention dam. Implement Asset management strategies
	Solid waste	See SG 7.3				
Witzenberg	Water	Yes, except Tulbagh and Wolseley	Yes, except Tulbagh and Wolseley	Pipe replacing at R1.4 Mil/annum (for all towns), network maintenance cost of R0.73 Mil/annum (all towns) Prince Alfred Hamlet: New reservoir at estimated cost of R5 Mil, new resource studies at value of R26 Mil Tulbagh: Proposed reservoir and upgrading of WTW, new resource studies at value of R26 Mil Wolseley: Proposed reservoir of R10 Mil and upgrading of WTW, new resource studies at value of R26 Mil Op-die-berg: Proposed upgrading of WTW	Water Master Plan, Asset Register (AR), water reduction articles and public water weeks, water demand management plan, Water Service development plan (WSDP), EWISA software (includes maintenance plan).	Implement Asset management strategies, Management of infrastructure and optimizing operation of the works will ensure minimum water losses at all water works and pipelines
	Sewerage	Yes	Yes, except Tulbagh	Pipe upgrading of R2.7 Mil (for all towns), maintenance costs at R1 Mil/annum, Proposed upgrading of WWTW Prince Alfred Hamlet: Plan to widen reticulation infrastructure at cost of R0.7 Mil	Sewer Master Plan, Asset Register, EWISA (Includes maintenance plan)	Implement Asset management strategies

				Tulbagh and Wolseley: need and/or proposed upgrading of WWTW			
	Electricity	Yes	No	Ceres: Developers pay for network extensions and shared network costs Tulbagh: R0.6 Mil for new main substation	20 Year Master Plan, AR	Implemented Asset management strategies	
	Roads	Yes	Yes	Maintenance R2.5 mil/annum (for all towns).	Pavement Management System (2005), Asset Register	Implement Asset management strategies, update of pavement management system	
	Storm water	No	No	Upgrading infrastructure at cost of R1 Mil (All towns)	Asset Register	Stormwater Master Plan, Implement Asset management strategies	
	Solid waste	See SG 7.3					
Drakenstein	Water	Yes, except Wellington and Saron	No, except Hermon	Paarl: Water Treatment Works (WTW) is being constructed valued at R38 Mil. R5.5 Mil/year is also being spent on upgrading existing pipelines. Maintenance cost estimated to be R30 Mil/year. Bulk Supply is sufficient Wellington: WTW, Pump Station and reservoir are being constructed, valued at R19.4 Mil. R26.7Mil will be spent on upgrading pipe network. Gouda: Proposed reservoir valued at R4.2 Mil Saron: Upgrading and replacing of existing 450mm dia bulk water main R4.4 Mil, New WTW valued at R4.2 Mil.	Water Master Plan, Bulk water supply study, Pressure Management Plan, Asset Register (AR), Asset Management Plan, water reduction articles and 'water weeks' to sensitise the public	Improve asset management techniques	
	Sewerage	No, except Hermon	No, except Hermon	Paarl: Upgrading sewer network R79 Mil, New bulk sewer main R11.2 Mil, busy upgrading WWTW, maintenance estimated at R11 Mil/year Wellington: Pump Station and Rising Mains R26 Mil, maintenance R8 Mil/year Gouda: Upgraded WWTW valued at R8.2 Mil. Maintenance cost estimated to be R0.4 Mil. Saron: Upgrading sewerage pipelines and Pump Station R1.1 Mil, Maintenance cost estimated to be R0.8 Mil/year	Sewer Master Plan, Asset Register and Asset Management	Improve asset management techniques	
	Electricity	Yes	Yes	Paarl: R20-30 Mil spent on sub-stations and cable extensions Wellington:	Electricity Master Plan, electricity saving methods (i.e. energy savers, street lights, solar panels), waste energy project, tariff investigation to decrease consumer consumption	Improve asset management techniques	
	Solid waste	See SG 7.3					

The present arrangement of service delivery and infrastructure in rural areas is below an acceptable standard which compounds the dire need for appropriate government intervention – probably only possible in partnership with non-governmental role-players. The following table states the situation in the rural area regarding municipal service infrastructure.

Table 43: Municipal service infrastructure in rural areas

Municipality	Municipal	Is the exist-	Is there capacity for	If not, what is being done to increase the ca-	What other measures are being	Recommendation
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	service	ing service capacity sufficient?	new development/growth in demand?	capacity of existing infrastructure and/or bulk supply?	undertaken to improve service availability?	
Langeberg	Water	Not provided by municipality				
	Sewerage	Not provided by municipality				
	Electricity	Yes	No	Put pressure on Eskom to increase bulk supply, maintenance cost at R1.5 Mil/annum (all towns), need to upgrade feeders to developments at cost of R0.8 mil		
	Storm water	No infrastructure in place				
	Solid waste	See SG 7.3				
Breede Valley	Water	Reticulation: yes	Reticulation: yes			
	Sewerage	Shortage of personnel and skills. These areas use sewage tanks - funds for equipment are not sufficient.				
	Electricity	Provided by Eskom				
	Solid waste	See SG 7.3				
Stellenbosch	Water	No	No	Pressure on existing bulk supply, reticulation network and treatment facilities	Water Master Plan, Asset Register (AR), water reduction articles and water weeks' to sensitise the public	Implement Asset management strategies
	Sewerage	No	No	Pressure on existing bulk supply, reticulation network and treatment facilities		
	Electricity	No	No	Major new feeders are in the process of being installed. Total cost R30 Mil, Substation renewal cost R10 Mil. Maintenance budget (for upgrades), estimated cost of R30 Mil per Annum	Electricity Master Plan, electricity saving methods (i.e. energy savers, street lights, solar panels).	Implemented asset management Strategies. Bulk supply needs to be increased
	Roads	Yes	No			
	Storm water	Yes	Yes		Floodline Studies and River Management Plans	Stormwater Master Plan. All new developments must construct retention dam. Implement Asset Management Strategies
	Solid waste	See SG 7.3				
Drakenstein	Water	No	No		Water Master Plan, Bulk water supply study, Asset Register (AR), Asset Management Plan, water reduction articles and public water weeks	Improve asset management techniques
	Sewerage	No	No			
	Electricity	Yes	Yes			
	Solid waste	See SG 7.3				

SG7.1 Water infrastructure

One of the most critical issues impacting on the economic-development process in the district is the water supply in the region and in each of the different towns and settlements, taking into account concerns about long-term water supply trends and climate-change processes.

For the Breede River Valley, small local supply schemes meet almost all of the urban water requirements in the Breede River component. Augmentation of current urban supply schemes may be required in the future, depending on growth in requirements. However, all local authorities must first undertake and implement more efficient water use and water re-use from their existing resources, before consideration will be given to the development of new schemes.

Table 44: Water infrastructure

Subject	Number	Description																
Theme	SG7	Infrastructure																
Component	SG7.1	Water infrastructure																
SD link		Access, care, democracy, burden sharing, eco-efficiency and justice																
Objectives		To manage the impact and exposure of external and internal threats to growth and development (read: sustainable development)																
Strategy (ies)	SG7.1	<ol style="list-style-type: none"> 1. Ensure that the municipal infrastructure to provide basic services to communities is in place, effective and maintained; for this to be achieved within a common understanding in enough detail of the long-term objectives and direction of our society and a common vision 2. Determine the impact of long-term water supply trends and climate-change processes on growth and development 3. Invest in technologies and systems that decouple economic growth from rising raw water consumption 4. Where urban development proposals will exceed infrastructure capacity, applications should be refused until provision is made to deal with the additional loads 																
Action(s)		<ol style="list-style-type: none"> 5. Local authorities to undertake and implement more efficient water use and water re-use from existing resources; management of infrastructure and optimizing operation of the works will ensure minimum water losses at all water works and pipelines; training of process controllers to increase awareness of the importance of operating and maintenance in the works <table border="1" style="width: 100%;"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>B Municipalities</td> </tr> </table> 6. Municipalities to prepare Water Master Plan, Asset Register (AR), Water Service Development Plan (WSDP) and conduct public water weeks <table border="1" style="width: 100%;"> <tr> <td>Priority</td> <td>High</td> </tr> <tr> <td>Agent</td> <td>B Municipalities</td> </tr> </table> 7. Implement land-use management tools (e.g. CWDSDF indicatory tool) to influence the location of water infrastructure <table border="1" style="width: 100%;"> <tr> <td>Priority</td> <td>High</td> </tr> <tr> <td>Agent</td> <td>CWDM</td> </tr> </table> 8. Municipalities to implement asset management strategies <table border="1" style="width: 100%;"> <tr> <td>Priority</td> <td>High</td> </tr> <tr> <td>Agent</td> <td>B Municipalities</td> </tr> </table> 	Priority	Very high	Agent	B Municipalities	Priority	High	Agent	B Municipalities	Priority	High	Agent	CWDM	Priority	High	Agent	B Municipalities
Priority	Very high																	
Agent	B Municipalities																	
Priority	High																	
Agent	B Municipalities																	
Priority	High																	
Agent	CWDM																	
Priority	High																	
Agent	B Municipalities																	
Spatial indicator(s)		9. The water infrastructure service capacity of the higher order towns are sufficient for future growth (Stellenbosch's needs urgent attention)																
Spatial link		10. Water infrastructure located in preferred SPC District-wide																

Policy im-
perative The medium- to long-term provision of urban infrastructure needs to consider the spatial guidelines as presented in this CWDSDF – cognisant of the provision of basic services to communities until current backlogs have been eradicated; ensure that the recurring shortage in bulk infrastructure does not become a threat to growth and development (the 'domino effect')

SG7.2 Electricity infrastructure

Table 45: Electricity infrastructure

Subject	Number	Description
Theme	SG7	Infrastructure
Component	SG7.2	Electricity infrastructure
SD link		Access, care, democracy, burden sharing, eco-efficiency and justice
Objectives	To manage	the impact and exposure of external and internal threats to growth and development (read: sustainable development)
Strategy	SG7.2	1. Ensure that the municipal infrastructure to provide basic services to communities is in place, effective and maintained; for this to be achieved within a common understanding in enough detail of the long-term objectives and direction of our society and a common vision
Action(s)	2.	Introduce electricity saving methods (i.e. energy savers, street lights, solar panels).
		Priority High
		Agent Eskom, B Municipalities
		3. Implemented asset management strategies and prepare an electricity master plan
		Priority High
		Agent Eskom and B Municipalities
		4. Implement land-use management tools (e.g. CWDSDF indicatory tool) to influence the location of electricity infrastructure
		Priority High
		Agent CWDM
		5. Complete a tariff investigation to decrease consumer consumption
Priority Medium		
Agent Eskom and B Municipalities		
Spatial indicator(s)	6.	Electricity is available to all users throughout the district – ensure service capacity of the higher order towns is sufficient for future growth
Spatial link	7.	Electricity infrastructure located in preferred SPC
Policy im- perative		District-wide An urgent need for additional power generation capacity; ensure that the recurring shortage in bulk infrastructure does not become a threat to growth and development (the 'domino effect')

SG7.3 Solid waste disposal

Waste management in municipalities resides under three municipal functions, i.e. waste collection, waste disposal and since recently, waste reduction. Where collection of domestic municipal waste is concerned,

the vast majority of urban residents are receiving a municipal collection service.

However, the management of waste disposal is generally poor with the exception of the Stellenbosch, Wellington and Wolseley landfills. The operation of the De Doorns site, in particular, is terrible. Most landfills also have insufficient long-term capacity with the Stellenbosch and Wolseley landfills reaching particularly critical stages. Regionalisation of landfilling should urgently be investigated, because landfill capacity will always be needed; even with waste reduction facilities in place.

Waste reduction within the Cape Winelands is generally poor since it has not, until recently, been a municipal function. The only recovery of any significance is done at the "dirty" MRFs at Paarl (currently being upgraded), Touws River and Ashton. Scavenging takes place at a number of the waste disposal sites in the area, contributing to operational difficulties. Stellenbosch has introduced source-separation with their so-called "blue bag" system in a number of residential areas. MRFs should be established in all the larger towns throughout the District. Composting of garden waste is done successfully near Stellenbosch, Klapmuts and Robertson and should be extended to all larger towns in the District. Stellenbosch Municipality also operates a composting facility for sewage sludge. Disposal Sites for Builders' Rubble should be closed and replaced with builders' rubble crushing plants to reclaim the material.

Table 46 indicate the landfill capacities that would be required for the next 30 years, based on a 2% annual growth and a 12m height restriction should no waste reduction take place (worse-case scenario).

Table 46: 30-year projection of required landfill capacities

Municipality	2007 Waste Volume ton/annum	Required Air-space m3	Required Footprint ha
Witzenberg	13,587	1,006,668	15
Drakenstein	55,170	4,087,519	35
Stellenbosch	50,960	3,775,621	33
Breede Valley	27,111	2,008,641	22
Langeberg	15,360	1,137,997	16
DMA	922	68,338	7

Through the use of GIS assisted positive/negative mapping, suitable sites for possible landfill can be identified by excluding potentially unsuitable sites. Criteria used as minimum requirement can include urban areas, steep slopes, hydrology, groundwater and geology. **Map 5** depicts the most suitable locations for solid waste disposal sites within the Cape Winelands district. It will, however, be necessary to conduct further analysis and verification of information/data to prepare a map at local and/or site-specific level.

Map 5: Composite map: most suitable locations for solid waste disposal sites

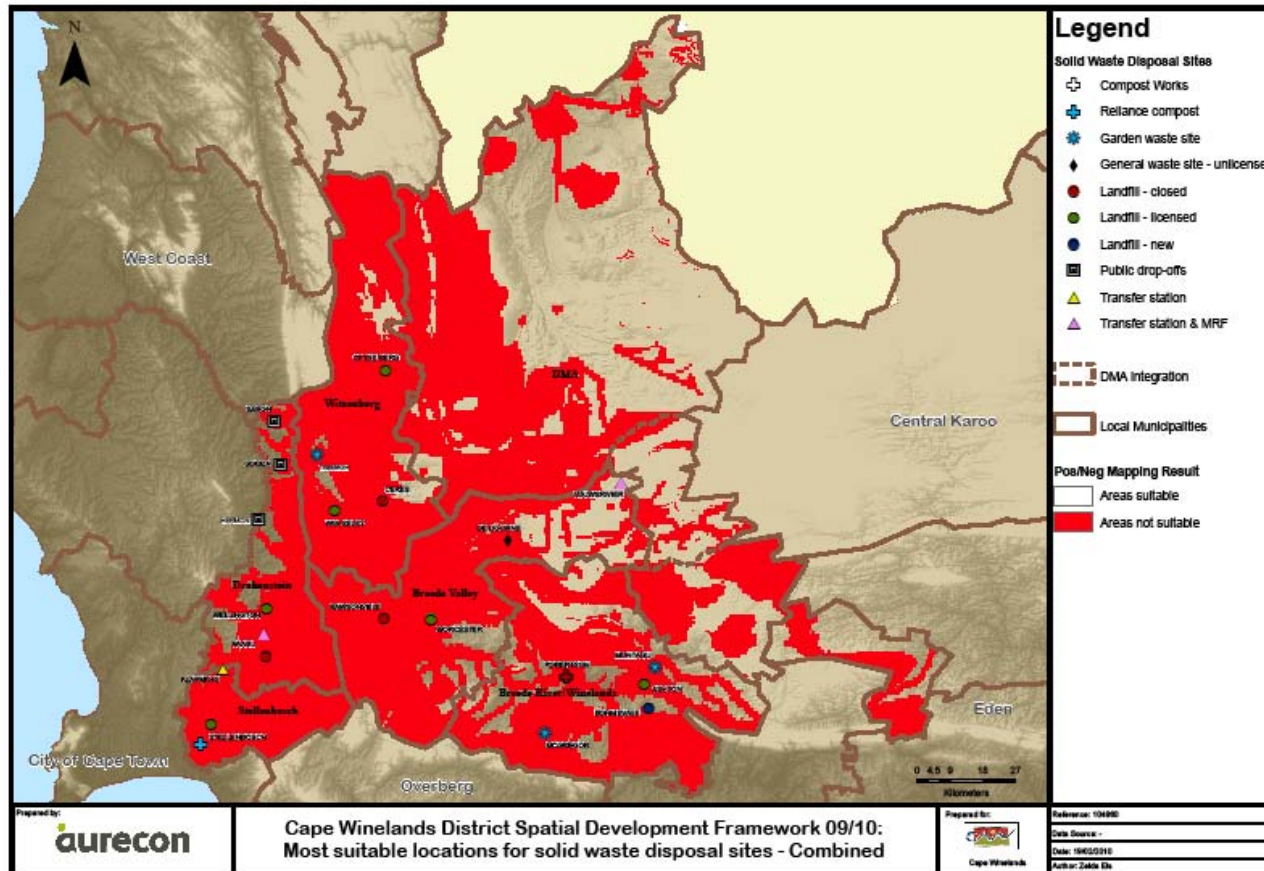


Table 47: Solid waste disposal

Subject	Number	Description																
Theme	SG7	Infrastructure																
Component	SG7.3	Solid waste disposal																
SD link		Access, care, democracy, burden sharing, eco-efficiency and justice																
Objectives		To improve the quality of life for the people of the region by ensuring principle-led responses through co-operative governance To manage the impact and exposure of external and internal threats to growth and development To improve and conserve the district's natural environment																
Strategy (ies)	SG7.3	1. Identify new waste disposal sites years in advance to ensure that communities are not located too close to future sites 2. Ensuring sufficient capacity for waste disposal 3. Systematically reducing the per capita rate of waste disposal to landfill																
Action(s)		4. Create public awareness <table border="1"> <tr> <td>Priority</td> <td>High</td> </tr> <tr> <td>Agent</td> <td>CWDM</td> </tr> </table> 5. Develop new landfill capacity ; implement land-use management tools (e.g. CWDSDF indicatory tool) to influence the location of new landfill sites <table border="1"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>CWDM</td> </tr> </table> 6. Investigate alternative technologies <table border="1"> <tr> <td>Priority</td> <td>High</td> </tr> <tr> <td>Agent</td> <td>CWDM</td> </tr> </table> 7. Develop waste reduction strategies <table border="1"> <tr> <td>Priority</td> <td>High</td> </tr> <tr> <td>Agent</td> <td>CWDM</td> </tr> </table>	Priority	High	Agent	CWDM	Priority	Very high	Agent	CWDM	Priority	High	Agent	CWDM	Priority	High	Agent	CWDM
Priority	High																	
Agent	CWDM																	
Priority	Very high																	
Agent	CWDM																	
Priority	High																	
Agent	CWDM																	
Priority	High																	
Agent	CWDM																	
Spatial indicator(s)		8. Amount of waste disposal capacity available 9. Daily disposal rate per capita 10. Solid waste disposal sites located in preferred SPC																
Spatial link		District-wide																
Policy imperative		Regionalisation of landfilling should urgently be investigated, because landfill capacity will always be needed; even with waste reduction facilities in place; ensure that the recurring shortage in bulk infrastructure does not become a threat to growth and development (the 'domino effect')																

SG7.4 Sewerage infrastructure

Table 48: Sewerage infrastructure

Subject	Number	Description				
Theme	SG7	Infrastructure				
Component	SG7.4	Sewerage infrastructure				
SD link		Access, care, democracy, burden sharing, eco-efficiency and justice				
Objectives		To manage the impact and exposure of external and internal threats to growth and development To improve and conserve the district's natural environment				
Strategy (ies)	SG7.4	1. Upgrade or rehabilitate Waste Water Treatment Plants at Rawsonville, Robertson, Montagu, Ashton, Paarl and Wellington 2. Where urban development proposals will exceed infrastructure capacity, applications should be refused until provision is made to deal with the additional loads				
Action		3. Implement land-use management tools (e.g. CWDSDF indicatory tool) to influence the location of sewerage infrastructure				
		<table border="1"> <tr> <td>Priority</td> <td>High</td> </tr> <tr> <td>Agent</td> <td>CWDM</td> </tr> </table>	Priority	High	Agent	CWDM
Priority	High					
Agent	CWDM					
Spatial indicator		4. Sewerage infrastructure located in preferred SPC				
Spatial link		District-wide				
Policy imperative		Ensure that the recurring shortage in bulk infrastructure does not become a real threat to growth and development (the 'domino effect')				

SG7.5 Transport infrastructure

The most important Regional Transport Corridor is the N1 road-rail link to Gauteng which breaks away from the Breede River Valley corridor at Worcester and passes through De Doorns, Touws River, Laingsburg and Beaufort West; rail freight and particularly rail passenger services have been declining on this route.¹¹⁶ In Government Gazette No 31422, parts of the N1 have been declared a Toll Road¹¹⁷:

- Portions of existing National Road N1: Part of Section 1, all of Section 2 and part of Section 3 from the Old Oak interchange (Section 1, km 18,9) up to km 55,15 (Section 1) and continue from km 67,15 (Section 1) to a point 810 meters to the east of Sand Hills intersection (Section 3, km 20,54), covering a distance of 105.8 km.

The main routes for freight transport (total weight) are the N1 and the R 60 between Worcester and Robertson with the R301 between Paarl and Wellington the second busiest route by volume, after the N1. The latter route is predominantly traffic of a localised nature.¹¹⁸ It is interesting that the R44,

¹¹⁶ PGWC, Provincial Spatial Development Framework, 2005

¹¹⁷ Webpage, SANRAL, 19 May 2009

¹¹⁸ CWDM, Winelands Integrated Transport Plan, 2005

R 46 and R303, in Witzenberg also carry high freight volumes and in view of the proposed toll roads to be established, the increase in traffic on these roads can be significant. It seems as if the road infrastructure, for current and future use, is inadequate in the Drakenstein, Stellenbosch and Breede Valley municipal areas.

An interesting feature is the parallel nature of the rail and road network that can create the potential for intermodalism and a higher use of the well-developed local rail network. The Western Cape Mainline Rail route is transporting below 20% of the freight tonnage carried on the N1 national road.¹¹⁹

In terms of a broad overview, the main elements of the transport system serving the Cape Winelands district are as follows¹²⁰:

- The area is served in varying degrees by three public transport nodes: minibus-taxi, bus and rail
- Taxi services are the overwhelming mode of transport
- Limited bus services exist, many of these are specially contracted services to factories
- Special subsidised learner transport services are provided in some areas
- Commuter rail services are provided from Cape Town and Bellville on two lines: the Stellenbosch line and the Paarl line with a limited service extending to Worcester
- Long-distance rail services to Johannesburg and Durban are provided from certain stations
- Long-distance inter city bus services are provided, and
- Farm transport is provided especially during the season, often using farm vehicles

In the Cape Winelands the rail network and operational system e.g. stations, commuter rail, are not optimised as stations do not have effective commuter accessibility and higher property values and commuter rail provides only fractional services to users. Unfortunately, although the Worcester to Wellington to Cape Town corridor and Muldersvlei to Eersterivier Corridor (via Stellenbosch) have been identified – by Metrorail – as two of eight functional rail corridors, it seems that in terms of implementation priorities, these two corridors are category B and C priorities.

Table 49: Transport infrastructure

Subject	Number	Description
Theme	SG7	Infrastructure
Component	SG7.5	Transport infrastructure (includes airstrip/-port)
SD link		Access, care, democracy, burden sharing, eco-efficiency and justice
Objectives		To promote sustainable resource use and responsible rural development To foster the inclusion of an economic perspective in land use management and land development
Strategy (ies)	SG7.5	1. Transport corridors containing both road and rail routes should be developed as primary freight and passenger routes; promote intermodalism between rail and road transport; consider the impact of water supply limitations, new energy resources, housing supply and demand trends and development along transport corridors

¹¹⁹ CWDM, Winelands Integrated Transport Plan, 2005

¹²⁰ Op.cit.

2. Strengthen the transport and other communication networks that link the better located areas with those with less potential¹²¹; Increase the ability to commute between higher order and lower order towns by managing the operating environment, transport system and decision making mechanisms relevant to transport planning; improve rural transport opportunities
3. Ensure mobility through affordable, reliable and time-starved transport opportunities — even if it means providing subsidised public transport where marginalised communities require government intervention (mainly rural areas) as a principle-led response; enhance mobility by locating residential areas close(r) to trip destinations
4. Apply the principles of densification and diversification along (selected) transport routes¹²²;
5. Consider rail network proposals in terms of the possibility to improve the existing rail network and public transport network efficiency; reconsider the categories in the Regional Rail Plan of the two functional rail corridors in the Cape Winelands district namely, Worcester to Wellington to Cape Town and Muldersvlei to Eersterivier corridor (via Stellenbosch)
6. Assess the need for tourism-orientated transport networks
7. Public transport services for special needs passengers; provide and ensure universal access to public transport facilities for persons with physical disabilities¹²³
8. Transport for learners: facilitate provision of improved public transport services for learners in rural areas; identify candidate pilot projects for specialized services¹²⁴
9. Non-motorized transport and road safety: improve the level of provision for pedestrians and cyclists¹²⁵
10. Institutional structures: establish institutional structures for the management of public transport at municipal level; increase capacity and resources for public transport planning and management; set up co-coordinating structures between municipalities¹²⁶
11. Larger towns and groups of towns that are functionally linked should make provision for future Bus Rapid Transit (BRT) routes in their transportation and land use planning proposals¹²⁷
12. To manage the investment programmes and location of transport infrastructure

Action(s)

13. Conduct **high-profile talks** with Metrorail on the 'transport infrastructure' strategies and proposed spatial guidelines in the CWDSDF

Priority	Very high
Agent	CWDM and B Municipalities

14. Include transport information/data in the integrated and centralised **spatial database**

Priority	High
Agent	CWDM

15. Implement **land-use management tools** (e.g. CWDSDF indicatory tool) to influence the location of 'new' transport infrastructure

Priority	High
Agent	CWDM

16. Conduct a study to determine the feasibility of a '**freight transport transfer station**' at either Klapmuts or Worcester to promote intermodalism

Priority	High
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¹²¹ CWDM, Cape Winelands Integrated Development Plan, 2009/2010.

¹²² PGWC, Provincial Spatial Development Framework, May 2009.

¹²³ Cape Winelands Integrated Transport Plan, December 2005.

¹²⁴ *ibid.*

¹²⁵ *ibid.*

¹²⁶ *ibid.*

¹²⁷ PGWC, Provincial Spatial Development Framework, May 2009

	Agent	CWDM
Spatial indicator(s)	17. Worcester, Wellington and Paarl (en-route to Cape Town) are serviced by effective rail networks 18. Transport infrastructure located in preferred SPC	
Spatial link	District-wide	
Policy imperative	In the context of the built, social, political, economic and environmental elements that underpin present-day society the provincial strategic objective to 'increase access to safe and efficient transport' is crucial to sustainable development; the interconnectivity between spatial planning and transport planning cannot be overemphasized owing to, amongst others, the leading role of infrastructure investment programmes on urban structure, increased ability of the 'middle-class' to afford vehicles, people's settlement preferences and the inadequacy of current road and rail networks in providing transport opportunities; if there is not an up-to-date Transport Plan for a municipal area, then the 'Terms of Reference' for the municipal SDF must demand the inclusion of transport planners as part of the multi-disciplinary (consultant) team; ensure that the recurring shortage in bulk infrastructure does not become a threat to growth and development (the 'domino effect')	

SG7.6 Telecommunication infrastructure

Table 50: Telecommunication infrastructure

Subject	Number	Description
Theme	SG7	Infrastructure
Component	SG7.6	Telecommunication infrastructure
SD link		Access, care, democracy, burden sharing, eco-efficiency and justice
Objectives		To promote sustainable resource use and responsible rural development
Strategy (ies)	SG7.6	1. Provide low cost high speed network services in the main centres ¹²⁸ 2. Pipelines, transmission lines and telecommunications masts should be aligned along existing and proposed transport corridors rather than along point to point cross-country routes ¹²⁹
Action		3. Implement land-use management tools (e.g. CWDSDF indicatory tool) to influence the alignment of telecommunication infrastructure
	Priority	High
	Agent	CWDM
Spatial indicator		4. Telecommunication infrastructure located in preferred SPC
Spatial link		District-wide
Policy imperative		-

¹²⁸ PGWC, Provincial Spatial Development Framework, May 2009.

¹²⁹ *ibid.*

SG7.7 Renewable energy infrastructure

In 2003 the Provincial Government of the Western Cape embarked on a programme to pave the way for wind energy as a viable, clean, renewable energy development within the Province. The vision of the strategic initiative was to establish a policy on the implementation of a methodology to be used for the identification of areas suitable for the establishment of wind energy projects.

The first method assessed was the “criteria based” method that used certain criteria to identify areas suitable for wind turbines but ended up defining where wind turbines should not be placed. The “landscape based” assessment was based on the qualitative, often subjective, perceptual, and ‘value laden’ concept of landscape character, aesthetic value, landscape sensitivity and landscape capacity assessment. Overlay maps of positive and negative criteria produce three zone types: preferred, negotiated and restricted. A “Hybrid” regional method was proposed that includes specifically the issue of cumulative impacts as well as adding “positive criteria” layers to the primary “negative mapping” technique. The study also proposed a site level methodology for establishing appropriate wind turbine development to assist in both the detailed preparation of proposals and local and provincial authorities in assessing such proposals.

Table 51: Renewable energy infrastructure

Subject	Number	Description								
Theme	SG7	Infrastructure								
Component	SG7.7	Renewable energy infrastructure								
SD link		Access, care, democracy, burden sharing, eco-efficiency and justice								
Objectives		To promote sustainable resource use and responsible rural development								
Strategy (ies)	SG7.7	1. As a principle-led (and policy) response, authorities to consider and promote the development of renewable energy power generation capacity subject to appropriate scale, form and location (see Chapter 8) 2. Consider providing renewable energy generated power to poverty-stricken areas ¹³⁰								
Action(s)		3. Conduct a study to evaluate the provincial policy on the implementation of a methodology to be used for the identification of areas suitable for the establishment of wind energy projects <table border="1"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>CWDM</td> </tr> </table> 4. Implement land-use management tools (e.g. CWDSDF indicatory tool) to influence the location of renewable energy facilities <table border="1"> <tr> <td>Priority</td> <td>High</td> </tr> <tr> <td>Agent</td> <td>CWDM</td> </tr> </table>	Priority	Very high	Agent	CWDM	Priority	High	Agent	CWDM
Priority	Very high									
Agent	CWDM									
Priority	High									
Agent	CWDM									
Spatial indicator		5. Renewable energy infrastructure accommodated at appropriate locations and ‘locally’ preferred scale, form, etc								
Spatial link		District-wide								
Policy imperative		To support the provincial strategic objective to encourage renewable energy programmes including the harnessing of wind and solar power as well as generating energy from alternative sources such as sewerage sludge, bio-gas and agricultural waste								

¹³⁰ PGWC, Provincial Spatial Development Framework, May 2009.

SG8 Housing

In September 2004, the national Minister of Housing launched 'Breaking New Ground: A Comprehensive Plan for the Development of Sustainable Human Settlements' (BNG). The plan is aimed at redressing *apartheid* spatial planning and development through the delivery of socially, economically and spatially integrated housing.¹³¹ The plan also stated that the initiative is "to redirect and enhance existing mechanisms to move towards more responsive and effective delivery", and aspires to "promote the achievement of a non-racial, integrated society through the development of sustainable human settlements and quality housing". The establishment by the national government of the Housing Development Agency (HDA) in February 2009 is probably a move in this direction.

The Western Cape Sustainable Human Settlement Strategy¹³² (WCSHSS) (also called Isidima) is the first step towards the development of a set of fully-fledged strategy and implementation plans for "sustainable human settlements" in the Western Cape. To achieve the goal of serving as a roadmap to dignified communities, the WCSHSS has set out to achieve the following objectives:

- **Objective 1:** Citizens of the Western Cape who live in a variety of different situations are aware of — and can easily access — a wide range of housing services and instruments that can assist them to participate in the development of a sustainable human settlement of their choice.
- **Objective 2:** Through the Integrated Governmental Relations (IGR) framework, all intergovernmental policies, plans and budgets that are related to human settlement development are aligned horizontally and vertically.
- **Objective 3:** Sustained municipal capacity building for delivery, including accreditation over time of those municipalities that have developed the capacity to carry out their housing mandate effectively and efficiently in accordance with the Breaking New Ground policy and the PGWC's various policy frameworks.
- **Objective 4:** A functioning property market across both first and second economies and an enabling environment for agents and institutions who want to design and implement sustainable human settlements in accordance with the WCSHSS approach.
- **Objective 5:** The institutional arrangements and capabilities of the Department Local Government & Housing and (where necessary) those of other provincial departments involved in implementation are developed to effectively design and implement the new WCSHSS.
- **Objective 6:** State land and other resources are used for spatial restructuring, with direct and indirect benefits for the poor.
- **Objective 7:** A new pact is consolidated between government and organised civil society to build up over time the trust, reciprocity and development practices required to imagine, design and implement vibrant sustainable neighbourhoods.
- **Objective 8:** The Western Cape's towns and cities become global leaders in sustainable resource use by making sure that all new buildings, infrastructure and open spaces are planned in accordance with ecological design principles, and that owners of existing buildings (in particular public sector owners) respond to incentives to retrofit their buildings in accordance with these principles.

¹³¹ PGWC, Department of Local Government and Housing, a discussion document, October 2005.

¹³² PGWC, Western Cape Sustainable Human Settlement Strategy, 2006.

The Isidima policy opted for a “quick-fix” solution towards realising sustainable human settlements rather than the structured approach advocated in the BNG policy via the creation of a wide range of legislative, financial and institutional mechanisms and instruments, not least because it may find it extremely difficult to rapidly build up the high-level management capacity that will be required to achieve this. Instead, a project focus is proposed through the identification of a specific set of initiatives, e.g. release of public land, identified for interventions and projects that will over time resolve the problem, and teams are put in place to make these happen. The WCHSS sets out from the assumption that, by combining system-wide interventions to transform housing markets (and related financial and institutional processes) through capital subsidies, infrastructure investments, project level interventions and sustained community engagement and participation, a wide range of resources, energies and capacities will be unlocked in ways that the state can steer to the benefit of the urban poor. Being more pragmatic the Isidima policy highlights the importance of incorporating environmental sustainability and participatory planning and design into the new approach, but there are also other issues that need to be grappled with in developing new imaginaries.¹³³ These include incrementalism, implementing mixed-income developments, achieving higher residential densities, the linkage of human settlements and health, and understanding the complexities of location.¹³⁴

Table 52: Housing: current situation at municipalities

Spatial component	Langeberg	Breede Valley	Witzenberg	Drakenstein	Stellenbosch
Housing (urban)	Not integrated with spatial planning; “production-line effect”	Not integrated with spatial planning; emphasis on provision of low-cost housing; location not according to SDF; demand for mid-value housing	Not integrated with spatial planning; construction company operates in isolation; recent developments problematic	Integrated with SDF; backlog “unknown”	Housing developments do not entertain SDF proposals; hamlets exist – Rathby, Vlottenburg, Koolenhof, Dwarsrivier/Boschendam;
Housing (rural)	No hamlets – only rural settlement	-	Would support agri-villages (availability of services to be secured)	High value – luxury housing (south of N1); pressure on Klapmuts area	Gated communities along urban edge and at hamlets; farm worker dwellings converted to tourism accommodation;

¹³³ African Centre for Cities Smit.W, Isidima: Creating dignified communities, Aug.2009.

¹³⁴ *ibid.*

SG8.1 Housing delivery

The Department of Housing reported in 2004 a backlog of 306 208 units within the Western Cape. The largest percentage of this housing backlog (71.5%) was in the Cape Metropolitan area, followed by the Cape Winelands area with 13.3%.¹³⁵

For all practical purposes the housing backlog — as flawed as any estimation of the housing demand might be — was estimated to be between 38 000-45000 for the district as a whole (see **Table 53**).

Table 53: Housing demand /backlog¹³⁶

	Municipal Estimates	2001 Census	Sanitation Back-log Study
Langeberg	2,694	1,638	5,263
Breede Valley	28,587	4,380	7,691
Drakenstein	22,748	7,711	13,501
Stellenbosch	16,643	5,090	7,870
Witzenberg	5,092	2,080	3,827
Rural Farmland	-		370
DMA	-		
CWDM (Total)	75,764	20,910	38,522

A study commissioned by the PGWC, identified the following key block-ages to the delivery of adequate housing in general, and the Western Cape specifically:¹³⁷

- Inadequate resources for housing and urban development
- Lack of a long-term housing plan
- Lack of understanding of the housing problem
- Lack of capacity for appropriate housing delivery

- Access to well-located land for housing
- The NIMBY syndrome
- Access to appropriate housing credit
- Policy incoherence and frequent policy changes

As mentioned under **SG 5.2**, the post-1994 planning ideology (including the provision of housing) advocates a remedial approach through different legislation but, also being applied in the Cape Winelands district, did not, as yet, manifest in real change to the urban structure or distribution of economic opportunities. In this regard a recent study¹³⁸ stated the following challenges (as identified by local municipalities) related to the implementation of housing projects:

- Capacity constraints within housing departments
- Insufficient planning to guide decisions regarding housing projects
- Insufficient funding and financial resources
- Insufficient suitable land
- Limited bulk infrastructure capacity
- Environmental and heritage constraints
- Obtaining approvals such as environmental and heritage approvals
- The high cost to develop in rural areas
- The lack of bulk services in rural areas, and
- Appropriately located land for housing

This study also proposed the following research projects to be included in the next budget cycle, namely:

- Comprehensive guidelines on land acquisitions and land swaps
- Alternative funding sources for housing projects
- Impact of demographic trends such as migration and HIV on housing delivery

¹³⁵ PGWC, State of the Environment Report, 2005.

¹³⁶ CWDM, Cape Winelands Integrated Development Plan, p 44 and 45 of 173.

¹³⁷ PGWC, Department of Local Government and Housing, a discussion document, October 2005.

¹³⁸ CWDM, Cape Winelands Integrated Sustainable Human Settlement Plan, Phases 3 & 4, Business Plan and Implementation, December 2009.

- Optimal means to improve capacity at local municipalities
- Alternative housing typology education programme
- Appropriate green technologies manual
- Guidelines for settling of rural dwellers
- Comprehensive analysis of the “gap” market, and
- Strategy for the implementation of social housing / rental stock

The mentioned housing backlog has bearing on the bottom-end of the affordable house-price value band. By making use of Stats SA data (see **Annexure 5**) an historic overview of the demand for houses, *greater than or equal to 80m²*, in the Cape Winelands (as proxied by statistics on new buildings completed), is the following:

- Between 1996 and 2002 new supply of *houses*, equal to or greater than 80m² oscillated roughly around 65.000m² p.a. – remember that the residential property cycle entered into an upswing phase during this period after stagnating for about a decade
- Between 2003 and 2007, *real* house prices rocketed into the stratosphere, resulting in new additions to stock averaging about 100.000m² p.a, and
- Over both of the periods, the number of residential units completed averaged roughly 400 units per annum.

The demand for new (formal) dwelling space is estimated to average roughly 63.000 m² p.a. over the 6-year period. This is well below the previous 6-year (2003-2008) average, which is to be expected given the phase we expect the house-price cycle to be in. Making the assumption that the average house is about 150 m², the forecast number of units demanded over the next 6 years would be on average approximately 300 units p.a (see **Table 54**). This demand for space will in all probability be satisfied within current delineated urban edges.

Table 54: Apportioning the forecast average p.a. demand for dwelling space in each municipality according to price class till 2014*

		Affordable	Mid-value	High-value	Luxury	Total
Municipality	Price = Null	R1 - R400 000	R400 000 - R800 000	R800 000- R1.5 mil	R1.5 mil +	Total
Langeberg						
sqm	776	1566	784	606	473	4206
units	4	9	4	3	3	24
Breede Valley						
sqm	1353	2803	1285	653	540	6635
units	10	20	9	5	4	48
Drakenstein						
sqm	7889	5745	5793	4965	5290	29681
units	35	26	26	22	24	132
Stellenbosch						
sqm	6128	2263	3505	4306	5648	21850
units	23	8	13	16	21	81
Witzenberg						
sqm	121	440	160	90	80	891
units	2	5	2	1	1	11
Cape Winelands (Total)						
sqm	15296	15375	11466	10037	11089	63263
units	71	72	54	47	52	296

***this forecast excludes current backlog (including informal settlements) and in-migration**

Regarding delivery on the demand for residential space, two distinct ‘segments’ of this (formal) residential market emerges in that supply is either by government or private developers. The ultimate role-player on the supply-side of the low-income housing market remains national and provincial government.

Table 55: Housing delivery

Subject	Number	Description										
Theme	SG8	Housing										
Component	SG8.1	Housing delivery										
SD link		Access, democracy, burden sharing, eco-efficiency and justice										
Objectives		To manage the impact and exposure of external and internal threats to growth and development (read: sustainable development) To promote the concentration and intensification of human and economic activities within the current land footprint and in areas of high accessibility To promote sustainable resource use and responsible rural development To address housing backlogs within a settlement hierarchy and propose alternative settlement options										
Strategy (ies)	SG8.1	<ol style="list-style-type: none"> The provision of housing to be according to a demand-driven and supply-negotiated approach rather than the 'incumbent' supply-driven and product-uniformity approach¹³⁹; promote small scale housing developments at appropriate locations rather than large mass scale developments; allocating appropriately located land for low-cost housing with sufficient (nearby) scope for (in)formal business activities; 'appropriate locations' to be based on SDF spatial guidelines (for the district and B municipal areas) Use a 'bundled' approach when consider the allocation of government resources for housing delivery with the primary informant to be a credible (district) IDP; allocate provincial housing funds according to CWDSDF spatial guidelines regarding integrated human settlements and the hierarchy of towns (as should be portrayed in the district CWIDP); Consider the full range of housing options e.g. location, typology, value bands, services infrastructure, etc in any government-funded housing development Promote the concept of inclusionary housing (define scale and format); all residential developments undertaken by the private sector (irrespective of it being on public or private land) above a certain threshold should provide 20% or more (the threshold may be revised from time to time) inclusionary housing opportunities, whether or not on a rental basis, as determined by the PSDF Explanatory Manual and Policy on Inclusionary Housing, and should include land and/or financial contribution towards social costs on the same legal basis as is currently valid towards infrastructural costs¹⁴⁰ 										
Action(s)		<ol style="list-style-type: none"> Create a working relationship with the newly established national Housing Development Agency; government to strengthen partnerships and/or agreements with other role-players in the delivery of low-cost housing <table border="1"> <tr> <td>Priority</td> <td>Medium</td> </tr> <tr> <td>Agent</td> <td>CWDM and B Municipalities</td> </tr> </table> Review and consider the proposals of the Cape Winelands Integrated Sustainable Human Settlement Plan (December 2009) in the context of the CWDSDF spatial guidelines; reconsider all planned housing projects in the context of the CWDSDF spatial guidelines; ensure that all housing projects conform to ISIDIMA policy guidelines <table border="1"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>PGWC, CWDM and B Municipalities</td> </tr> </table> Implement appropriate measures to develop, manage and monitor 'housing' indicators to determine (1) the current state of affairs (2) developing trends, patterns and pressure points (3) the outcome of interventions or policies (4) which adjustments to consider as a result of outcomes, and (5) milestones achieved or failures that frustrate progress <table border="1"> <tr> <td>Priority</td> <td>Very high</td> </tr> </table> 	Priority	Medium	Agent	CWDM and B Municipalities	Priority	Very high	Agent	PGWC, CWDM and B Municipalities	Priority	Very high
Priority	Medium											
Agent	CWDM and B Municipalities											
Priority	Very high											
Agent	PGWC, CWDM and B Municipalities											
Priority	Very high											

¹³⁹ Consolidating Developmental Local Government, Lessons from the South African Experience, An Isandla Institute Book Project, 2008.

¹⁴⁰ PGWC, Provincial Spatial Development Framework, May 2009.

		<table border="1"> <tr> <td>Agent</td> <td>CWDM</td> </tr> </table>	Agent	CWDM		
Agent	CWDM					
		8. Conduct a comprehensive consultation and participation process throughout the district to sensitise and inform stakeholders regarding government's approach to housing delivery				
		<table border="1"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>CWDM and B Municipalities</td> </tr> </table>	Priority	Very high	Agent	CWDM and B Municipalities
Priority	Very high					
Agent	CWDM and B Municipalities					
		9. Review and reconsider housing demand datasets ; create equity regarding the use of these datasets; integrate housing demand datasets into a municipal information system (also to be part of the integrated and centralised spatial database)				
		<table border="1"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>B Municipalities</td> </tr> </table>	Priority	Very high	Agent	B Municipalities
Priority	Very high					
Agent	B Municipalities					
		10. Develop a ' set of criteria ' (and/ or prioritisation model) – based on CWDSDF spatial guidelines – to be used in the identification, design and implementation of (short-term) supply-driven housing delivery				
		<table border="1"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>PGWC, CWDM and B Municipalities</td> </tr> </table>	Priority	Very high	Agent	PGWC, CWDM and B Municipalities
Priority	Very high					
Agent	PGWC, CWDM and B Municipalities					
Spatial indicator(s)		11. Large mass-scale government-funded housing developments provided in (only) higher order towns				
		12. Small-scale housing developments (including a focus on the provision of serviced sites) provided in first- and second-order towns (or at appropriate locations in higher order towns)				
Spatial link		District-wide				
Policy imperative		<p>To primarily protect community heritage, values, etc when considering the provision of housing the following are of importance:</p> <ul style="list-style-type: none"> • Eradication of backlogs is not the same as the introduction of new households into the community, and • Integration is not the same as infiltration <p>The following provincial objectives should be promoted:</p> <ul style="list-style-type: none"> • Developing integrated human settlements looking at a number of innovative ways to provide more people with access to shelter and basic services • Finding a range of ways to deliver sustainable housing opportunities; increase our focus on the provision of serviced sites • Making land available for human settlement development • Tripling the average density of housing projects on well-located land to 90 units per hectare • Reviewing all provincial spatial planning legislation with the aim of consolidating all of it into one Act that simplifies and clarifies roles and responsibilities regarding land use planning • Exploring the viability of alternative building materials and methods for house construction 				

SG8.2 Land acquisition and release programmes

One of the multiple instruments available to government to create sustainable human settlements is a land-acquisition and land-release programme. Any such programme needs to be part of the broader response by government in the provision of housing. It is also important to ensure that the release and development of state-owned land contribute to the restructuring and integration of opportunities in towns.

A recent study¹⁴¹ determined that for any land-release programme to be successful the elements of finance, legal, (strategic and operational) governance, stakeholder interaction and human resources need to be addressed. These programmes also constitute a 'set of components' e.g. information and datasets, land-release benchmarks, risk and change management, release mechanisms, etc, that together inform the design and implementation of a particular programme. Furthermore, the implementation within a bureaucratic environment also demands that the focus of effort be put at the front-end of the programme, as this is where the opportunity to add value is greatest – and the cost of making changes smallest.

Table 56: Land acquisition and release programmes

Subject	Number	Description				
Theme	SG8	Housing				
Component	SG8.2	Land acquisition and release programmes				
SD link		Access and democracy				
Objectives		To manage the impact and exposure of external and internal threats to growth and development (read: sustainable development) To promote the concentration and intensification of human and economic activities within the current land footprint and in areas of high accessibility To promote sustainable resource use and responsible rural development To address housing backlogs within a settlement hierarchy and propose alternative settlement options				
Strategy	SG8.2	1. To facilitate the efficient use of government-owned land in the transformation of towns and to ensure that public land-release programmes achieve urban-land-market outcomes that support poor people's capacity to improve their material conditions and economic well-being				
Action		2. Each municipality to prepare and implement a land-release programme of government-owned land (not only for municipal-owned land) and a land-acquisition programme for the provision of mandated services and infrastructure				
		<table border="1"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>B Municipalities</td> </tr> </table>	Priority	Very high	Agent	B Municipalities
Priority	Very high					
Agent	B Municipalities					
Spatial indicator		3. Each municipality has prepared and implemented a land-acquisition and land-release programme				
Spatial link		District-wide				
Policy imperative		The provincial objective to make land available for human settlement development should be supported				

¹⁴¹ Urban LandMark, An assessment of the land-release programme of the Western Cape Provincial Department of Local Government and Housing, Nov 2009.

SG8.3 Informal settlements

There are 117 informal settlements in the Cape Winelands district with altogether 37 119 informal dwellings at an average density of 71 dwellings per hectare. About 60% of all informal dwellings are situated within the Stellenbosch and Drakenstein municipalities with a further 23% in the Breede Valley Municipality. There are 27 informal settlements with a high vulnerability index of which 18 are situated within the Stellenbosch and Drakenstein municipalities with an aggregate 8473 dwellings.

The rationale behind informal settlements is insufficient supply of land and housing by government. This phenomenon can also be ascribed to flaws in land use planning, land legislation (e.g. different planning and revenue systems) and housing policy.¹⁴²



Table 57: Informal settlements

Subject	Number	Description
Theme	SG8	Housing
Component	SG8.3	Informal settlements
SD link		Access, care, democracy, burden sharing, eco-efficiency and justice
Objectives		To manage the impact and exposure of external and internal threats to growth and development (read: sustainable development) To promote the concentration and intensification of human and economic activities within the current land footprint and in areas of high accessibility To promote sustainable resource use and responsible rural development To address housing backlogs within a settlement hierarchy and propose alternative settlement options
Strategy (ies)	SG8.3	1. Consider the prioritised provision of housing for beneficiaries in high-risk informal settlements (can be in-situ upgrading) – in the context of available funds government should prioritise high-risk informal settlements in the Stellenbosch and Drakenstein municipal areas;

¹⁴² Mahadevia, D, Land for the Urban Poor: Problems and Possibilities, Lecture on 13 May 2009.

		<p>consider upgrading (read: provision of basic services) of existing informal settlements (with medium- and low-risk profile) for improved living conditions</p> <p>2. Accept the continued existence of informal settlements (at the bottom of the housing ladder) and proactively identify land for low-income housing also as “preferred” areas for informal settlement</p>								
Action(s)		<p>3. Incorporate the extent of the housing demand generated from high-risk informal settlements (applying the demand-driven and supply-negotiated approach) in the relevant housing demand datasets and prioritisation processes to allocate government resources for housing delivery</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>PGWC, CWDM and B Municipalities</td> </tr> </table> <p>4. Develop a strategy to address land invasion</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Priority</td> <td>Medium</td> </tr> <tr> <td>Agent</td> <td>CWDM</td> </tr> </table>	Priority	Very high	Agent	PGWC, CWDM and B Municipalities	Priority	Medium	Agent	CWDM
Priority	Very high									
Agent	PGWC, CWDM and B Municipalities									
Priority	Medium									
Agent	CWDM									
Spatial indicator(s)		<p>5. The need for basic services, housing and/or land in all informal settlements with a high vulnerability index has been addressed</p> <p>6. The current footprint of informal settlements has decreased</p> <p>7. The number of dwellings in high-risk informal settlements has decreased (linked to the prioritised provision of housing for beneficiaries in high-risk informal settlements)</p>								
Spatial link		District-wide								
Policy imperative		<p>The following provincial objectives should be promoted:</p> <ul style="list-style-type: none"> • Developing integrated human settlements looking at a number of innovative ways to provide more people with access to shelter and basic services • Finding a range of ways to deliver sustainable housing opportunities; increase our focus on the provision of serviced sites • Making land available for human settlement development 								

SG9 Disaster management

Table 58: Disaster management

Subject	Number	Description
Theme	SG9	Disaster management
Component	SG9.1	Disaster management (floods, fire, earthquakes and hazardous material)
SD link		Access, care and democracy
Objectives		To manage the impact and exposure of external and internal threats to growth and development (read: sustainable development) To promote sustainable resource use and responsible rural development To improve and conserve the district's natural environment
Strategy Action(s)	SG9.1	<ol style="list-style-type: none"> 1. Get physical planning, engineering and construction measures in place 2. Build sufficient and appropriately located fire stations 3. Plan and provide for buffer zones between residential and vegetation areas 4. Plan and provide access roads for fire trucks in informal settlements; provide suitable roads as evacuation routes in informal settlements; provide informal areas with fire-resistant materials; provide fire hydrants in informal settlements 5. Plan fire services in line with new development needs 6. Apply an acceptable housing density (relevant to the specific housing development) that would limit the spread of fire 7. Ensure that development of residential dwellings only takes place after adequate bulk services are provided 8. Provide additional fire hydrants in all areas 9. Install watch towers, fire breaks, fire extinguishers in forestry areas 10. Ensure that fire hydrant water supply is sufficient in higher lying areas 11. Ensure the enforcement of an Environmental Impact Assessment (EIA) with all development projects (according to the NEMA guidelines) 12. Plan for the upgrading of existing infrastructure to cope with new developments 13. Identification and plotting of vacant high-risk flood areas for future reference and avoid human settlements in such areas 14. Avoid development and settling of communities along rivers and within the flood line 15. Apply and update zoning regulations regularly in response to changed disaster management requirements; develop zoning codes for high risk areas 16. Identify alternate suitable venues/facilities for emergency services 17. Apply low intensity land use in 1:100 flood line areas 18. Study and understand the impact of climate change on development 19. Ensure proper and appropriate signage regarding flood risk especially in low-lying areas 20. Plan and build retention dams to reduce risk of flooding 21. Restore and maintain water catchment areas 22. Build retaining walls to protect buildings from stormwater 23. Improve and upgrade stormwater reticulation systems regularly 24. Develop and maintain sustained cleaning programmes for rivers and dams 25. Plan and construct dams with larger capacity to regulate flow of water 26. Identify earthquake prone areas / geological faults 27. Development of suitable building codes (enforcement thereof)

	<p>28. Limit development in high risk areas</p> <p>29. Approval of only single-storey buildings in disaster prone areas and at appropriate densities</p> <p>30. Enforce area-specific building material/methods/codes</p> <p>31. Design strong earthquake resistant infrastructure services</p> <p>32. Create a zoning for major hazardous installations (MHI)</p> <p>33. Proper planning be done regarding the placement of factories and plants</p> <p>34. Limit population figures around MHIs</p> <p>35. Enforcement and evaluation of risk assessment for major hazardous installations</p> <p>36. Monitoring, restricting and managing of routes for hazardous materials (hazmat) in transit (railways/roads)</p> <p>37. Provide specific parking areas along the roadside for vehicles transporting hazardous material</p> <p>38. Increase hazmat capabilities on main routes where hazmat freight vehicle parking areas are to be found</p> <p>39. Identification of containment sites and measures</p> <table border="1"> <tr> <td>Priority</td> <td>High*</td> </tr> <tr> <td>Agent</td> <td>PGWC, CWDM and B Municipalities (Disaster Management Centres)*</td> </tr> </table> <p>*Refer to actions 2 to 39</p>	Priority	High*	Agent	PGWC, CWDM and B Municipalities (Disaster Management Centres)*
Priority	High*				
Agent	PGWC, CWDM and B Municipalities (Disaster Management Centres)*				
Spatial indicator	40. A disaster risk profile for the district has been completed				
Spatial link	District-wide				
Policy imperative	The Emergency and Disaster Management Centre(s) located at the most suitable location(s)				

c. Economic imperative

SG10 Space economy

All over the world recent global events and a greater awareness of long-term structural changes (like climate change, energy crises and other shifts) make planners aware of the need to take a broader look at environmental changes. Naturally, this should also apply to expected future developments in this region with the following of particular interest:

- The current *global recession*, which has also reached South Africa, will have its impact on this region as well. Thus, world market prices of higher quality wines will be dampened over (at least) the next few years; overseas tourists in the high earnings segment will be much fewer in numbers; the influx of high income retirees (who buy or build luxury homes in Cape Winelands towns and popular villages) will subside, and property markets in general will be dampened. Experts tell us that this downturn will not be reversed too soon; there may even be a more permanent dampening of "luxury lifestyles".
- Current *political changes* in South Africa may also lead to some dampening of the earnings and spending patterns of higher income households in South Africa (although no drastic shift in economic policies is foreseen). This, again, may negatively affect those settlements in the Cape Winelands which depend a lot on high income visitors, luxury property purchases or retirees moving south (e.g. Franschhoek).
- Over the longer run there are clear signs that *climate change* will affect South(west)ern Africa quite significantly, implying lower rainfall and some dampening of the current diverse pattern of agricultural production. At the same time efforts to better utilise local *water resources*, dams and other storage facilities will probably be intensified. The same can be expected in the sphere of *power generation* and the utilisation of alternative energy sources.

With respect to these and other long-term changes, the district once again benefits from its diversity of sectors, growth factors and settlement patterns. At the same time much will depend on the way local authorities and their development partners address those long-term change factors. Over the short term the main challenge is the (incremental) creation of local capacity to understand and analyse these changes and to pragmatically plan appropriate action.

After almost a decade of frantic efforts to push up South Africa's GDP growth from 2–3 per cent to 6 per cent per annum, we are suddenly experiencing a drop to even below two per cent, with most serious economists warning that recovery from the global recession may be slower or more dampened than lately suggested. The reasons are that some of the more fundamental dampening forces (like higher oil prices and the need to give far greater care to the environment) may persist much longer.

Thus it would seem unrealistic to project 5–6 per cent p.a. nation-wide growth over the next few years. A return to the 3–5 per cent band may be more realistic.

Table 59: Estimated growth % per annum

		GDP growth % per annum	
		2010 – 2014	2015 – 2018
1	Stellenbosch, Paarl	6	5
2	Worcester	4–5	3–4

3	Tulbagh, Ceres, Robertson, Montagu	3-4	3
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In this context, the Western Cape may be able to remain at the upper end of aggregate GDP growth across South Africa, i.e. 4–5 per cent p.a. In the region, the Cape Winelands district will probably combine relatively higher growth rates in Stellenbosch/Paarl and slower growth in the rural areas, where the population is stagnant if not declining. It is for these 'rural' areas that **localized planning** should inform, *inter alia*, municipal decisions after considering the following:

- Population growth
- The changing economic base and sector structure e.g. for the **Stellenbosch/Drakenstein** area: the likelihood of consolidation and much greater price competition to impact negatively on investment and expansion plans, placing greater emphasis on farming in other products and on agri-tourism; and for the **Franschhoek** area: the steady growth in the tourism service sector that can lead to further deepening of tourism-related business activities (like craft markets, exhibitions and conferences) across the whole area
- Land use changes and land reform opportunities inside and around the settlement areas and the respective urban edges
- Expected rural area development patterns in the different local municipal areas and around the towns
- The impact of water supply limitations (accelerated by longer run climate change) and new energy sources on evolving local economic activities
- Existing structural deficiencies within all urban and rural configurations, and
- Facilitation of growth opportunities along transport corridors (e.g. N1 - Paarl/Klapmuts/Cape Town).

Parallel to the mentioned consolidation of growth we should expect increasingly diverse and creative ways to (better) utilise vacant or underutilised land. This can be through new land-reform strategies, expan-

sion of (peri-)urban agriculture and the facilitation of new small-enterprise clusters (e.g. agro-clusters or incubators).

The top growth sectors in the Cape Winelands¹⁴³ between 2000 and 2004, based largely on domestic demand, trade and tourism, were (percentage growth in brackets):

- Wholesale and retail (including catering and accommodation) (10,12%);
- Manufacturing (6.83%);
- Finance and business services (5.58%); and
- Transport and communication (5.25%).

The following sectors are regarded as key in driving growth, job creation and poverty reduction in the Cape Winelands:

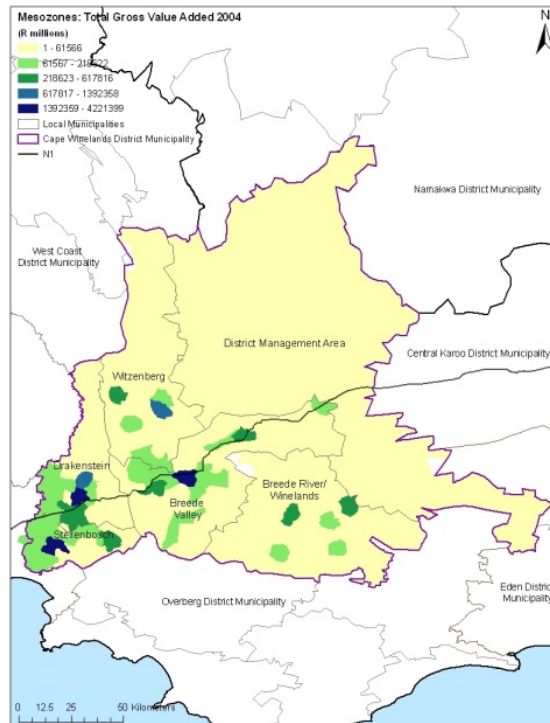
1. *Agriculture*: significant for its forward linkages within the economy; direct contribution to turnover and employment; robustness and resilience; and potential for new activities and markets.
2. *Tourism*: key sector owing to established foreign markets and networks; potential for expansion in the domestic market; generation of foreign currency; backward linkages to agricultural sector; lateral linkages to services sector; and the existing built and natural capital within the region.
3. *Financial/ Real Estate/ Insurance and Business Services Sector*: leading growth sector currently; potential to attract the 'Call Centre' and Business Processes Outsourcing industry into the region, in particular the Dutch industry; and the region's ability to attract Johannesburg and Cape Town based firms' head quarters – the Cape Winelands is definitely the 'place to be'.
4. *Manufacturing*: established sector with strong backward linkages to agriculture; potential for SMME development; and an important job generator.

¹⁴³ CWDM, Cape Winelands Growth and Development Strategy, 2006.

The analysis of the space economy describes high points in total GVA contribution from the areas in and around towns with notable secondary contributions from certain 'rural' areas in the Stellenbosch, Drakenstein and Breede Valley municipal areas (see **Map** opposite).

Over the past decade(s), **Stellenbosch** has seen growth in each of the following sectors:

- Higher education and research
- Agriculture and agri-processing
- Tourism
- Corporate headquarters and business services
- Retirement settlements, and
- Other sectors that include a fairly buoyant retail sector and diverse (small and medium-sized) industrial enterprises. These could be related to agriculture, forestry, furniture making, high-tech equipment (linked to the Technopark) publishing or the craft sector.



In sharp contrast to Stellenbosch with its university-dominance, industry is the largest sector of the **Paarl/Wellington** economy, with agriculture a strong second and transport (services) another significant sector. This is due to the proximity to the N1 and Du Toitskloof, but also Paarl's central location with respect to Bainskloof Pass and the R44/R311 to the North. In addition to these three sectors, tourism is also significant for Paarl as well as Wellington, although not as prominent as in the case of Stellenbosch/Franschhoek. Similarly, some higher education facilities give this area a strong base in education, though in no ways comparable to Stellenbosch. On the other hand, Paarl also has corporate headquarters and, due to its stronger manufacturing base, seems well placed to attract others.

Being the largest town in the area, Paarl/ Wellington have attracted all the major retail chains, making retailing a further growth sector. Here again, the nearby N1 has been a strong drawcard for retail expansion. To some extent, this as well as the broad sector base has also stimulated financial, property and business services.

Looking at overall population growth, Drakenstein's positive growth over the past decade was much lower than that of Stellenbosch (growing at approximately 2.0% annually between 2001 and 2007, compared to the rapid increase of Stellenbosch). Factors determining this growth – and shaping future growth, expected to range between 1.8 and 2.5% p.a. – include the following:

- A lower growth of industrial output due to global competition has also dampened employment in this sector. In fact, Paarl/ Wellington have lost some factories in (i.a.) the clothing sector, with others probably struggling right now.
- With a less buoyant manufacturing sector and with sharp rises in the petrol price over the past years (which dampened car travel to/from the north along the N1), two important growth forces of this urban area have been dampened.

- Much of the natural rural-urban shift from the Drakenstein and wider Cape Winelands platteland has not stopped in Paarl, but people have moved right into the metro-area. This has counter-balanced some of the immigration (mostly from the Eastern Cape via Eden) and new influx of retirees (of which Drakenstein also gets some).

Although less dynamic than Stellenbosch, the above factors and the current sector structure of this urban area should be viewed in a positive light. The population is likely to increase further, the sector base is broad and the different growth sectors complement each other well.

The area covered by **Brede Valley Municipality** consists basically of the N1-transport corridor between the entrance to the Karoo and Du Toitskloof Pass, together with the Wemmershoek mountain in the south west of the area. Worcester fulfils a multiple role in this area with the smaller places along the N1 corridor either directly linked to the transport sector or agricultural activities in the more immediate vicinity. Thus, Touws River derived its significance from the station and its role as transfer from steam to electricity – a role that has been lost and which caused the shrinking of the town’s economic base. De Doorns has been linked to agriculture, with special focus on export grapes, where increased global competition has caused local stagnation. Rawsonville is agri-processing based, with additional activities due to its location at the inland edge of Du Toitskloof Pass.

Smaller places to the north of the N1 are mostly linked to tourism (like Goudini and Matroosberg) and dispersed agricultural activities

In the **Witzenberg municipal area** the activities around towns are essentially agriculture based, with the towns being “agricultural service centres”, with some agri-processing as well, related to wine, fruit, vegetable and other niche products. Some places are well-known for their niche-products, like Ceres for its nearby cherry orchards in the mountainous hinterland. Parallel to agriculture, this municipal area is also strong in the tourism field, catering for Cape Town and other Western Cape day- and weekend tourists as well as up-country seasonal tourists.

Once again, the continuation of diversified agriculture, some forestry and river fishing strengthen the attractiveness of the area for outside visitors. In addition, the diversity of small towns, interspaced with farms and other rural sights (like snow-capped mountains) make the area particularly attractive for short-term visitors. The fact that these destinations are just a short distance from the N1 (and a mere 150-200 km from Inner-Cape Town) further adds to the comparative strength of the area for tourists.

Although the **Langeberg municipal** area has certain parallels with the Witzenberg area, there are also distinct differences, which suggest a relatively lower (if any) negative population growth.

- The Langeberg area is far more strategically located, with the R60-south, linking with the N1, the R317 with the Overberg and the R60-north with Worcester as well as the N1 and the northern cluster of the District. In addition, Montagu provides the links to the R62, which is the main tourism route through the Klein Karoo, including Oudtshoorn and other Eden destinations.
- The five towns, closely linked to each other as well as those distance routes, provide a valuable range of tourist attractions for both short distance/short visit tourists and for longer distance visitors and foreign tourists. What is more, each of these towns has a particular “mix” of agriculture, tourism and retirement settlements as well as small town history and culture, strengthening their respective attractions and increasing the uniqueness of the whole cluster.
- Although Ashton doesn’t easily fit into the range of more typical “tourist destinations” – being primarily a centre for food processing and other agro-industries-related activities – it broadens the economic base of this cluster by adding a significant industrial segment (and helping the farmers in the region).
- While Ashton is the industrial centre of the cluster, Robertson is the largest town and has the broadest economic base. This is further enhanced by its closeness to Worcester and its central location vis-à-vis the other places in the cluster.

Given these factors as well as past trends, it is projected that the Langeberg municipal area will maintain its current population, notwithstanding normal rural-urban migration and the rationalisation of agriculture and industry. As indicated already, local economic development in this area is based on:

- diversified agriculture (including wine/grapes)
- tourism (catering for day, weekend, event, 'route', adventure/sport, health and cultural tourists)
- agri-processing

- retirement settlement
- other small-town functions

It is important to be aware of the opportunities arising out of the complementarity of these growth sectors. If anything, the diversity factor is even stronger here than in the Witzenberg area, although the respective towns are relatively small, so that economics of scale are not easily achieved. The proximity to both the N2 and the N1 is, however, a further advantage.

Table 60: Space economy

Subject	Number	Description
Theme	SG10	Space economy
Component	SG10	Space economy
SD link		Access, care, burden sharing and eco-efficiency
Objectives		To improve the quality of life for the people of the region by ensuring principle-led responses To manage the impact and exposure of external and internal threats to growth and development (read: sustainable development) To promote sustainable resource use and responsible rural development To foster the inclusion of an economic perspective in land use management and land development To consider the spatial rationale for the implementation of government policies within the Cape Winelands district
Strategy (ies)	SG10	<ol style="list-style-type: none"> 1. <u>Stellenbosch Municipality</u>: to watch carefully how growth impacts on the environment, on its "urban edge" and on the competition between different land uses; create a conducive policy environment to facilitate land use that strengthen sustainable economic growth sectors 2. <u>Drakenstein Municipality</u>: view the current sector structure of this urban area in a positive light (sector base is broad and the different growth sectors complement each other well); create a conducive policy environment to facilitate land use that strengthen sustainable economic growth sectors 3. <u>Breede Valley Municipality</u>: improvement of service delivery to existing enterprises and households to prevent them from moving elsewhere even faster or getting into profitability crises; ensure the closest possible interaction and co-operation between the public and the private sector; as far as poverty and unemployment pockets are concerned to facilitate the movement of households to larger urban areas may be as relevant as <i>ad hoc</i> social support and improvements in the most basic infrastructure services 4. <u>Witzenberg Municipality</u>: be aware of the need for the reconciliation between a stagnant, if not declining population and the need and demand for improved residential infrastructure facilities, in the context of a decreasing local revenue base 5. <u>Langeberg Municipality</u>: encourage the rationalisation of agriculture and industry 6. Ensure that planning and implementation correspond with growth and development objectives of the private sector; promote pragmatism, flexibility and the closest possible interaction and cooperation between the public and the private sector; identifying which roles are best fulfilled by the state, and which should be left to the private sector and civil society - achieving most things in partnerships with other key stakeholders; government to facilitate on a joint basis efforts and assure that public programmes interact with private initiatives on a partnership basis; higher profiles are needed than what exist at present, together with proactive Public Private Partnership initiatives, possibly with stronger support from local universities

	<p>7. Consider the most prominent factors influencing the agricultural economy to include land reform, land and water use, loss of natural habitat and urban expansion</p> <p>8. Counter the limited local development base of most towns with progressive strategies to optimize the use of available resources and infrastructure to, inter alia, give effect to a transformation agenda</p> <p>9. Strengthen the linkages to improve access for households from the areas with less economic potential to areas with greater potential to access employment and social opportunities (also see SG7.5)</p> <p>10. For the 'small' towns like Hermon, Gouda, Saron, Prince Alfred Hamlet and Op-die-Berg where diseconomies of small scale will make it almost impossible to maintain personal services it seems as if it will be left to local community, corporate or small enterprise initiatives – <i>encouraged, facilitated and monitored by municipalities and other public support agents</i> – to address the needs</p>				
Action(s)	<p>12. (Incrementally) create local (municipal) capacity to understand and analyse long-term change factors and to pragmatically plan appropriate action</p> <p>13. Create partnerships for the closest possible interaction between the public and the private sector</p> <p>14. Facilitate economic growth and employment creation in areas where this is most effective and sustainable; address the need, scope and preconditions for local incubator developments in towns 'where this is most effective and sustainable'</p> <p>15. Identify and consolidate growth momentum</p> <p>16. Optimize tourism potential of certain tourist attractions/destinations</p> <p>17. Co-ordinate bottom-of-the-pyramid interventions in appropriate towns through strengthening knowledge and awareness, public sector support and corporate engagement</p> <p>18. Develop a strategically well-planned and communicated local industrial development strategy for the area along the R301 between Paarl and Wellington (also identifying potential small industry incubators); accentuate the visibility of poverty pockets (e.g. along the R301) to mobilise private as well as public and civil society initiatives to accelerate low cost housing projects, support local small enterprises, strengthen community (self-help) initiatives and have the corporate sector support "business at the bottom of the pyramid" (also see SG 4.2)</p> <p>19. Ensure effective support and services to small businesses especially in the 'lower' order towns</p> <p>20. Create and use 'basic' economic indicators to provide information on the current state of affairs, developing trends, patterns and pressure points, the outcome of interventions or policies, which adjustments to consider as a result of outcomes, and milestones achieved or failures that frustrate progress</p> <p>21. Consider a significantly enlarged capacity of Worcester-based small enterprise support suppliers (be they Red Door, Seda or NGO-linked)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Priority</td> <td>Very high*</td> </tr> <tr> <td>Agent</td> <td>CWDM*</td> </tr> </table> <p>* refer to actions 12 to 21</p>	Priority	Very high*	Agent	CWDM*
Priority	Very high*				
Agent	CWDM*				
Spatial indicator(s)	<p>22. Increase in primary contributions to total GVA strengthened as per current geographic referenced area (note: to focus on the spatial, racial and social class <i>spread of development</i> and the <i>safeguarding of sustainability</i> - rather than the "creation" of new growth sectors or initiatives)</p> <p>23. LUMS of municipalities accommodate progressive measures to strengthen (local) economic growth momentum</p> <p>24. LED strategies to also emphasise the critical need for cooperative management (including governance) between public and private sector in 'small' towns</p>				
Spatial link	District-wide				
Policy imperative	Create an enabling policy environment to introduce land use guidelines that strengthen sustainable economic growth sectors e.g. Stellenbosch – tourism, knowledge economy; Drakenstein – industrial, agriculture				

SG11 Socio-economic issues

In line with the other levels of government, local authorities – and district authorities like the CWDM – are committed to address socio-economic challenges in their area as effectively as it is practically possible. While they are but one of many “actors” or players in the process of “facilitating socio-economic advancement” or the vision of “working together we can do more by improving the quality of life for all our people living in rural areas” (see **SG6**), the potential role of the CWDM should not be underrated.

SG11.1 Black economic empowerment

The goals and challenges of black economic empowerment (BEE) apply to all the towns/villages and all the economic (sub) sectors in the region. They are as relevant to Stellenbosch with the university, local corporate enterprises and tourism activities as they are for little hamlets like Prince Alfred and McGregor. Momentum in these processes is maintained through pressures at national and provincial government level, the implementation of BEE-Charters and ongoing interactions between blacks and whites in the employment and business scene. Within the Cape Winelands district a lot of emphasis falls on the procurement practice of the municipalities and other parastatal bodies, i.e. efforts to strengthen black suppliers. Similar emphasis should fall on support for black owned small and micro-enterprises and a considerate approach vis-à-vis (predominantly black-operated) local *informal* businesses. Amongst others this calls for pragmatism and flexibility in the application of zoning regulations and an acceptance of the close integration of residential and business spheres. In rural areas it calls for flexibility towards non-agricultural business activities outside urban boundaries.

Table 61: Black economic empowerment

Subject	Number	Description				
Theme	SG11	Socio-economic issues				
Component	SG11.1	Black economic empowerment				
SD link		Democracy and justice				
Objectives	To improve the quality of life for the people of the region by ensuring principle-led responses					
Strategy (ies)	SG11.1	<ol style="list-style-type: none"> 1. Ensure that procurement practices achieve black economic empowerment 2. Support for black-owned small and micro-enterprises and a considerate approach vis-à-vis (predominantly black-operated) local <i>informal</i> businesses 				
Action		<ol style="list-style-type: none"> 3. LUMS of municipalities to accommodate progressive measures that strengthen (local) economic growth momentum, leveraging opportunities for black economic empowerment and black owned small and micro-enterprises and a considerate approach vis-à-vis (predominantly black-operated) local <i>informal</i> businesses <table border="1" style="width: 100%;"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>B Municipalities</td> </tr> </table>	Priority	Very high	Agent	B Municipalities
Priority	Very high					
Agent	B Municipalities					
Spatial indicator		4. Increase in the number of black-owned service providers procured by municipalities				
Spatial link		District-wide				
Policy imperative		Consideration of the critical issues impacting on the economic-development process in the district				

SG11.2 Poverty alleviation/ unemployment

South Africa is generally viewed as one of the countries in the world with particularly high levels of unemployment. This applies to most parts of South Africa, although the Western Cape boasts distinctively lower levels of urban and rural unemployment. Although detailed, reliable statistics about unemployment in the Cape Winelands area are not available, it is still a fact that larger towns like Stellenbosch, Paarl and Worcester have sizeable numbers of unemployed people and that the smaller rural places also each have 10-15% unemployment relative to their labour supply. In addition, the two key growth sectors of the region – agriculture and tourism – have strong seasonal activity patterns. This creates seasonal unemployment, which can have serious effects on local economic activities, earnings patterns and social behaviour.

For municipalities high unemployment levels imply the need to try and attract outside investors or entrepreneurs and to encourage the further diversification of local business. An excellent example, most relevant for the Cape Winelands region, is the broadening of local wine farming and other agriculture into agri-tourism. Ideally, the tourism (high) season complements the farming season(s).

Similarly, the attraction of a steady stream of retirement “settlers”, many of whom invest in new or reconditioned properties, can help to counter job losses in different sectors. In the case of clothing and textile industries, pro-active support for the technical upgrading of existing firms may also help to “save” jobs.

It should be clear from the above that the CWDSDF is of only limited direct relevance or benefit in the countering of unemployment. Yet, a SDF can shape the local business environment, which itself is important in efforts to further diversify local economies. With its diversity of larger and smaller towns, the wide range of subsectors and the existence of an active small enterprise sector, the preconditions for employment creation exist in the area – but they need a flexible and supportive hand from local authorities.

Map 6: Percentage households earning less than R19 200 pa

In line with these remarks, the level and intensity of poverty may be far less in the Cape Winelands settlements than in other provinces of South Africa and in the metropolitan areas. Yet, there is enough evidence about existing (often severe) “pockets of poverty” in the different urban and rural settlements of the region. Once again the causes relate to seasonal unemployment, low skills levels, low remuneration in agriculture, the influx of migrants from the Eastern Cape or other African countries, the downscaling of labour intensive local industries and other sector shifts. **Map 6** shows the main places by the percentage of households earning less than R 19 200 per annum. R19 200 per annum was the household subsistence level in 2001. De Doorns, Touws River and Ashton are towns with high poverty levels. As one would expect, the main places closest to Cape Town have the least poverty as they are closest to employment. Ceres and Worcester are towns further from Cape Town which have lower poverty levels.

Municipalities can help ameliorate such poverty through:

- Their action to attract new enterprises and job opportunities,
- The expansion of infrastructure facilities to reach the poor and “unhoused” in all parts of local settlements,
- Efforts to step up the supply of “affordable housing” in existing towns (where appropriate), and
- Municipal initiatives to activate or help coordinate private sector and NGO as well as civil society efforts to also address dimensions of local poverty.

Many of these efforts are not of direct relevance for the CWDSDF, although a **flexible business development environment** will (also in the Cape Winelands area) most probably **help** to attract entrepreneurs or external corporates to the area.



Table 62: Poverty alleviation/ unemployment

Subject	Number	Description				
Theme	SG11	Socio-economic issues				
Component	SG11.2	Poverty alleviation/ unemployment				
SD link		Access, care, democracy, burden sharing and justice				
Objectives		To improve the quality of life for the people of the region by ensuring principle-led responses To manage the impact and exposure of external and internal threats to growth and development (read: sustainable development) To foster the inclusion of an economic perspective in land use management and land development				
Strategy (ies)	SG11.2	<ol style="list-style-type: none"> 1. Consider the challenges with respect to urban integration, with the remoteness of the former "African locations" particularly severe in the case of most towns. Focus efforts on utilizing the space in between for urban-agriculture projects, since the virtual stagnation of the local population in numbers limits the demand for residential plots; the same applies to the distances between the towns, which makes it difficult to utilise economies of scale for larger facilities; efforts should be made to utilise public vacant land along the linking routes for land reform and small scale farming (where suitable) 2. Afford greater attention to successes and challenges of informal-sector activities and self-employment 3. Attract outside investors or entrepreneurs and encourage the further diversification of local business 4. Promote small-scale penetrating programmes rather than large-scale initiatives 5. Create development partnerships between public sector institutions, between the public and private sector or between non-governmental organizations and communities 6. Strengthen rural support programmes for commercial and small-scale farming and develop the potential of the agricultural value chain 				
Action(s)		<ol style="list-style-type: none"> 7. LUMS of municipalities to accommodate progressive measures that strengthen (local) economic growth momentum 8. Expand basic infrastructure facilities to reach the poor and "unhoused" in all parts of local settlements 9. Conduct efforts to step up the supply of 'affordable housing' in existing towns (where appropriate; see SG8) 10. Activate or help coordinate private sector and NGO as well as civil society efforts to also address dimensions of local poverty <table border="1"> <tr> <td>Priority</td> <td>Very high*</td> </tr> <tr> <td>Agent</td> <td>CWDM and B Municipalities*</td> </tr> </table> <p>* refer to actions 7 to 10</p>	Priority	Very high*	Agent	CWDM and B Municipalities*
Priority	Very high*					
Agent	CWDM and B Municipalities*					
Spatial indicator		11. The SDF and LUMS of the respective B municipalities include progressive measures that strengthen (local) economic growth momentum				
Spatial link		District-wide				
Policy imperative		As far as poverty pockets and unemployment are concerned, to facilitate the movement of households to larger urban areas may be as relevant as ad hoc social support and improvements in the most basic infrastructure services				

SG11.3 Education and skills supply

Lack of skills and an inadequate capacity of our education and training facilities to supply the necessary skills currently hamper economic and social development in all parts of the country. Compared to other regions the skills gap is probably less in the Western Cape than anywhere else. This applies in particular to places like Stellenbosch and Paarl, which are close to local training facilities and right at the edge of the metropolitan area. Skills and management shortages are more severe in the smaller towns across the Cape Winelands, much in line with the worldwide skills-containment dilemma of ru-

ral areas. Yet, here again the skills gap may still be less severe in the Cape Winelands than in most other South African municipalities located a distance from the larger urban areas. Another skills gap may actually be more important in the context of this report, viz. the lack of professional expertise necessary to fully grasp the local development environment, current and future challenges in the LED-process and constructive steps needed to overcome development bottlenecks. Unfortunately the lack of such experience or insights leads to missed opportunities in efforts to attract new business ventures or to open new development visions. The best way to tackle this dilemma in the Cape Winelands area is for local authorities to seek close partnerships with local businesses, NGOs and other civil society stakeholders. In this particular district these other partners may be able to mobilise some of the deficient skills, especially if we take into account the steady inflow of retiring people from (other) metropolitan areas as well as pro-active training efforts of higher education institutions.

Table 63: Education and skills supply

Subject	Number	Description								
Theme	SG11	Socio-economic issues								
Component	SG11.3	Education and skills supply								
SD link		Access, care, democracy and justice								
Objectives		To improve the quality of life for the people of the region by ensuring principle-led responses To manage the impact and exposure of external and internal threats to growth and development (read: sustainable development) To foster the inclusion of an economic perspective in land use management and land development								
Strategy (ies)	SG11.3	<ol style="list-style-type: none"> To co-ordinate and implement support programmes in order to build social capital and facilitate linkages between rural communities & government resources¹⁴⁴ To co-ordinate & monitor social development programmes & impact within the Cape Winelands¹⁴⁵ To establish specific programmes & host events for targeted groups: gender, youth, disabled and elderly¹⁴⁶ To establish an inter-governmental Social Development team in the district & build internal capacity¹⁴⁷ 								
Action(s)		<ol style="list-style-type: none"> Introduce steps that might encourage the attraction of education and training facilities to smaller district towns and rural area <table border="1" style="width: 100%;"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>PGWC and CWDM</td> </tr> </table> Conduct ongoing training and exposure, as 'learning organizations', for councillors and municipal officials (see SG1.2) <table border="1" style="width: 100%;"> <tr> <td>Priority</td> <td>High</td> </tr> <tr> <td>Agent</td> <td>PGWC and CWDM</td> </tr> </table> 	Priority	Very high	Agent	PGWC and CWDM	Priority	High	Agent	PGWC and CWDM
Priority	Very high									
Agent	PGWC and CWDM									
Priority	High									
Agent	PGWC and CWDM									
Spatial indicator		8. The areas of the Witzenberg, Breede Valley and Langeberg municipal areas within the Breede River catchment targeted for skills development programmes (and associated infrastructure)								
Spatial link		District-wide								
Policy imperative		In addition to inter-governmental co-operation, it is critical for local authorities to seek close partnerships with local businesses, NGOs and other civil society stakeholders								

¹⁴⁴ CWDM Integrated Development Plan, 2009/2010.

¹⁴⁵ *ibid.*

¹⁴⁶ *ibid.*

¹⁴⁷ *ibid.*

SG12 Land reform

The Land Reform Area Based Plan¹⁴⁸ of the Cape Winelands district found that limited progress has been made with land reform in the Cape Winelands while the most success has been achieved in Witzenberg, as a number of land reform projects were initiated with the building of the Koekedouw Dam in the 1990s. In the Cape Winelands 40 671 ha of land has been transferred for land reform purposes by the Department of Land Reform and Rural Development to date, of which 27 344 ha falls within the Witzenberg Municipality.

Land reform programmes, *inter alia*, Land Redistribution Agriculture Development (LRAD), Land Acquisition for Sustainable Settlement (LASS) and Settlement Production Land Acquisition Grant (SPLAG) have been developed to facilitate demand-driven residential settlement, small scale farming and commercial farming but considers available funds as the only supply-side condition. The 2009/2010 budget allocation for land reform projects in the Cape Winelands district amounts to R120.000.000,00 with in excess of R600.000.000,00 needed to fund listed applications. The problem to effectively forecast demand hinders pro-active planning of land reform programmes with numerous factors, i.e. capacity, public involvement, property market fluctuations and suitable land restricting implementation. It is foreseen that the implementation of land reform in the Cape Winelands will not have an adverse effect on the spatial (agricultural) footprint but will impact on urban/rural functionality and the social and economic composition of the district.

The more equal spread of rural land ownership and the increase of black-owned farms or agricultural small holdings must rank high on the government's development agenda. With agriculture playing such a significant role in the Cape Winelands and with most of the existing farms still white-owned, there is, naturally, a lot of pressure to help accelerate the land reform process.

Although municipalities are not the most critical players in the land reform process, they can play a significant role in different areas, viz.:

- explicitly identifying municipal land available for land reform and small-holding projects,
- closely monitoring local land use patterns (including the discontinuation of existing or past land uses – like derelict rail lines and buffer strips) in order to identify land that could be made available for new schemes,
- the flexible application of planning and zoning controls in order to facilitate the re-use of vacant land for small scale farming or urban (market garden) agriculture, and
- support to local small scale farming projects along the lines of conventional small enterprise support.



In this context, we can state that, spread across the large Cape Winelands district, there are many land patches which are suitable for (black) agricultural projects, if only they are clearly identified and if the process of (re-)zoning and re-use can be made more efficient and less arduous. This, however, demands 'supply-driven' land reform where land is 'pro-actively' identified considering issues such as land acquisition (e.g. cost), land suitability, service infrastructure (e.g. roads), water resources, access to support programmes, markets, settlement options, supporting social and economic infrastructure, environmental sensitivity, etc. The CWDSDF propose

¹⁴⁸ CWDM, Cape Winelands Area Based Plan, October 2008

an 'indicatory decision tool' (see **Chapter 8**) to be used in land-use-management decisions that suggests that it may be opportune to encourage certain types of development in the Buffer 2 areas in the Olifants/Gouritz and Breede River catchment areas (that otherwise would probably not have been allowed) to assist with, amongst others, land reform — as a principle-led response.

Subject to the implementation of 'supply-driven' land reform and detailed feasibility studies, the Elsenburg area should be considered for small scale farming — associated with the possibility of physical, social and economic links with the Elsenburg academic institution and Klappmuts. Likewise, it is imperative for government to investigate land reform opportunities inside and around the existing settlement areas and the respective urban edges (SG7.5.3)

Table 64: Land reform

Subject	Number	Description								
Theme	SG12	Land reform								
Component	SG12	Land reform								
SD link		Access, care, democracy, burden sharing, eco-efficiency and justice								
Objectives		To improve the quality of life for the people of the region by ensuring principle-led responses To manage the impact and exposure of external and internal threats to growth and development (read: sustainable development) To promote sustainable resource use and responsible rural development								
Strategy (ies)	SG1.1	<ol style="list-style-type: none"> To consider a 'supply-driven' land reform process where land is 'pro-actively' identified considering issues such as land acquisition (e.g. cost), land suitability, service infrastructure (e.g. roads), water resources, access to support programmes, markets, settlement options, supporting social and economic infrastructure, environmental sensitivity, etc; facilitate the land-reform process inside and around urban settlement areas, including a widening of scope for urban and small-holding agriculture Effectively include local municipalities in planning, management and implementation of land reform e.g. the formulation of the Area Based Plans Monitor and address farm evictions through proper support networks and programmes Place stronger emphasis on co-operative efforts like contract farming and partnership agreements Land outside urban edges should be valued at market rates based on actual commercial returns from existing land use rights Proposals flowing from implementing the Transformation of Certain Rural Areas Act, 1998 (Act 94 of 1998 – TRANCA) in the settlements of Pniel and Saron, should be incorporated into SDFs¹⁴⁹ 								
Action(s)		<ol style="list-style-type: none"> Investigate the Elsenburg area and areas inside and outside existing settlements (of delineated urban edges) for land reform opportunities (with emphasis on small scale farming) <table border="1" style="width: 100%;"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>Department of Land Reform and Rural Development; CWDM and B Municipalities</td> </tr> </table> Complete a review of the Cape Winelands District Area Based Plan to consider, <i>inter alia</i>, the CWDSDF spatial proposals; to also consider security of tenure and permanency of settlement <table border="1" style="width: 100%;"> <tr> <td>Priority</td> <td>High</td> </tr> <tr> <td>Agent</td> <td>Department of Land Reform and Rural Development</td> </tr> </table> 	Priority	Very high	Agent	Department of Land Reform and Rural Development; CWDM and B Municipalities	Priority	High	Agent	Department of Land Reform and Rural Development
Priority	Very high									
Agent	Department of Land Reform and Rural Development; CWDM and B Municipalities									
Priority	High									
Agent	Department of Land Reform and Rural Development									

¹⁴⁹ PGWC, Provincial Spatial Development Framework, May 2009.

Spatial indicator(s)	9. Increase in the total area of land as part of land reform programmes 10. Small scale farming initiatives started in and around existing settlements 11. Decrease in the number of farm evictions
Spatial link	District-wide
Policy imperative	To support the national objective of developing and implementing a comprehensive rural development strategy linked to land and agrarian reform and food security

SG13 Property market

The matching of supply and demand in the property market is a formidable task, for essentially two reasons. Firstly, building construction has a long gestation period. Secondly, property has a longer economic life than even durable consumer goods. This implies that, once an oversupply has developed in the property market, it will take many years to be rectified since the existing stock is consumed over decades, leaving only growth in demand to restore equilibrium.

There is a close correlation between economic growth and the demand for (property type) space, while government policies on land use and the provision of infrastructure act as regulators of outcome. Additional factors that determine the demand for residential space are the following:

- Interest rates (determine affordability and influence the economy)
- Disposable income or Growth Domestic Product
- Household debt, and
- Upward mobility on the housing ladder (now particularly by people of colour)

The issues of demand for residential space and housing delivery were addressed in §SG8, with affordability and access to low-cost housing a key component in ensuring integrated and sustainable human settlements; clearly underwritten by the following provincial objectives:

- Developing a comprehensive range of services aimed at strengthening families

- Developing integrated human settlements looking at a number of innovative ways to provide more people with access to shelter and basic services
- Finding a range of ways to deliver sustainable housing opportunities; increase our focus on the provision of serviced sites
- Making land available for human settlement development

It is argued that it is impossible to understand many aspects of urban dynamics without understanding housing supply, and that it is difficult to think sensibly about real estate in many contexts without understanding the urban equilibrium which determines the price and quantity of housing.¹⁵⁰ This highlights the need to establish a dynamic database of property information for the district to guide the establishment of planning frameworks and to facilitate more informed decision-making. For example, land-use trends and future demands need to be taken into account when urban edges are determined. Similarly, the land-use demand implications of economic growth-rate targets need to be taken into account.

Considering the various price classes, **Table 65** shows that the number of sales in the Cape Winelands district peaked in 2007 with the mean sales price continuing the upward curve since 2006. The Drakenstein area had the most full-title sales in the recorded period; however, Stellenbosch has a significantly higher mean sales price than the other municipalities. This is because most of Drakenstein's sales are in the lowest

¹⁵⁰ NBER Working Paper Series, Urban Growth and Housing Supply, Working Paper 11097, January 2005.

(affordable) price class whereas most of Stellenbosch's sales are in the luxury price class.

Table 65: Full-title residential sales (2006-2008)

Municipality	Year	Number of sales					Mean Sales Price
		R0 - R400 k	R400 k - R800 k	R800 k - R1.5 mil	R1.5 mil +	Total	
Langeberg	2006	184	93	63	35	375	R 641,209
	2007	329	157	110	77	673	R738,312
	2008	264	126	101	70	561	R771,708
Breede Valley	2006	325	156	82	35	598	R716,858
	2007	400	182	107	57	746	R681,865
	2008	415	127	86	51	679	R640,441
Drakenstein	2006	232	220	279	126	857	R1,005,811
	2007	428	282	412	318	1440	R1,208,617
	2008	350	231	258	231	1070	R1,342,030
Stellenbosch	2006	215	139	134	263	751	R1,784,413
	2007	197	162	207	454	1020	R2,093,314
	2008	151	82	115	340	688	R2,436,349
Witzenberg	2006	175	70	26	14	285	R675,562
	2007	294	82	40	41	457	R640,671
	2008	182	73	55	26	336	R738,717
Cape Wine-lands DM	2006	1131	678	584	473	2866	
	2007	1648	865	876	947	4336	
	2008	1362	639	615	718	3344	

Table 66 shows that unlike full-title sales, the number of sectional title sales over the three year period increased. Stellenbosch has the most sectional title sales in the period and the highest mean sales price – as a consequence of the demand created by University students and investment opportunities. Drakenstein has the second highest number of sales and the other municipalities hardly have any sectional title sales.

Table 66: Sectional title residential sales (2006 - 2008)

Municipality	Year	Number of sales					Mean Sales Price
		R0 - R400 k	R400 k - R800 k	R800 k - R1.5 mil	R1.5 mil +	Total	
Lange-	2006	46	12	1	0	57	R240,484

berg	2007	19	7	0	0	26	R215,469
	2008	24	6	7	1	38	R437,568
Breede Valley	2006	14	6	0	0	20	R342,470
	2007	21	23	0	0	44	R406,411
	2008	10	44	5	0	59	R556,614
Drakenstein	2006	55	108	1	0	164	R468,828
	2007	62	122	10	16	210	R659,102
	2008	50	80	8	35	173	R954,027
Stellenbosch	2006	13	189	191	31	424	R910,596
	2007	19	190	180	41	430	R936,671
	2008	21	145	288	54	508	R993,985
Witzenberg	2006	7	1	2	0	10	R462,000
	2007	5	13	1	0	19	R474,842
	2008	2	1	0	0	3	R501,667
Cape Wine-lands DM	2006	135	316	195	31	677	
	2007	126	355	191	57	729	
	2008	107	276	308	90	781	

As an example of social (spatially-induced) inequality, the clustering of residential neighbourhoods based on socio-economic class – the so-called price gradient – is as a result of residential property price. The practical situation “on the ground” is that suburbs (and now even rural residential developments) are mainly formed around class. In practice, this is reflected in differential mean house prices of neighbourhoods, with relatively small standard deviations (variation of prices within homogeneous suburbs); and all towns display the same pattern. These differentiated price classes have developed over time through a combination of the price mechanism (i.e. organically) and human intervention (town planning).

Considering other property types, office space accounts for only 4% of the total square meterage of buildings completed in the Cape Winelands between 2002 and 2006 whereas retail space accounts for about 11% and industrial space about 16% (also see **SG5**). For structural reasons no drastic surge for office, industrial and retail space in the Cape Winelands is foreseen (see **SG8** for the demand for residential space).

Government should seek the **contribution of private developers** in the (re-) structuring of cities/ towns. Even within a highly regulated industry, the opportunities and associated value of a property is critically linked to location, and, therefore, price. Government should, consequently, make the right decisions regarding the regulatory environment and public investment with, especially the latter, to be effectively communicated to the market. A recent study¹⁵¹ indicated the following preferences regarding location as important for developers.

Residential developments

Except for affordable housing developments, being far from informal settlements. The land must be currently zoned/zonable under municipal, provincial or national government policy and bulk electricity, water and sewage disposal must be available.

Office developments

The land zoning and bulk service availability mentioned above is important, to office developers but not as crucial as for residential development. Developing in a municipality that processes applications/plans within a reasonable timeframe is of greater importance. Close proximity to freeways is important.

Retail developments

Land zoning, bulk service availability and being far from informal settlements.

Industrial and warehouse developments

Availability of bulk electricity and developing in a municipality that processes applications/plans within a reasonable timeframe.

Mixed-use developments

Availability of bulk electricity and water.

¹⁵¹ Gauteng Provincial Government, Department of Economic and Development Planning, Development Trend Analysis, Gauteng Province (Author: Rode & Associates), February 2009

Table 67: Property market

Subject	Number	Description								
Theme	SG13	Property market								
Component	SG13	Property market								
SD link		Democracy and burden sharing								
Objectives		To improve the quality of life for the people of the region by ensuring principle-led responses To manage the impact and exposure of external and internal threats to growth and development (read: sustainable development) To consider the spatial rationale for the implementation of government policies within the Cape Winelands district								
Strategy (ies)	SG13	<ol style="list-style-type: none"> Promote the need for (urban) planners to understand housing supply as imperative for understanding many aspects of urban dynamics, and the awareness that it is difficult to think sensibly about real estate in many contexts without understanding the urban equilibrium which determines the price and quantity of housing Facilitate a market equal system from a market unequal base Consider property market informants and land market value¹⁵² in formulating spatial guidelines (also in densification strategies and vacant and underutilised land audits); acknowledge property market forces and consider determinants and dynamics of commercial, office, residential and retail markets in spatial planning e.g. location preferences Consider the location and structuring of local and regional shopping centres in a way that is conducive to BEE, local informal-trading upgrading and LED in general 								
Action(s)		<ol style="list-style-type: none"> SDFs (and associated strategies) to include extensive property market analysis as critical informant to the ability of long-term comprehensive planning to meet its objectives <table border="1"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>B Municipalities</td> </tr> </table> Establish a dynamic (regional) database of property information to guide the establishment of town planning frameworks and to facilitate more informed decision-making <table border="1"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>CWDM</td> </tr> </table> 	Priority	Very high	Agent	B Municipalities	Priority	Very high	Agent	CWDM
Priority	Very high									
Agent	B Municipalities									
Priority	Very high									
Agent	CWDM									
Spatial indicator		<ol style="list-style-type: none"> A change to the residential price gradient of higher order towns A regional property database developed 								
Spatial link		District-wide								
Policy imperative		Include extensive property market analysis in (spatial) planning as a critical informant to the ability of long-term comprehensive planning to meet its objectives								

¹⁵² Definition of market value: It is the estimated amount for which a property should exchange, on the date of valuation, between a willing buyer and a willing seller, in an arm's-length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently, and without compulsion.

SG14 Knowledge economy

Given the many challenges currently facing developed and underdeveloped countries (including the current global crisis and environmental as well as social transformations) the demands made on skills training, applied as well as fundamental research and the utilisation of research are huge. This also applies to South Africa which faces the challenges of both, developed and developing societies. The Western Cape is currently still relatively better placed (in terms of most knowledge-generation indicators) to tackle (some of) these challenges. This is relevant for Stellenbosch and the Stellenbosch-Paarl axis, but also for some of the other places in the district.

Here we must see the knowledge economy as both an input into and an output of economic growth. The type of sectors and niches which characterize the Cape Winelands economy demand fairly sophisticated skills and technology inputs (even the agricultural niches!). On the other hand many new or growing enterprises are directly engaged in the research, development and training fields (e.g. alternative energy, organic food and environmental care). Thus, “knowledge generation” can be viewed as a growth sector in the Cape Winelands economy.

Table 68: Knowledge economy

Subject	Number	Description				
Theme	SG14	Knowledge economy				
Component	SG14	Knowledge economy				
SD link		Access, democracy, burden sharing and justice				
Objectives		To improve the quality of life for the people of the region by ensuring principle-led responses To manage the impact and exposure of external and internal threats to growth and development (read: sustainable development)				
Strategy	SG14	1. To seek close partnerships with local businesses, academic institutions, NGOs and other civil society stakeholders to promote interventions in skills training and applied as well as fundamental research and the utilisation of research				
Action		2. LUMS of municipalities to accommodate progressive measures that strengthen (local) economic growth momentum				
		<table border="1"> <tr> <td>Priority</td> <td>Very high</td> </tr> <tr> <td>Agent</td> <td>B Municipalities</td> </tr> </table>	Priority	Very high	Agent	B Municipalities
Priority	Very high					
Agent	B Municipalities					
Spatial indicator		-				
Spatial link		District-wide				
Policy imperative		To view the “knowledge generation” as a growth sector in the Cape Winelands economy				

d. Environmental integrity

SG15 Biodiversity conservation

The Cape Winelands district is endowed with a number of natural and human systems.

Natural systems provide ecological services to the social systems namely biodiversity, soil and water services. These services and elements that provide the services are impacted by human activities and climate change. The services are introduced below and described in more detail in **Annexure 6** that represents the **Environmental situation analysis**.

Biodiversity refers to the multitude of fauna, flora and micro-organism species that constitute an ecosystem at three scales *viz.* genetic, species and ecosystem. Although there is limited research on the role of biodiversity in functioning of ecosystems, there is general consensus that the loss of biodiversity would impact on ecosystem services and in turn on human well being. Biodiversity for example plays an important role in *inter alia* the pollination of crops and natural vegetation, the provision of useful species such as flowers for harvesting, fauna and flora species for pest control, and the creation of a pleasant and attractive environment for tourists for instance.

The Cape Winelands district is dominated by the Fynbos Biome (*aka* the Cape Floristic Kingdom) and the Succulent Karoo Biome. Both these are recognized as global biodiversity hotspots, with high levels of plant diversity and endemism (Midgley *et al.* 2008). These vegetation types provide habitat for many animal and micro-organism species that together provide ecological services. Even though a particular organism may not provide a direct or indirect service to the human system it helps maintain balances within the natural system that in turn provides important ecological services.

Soil, which largely determines the characteristic of the land on which it occurs, provides a number of ecological services for development, most notably a medium within which to grow crops. It is important to note, however, that this service in particular is provided in combination with climate and water availability and thus cannot be seen in isolation.

Soil is derived from the underlying geological formations and derives its characteristics from these formations. It takes a long time to form and is easily eroded if the land is not appropriately managed resulting in loss of productive areas.

The following comment underpins the selection of objectives, strategies and actions to serve as (spatial) management and rehabilitation recommendations in the context of biodiversity conservation:

- Many of the freshwater ecosystems in the CWDMA and priority conservation areas are on a trajectory of increasing degradation as a result of ever-expanding levels of impact. Few freshwater ecosystems have protected status, particularly in low lying areas, and many of the vegetation types are

subject to intense development pressure. Thus any remnant, relatively unimpacted systems are not only important from a biodiversity perspective, but in terms of ensuring sustainable ecosystem processes in the long term, it is also essential that measures are instated that allow for active rehabilitation of impacted systems

- Water quality constituents have been identified as the most critical contributors to poor water quality in the Berg Rivier system, particularly within the Drakenstein municipal area. Water quality impacts in the Berg Rivier have social, recreational, human health, ecological and economic impacts, and are thus seen as a critical issue that needs to be addressed as a matter of urgency
- Many of the core areas and larger conservation areas and critical biodiversity areas (CBA) do not have adequate buffer areas to protect them from degradation emanating from the surrounding land use. In many instances farming operation encroach against core areas and CBAs, and
- Class D has been determined by DWAF as the minimum level of water quality that is acceptable in any system. Management of a system to levels below Class D therefore contravenes this basic national principle. Implementation of this objective has a strong spatial element, and draws on the results of the situation assessment in determining areas in which rehabilitation and management efforts should be focused.

Table 69: Biodiversity conservation

Subject	Number	Description
Theme	SG15	Biodiversity conservation
Component	SG15	Biodiversity conservation
SD link		Care, democracy, burden sharing and eco-efficiency
Objectives		To improve the quality of life for the people of the region by ensuring principle-led responses To manage the impact and exposure of external and internal threats to growth and development (read: sustainable development) To promote sustainable resource use and responsible rural development To improve and conserve the district's natural environment To consider the spatial rationale for the implementation of government policies within the Cape Winelands district
Strategy (ies)	SG15	<ol style="list-style-type: none"> 1. Redress the inadequate levels of protection currently afforded to freshwater ecosystems, core areas and critical biodiversity areas (CBAs) in the municipal area, and protect the remaining biodiversity assets 2. Provide adequate protection for the natural vegetation in the buffer areas surrounding Core Areas and rehabilitate inadequate buffer areas 3. Monitor and manage the expansion and establishment of statutory conservation areas in a district-wide linked open space system 4. Develop clear thresholds or limits of acceptable loss of natural habitat, linked to geographic identities, to guide land-use planning and management of land and resources in a sustainable way¹⁵³ 5. Develop a model that monitors the demand and supply of building materials in the Drakenstein and Stellenbosch municipal areas and the Breede River Valley¹⁵⁴; monitor building activity as a proxy for demand and supply of building material 6. Create a synthesis between biodiversity conservation and agricultural land uses in rural areas as well as between open space and urban development in urban areas¹⁵⁵ through e.g. spatial planning categories 7. All land in the Province should be defined by the following Broad Spatial Planning Categories in order to manage land use change in the four main physiographic components of the Province, i.e. the coastal zone, the coastal plain, the mountain spine and valleys, and the inland plains¹⁵⁶

¹⁵³ PGWC, Provincial Spatial Development Framework, May 2009.

¹⁵⁴ Ibid.

¹⁵⁵ Ibid.

Action(s)	<p>8. Interact widely with other planning initiatives in its area, to ensure alignment, rationalise resources and maximise synergies for the protection and maintenance of ecosystem services</p> <p>9. No further loss of wetlands and endangered vegetation types, particularly CBAs. The protection of wetlands is supported by DWAF’s national policy statement on wetlands, which includes the intention to “take all reasonable measures to prevent the degradation and promote the improved management and rehabilitation of the water resource [including wetlands]”</p> <p>10. Maintenance of existing buffers between wetlands and Core Areas (Category A) and the surrounding land-use activities, where these are already in place and such that adequate levels of protection are provided.</p> <p>11. Progressive re-instatement of buffers / ecological setbacks to prevent ongoing degradation of wetland systems and conservation areas.</p> <p>12. Prevention of the continuous cycles of erosion that affect many naturally unchannelled valley bottom wetlands and river channels, and lead to loss of wetland ecosystem services at a catchment level.</p> <p>13. A focus of rehabilitation efforts on identified, special focus sub-catchments and conservation areas, where vegetation, and/or geomorphological characteristics and/or fauna (fish, birds, invertebrates or mammals) are recognised as being of particular importance</p> <p>14. Develop buffer zones in areas bordering core areas on farms where there is intensive and extensive agricultural practices</p> <p>15. Encourage the conservation of remaining natural vegetation on the farm and rehabilitate unproductive areas</p> <p>16. Improve and maintain ecological corridors across a farming entity to allow for fauna and flora migration</p> <p>17. Discourage the introduction of exotic species as outlined in the Biodiversity Act</p> <p>18. Promote the use of environmentally friendly practices, particularly with regard to crop spraying, excessive and untimely irrigation, invasive alien control, animal husbandry, ploughing, burning and waste management</p> <p>19. Encourage the planting of drought tolerant crop species that do not rely on irrigation as opposed to irrigation intensive crops</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Priority</td> <td>Very high*</td> </tr> <tr> <td>Agent</td> <td>CWDM in association with relevant stakeholders*</td> </tr> </table> <p>*refer to actions 9 to 19</p>	Priority	Very high*	Agent	CWDM in association with relevant stakeholders*
Priority	Very high*				
Agent	CWDM in association with relevant stakeholders*				
Spatial indicator(s)	20. Increase in the area covered by conservation areas (as core or buffer areas)				
Spatial link	21. Clear thresholds developed for areas of bioregional homogeneity				
Policy imperative	The approach to biodiversity conservation management should be in accordance with bioregional planning i.e. where the different planning initiatives conform to areas of bioregional homogeneity; a hierarchy of ‘conservation plans’ e.g. Strategic Environmental Assessment (SEA), Environmental Management Framework (EMF), etc needs to be implemented				

¹⁵⁶ PGWC, Provincial Spatial Development Framework, May 2009.

SG16 Spatial planning categories

In accordance with the bioregional planning framework that the Western Cape has adopted, the PSDF calls for the delineation of spatial planning categories (SPCs) that cover the entire municipal area. These SPCs must be part of a spatial development framework to guide decision-making regarding land-use at all levels of planning, and be articulated in a spirit of creating and fostering an organised process that enables people to work together to achieve sustainable development in a coherent manner.¹⁵⁷ They are the tools through which an SDF clarifies the inherent land use suitability of different landscapes.¹⁵⁸ SPCs are not development proposals and do not confer development rights.

In accordance with the informed scale and level of planning with the district as subject area, the CWDSDF includes delineated SPCs and an indicatory decision tool (see **Chapter 8**) for use in land-use-management decisions. It, however, only represents a high-level qualitative assessment of the co-existence, linked to geographic space, between a particular land use and a specific spatial planning category; with our interpretation of the PGWC Rural Guidelines¹⁵⁹ used as benchmark in the assessment. It is re-emphasised that although there is now conformity (in mapping and interpretation) regarding the SPC classification¹⁶⁰, it is likely that the occurrence, type, form and scale of a particular land use, associated with a specific category, will differ between the respective planning clusters, demanding differentiation in decision-making. As one informant in determining the inherent land use suitability of different landscapes transformation thresholds (for biodiversity conservation 'targets') must be determined at the appropriate scale (preferably as small as possible).

SG16.1 Core 1 area

The core 1 and 2 areas are constituted of: wilderness areas, other statutory conservation areas, critical biodiversity areas, CBA ecological support areas and rivers and ecological corridors. The main purpose of core areas is for conservation of biodiversity and ecosystem functioning, especially of the Cape Floral Kingdom, non-destructive recreational usage, research and education.

CBAs are terrestrial and aquatic features in the landscape that are critical for conserving biodiversity and maintaining ecosystem functioning. Ideally they should be conserved within core areas, but there are instances where the CBA is situated within a confined area and cannot practically be included in a core area. In these circumstances CBAs should be identified, mapped and managed as special management units that would ensure the survival and spread in the spatial extent of the characteristic features that characterise each CBA. Ideally CBAs should be managed so that eventually they could become core areas with a suitable buffer to ensure the long term protection of the CBAs. Ecological support areas (ESA) provide ecological services that support core areas and critical biodiversity areas. If the ESA is compromised through for example pollution or destruction they may not be able to sustain the Core Areas and CBAs resulting in the demise of these areas. It is imperative that conservation areas in buffer areas that are isolated from the

¹⁵⁷ Fine scale biodiversity planning was used as primary informant in the delineation of district SPCs.

¹⁵⁸ PGWC, Western Cape Provincial Spatial Development Framework, Rural Land Use Planning and Management Guidelines, May 2009.

¹⁵⁹ *ibid.*

¹⁶⁰ *ibid.*

core area and each other, as well as isolated core areas, are linked via corridors. These corridors need to be wide enough, of the same vegetation structure as the conservation nodes and undisturbed to allow for species migration through them.

Conservation areas and corridors should be planned and orientated to mitigate and adapt to impacts of climate change. There is a natural gradient towards more productive growth in terms of biomass and species towards the equator. Species are adapted to specific niches affected by non-living factors e.g. temperature and moisture. Climate change would impact on these parameters and change the distribution of these niches predominantly in a North-South direction superimposed over an altitude effect. Should the area become drier, the tendency would be for species to move to higher altitudes and further north, where it is expected to be moister. This does however depend on site specific parameters. It is thus preferable to have larger areas conserved over wider area to allow species impacted by climate change to migrate into more suitable areas.

Table 70: Spatial planning category: Core 1 area

Subject	Number	Description				
Theme	SG16	Spatial planning categories				
Component	SG16.1	Spatial planning category: Core 1 area				
SD link		Care, democracy, burden sharing and eco-efficiency				
Objectives		To promote sustainable resource use and responsible rural development To improve and conserve the district's natural environment To consider the spatial rationale for the implementation of government policies within the Cape Winelands district Maintain and restore ecosystem functioning to its natural state, particularly pattern and processes				
Strategy	SG16.1	1. Minimise factors that impact on pattern and process integrity in core areas				
Action(s)		2. Remove invasive alien vegetation 3. Encourage environmental education and non-consumptive low impact eco-tourism 4. Harvesting of natural resources done sustainably 5. No large eco-tourism developments permitted 6. Develop a programme based on cooperative governance by all stakeholders that identifies CBAs and attempts to create buffers around them as well as corridors linking them				
		<table border="1" style="width: 100%;"> <tr> <td>Priority</td> <td>High*</td> </tr> <tr> <td>Agent</td> <td>CWDM in association with relevant stakeholders*</td> </tr> </table>	Priority	High*	Agent	CWDM in association with relevant stakeholders*
Priority	High*					
Agent	CWDM in association with relevant stakeholders*					
		*refer to actions 2 to 5				
Spatial indicator(s)		7. Increase in area of core area from current state (see SG6.1) 8. No decrease in habitat integrity from current state i.e. loss of biodiversity, pattern or process				
Spatial link		All areas defined as core 1 areas (see Annexure 2)				
Policy imperative		Delineate spatial planning categories at the smallest scale possible; consider not only conserving biodiversity and maintaining ecosystem functioning but also the social and economic value of landscapes				

SG16.2 Core 2 area

Table 71: Spatial planning category: Core 2 area

Subject	Number	Description				
Theme	SG16.2	Spatial planning categories				
Component	SG16.2	Spatial planning category: Core 2 area				
SD link		Care, democracy, burden sharing and eco-efficiency				
Objectives		To promote sustainable resource use and responsible rural development To improve and conserve the district's natural environment To consider the spatial rationale for the implementation of government policies within the Cape Winelands district Maintain and restore ecosystem functioning to its natural state, especially ecological processes in support of wetlands and rivers in critical biodiversity areas				
Strategy	SG16.2	1. Minimise factors that impact on pattern and process integrity				
Action(s)		2. Remove invasive alien vegetation 3. Encourage environmental education and non-consumptive low impact eco-tourism 4. Harvesting of natural resources done sustainably 5. No large eco-tourism developments permitted 6. Minimise impact of existing agricultural activities. 7. Incentivise the consolidation of the conservation estate				
		<table border="1"> <tr> <td>Priority</td> <td>High*</td> </tr> <tr> <td>Agent</td> <td>CWDM in association with relevant stakeholders*</td> </tr> </table>	Priority	High*	Agent	CWDM in association with relevant stakeholders*
Priority	High*					
Agent	CWDM in association with relevant stakeholders*					
		*refer to actions 2 to 7				
Spatial indicator(s)		8. No further decrease in area of Core 2 Areas from current state 9. No further decrease in habitat integrity from current state i.e. loss of biodiversity, pattern or process 10. No further increase in agricultural areas (but in accordance with transformation thresholds and a principle-led response)				
Spatial link		All areas defined as Core 2 Areas (see Annexure 2)				
Policy imperative		Delineate spatial planning categories at the smallest scale possible; consider not only conserving biodiversity and maintaining ecosystem functioning but also the social and economic value of landscapes				

SG16.3 Buffer 1 area

Buffer areas occur adjacent to core areas. This is regarded as a soft boundary, suggesting that it does not have official cadastral boundaries. The buffer areas include private reserves and other forms of private land and conservation areas. These areas are intended to reduce the impact of human settlement and intensive agriculture on the core areas and link isolated core areas by creating corridors. Certain human activities can occur such as extensive farming or small localised developments keeping the conservation importance of the land in mind.

Table 72: Spatial planning category: Buffer 1 area

Subject	Number	Description				
Theme	SG16	Spatial planning categories				
Component	SG16.3	Spatial planning category: Buffer 1 area				
SD link		Care, democracy, burden sharing and eco-efficiency				
Objectives		To promote sustainable resource use and responsible rural development To improve and conserve the district's natural environment To consider the spatial rationale for the implementation of government policies within the Cape Winelands district Maintain and restore ecosystem functioning to its natural state, especially ecological processes in support of wetlands and rivers in critical biodiversity areas Protect core areas				
Strategy	SG16.3	1. Minimise factors that impact on pattern and process integrity within the buffer				
Action(s)		2. Strengthen the conservation and extensive agricultural economies 3. Enhance biodiversity through innovative agricultural practices (e.g. veld management) and rehabilitation of previously disturbed agricultural land 4. Buffer against the impacts of climate change 5. River bank development should be set back behind the ecological setback lines including flood and storm surge lines (1:50 year floodline: property boundaries; 1:100 years floodline: building platform) 6. Remove invasive alien vegetation 7. Encourage environmental education 8. Harvesting of natural resources done sustainably 9. Rehabilitate natural areas 10. Restore and maintain ecological corridors 11. Retain landscape scale biodiversity corridors 12. Buffer ecological support areas which support critical biodiversity areas				
		<table border="1"> <tr> <td>Priority</td> <td>High*</td> </tr> <tr> <td>Agent</td> <td>CWDM in association with relevant stakeholders*</td> </tr> </table>	Priority	High*	Agent	CWDM in association with relevant stakeholders*
Priority	High*					
Agent	CWDM in association with relevant stakeholders*					
		*refer to actions 2 to 12				
Spatial indicator(s)		13. No further decrease in area of buffer 1 areas from current state 14. No further decrease in habitat integrity of natural area from current state i.e. loss of biodiversity, pattern or process				
Spatial link		All areas defined as Buffer 1 Areas (see Annexure 2)				
Policy imperative		Delineate spatial planning categories at the smallest scale possible; consider not only conserving biodiversity and maintaining ecosystem functioning but also the social and economic value of landscapes				

SG16.4 Buffer 2 area

Table 73: Spatial planning category: Buffer 2 area

Subject	Number	Description				
Theme	SG16	Spatial planning categories				
Component	SG16.4	Spatial planning category: Buffer 2 area				
SD link		Care, democracy, burden sharing and eco-efficiency				
Objectives		To promote sustainable resource use and responsible rural development To improve and conserve the district's natural environment To consider the spatial rationale for the implementation of government policies within the Cape Winelands district Maintain and restore ecosystem functioning to its natural state, especially ecological processes in support of wetlands and rivers in critical biodiversity areas Protect core areas				
Strategy	SG16.4	1. Minimise factors that impact on pattern and process integrity within the buffer				
Action(s)		2. Manage for sustainable development of current land use in the area 3. Protect existing agricultural activity to ensure food security, contribution to the regional economy, maintenance and management of rural areas and contributing to the working agricultural and cultural landscape 4. Facilitate agricultural diversification and non-agricultural opportunities and "value-adding" to the primary product 5. Accommodate space extensive urban uses and extensive agricultural uses 6. Enhance biodiversity through innovative agricultural practices 7. Minimize fragmentation of remaining natural habitats and corridors 8. Reverse lost biodiversity in order to reinstate buffer zones and corridors 9. Rehabilitate degraded areas 10. Urban development may not be located on or near the sources of building materials identified until they have been exploited and extraction sites rehabilitated ¹⁶¹ 11. Remove invasive alien vegetation				
		<table border="1"> <tr> <td>Priority</td> <td>High*</td> </tr> <tr> <td>Agent</td> <td>CWDM in association with relevant stakeholders*</td> </tr> </table>	Priority	High*	Agent	CWDM in association with relevant stakeholders*
Priority	High*					
Agent	CWDM in association with relevant stakeholders*					
		*refer to actions 2 to 11				
Spatial indicator(s)		12. No further decrease in area of Buffer 2 Areas from current state 13. No further decrease in habitat integrity of natural area from current state i.e. loss of biodiversity, pattern or process				
Spatial link		All areas defined as Buffer 2 Areas (see Annexure 2)				
Policy imperative		Delineate spatial planning categories at the smallest scale possible; consider not only conserving biodiversity and maintaining ecosystem functioning but also the social and economic value of landscapes				

¹⁶¹ PGWC, Provincial Spatial Development Framework, May 2009.

SG17 Water resource and quality

Water resources in the Cape Winelands provide a variety of direct and indirect ecosystem services. Not only is drinking water essential to human survival, but water resources are also critical to cultivation, processing and manufacturing. In addition the river systems of the Cape Winelands are important tourist and recreational resources and contribute to the sense of the place of the Winelands. The district straddles four Water Management Areas (WMA) *viz.* Gouritz, Olifants/Doorn, Breede and Berg WMAs. Of these the Breede River and Berg Rivier systems provide most of the water used to irrigate crops in the Cape Winelands as well as water for domestic purposes within and beyond the boundaries of the Cape Winelands, mostly notably also contributing significantly to the supply of the Cape Metropolitan Area.

The Cape Winelands district holds sufficient water resources to maintain sustainable delivery for growth and development subject to increased storage capacity, agricultural consumption and future requirements for the Cape Metropolitan area.¹⁶² The Berg Rivier system is, however, under severe strain but the Breede River system produces double the amount of water currently used with the definite possibility to provide for small scale farming subject to the allocation of rights to water and storage capacity.¹⁶³ Small local supply schemes meet almost all of the urban water requirements in the Breede River component. Augmentation of current urban supply schemes may be required in the future, depending on growth in requirements. However, all local authorities must first undertake and implement more efficient water use and water re-use from their existing resources, before consideration will be given to the development of new schemes.¹⁶⁴

Irrigation is by far the largest user of water in the Breede River component. Excluding transfers, it accounts for approximately 95% of the total local water use for this region of the WMA. The greatest use of groundwater takes place in the Upper Breede and particularly upstream of Ceres, in the vicinity of Rawsonville, and in the Hex River valley. In estimating water availability, the issues of ecological water requirements, hydrology and climate change have been identified as uncertainties.

The Breede River Basin Study (BRBS) has identified that without implementing WC/DM (water conservation and demand management), the current (2005) urban water requirement of 26 million m³/a is expected to increase to 61 million m³/a by 2030. Effective water demand management measures are not being implemented in the urban sector, and significant water savings can still be achieved. According to national estimates provided in the draft WC/DM Strategy for the Water Services Sector, potential savings of up to 40% of existing consumption can be realised in urban areas through the implementation of water demand management measures. A 30% saving in water use by the urban sector will limit the urban water requirement to 43 million m³/a by 2030, a net increase of 17 million m³/a, much of which will be in the larger urban centres, such as Worcester, where there is currently sufficient surplus available towards meeting these requirements.

¹⁶² Mr J Roberts, Department Water Affairs and Forestry, July 2009.

¹⁶³ *Ibid.*

¹⁶⁴ Breede River Water Management Area, Internal Strategic Perspective, October 2004.

The following reconciliation measures to enable additional yield in the Breede River has been identified: ¹⁶⁵

- Verification of existing lawful use
- Water conservation and demand management
- Trading of water
- Clearing of invasive alien plants
- Development of groundwater potential, and
- Development of surface water yield potential.

Table 74: Water resource and quality

Subject	Number	Description				
Theme	SG17	Water resource and quality				
Component	SG17	Water resource and quality				
SD link		Access, care, democracy, burden sharing, eco-efficiency and justice				
Objectives		To promote sustainable resource use and responsible rural development To consider the spatial rationale for the implementation of government policies within the Cape Winelands district Improve and maintain water quality				
Strategy (ies)	SG17	1. Bring about a measurable improvement in water quality in the Berg River and the Breede River, specifically with regard to salinity, bacterial contamination and nutrients 2. Ensure that no river in the district have water of a quality that would be rated below Class D in terms of DWAF's Resource Directed Measures criteria 3. Ensure sufficient water resources to maintain sustainable delivery for growth and development through, <i>inter alia</i> , implementing measures to deliver additional yield				
Action(s)		4. Reduce pollution of water resources 5. Conserve water 6. Protect wetlands, river channels and water impoundments 7. Provide adequate sewage management services, especially to informal settlements 8. Stop illegal water abstraction 9. Reduce water wastage by repairing leaking systems and discouraging water intensive cash crops 10. Improve and maintain the ecological integrity including natural processes within wetlands, river channels and water impoundments 11. Implement identified measures to enable additional yield in the Breede River				
		<table border="1"> <tr> <td>Priority</td> <td>High*</td> </tr> <tr> <td>Agent</td> <td>CWDM in association with relevant stakeholders*</td> </tr> </table>	Priority	High*	Agent	CWDM in association with relevant stakeholders*
Priority	High*					
Agent	CWDM in association with relevant stakeholders*					
		*refer to actions 4 to 11				
Spatial indicator(s)		12. Improvement of water quality from current state in all water resources 13. No further decrease in habitat integrity of natural area from current state i.e. loss of biodiversity, pattern or process 14. Increase in water availability				
Spatial link		District-wide				

¹⁶⁵ Breede River Water Management Area, Internal Strategic Perspective, October 2004.

Policy imperative Consider the issues of ecological water requirements, hydrology and climate change in estimating water availability

SG18 Climate change

In the Western Cape climate change is predicted to result in a drying trend from west to east, with a weakening of winter rainfall, possibly slightly more summer rainfall (mainly in the east of the province), a shift to more irregular rainfall of possibly greater intensity, and rising mean, minimum and maximum temperatures. In the Cape Winelands these trends are likely to result in increased competition for scarce water resources. The competition for water resources would bring developed areas in direct conflict with natural systems such as rivers and other wetlands through water extraction. To protect wetlands effectively the ecological reserve needs to be maintained. The ecological reserve is the minimum amount of water required to maintain in situ ecological systems. With changing rainfall patterns, there is a need to adapt to changes in rainfall patterns in the way we store, transfer and use water. Commitments made by DWAF in 2006 are still valid and these are to:

- Consider climate change impacts in our water conservation and demand
- Review and reassess the ways in which South Africa operates its dams and quantifies the ecological reserve to account for a changing climate
- Review the details of water-sharing agreements in the light of new physical realities
- Examine the design and implementation of the water allocation reform process to ensure that climate change considerations are taken into account, and
- Design and implement an outreach strategy to create awareness of the implications of climate change among stakeholders and customers in the water sector.

Climate change would furthermore compromise the integrity of natural vegetation, especially vegetation that is stressed due to development. The ecological services provided by the vegetation and associated ecosystems e.g. flood attenuation, soil erosion, pollinators, pest control etc; will be compromised, which would limit the potential for sustainable development.

Table 75: Climate change

Subject	Number	Description
Theme	SG18	Climate change
Component	SG18	Climate change
SD link		Access, care, democracy, burden sharing, eco-efficiency and justice
Objectives		To manage the impact and exposure of external and internal threats to growth and development (read: sustainable development) Mitigate impacts of climate change on natural environment
Strategy (ies)	SG18	1. Find ways to reduce water demand and investigating water-efficient ways of expanding the agricultural economy 2. Reduce human induced impact on the natural environment that causes the environment to be less resilient to climate change
Action(s)		3. Remove invasive alien vegetation to make more water available for natural processes and reduce competition 4. Allow for a buffer along river banks to protect the banks from flood damage

	<ol style="list-style-type: none"> 5. Restore and maintain corridors aligned in altitudinal direction, North South direction and West East direction to allow for migration of organisms affected by climate change 6. No further development may be permitted on river banks that are prone to flooding and below the 1:50 year floodlines (erven) and the 1:100 year floodline (building platforms) 7. Reduce green house gas emissions 8. Ensure new developments to adhere to standards of high energy efficiency, low embedded carbon and good accessibility by public transport (e.g. high levels of insulation; minimal use of plastics; green transport plans for major employers) 9. Promote changes to existing developments that will increase the efficiency of energy use in power, heating and transport (e.g. insulation) 10. Promote local services to increase resource efficiency (e.g. local shops, recycling services etc) 11. Promote land uses that serve as carbon sinks (e.g. community woodlands) 12. Encourage the development and use of renewable sources of energy, preferably local (e.g. wind power, biomass etc) 13. Reduce the amount of waste (particularly biodegradable waste), the volume sent to landfill and maximise capture and use of greenhouse gases, particularly methane (e.g. waste minimisation, composting etc) 14. Guide new development to locations that best offer protection from the likely impacts – including flooding and drought, sea level rise, storminess, soil subsidence and heave and implications for supply and demand of essential services (e.g. preference to locations that have sustainable existing water supply rather than those that require long distance supply) 15. Ensure that the design and layout of new developments (including buildings, open spaces and infrastructure) will be resilient or adaptable to the likely impacts during the development’s lifetime (e.g. designing in flood protection and water saving features; orientation to take advantage of solar gain for PVs etc); 16. Promote changes to existing development that will enhance its resilience or adaptability to the likely impacts during its lifetime (e.g. improving site drainage; introducing grey water recycling etc) <table border="1" style="width: 100%;"> <tr> <td>Priority</td> <td>High*</td> </tr> <tr> <td>Agent</td> <td>CWDM in association with relevant stakeholders*</td> </tr> </table> <p>*refer to actions 3 to 16</p>	Priority	High*	Agent	CWDM in association with relevant stakeholders*
Priority	High*				
Agent	CWDM in association with relevant stakeholders*				
Spatial indicator(s)	<ol style="list-style-type: none"> 17. Where required the buffer width should be increased; increase in the length and width of corridors in altitudinal, North-South and East-West directions 18. The current area of each of the natural areas should not be reduced or fragmented 19. The levels of pollution should show a reduction 20. Measured decrease in green house gas emissions 21. The extent of invasive alien infestation should be reduced from its current state 				
Spatial link	District-wide				
Policy imperative	The impacts of climate change are likely to be greatest where they co-occur with a range of other stresses, including unequal access to resources, enhanced food insecurity and poor health management				

8. Decision-making tools

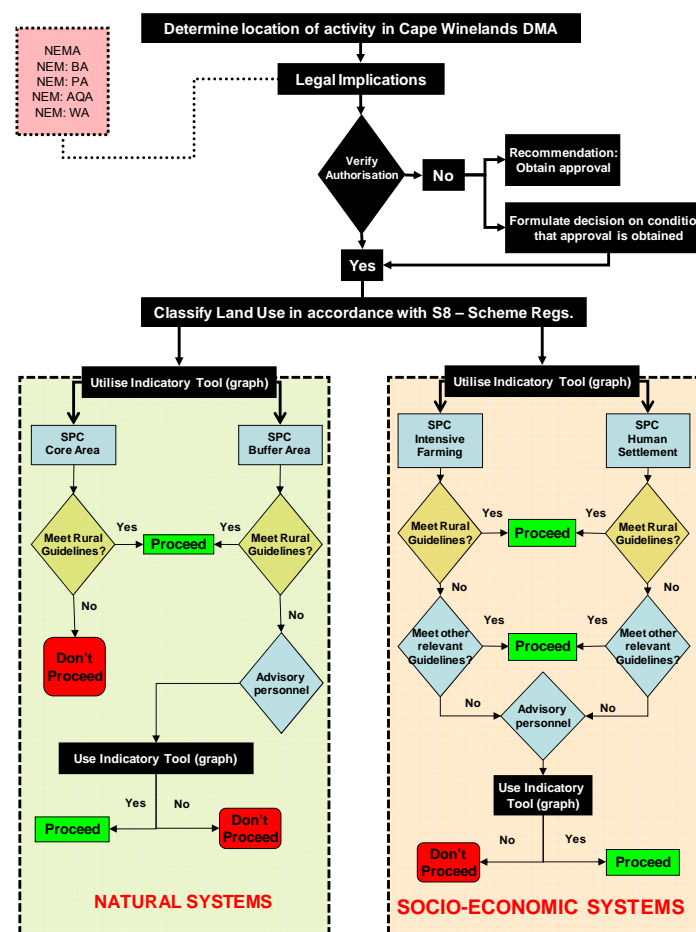
The Situational Analysis that was undertaken (see **Chapter 5**) yielded the necessity for a user-friendly tool to assist the Cape Winelands District Municipality (and B Municipalities) to make decisions regarding the appropriate use of land for development. This need culminated in the development of two unique tools, namely a decision flow diagram and an indicatory decision tool represented in the form of a graph.

8.1 Decision flow diagram

The intent of the decision flow diagram is to provide the municipalities with a generic approach to consider various information when considering a particular application within a particular area i.e. a specific land use within a spatial planning category. The first phase is defined as the legal phase which is required to ascertain if the activity being applied for triggers any legal requirements, such as the necessity to have an environmental authorisation or water licence. The second phase is to establish which land use applies in accordance with the Section 8 Scheme Regulations (for rural areas).¹⁶⁶ It is important to determine the land use as it is required to use the indicatory decision tool (graph) to assist in terms of determining the SPC as applicable for a given bio-region. The decision flow diagram is then split into two major sections namely natural systems (core and buffer zones) and the socio-economic zone (intensive farming and human settlement). With reference to the flow diagram a set of questions applies per SPC for consideration and in each respective zone the requirement to engage with relevant advisory committees (e.g. CapeNature Land-Use advisory unit in Jonkershoek and the Department of Agriculture LandCare office in Elsenburg) is promoted to ensure an informed decision is taken.

¹⁶⁶ Section 8 Scheme Regulations refers to the regulations drafted and approved in terms of Section 8 of the Land Use Planning Ordinance, 1985 (Ord.15 of 1985); to be replaced by integrated scheme regulations for each respective municipal area.

Figure 13: Decision Flow Diagram



8.2 Indicatory decision tool

As the title suggests, this is an indicatory tool (see **Figure 14**) and therefore needs to be utilised within that context. After considering the informed scale of planning, complexity of interconnectedness and the detail/specifics of information required, it was decided to only complete a high-level qualitative assessment of the co-existence, linked to geographic space, between a particular land use and a specific Spatial Planning Category — as opposed to develop a fully-fledged decision matrix. Our interpretation of the PGWC Rural Guidelines¹⁶⁷ was used as a benchmark in the assessment (indicated as the red line in **Figure 14**).

The assessment formula, applied in an Excel template, is based on a value range between 0 and 20 that reflects the anthropocentric¹⁶⁸ value (referred to as human impact) of the land use and SPC, respectively, with the highest value attached to urban development. The value range for each SPC is as follows:

- Core 1 area: 0-3
- Core 2 area: 3-8
- Buffer 1 area: 8-12
- Buffer 2 area: 12-15
- Intensive agriculture area: 15-20
- Urban area: 20

(Note: the intervals between the values do represent the varying human impact associated with the land-use)

Each point in **Figure 14** is associated with a particular land-use and area. We specifically did not use the municipal areas as reference areas as these do not represent 'areas of bioregional homogeneity' (see **Chapter 3**). It can be assumed that the space above the benchmark-line indicates a more conservation-orientated approach to land-use

management whereas below the line decision-making is more development-orientated; effectively meaning that human activity intrudes into areas 'normally' associated with controlled/limited human impact. Even with this high-level assessment it was paramount that the basic outcome should represent a principle-led response (see **Chapter 6**).

The main finding of the assessment, as illustrated in **Figure 14**, is that land-use management within the respective B Municipalities must differ, indicating disparateness and diversity that demands differentiation in decision-making. **Figure 14** suggests that it may be appropriate to encourage certain types of development in the Buffer 2 areas in the Olifants/Gouritz and Breede River catchment areas to assist with land reform, social equity and energy efficiency. This, however, would only be feasible to the degree that the proposed development does not degrade the buffer to the extent that it no longer offers protection to the core areas and impacts on biodiversity, ecosystem services and ecological support areas (ESA) — thus referring to transformation thresholds. It appears that sustainable development in the Berg Rivier catchment is questionable and efforts should be made to rehabilitate buffer and core areas in order to improve biodiversity corridors, biodiversity in general and ecosystem services. Hence the more conservation-orientated approach.

This is in line with earlier suggestions that **Stellenbosch** doesn't lack opportunities for growth but rather needs to watch carefully how this growth impacts on the environment, on its "urban edge" and on the competition between different land uses. The same applies for **Draakenstein**, although less dynamic than Stellenbosch, the current economic sector structure of this urban area should be viewed in a positive light and taking a longer run view, the steady expansion of the Paarl/Wellington centre should be assured, given the gradual expansion of the Cape Metro, the "bottleneck" position of the N1 leading up to Du Toitskloof and the broad base of the local economy. It would seem logical that over time more agricultural land will be taken up by industrial, commercial and residential expansions; pointing to, amongst others, the need for a strategically well-planned and communicated local industrial

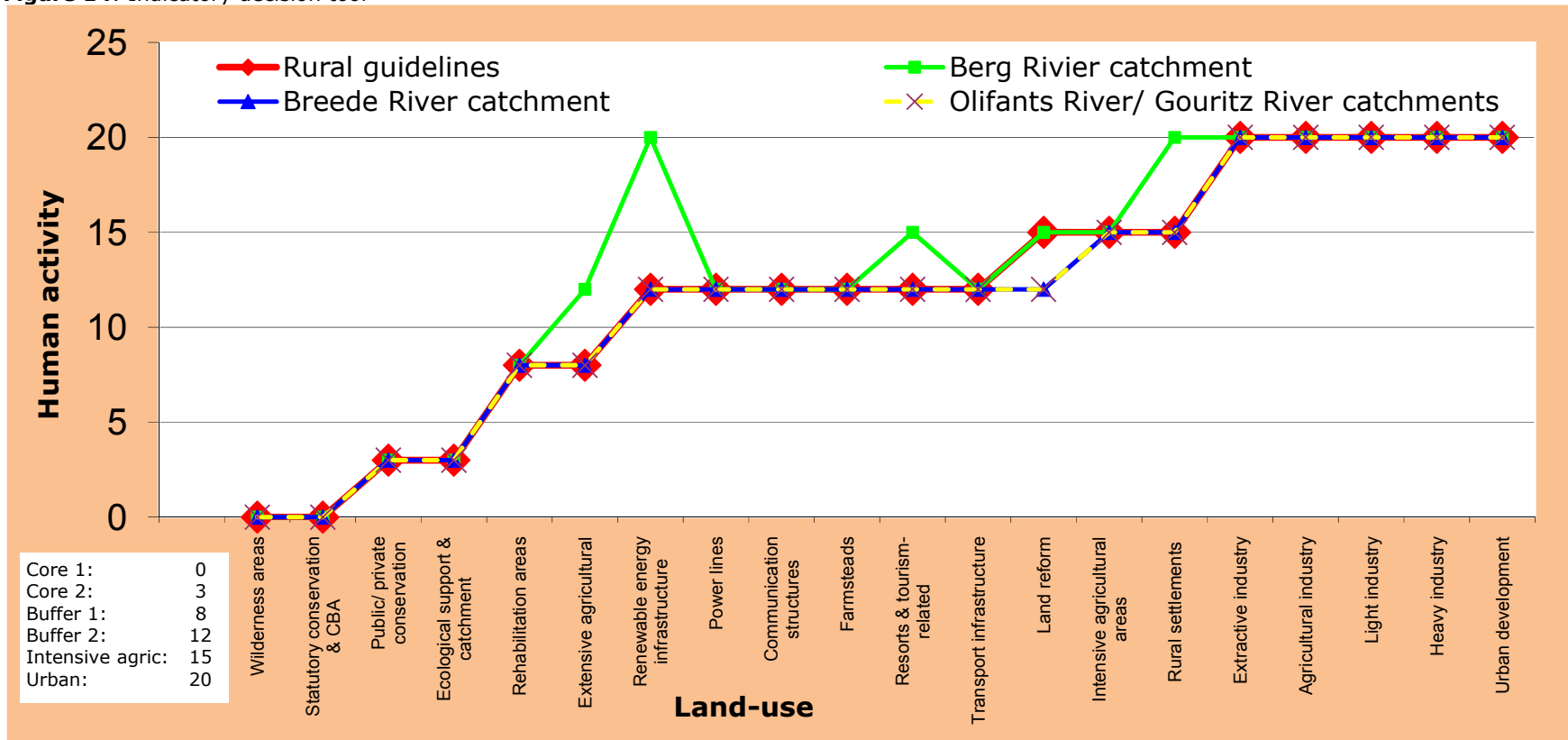
¹⁶⁷ Western Cape Provincial Spatial Development Framework, Rural Land Use Planning and Management Guidelines, May 2009

¹⁶⁸ Anthropocentric means seeing things from a human-centered perspective

development strategy. Also be mindful of the understated dissimilarities between the northern and southern areas of the Drakenstein Municipality that represent a planning dichotomy within one administrative unit – this area has been identified as a “hot spot” regarding the merit of the existing municipal boundary alignment.

The CWDSDF does not include a Land Use Management System (LUMS) or a Strategic Environmental Assessment (SEA) with this introductory tool to be refined at local level before application.

Figure 14: Indicatory decision tool



9. Key spatial proposals

Cape Winelands district

1. Acknowledge the disparateness and diversity of the district
2. Decisions to ensure a principle-led response
3. Establish information management systems with datasets (e.g. spatial, transport, property)
4. Effective and sufficient (spatial planning) staff complement
5. Make available spatial guidelines and information to the public
6. Apply the hierarchy of towns in public investment decisions
7. Consider the existing structural deficiencies, a changing economic base, sector structure of towns and longer run evolution of town centres
8. Create partnerships for the closest possible interaction between the public and the private sector
9. Facilitate economic growth and employment creation in areas where this is most effective and sustainable; address the need, scope and preconditions for local incubator developments in towns 'where this is most effective and sustainable'
10. Identify and consolidate (economic) growth momentum
11. Enforce the delineation of an urban edge only for higher, first and second order towns
12. Increased gross residential densities in higher order towns
13. Develop an LUMS for each B Municipality
14. Conduct the necessary steps to give effect to the registration of the WHS
15. Regionalisation of landfilling should urgently be investigated
16. Transport corridors containing both road and rail routes should be developed as primary freight and passenger routes
17. Increase the ability to commute between higher order and lower order towns
18. Accommodate renewable energy infrastructure at appropriate locations
19. The provision of housing to be according to a demand-driven and supply-negotiated approach
20. Small-scale housing developments (including a focus on the provision of serviced sites) provided in first- and second-order towns (or at appropriate locations in higher order towns)
21. Each municipality to prepare and implement a land-release programme
22. Consider the prioritised provision of housing for beneficiaries in high-risk informal settlements
23. Facilitating the movement of households to larger urban areas may be as relevant as ad hoc social support and improvements in the most basic infrastructure services
24. View the "knowledge generation" as a growth sector in the Cape Winelands economy
25. Develop clear thresholds or limits of acceptable loss of natural habitat
26. Delineate spatial planning categories at the smallest scale possible; consider not only conserving biodiversity and maintaining ecosystem functioning but also the social and economic value of landscapes

27. Consider the issues of ecological water requirements, hydrology and climate change in estimating water availability
28. Acknowledge the impacts of climate change to be greatest where it co-occur with a range of other stresses
29. Introduce steps that might encourage the attraction of education and training facilities to smaller district towns and rural area
30. Prioritise three development corridors viz. N1 corridor between Paarl and Cape Town, R301 between Paarl and Wellington and the N1 traversing the Worcester urban area, for urgent planning of future growth options

Berg River catchment (Stellenbosch and Drakenstein municipalities)

1. Establish a regional planning forum
2. Higher order towns as priority investment areas
3. Acknowledge as growth management areas
4. Urban restructuring possible
5. Settlement in existing nodes
6. Perform localised spatial planning; compile neighbourhood plans for the higher-order towns in the district (to also consider the structure, function and purpose of neighbourhoods)
7. Reconsider municipal boundaries at identified "hot spots"
8. Establish and formalise the envisaged Cape Winelands Biosphere Reserve Management Committee
9. Conduct a rural land use audit (GIS based) to determine the current 'state of development'
10. Ensure that the recurring shortage in bulk infrastructure does not become a threat to growth and development (the 'domino effect')
11. Large mass-scale government-funded housing developments provided in (only) higher order towns
12. Create an enabling policy environment to introduce land use guidelines that strengthen sustainable economic growth sectors e.g. Stellenbosch – tourism, knowledge economy; Drakenstein – industrial, agriculture
13. Ensure the steady expansion of the Paarl/Wellington centre and proactively manage the take-up of agricultural land for more urban-like land use
14. Investigate the Elsenburg area and areas inside and outside existing settlements (of delineated urban edges) for land reform opportunities (with emphasis on small scale farming)
15. Ensure a change to the residential price gradient of higher order towns
16. Integrate disadvantaged communities into the urban fabric through infill development on strategically located vacant land and corridor development along the main linkages between these communities and the major concentrations of job opportunities (where possible); facilitate the social and functional integration of the urban area along the R301 between Paarl and Wellington and strengthen the potential for the establishment and growth of small and medium enterprises



Breede River catchment (Breede Valley Municipality)

1. Priority growth management area*
2. Perform localised spatial planning *
3. Urban restructuring possible*
4. Settlement in existing nodes
5. Establish a local planning forum
6. Ensure that the recurring shortage in bulk infrastructure does not become a threat to growth and development (the 'domino effect')
7. Initiate a study to determine the possible establishment and registration of an 'Upper Breede River Valley' Biosphere Reserve
(*include only the town of Worcester)



Breede River catchment (Witzenberg and Langeberg municipalities)

1. "Social" public investment areas
2. Urban restructuring limited
3. Settlement in existing nodes (deviation only as a principle-led response)
4. Establish a local planning forum
5. Initiate a study to determine the possible establishment and registration of an 'Upper Breede River Valley' Biosphere Reserve



Gouritz River/ Olifants River catchments

1. Selected public investment and settlement only as principle-led response
2. Land use management according to Indicatory decision tool



10. Policy implementation

Given the planning level and strategic nature of this study it is not a spatial perspective (a few carefully phrased, powerful position statements) or a growth management study (which considers that growth in population and the economy is supported by the necessary services and infrastructure and at the same time meets spatial and socio-economic objectives¹⁶⁹) but a proposal of spatial guidelines to take effect within the district in order to direct future (spatial) interventions as a result of growth, development and policy and to reduce developmental disparities.

It is therefore necessary to adopt a **co-ordinated approach to implementation** that considers the following elements:

- **Unbiased approval:** the spatial guidelines are to be “unconditionally” endorsed, integrated with ‘own’ policy and applied by all spheres of government
- **High-impact conversation:** involve the right people at the right time regarding the right elements
- **Political tolerance:** advocacy of straightforward proposals and acceptance of sometimes prolonged outcomes-based timeframes
- **Champion:** institutionalise responsibility and accountability for implementation, monitoring and reporting with a particular authority
- **Change management:** where systems, structures and tools must be re-evaluated, and
- **Monitoring:** the monitoring of outcomes through the measurement of indicators

This co-ordinated approach must also include the private sector. We deem the guidelines to be logical and defensible in terms of longer-run sustainability goals and other needs expressed or accepted in our society. Yet, the implementation of these guidelines in pursuit of objectives is often difficult, maybe “costly” and is frequently not understood fully.

The following notes focus on guidelines relevant for economic-development activities, most of which have to be tackled by the private sector, i.e. small, medium and large enterprises as well as informal or micro-enterprises. Since this may often be difficult, the interaction or co-operation between the private sector and public entities as well as NGOs and other players in civil society becomes important.

General steps to facilitate specific action proposed by the CWDSDF are the following:

- The private sector needs to be persuaded to accept the realities, challenges and potential conflicts that have made the CWDSDF necessary, relevant and important
- Wider knowledge, understanding, discussion and acceptance of the CWDSDF guidelines have to be pro-actively pursued. Such acceptance needs to happen among individuals, in representative bodies (e.g. business chambers and sector associations) and in public-private partnerships (PPPs)
- Public understanding of the long-term implications of non-compliance with the CWDSDF has to be strengthened (e.g. climate change, decline in tourism, social tensions)
- Private-sector operators have to become more aware of the (new) opportunities created by CWDSDF guidelines
- There needs to be greater clarity about the practical implementation of CWDSDF-triggered investment changes, so that enterprises can adjust their planning
- There needs to be regular reporting on progress in the implementation of CWDSDF proposals, including case studies about what the pri-

¹⁶⁹ City of Johannesburg, Department Planning and Urban Management, Johannesburg Growth Management Strategy, 2008

vate sector did (or did not do) to fit in with the CWDSDF. Such steps should include meetings and published reports

- There is also a need and scope to publicise opportunities of what (“clever”) enterprises could do to develop within the boundaries of the Cape Winelands district
- There should be informal meetings in each of the towns in the Cape Winelands district about local changes and opportunities
- The public sector could initiate projects to trigger new developments (e.g. to better integrate settlements), even though the private sector has to eventually do the bulk
- Plan and implement joint Private Public Partnership projects
- Regularly compare progress in Cape Winelands places, and
- Encourage the private sector to publicise their action, and challenge business associations to propagate joint efforts.

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