

CONTENTS

GLOSSARY

1 INTRODUCTION

- 1.1 Purpose of this Report
- 1.2 Brief Overview of Beaufort West Municipality
- 1.3 What is an SDF and why it is needed?
- 1.4 Legal Status of the SDF
- 1.5 Relationship with other plans
- 1.6 The Consultant's Brief

2 GOVERNANCE AND LEGISLATION

- 2.1 National Policy
 - 2.1.1 DFA Principles
 - 2.1.2 Neighbourhood Development Partnership Grant (NDPG) Requirements
 - 2.1.3 NSDP Spatial Guidelines
 - 2.1.4 Department of Environmental Affairs and Tourism: South Africa's National Biodiversity Strategy and Action Plan
 - 2.1.5 Regional Industrial Development Strategy (RIDS)
- 2.2 Provincial Policy
 - 2.2.1 Western Cape Provincial Spatial Development Framework (WC-PSDF), 2009
 - 2.2.2 Strategic Infrastructure Plan (SIP), Provincial Government: Western Cape Department of Public Works and Transport, 2006
 - 2.2.3 Provincial Urban Edge Guideline
 - 2.2.4 Guidelines for Resort Developments in the Western Cape
 - 2.2.5 Guidelines for Golf Courses, Golf Estates, Polo Fields and Polo Estates in the Western Cape
 - 2.2.6 Provincial Growth and Development Strategy (PGDS), 2006
 - 2.2.7 Rural Land Use Planning and Management Guidelines, 2009
 - 2.2.8 Settlement Restructuring: An Explanatory Manual, 2009

- 2.2.9 The Provincial Land Transport Framework, Provincial Government: Western Cape Department of Transport and Public Works, 2011

- 2.3 District Policy
 - 2.3.1 Central Karoo District Municipality Spatial Development Framework (2008)
 - 2.3.2 Mobility Strategy for the Central Karoo district Municipality 2013
- 2.4 Municipal Policy
 - 2.4.1 IDP Spatial Representation
 - 2.4.2 Beaufort West Municipality Spatial Development Framework, 2008
 - 2.4.3 Beaufort West Urban Restructuring Framework, 2011
 - 2.4.4 Beaufort West Municipal Gap Analysis and Project Plan, 2012
- 2.5 Abutting Spatial Development Frameworks
 - 2.5.1 Laingsburg Spatial Development Framework, 2011
 - 2.5.2 Karoo Hoogland Spatial Development Framework (2010)
 - 2.5.3 Ubuntu Spatial Development Framework, 2007
 - 2.5.4 Camdeboo Spatial Development Framework, 2012
 - 2.5.5 Prince Albert SDF
 - 2.5.6 Baviaans Spatial Development Framework, 2007
- 2.6 Alignments
 - 2.6.1 Vertical Alignment
 - 2.6.2 Horizontal Alignment

3 THE CURRENT STATE OF THE MUNICIPALITY

- 3.1 A Framework of Interrelated Systems
- 3.2 Land
 - 3.2.1 Geology and Soils
 - 3.2.2 Climate
 - 3.2.3 Climate change
 - 3.2.4 Topography and Landscape Character, Slopes and Aspect

3.2.5	Water Resources (Hydrology)	4.1.2	Guidelines for the Formulation of SDF's
3.2.6	Biodiversity	4.1.3	Public Participation Phases
3.2.7	Biodiversity Conservation	4.2	Phase 2 Report Back: Meetings and Workshops
3.2.8	Agriculture	4.2.1	Public Participation Process Planning
3.2.9	Building Materials and Mining	4.2.2	Needs, Issues and Problems
3.2.10	Overall Land Use	4.2.3	Vision
3.3	Socio-Economic Conditions		
3.3.1	Demographic Profile	5.	CONCEPTUAL DEVELOPMENT FRAMEWORK
3.3.2	Health	5.1	Spatial Vision
3.3.3	Education	5.1.1	Spatial Vision and Core Ideas
3.3.4	Employment, Occupation and Income Levels	5.2	Macro-Conceptual Framework
3.3.5	The Economy	5.2.1	Natural Systems Synthesis
3.3.6	Land Reform	5.2.2	Socio-Economic and Built Environment Synthesis
3.3.7	Cemeteries	5.2.3	Sector GVA Contributions
3.3.8	Crime	5.2.4	Sector Employment Contributions
3.3.9	Property Market Patterns and Growth Pressures	5.2.5	Broad Spatial Concept
3.3.10	Municipal Finances	5.3	Municipal Spatial Development Framework
3.3.11	Heritage	5.3.1	Bio-Regions
3.4	Urban Settlements and Hierarchy	5.3.2	Spatial Planning Categories for Land Use Management
3.4.1	Hierarchy and Role of the Settlements	5.3.3	Sustaining the Economy
3.4.2	Transportation	5.3.4	Major Infrastructure Projects
3.4.3	Solid Waste Management	5.3.5	Major Tourism Destinations
3.4.4	Water / Infrastructure	5.3.6	Land Reform
3.4.5	Waste Water Treatment (Sanitation)	5.4	Urban Related Development
3.4.6	Energy	5.4.1	Settlement Guidelines
3.4.7	Housing	5.5	Climate Change
3.4.8	Open Space and Commonages	5.6	Urban Design Guidelines
3.4.9	Tourism	5.7	Potential Rural Nodes and Periodic Rural Markets
4.	PUBLIC PARTICIPATION	5.8	Settlement Hierarchy and Structure
4.1	Introduction		
4.1.1	Purpose of this Chapter		

- 5.9 Beaufort West Town
 - 5.9.1 Spatial Analysis
 - 5.9.2 Beaufort West Town: Draft Spatial Development Framework
- 5.10 Merweville
 - 5.10.1 Spatial Analysis
 - 5.10.2 Merweville: Draft Spatial Development Framework
- 5.11 Murraysburg
 - 5.11.1 Spatial Analysis
 - 5.11.2 Murraysburg: Draft Spatial Development Framework
- 5.12 Nelspoort
 - 5.12.1 Spatial Analysis
 - 5.12.2 Nelspoort: Draft Spatial Development Framework
- 5.13 General Projects
- 6. IMPLEMENTATION FRAMEWORK**
- 6.1 Implementation
 - 6.1.1 Municipal SDF Policy / Project List
 - 6.1.2 Municipal IDP / Project List
 - 6.1.3 Municipal Policy / Project Prioritisation
- 6.2 Monitoring and Revision Framework
 - 6.2.1 Review Progress in IDP
 - 6.2.2 Projects / Policies to be reported in IDP
- 6.3 Configure Sector Plans

REFERENCES

LIST OF FIGURES

- Figure 1.1.1 Study Area
- Figure 1.1.2 Aerial Photograph
- Figure 1.4.1 Link between SDF/IDP/Budget
- Figure 1.4.2 Layers of SDF and Level of Detail
- Figure 1.4.3 SDF relationship to sector plans
- Figure 1.5.1 Guidelines for preparing SDFs
- Figure 1.5.2 Phases in the process of completing an SDF
- Figure 1.5.3 Proposed Relationship between IDPs, Implementation Plans, including HSPs and SDFs
- Figure 2.1.1 DFA: Chapter 1 - Land Development Principles
- Figure 2.1.2 Principles of the NSDP Spatial Guidelines
- Figure 2.1.3 Development Potential along Linear Corridors
- Figure 2.1.4 Proposed Draft National SDF
- Figure 2.1.5 Differences between Ideal and Actual Patterns of Resources and Opportunities
- Figure 2.1.6 Determinants of Systemic Competitiveness
- Figure 2.1.7 Medium to High Base Areas
- Figure 2.1.8 Distribution of Economic Activity, based on GVA
- Figure 2.2.1.1 Patterns of Economic Activity
- Figure 2.2.1.2 WCPSDF: Central Karoo
- Figure 2.3.1.1 Central Karoo District SDF
- Figure 2.3.2.1 Mobility Strategy for Central Karoo District Municipality
- Figure 2.4.1.1 IDP Budget 2012-2017
- Figure 2.4.2.1 Beaufort West Municipality SDF
- Figure 2.4.3.1 Urban Restructuring Framework: Beaufort West
- Figure 2.4.3.2 Urban Restructuring Framework: Merweville
- Figure 2.4.3.3 Urban Restructuring Framework: Nelspoort
- Figure 2.6.1 Beaufort West Conceptual SDF showing alignment with surrounding SDFs
- Figure 3.1.1 A Framework of Interrelated Systems
- Figure 3.2.1.1 Geology (ENPAT)
- Figure 3.2.1.2 Soil Depth

Figure 3.2.1.3	Percentage of Clay	Figure 3.3.3.1	Education
Figure 3.2.2.1a	Climate: Temperature	Figure 3.3.3.2	Census Education
Figure 3.2.2.1b	Solar radiation map for South Africa	Figure 3.3.4.2	Employment
Figure 3.2.2.2	Climate: Rainfall	Figure 3.3.5.1	Income
Figure 3.2.2.3a	Average annual wind speed and direction for Beaufort West	Figure 3.3.5.3a	An illustration of the linkages between key sector contributions to income (receipts - supply) and the expenditure (demand) of the Trade, Transport and Accommodation sector
Figure 3.2.2.3b	Summer wind speed and direction for Beaufort West	Figure 3.3.5.3b	An illustration of the linkages between key sector contributions to income (receipts - supply) and the expenditure (demand) of the Services sector
Figure 3.2.2.3c	Winter wind speed and direction for Beaufort West	Figure 3.3.5.3c	An illustration of the linkages between key sector contributions to income (receipts - supply) and the expenditure (demand) of the Agriculture sector
Figure 3.2.2.3d	Estimated wind speeds for South Africa		
Figure 3.2.2.4	Wind and Solar Farm Siting Principles		
Figure 3.2.4.1	Topography		
Figure 3.2.4.1a	Example of a cosmic landscape along the N1 national road, south of Beaufort West	Figure 3.3.6.1	Land Reform Projects
Figure 3.2.4.1b	Example of a romantic landscape between Beaufort West and Nelspoort	Figure 3.3.7.1	Cemeteries
Figure 3.2.4.2	Slope	Figure 3.3.9.1	A breakdown of the total value of residential and non-residential building activity on an annual basis for the period 2007 to 2010
Figure 3.2.4.3	Aspect		
Figure 3.2.5.1	Hydrology: River Systems and Major Dams	Figure 3.3.9.2	Properties for Sale
Figure 3.2.5.2	River Conservation Status	Figure 3.3.11.1a	Proposed Urban Conservation Area: Beaufort West
Figure 3.2.6.1	Vegetation: Biomes	Figure 3.3.11.1b	The Dutch Reformed Mission Church and Parsonage, Donkin Street, Beaufort West
Figure 3.2.6.2	Vegetation Type		
Figure 3.2.6.3	Vegetation Status	Figure 3.3.11.2	Single point heritage sites within the Beaufort West Municipality
Figure 3.2.6.4a	Critical Biodiversity Areas		
Figure 3.2.6.4b	Critical Biodiversity Areas CBA Categories	Figure 3.4.1	Hierarchy of Settlement, Linkages and investment priority
Figure 3.2.7.1	Reserves and Protected Areas	Figure 3.4.1.1	Aerial Photograph: Beaufort West
Figure 3.2.8.1	Land Capability	Figure 3.4.1.2	Aerial Photograph: Merweville
Figure 3.2.8.2	Agricultural Land Uses	Figure 3.4.1.3	Aerial Photograph: Murraysburg
Figure 3.2.8.4	GVA composition for Beaufort West Municipality	Figure 3.4.1.4	Aerial Photograph: Nelspoort
Figure 3.2.9.1	Mining	Figure 3.4.2.1	Transportation
Figure 3.2.9.2	Applications for shale gas exploration	Figure 3.4.2.5	Proposed phased NMT Implementation Plan
Figure 3.2.9.3	Fracking in Pinedale, Wyoming	Figure 3.4.3.1	Landfill Sites: Beaufort West Municipality
Figure 3.2.9.4	Fracking near Aztec Ruins and Mesa Verde, New Mexico	Figure 3.4.4.1	Water Supply Infrastructure: Beaufort West Municipality
		Figure 3.4.5.1	Waste Water Treatment: Beaufort West Municipality
Figure 3.3.1.1	Population Density	Figure 3.4.6.1	Energy: Beaufort West Municipality
Figure 3.3.2.1	Health Facilities: Municipality		

Figure 3.4.7.1	Housing Projects (Beaufort-West Mun. 2013)	Figure 5.10.1.1	Merweville: Aerial photograph
Figure 3.4.8.1	Beaufort West: Commonage and Open Spaces	Figure 5.10.1.2	Merweville: Analysis
Figure 3.4.8.2	Nelspoort: Commonage and Open Space	Figure 5.10.2.1	Merweville: Initial Conceptual SDF
Figure 3.4.8.3	Murraysburg: Commonage and Open Space	Figure 5.11.1.1	Murraysburg: Aerial Photograph
Figure 3.4.8.4	Merweville: Commonage and Open Space	Figure 5.11.1.2	Murraysburg: Analysis
Figure 3.4.9.1	Tourism in Beaufort West Municipality	Figure 5.11.2.1	Murraysburg: Initial Conceptual SDF
Figure 3.4.9.2	Christiaan Barnard Museum in Donkin Street, Beaufort-West	Figure 5.12.1.1	Nelspoort: Aerial photograph
		Figure 5.12.1.2	Nelspoort: Analysis
		Figure 5.12.2.1	Nelspoort: Initial Conceptual SDF
Figure 4.1.3	Public participation phases as part of the overall SDF process	Figure 6.2.1	Phases in the process of completing and SDF
Figure 5.1.1	Fracking in Pinedale, Wyoming	Figure 6.2.2	Proposed Relationship between IDPs, Implementation Plans, including HSPs and SDFs
Figure 5.1.2	Fracking near Aztec Ruins and Mesa Verde, New Mexico		
Figure 5.2.1.1	Beaufort West Municipality: Natural Systems Synthesis		
Figure 5.2.1.2	Critical Biodiversity Areas (DEA&DP, 2011)		
Figure 5.2.2.1	Beaufort West Municipality: Socio-economic Synthesis		
Figure 5.2.5.1	Beaufort West Municipality: Broad SDF Concept		
Figure 5.3.1	Beaufort West Municipality: Spatial Development Framework		
Figure 5.3.1.1	Beaufort West Bio-regions		
Figure 5.3.2.1	Spatial Planning Categories		
Figure 5.3.4.1	Major Transport Routes Requiring/Planned for upgrading		
Figure 5.3.5.1	Major Tourism Destinations		
Figure 5.3.6.1	Land Reform Projects		
Figure 5.4.1.1	Walking Distance		
Figure 5.4.1.2	Integration of Urban Activities		
Figure 5.4.1.3	Socio-economic integration and Interface Treatment		
Figure 5.4.1.4	Intensification Corridors		
Figure 5.4.1.5	Sub-Centre Nodes		
Figure 5.4.1.8a	Location options for wind turbines		
Figure 5.4.1.8b	Wind farm near Klipheuwel outside Durbanville, Western Cape		
Figure 5.4.1.8c	Visual simulation of wind turbines, Western Cape		
Figure 5.4.1.9	Off-grid infrastructure options		
Figure 5.5.1	Climate Change		
Figure 5.8.1	Settlement Hierarchy		
Figure 5.9.1.1	Beaufort West town: Aerial photograph		
Figure 5.9.1.2	Beaufort West town: Analysis		
Figure 5.9.2.1	Beaufort West town: Initial Conceptual SDF		

LIST OF TABLES

Table 2.2.2.1	Strategic Infrastructure Plan (SIP), Provincial Government: Western Cape Department of Public Works and Transport, May 2006
Table 2.2.4.1	Area Densities
Table 2.2.4.2	Unit Sizes
Table 2.2.6.1	Beaufort West Municipality: Key Target Areas from PGDS
Table 2.4.1.1	IDP Budget 2012-2017
Table 2.4.4.1	Beaufort West SDF Project Plan
Table 3.2.6.4a	Critical Biodiversity Areas
Table 3.2.6.4b	Desired Management Objectives per mapped CBA
Table 3.2.8.6a	Gross farming income by main division
Table 3.2.8.6b	Gross farming income from field crops
Table 3.2.8.6c	Gross farming income from horticultural products
Table 3.2.8.6d	Gross farming income from animals and animal products
Table 3.2.8.6e	Average Farm Contribution
Table 3.2.8.7a	Paid employees according to occupation
Table 3.2.8.7b	Minimum wages for farm labourers
Table 3.2.8.8	Land required for food security: Beaufort West Municipality
Table 3.2.9	Test scenario summary of macro-economic model output

Table 3.3.1.1	Summary of population data 2001 – 2011
Table 3.3.1.2	Population per main settlement
Table 3.3.1.4	Age Structure (2011)
Table 3.3.1.6	Population
Table 3.3.2.1	Health Conditions in the Beaufort-West Municipality
Table 3.3.3.1	Highest education level
Table 3.3.4.1	Beaufort West Municipality labour market information, 1996 - 2001
Table 3.3.4.2	Sector Contribution to employment in 2001 and 2007
Table 3.3.5.2	An assessment of sector contributions to GVA in 2001 and 2009 and employment per sector in 2001 and 2007 for the Beaufort West economy
Table 3.3.5.3a	Sector contribution to GVAR in 2011 for the Beaufort West local area
Table 3.3.5.3b	Sector contribution to GVAR for the Beaufort West economy in 2011
Table 3.3.5.3c	Input values required to generate the level of GRP achieved in 2011 per sector
Table 3.3.6.1	Land reform projects in the Beaufort West Municipality
Table 3.3.7.1	Cemeteries in Beaufort West Municipality
Table 3.3.9.1	Breakdown of the number and value of new residential and non-residential building projects per year from 2007 to 2010
Table 3.3.9.2	Property Sales (Urban)
Table 3.3.9.3	Property Sales (Rural)
Table 3.4.2.2	Minibus taxi services
Table 3.4.3.1	Refuse removal 2007 and 2011
Table 3.4.4.1	Bulk Water Infrastructure Priority Projects
Table 3.4.5.1	Bulk Waste Water Infrastructure Priority Projects
Table 3.4.6.1	Energy/Fuel used for lighting of households (Census 2011)
Table 3.4.7.1	Housing provision 2007 and 2011
Table 3.4.7.2	Number of people on the waiting list in the Beaufort-West Municipality
Table 3.4.7.3	Projected housing land need to 2030
Table 3.4.7.4	Current and Planned Municipal Projects: 10 Years HS
Table 5.3.1.1	Sub-regions and characteristics

Table 5.3.2.1	Spatial Planning Categories
Table 5.3.4.1	IDP Budget 2012-2017
Table 6.1.1	Municipal SDF Policy / Project List
Table 6.1.2	Municipal IDP Policy / Project List
Table 6.1.3	Municipal Policy / Project Prioritisation
Table 6.2.2	Projects Evaluation and Report Framework
Table 6.3.1	SDF Relationship with Sector Plans

LIST OF GRAPHS

Graph 2.1.1.1	World Population growth projections 2010 to 2050
Graph 2.1.1.2	Projected growth in global and regional international tourist arrivals between 1950 and 2020
Graph 3.2.2.1	Average Annual Temperature and Precipitation
Graph 3.3.1.5	Beaufort West Gender Split
Graph 3.3.1.7	Projected net migration, 2001 – 2025
Graph 3.3.4.2	Sector Contribution to employment in 2001 and 2007
Graph 3.3.4.4a	Income distribution by individual, 2011
Graph 3.3.4.4b	Income (per annum) distribution by population group
Graph 3.3.4.5	Social grant data
Graph 3.3.5.1	Sector contributions to GVA for the local and district municipal areas in 2001 and 2009
Graph 3.3.8.1	Reported crime statistics for Beaufort West Municipality
Graph 3.3.10.1	An illustration of the operating income and expenditure for the Beaufort West Municipality together with the difference between income with and without grants and subsidies over the period 2009/2010 to 2011/2012
Graph 3.3.10.2	An illustration of outstanding debt in terms of rates and services from 2009/2010 to 2011/2012
Graph 3.4.5.1	Toilet facilities 2007 and 2011
Graph 5.2.3.1	Sector contribution to GVA for the Beaufort West Municipality
Graph 5.2.3.2	Sector contributions to GVA in Rand terms for the local and district municipal areas in 2001 and 2009
Graph 5.2.4.1	Sector contribution to Employment

LIST AND EXPLANATION OF ACRONYMS

B&Bs	Bed and Breakfast establishments	IENTP	Integrated Environmental Management Plan
BEE	Black Economic Empowerment	IRPTN	Integrated Rapid Public Transport Network
BNG	Breaking New Ground	IRT	Integrated Rapid Transport
CAPE	Cape Action for the People and the Environment	IRTN	Integrated Rural Transport Network
CARA	Conservation of Agricultural Resources Act	IT	Information and Technology
CBAAs	Critical Biodiversity Areas	LEAP	Living Edge of Africa Project
CBD	Central Business District	LED	Local Economic Development
CPITR	Consumer Price Index for Total Rural Population	LUMS	Land Use Management Schemes
CRDP	Comprehensive Rural Development Programme	LUPO	Land Use Planning Ordinance (Ordinance 15 of 1985)
DEA&DP	Department of Environmental Affairs and Development Planning	MEDS	Micro-Economic Development Strategy
DFA	Development Facilitation Act	MIG	Municipal Infrastructure Grant
DME	Department of Minerals and Energy	MPCCs	Multi Purpose Community Centres, also currently known as Thusong Service Centres
DRDLR	Department of Rural Development and Land Reform	MSA	Municipal Systems Act, 2000 (MSA: Act 32 of 2000)
DTI	Department of Trade and Industry	MTAS	Municipal Turn Around Strategy
DWAF	Department of Water Affairs and Forestry	MTB	Mountain Bike routes / trails
EMF	Environmental Management Framework	NBSAP	National Biodiversity Strategy and Action Plan
EPWP	Extended Public Works Program	NDAs	New Development Areas
GAP housing	The term that describes the shortfall, or 'gap' in the market between residential units supplied by the state and houses delivered by the private sector	NDPG	Neighbourhood Development Partnership Grant
GDP	Gross Domestic Product	NGOs	Non Governmental Organisations
GHG	Green House Gasses	NMT	Non-Motorised Transport
GLA	Gross Leasable Area	NPC	National Planning Commission
GRP	Gross Regional Product, i.e. for district or local Municipality	NPDG	Neighbourhood Development Program Grant
GVA	Gross Value Added	NSDP	National Spatial Development Perspective
Ha	Hectare	OECD	Organisation for Economic Cooperation and Development
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome	PGDS	Provincial Growth and Development Strategy
HSP	Human Settlement Plan	PHC	Primary Health Care
I&APs	Interested and Affected Parties	PLAS	Proactive Land Acquisition Strategy
IDP	Integrated Development Plan	PLTF	Provincial Land Transport Framework
		PTP	Public Transport Plan
		RIDS	Regional Industrial Development Strategy
		SANBI	South African National Biodiversity Institute