CAPE WINELANDS DISTRICT MUNCIPALITY

CAPE WINELANDS DISTRICT
MUNICIPALITY • MUNISIPALITEIT • UMASIPALA

2020/2021

Integrated Development Plan (IDP)

Draft Third Review of 2017 - 2021 Plan

As prescribed by Section 34 of the Local Government:

Municipal Systems Act, 32 of 2000

FOREWORD: EXECUTIVE MAYOR

To be included in the final draft document.



Executive Mayor
Alderman (Dr) Helena von Schlicht

OVERVIEW / PREFACE: MUNICIPAL MANAGER



To be included in the final draft document.

Municipal Manager

Mr Henry Prins

INTEGRATED DEVELOPMENT PLAN (IDP) REVIEW DOCUMENT

The Municipality's IDP is its principal strategic planning instrument, which directly guides and informs its planning, budget, management and development actions. This framework is rolled out into objectives, key performance indicators and targets for implementation which directly inform the Service Delivery and Budget Implementation Plan (SDBIP).

According to legislation, as per Section 34 of the Municipal Systems Act, 2000 (Act 32 of 2000):

"A municipal council must review its integrated development plan annually in accordance with an assessment of its performance measurements and to the extent that changing circumstances so demand…"

On 25 May 2017 our 4th Generation IDP 2017 - 2022 was adopted by council which serves as our 5 year plan. On 27 May 2019 our 2nd Review IDP was adopted by council.

This document serves as the 3rd Review of the 2017/18 – 2020/21 Integrated Development Plan.

It is not the intention of the current document to duplicate the background information and detail that is already in the 2017 - 2022 document, therefore this document should be read in conjunction with the 4th Generation IDP (2017 – 2022), 1st Review IDP and the 2nd Review IDP ***as the Review does not constitute a new IDP***.

GLOSSARY OF ACRONYMS

AFS	Annual Financial Statements
AG	Auditor General
AGSA	Auditor General South Africa
AH	Agri-hub
B – Municipalities	Local Municipalities
BOWL	Breede Valley, Overberg, Witzenberg, Langeberg
C - Municipalities	District Municipalities
CFO	Chief Financial Officer
CoCT	City of Cape Town
CW	Cape Winelands
CWD	Cape Winelands District
CWDM	Cape Winelands District Municipality
CWDSDF	Cape Winelands District Spatial Development Framework
CW-IAOS	Cape Winelands Investment Attraction and Opportunities Strategy
CW-RLEDS	Cape Winelands Regional Local Economic Development Strategy
CW-TMS	Cape Winelands Tourism Marketing Strategy
DCAS	Department of Cultural Affairs and Sport
DEADP	Department of Environmental Affairs and Development Planning
DEDAT	Department of Economic Development and Tourism
DITP	District Integrated Transport Plan
DOA	Department of Agriculture
DPPCom	District Public Participation and Communication
DRDLR	Department of Rural Development and Land Reform
DUI	Driving Under the Influence
DWA	Department of Water Affairs
ECD	Early Childhood Development
EPWP	Expanded Public Works Programme
FPA	Fire Protection Association
FPSU	Farmer Production Support Unit
GDPR	General Data Protection Regulation
HIV/AIDS	Human Immune Virus/Acquired Immune Deficiency Syndrome
HR	Human Resources
HRIS	Human Resource Information System
HRM	Human Resource Management
ICLEI	International Council for Local Environmental Initiatives
ICT	Information and Communication Technology
IDP	Integrated Development Plan
IGR	Integrated Government Relations
IPTN	Integrated Public Transport Network
ITC	International Training Centre
JDA	Joint District Approach
KPA	Key Performance Area
KPI	Key Performance Indicator
LAB	Local Action for Biodiversity
LED	Local Economic Development
LG	Local Government
LTA	Local Tourism Association
LUMS	Land Use Management System
MEC	Member of the Executive Council
MFMA	Municipal Financial Management Act
MPAC	Municipal Public Accounts Committee
MSA	Local Government: Municipal Systems Act
MTREF	Medium-Term Revenue and Expenditure Framework

NGO	Non-Governmental Organisation
PMS	Performance Management System
PPPCom	Provincial Public Participation and Communication
RSA	Republic of South Africa
RTO	Regional Tourism Organisation
RUMC	Rural Urban Market Centre
SAMRAS	South African Municipal Resource System
SDBIP	Service Delivery and Budget Implementation Plan
SDF	Spatial Development Framework
SMME	Small Medium & Micro Enterprises
SMT	Senior Management Team
SO	Strategic Objective
SONA	State of the Nation Address
SPC	Spatial Planning Categories
TB	Tuberculosis
TRANCRAA	Transformation of Certain Rural Areas Act
WBRA	Ward base risk assessment
WC	Western Cape
WC DOA	Western Cape Provincial Department of Agriculture

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CHAPTER 1: INTRODUCTION AND OVERVIEW

1.1 Vision, Mission and Core values



1.2 Cape Winelands District Municipality - Top administrative structure



MUNICIPAL MANAGER

Mr Henry Prins



EXECUTIVE DIRECTOR:

COMMUNITY DEVELOPMENT AND PLANNING SERVICES

Mr PA Williams



EXECUTIVE DIRECTOR:

TECHNICAL SERVICES

Mr F Van Eck



CHIEF FINANCIAL OFFICER:

FINANCIAL AND STRATEGIC SUPPORT SERVICES

Ms FA du Raan-Groenewald

1.3 Cape Winelands Macro Structure



Approved by Council on 6 December 2018

1.4 Strategic Objectives

OFFICE OF THE MUNICIPAL MANAGER Integrated Development Planning Performance Management Risk Management Internal Auditing Communications	
STRATEGIC OBJECTIVES	**PREDETERMINED DEVELOPMENT OBJECTIVES**
SO 1 Creating an environment and forging partnerships that ensure social and economic development of all communities, including the empowerment of the poor in the Cape Winelands District.	1.1 Provide a comprehensive and equitable Municipal Health Service including Air Quality Management throughout the CWDM. 1.2 Ensure coordination of multi-disciplinary and sectoral disaster risk reduction through integrated institutional capacity for Disaster Risk management, Disaster Risk Assessment and Response and Recovery 1.3 Effective planning and coordination of specialized fire-fighting services throughout the CWDM 1.4 To facilitate environmentally sustainable economic development planning through the development and maintenance of strategic partnerships, investment attraction, retention and opportunities, SMME support and development, skills development and information knowledgement. 1.5 To facilitate, ensure and monitor the development and empowerment of the poor by graduating people out of poverty, social inclusion and improving the livelihood of the poor, vulnerable groups, rural farm dwellers and rural communities.
SO 2 Promoting sustainable infrastructure services and a transport system which fosters social and economic opportunities	2.1 To comply with the administrative and financial conditions of the Western Cape Government roads agency function agreement. 2.2 To implement sustainable infrastructure services. 2.3 To increase levels of mobility in the whole of the CWDM area. 2.4 To improve infrastructure services for rural dwellers 2.5 To implement an effective ICT support system
SO 3 Providing effective and efficient financial and strategic support	3.1 To facilitate and enhance sound financial support services 3.2 To strengthen and promote participative and accountable IGR and governance.

services to the Cape Winelands District Municipality.	3.3 To facilitate and enhance sound strategic support services

	Cape Winelands	Stellenbosch	Drakenstein	Witzenberg	Breede Valley	Langeberg
Vision	A Unified Cape Winelands of excellence for sustainable development.	Valley of Opportunity and Innovation	A city of excellence	A Municipality that cares for its community, creating growth and opportunities.	A unique and caring Valley of service, excellence, opportunity and growth.	To progress and grow from being one of the best municipalities, to be the best municipality
Mission	Working together towards effective, efficient and economically sustainable development	Our Mission is to deliver cost-effective services that will provide the most enabling environment for civil and corporate citizens.	a) Protecting and enhancing of the quality of life of our residents and the unique environment of our area; b) Providing efficient and effective delivery of services which is responsive to the community's needs; c)Promoting the principles of access, equity and social justice in the development of services; d)Delivering an effective organisational culture which strives for service excellence; e) Exercising regulatory functions of Council consistently and without bias; f) Encouraging community participation in the processes of Council by consulting widely on its activities and policies; g) Creating an enabling environment for economic growth, job creation and the alleviation of poverty; and h) Employing a future-oriented approach to planning.	The Witzenberg Municipality is committed to improve the quality of life of its community by: • Providing and maintaining affordable services. • Promoting Social and Economic Development; • The effective and efficient use of available resources; and Effective Stakeholder and Community participation	To be a South African care capital by providing sustainable and affordable basic services in a safe and healthy environment which, promotes social and economic welfare through participative governance in a committed service orientated approach, and appreciates committed staff as the organisation's most valuable resource and key to service delivery.	By providing cost effective quality services to the Citizens, exercise good leadership, ensuring sound governance and financial management

1.5 Horizontal alignment with District and Local Municipalities

	Cape Winelands	Stellenbosch	Drakenstein	Witzenberg	Breede Valley	Langeberg
Objectives	1. Creating an environment and forging partnerships that ensure social and economic development of all communities, including the empowerment of the poor in the Cape Winelands District. 2. Promoting sustainable infrastructure services and a transport system which fosters social and economic opportunities. 3. Providing effective and efficient financial and strategic support services to the Cape Winelands District Municipality.	1. Valley of possibility 2.A green and sustainable valley 3. A safe valley 4. Dignified Living 5. Good governance and compliance	1. Governance and stakeholder participation 2. Financial sustainability 3. Institutional transformation 4. Physical infrastructure and services 5. Planning and economic development 6. Safety and environmental management 7. Social and community development	1.Essential Services 2.Governance 3.Communal Services 4.Socio-Economic Support Services	1.To provide, maintain and assure basic service and social upliftment for the Breede Valley community 2. To create an enabling environment for employment creation and poverty eradication through proactive economic development and tourism 3.To ensure a safe, healthy, clean and sustainable external environment for all Breede Valley's people 4.To actively participate in determining the future of our country (nation building 5.To ensure a healthy and productive workforce and an effective and efficient work environment 6.Assure a sustainable future through: sound financial management; continuous revenue growth; corporate governance and risk management practices; quality resources; and, value-adding partnerships	**1.Housing:** Effective approach to integrated human settlements and improve living conditions of all households **2.Basic Service Delivery**: Maintain infrastructure to provide basic services to all citizens **3. Local Economic Development**: Create an enabling environment for economic growth and decent employment **4.** An Efficient, effective, responsive and **accountable administration** **5.Sound Financial Management**: Adherence to all laws and regulations applicable to LG **6. Effective stakeholder engagements** to promote civic education

1.6 Alignment between National, Provincial & CWDM

National Priorities (2019 – 2024)	Western Cape Vision-inspired Priorities (2019 – 2024)	Cape Winelands District Municipality Strategic Objectives	CWDM Pre-determined objectives
National Priority 5: Social cohesion & safe communities **National Priority 2:** Education, skills & health	**Vision-inspired priority 1:** Safe and Cohesive communities	**SO1:** Creating an environment and forging partnerships that ensure social and economic development of all communities, including the empowerment of the poor in the Cape Winelands District	**PDO 1.1** Provide a comprehensive and equitable Municipal Health Service including Air Quality Management throughout the area of Cape Winelands District Municipality. .
National Priority 5: Social cohesion & safe communities	**Vision-inspired priority 1:** Safe and Cohesive Communities	**SO1:** Creating an environment and forging partnerships that ensure social and economic development of all communities, including the empowerment of the poor in the Cape Winelands District.	. **PDO 1.2:** Ensuring coordination of multi-disciplinary and sectoral disaster risk reduction through integrated institutional capacity for Disaster Risk management, Disaster Risk Assessment, Response and Recovery.
National Priority 5:Social cohesion & safe communities	**Vision-inspired priority 1:** Safe and Cohesive Communities	**SO1:** Creating an environment and forging partnerships that ensure social and economic development of all communities, including the empowerment of the poor in the Cape Winelands District	**PDO 1.3:** Effective planning and coordination of specialized fire-fighting services through the CWDM.

National Priorities (2019 – 2024)	Western Cape Vision-inspired Priorities (2019 – 2024)	Cape Winelands District Municipality Strategic Objectives	CWDM Pre-determined objectives
National Priority 1: Economic transformation & job creation	**Vision-inspired priority 3:** Empowering people	**SO1:** Creating an environment and forging partnerships that ensure social and economic development of all communities, including the empowerment of the poor in the Cape Winelands District	**PDO 1.4:** To facilitate environmentally sustainable economic development planning through the development and maintenance of strategic partnerships, investment attraction, retention and opportunities, SMME support and development, skills development and information acknowledgement.
National Priority 1: Economic transformation & job creation **National Priority 1**: Education, skill & health **National Priority 5**:Social cohesion & safe communities	**Vision-inspired priority 1:** Safe and Cohesive Communities **Vision-inspired priority 2:** Economy and jobs	**SO1:** Creating an environment and forging partnerships that ensure social and economic development of all communities, including the empowerment of the poor in the Cape Winelands District	**PDO 1.5:** To facilitate, ensure and monitor the development and empowerment of the poor by graduating people out of poverty, social inclusion and improving the livelihood of the poor, vulnerable groups, rural farm dwellers and rural communities.
National Priority 4: Spatial integration, human settlements & local government	**Vision-inspired priority 4:** Mobility and Spatial Transformation	**SO2:** Promoting sustainable infrastructure services and a transport system which fosters social and economic opportunities	**PDO 2.2:** To implement sustainable infrastructure services **PDO 2.4:** To improve infrastructure services for rural dwellers
National Priority 1: Economic transformation & job creation **National Priority 5**:Social cohesion & safe communities	**Vision-inspired priority 4:** Mobility and Spatial Transformation	**SO2:** Promoting sustainable infrastructure services and a transport system which fosters social and economic opportunities	**PDO 2.3:** To increase levels of mobility in the whole of the CWDM area.

CHAPTER 2: STRATEGIC SUBSTANCE OF THE IDP

2.1 Response on public input

Public Participation sessions were held in Stellenbosch and Worcester on 18 and 25 November 2019.

CAPE WINELANDS DISTRICT MUNICIPALITY

ACTION MINUTES OF IDP PUBLIC PARTICIPATION MEETING OF THE CAPE WINELANDS DISTRICT MUNICIPALITY HELD ON MONDAY, 18 NOVEMBER 2019 AT STELLENBOSCH TOWN HALL

Present:

Community organisations, NGO's, NPO's and businesses from the Paarl and Stellenbosch area.

IDP.1 OPENING & WELCOME

Councillor Du Plessis opened the day and welcome all present.

IDP.2 PURPOSE

Mr Henry Prins, Municipal Manager, explained the purpose of the day. The fact that it is important for all stakeholders to be part of this important process so that service delivery can take place.

DRAFT

IDP.3 EXHIBITIONS

All stakeholders present had the opportunity to visit the departmental exhibitions in the hall. Ask relevant questions regarding projects and support. Some questions was answered on the day and the other questions will be referred to the relevant departments.

1. Mr Fred Simons requires support with regard to safety in the Stellenbosch, Franschoek, Kylemore and Simonduim area. Educational talks with children and youth from age 5 till 18 years.
   (Organisation: Dare to Care - 083 502 6650)
   Cape Winelands District Municipality will refer this matter to the Provincial Department of Community Safety

2. Mr Klaas Morkel and Ms Salie Goosen requests training and educational talks for youth and woman regarding Community Safety in the Wellington farm areas.
   (Organisation: Adama Foundation, CPF and Wellington Rural Development Forum – klaas@bosmanadama.co.za)

   (Organisation: Wellington Rural Development Forum – Salie Goosen 063 387 2065)
   Cape Winelands District Municipality will refer this matter to the Provincial Department of Community Safety.

3. Ms Diana Williams would like information regarding safety for elderly people. What must an elderly person do if he or she witnesses a crime or criminal activities in her area?
   (Organisation: Idas Valley Golden Boys & Girls – 079 783 6887)
   Cape Winelands District Municipality will refer this matter to the Provincial Department of Community Safety and Stellenbosch Municipality.

DRAFT

4. Ms Diana Williams also had a follow up question regarding holiday programmes for the youth in Idas Valley, Stellenbosch.
   (Organisation: Idas Valley Golden Boys & Girls – 079 783 6887)
   Cape Winelands District Municipality will refer this matter to the Department of Cultural Affairs and Sport and Stellenbosch Municipality.

5. Mr Eddie Williams had the following questions:
   (Organisation: Koinonia – eddieyac@gmail.com / 076 168 2617)

   5.1) How can we apply for safety kits for youth workers in Drakenstein?
   Cape Winelands District Municipality will refer this matter to the Provincial Department of Community Safety.

   5.2) How can organisations apply for Qubeka bikes?
   Cape Winelands District Municipality will refer this matter to the Western Cape Education Department.

   5.3) How do we apply for holiday programmes for the Drakenstein area?
   Cape Winelands District Municipality will refer this matter to the Department of Cultural Affairs and Sport.

6. Mr Ivor Collins requests more safety at their school in Drakenstein, fencing, safety kits for learners and whistles.
   (Organisation: Paulus Joubert Secondary School – maori10@webmail.co.za / 083 346 3889)
   Cape Winelands District Municipality will refer this matter to the Provincial Department of Community Safety.

DRAFT

7. Ms Noluthando Magwa requests that there must be given more attention to safety at ECD centres especially in Kayamandi, Stellenbosch. Ms Magwa requests also assistance regarding funding for ECD centres. Ms Magwa is very grateful to Cape Winelands for providing her with the fireproof paint.
   (Organisation: Kayamandi ECD Forum – 072 407 6984)
   Cape Winelands District Municipality will refer this matter to Stellenbosch Municipality, Cape Winelands District Municipality (Rural and Social Department), Department of Community Safety and Social Development.

8. Mr Aldridge Frazenburg requires investigation regarding Dassonberg Road, Franschoek. According to Mr Frazenburg this road is full of potholes and cannot be used.
   (Organisation: Stellenbosch Municipality – aldridge.frazenburg@stellenbosch.gov.za)

   Cape Winelands District Municipality will refer this matter to their Technical Department.

9. Mr Heinrich Albertus and Ms Melissa Clark the follow questions:
   (Organisation: CW – lissacla21@gmail.com / 078 813 4762)

   9.1) How do they apply for a new route in a new area as there is no taxi transport currently?
   9.2) Process to get a permit to operate on a specific route?
   9.3) How many permits per individual?
   9.4) Where can complains be reported to?

   Cape Winelands District Municipality will refer this matter to their Technical Department.

DRAFT

10. Mr Vernon Moses would like more information regarding Skills Development training, and other training which Cape Winelands assist with.
    (Organisation: Drakenstein Snac – mosesvernon4@gmail.com / 072 495 8679)
    Cape Winelands District Municipality will refer this matter to their Rural and Social Department.

11. Mr Klaas Morkel requests more development for youth and children like rieldans and drama. As well as education in teenage pregnancy and drug abuse.
    (Organisation: Adama Foundation, CPF and Wellington Rural Development Forum – klaas@bosmanadama.co.za)
    Cape Winelands District Municipality will refer this matter to their Rural and Social Department.

12. Mr Fred Simons feels that the amount given through the Grant in Aid programme is too little, the allocations needs to be higher. Mr Simons also requests information regarding holiday programmes in his area.
    (Organisation: Dare to Care - 083 502 6650)
    Cape Winelands District Municipality will refer this matter to their Rural and Social Department as well as Department Cultural Affairs and Sport.

13. Ms Elizabeth Julies requests information regarding financial assistance for their holiday programmes.
    (Organisation: Adama Foundation Trust – ejulies85@gmail.com / 079 903 9740)
    Cape Winelands District Municipality will refer this matter to their Rural and Social Department.

DRAFT

14. Mr Vernon Moses requests financial assistance for the year 2020, for youth camps and holiday programmes.
    (Organisation: Drakenstein Snac – mosesvernon4@gmail.com / 072 495 8679)
    Cape Winelands District Municipality will refer this matter to their Rural and Social Department.

15. Councillor Salie Peters requests more information regarding the Rural and Social department of Cape Winelands District Municipality. He would like to know and understand how some of the programmes works.
    (Organisation: Stellenbosch Municipality – 084 366 3178)
    Cape Winelands District Municipality will refer this matter to their Rural and Social Department.

16. Mr Gershwin Balie requested information regarding funding for multi-media training for youth.
    (Organisation: Keep the Dream – shenaydavids@yahoo.co.uk / 084 857 2475
    Cape Winelands District Municipality will refer this matter to their Rural and Social Department.

17. Ms Christine Albertus needs assistance with her soup kitchen in her community.
    (Organisation: Soup kitchen – 076 191 1342)
    Cape Winelands District Municipality will refer this matter to their Rural and Social Department.

18. Ms Shenay Davids would like to know if she can still apply for funding for holiday programmes for this year (2019).
    (Organisation: Keep the Dream - shenaydavids@yahoo.co.uk / 084 857 2475
    Cape Winelands District Municipality will refer this matter to their Rural and Social Department.

DRAFT

19. Ms Salie Goosen requests urgent assistance regarding funding and assistance with various forums so that they can do projects within their communities.
    (Organisation: Wellington Rural Development Forum – 063 387 2065)
    Cape Winelands District Municipality will refer this matter to their Rural and Social Department.

20. Mr Chester Andrews would like to know what challenges does the LED department have that can be solved digitally, which will stimulate business growth.
    (Organisation: Vine Dimension – chesterright@gmail.com / 078 124 7045)
    Cape Winelands District Municipality will refer this matter to Local Economic Development department.

21. Mr Willie Barends requests clarity as Drakenstein Municipality officials frustrates SMME's with late payments and they do not process documents of suppliers.
    (Organisation: Barends Industrial Solutions – puncture@magicmail.co.za / 073 599 7022)
    Cape Winelands District Municipality will refer this matter to Drakenstein Municipality.

22. Mr Christian Nkosi requests the possibility of a satellite fire station in Kayamandi, as this area is a high risk with numerous informal settlements.
    (Organisation: SANCO – 071 198 7795)
    Cape Winelands District Municipality will refer this matter to Stellenbosch Municipality.

DRAFT

23. Ms Phathiswa Tsoni would like to say thank you to Cape Winelands for the fireproof paint that they received. Because of this they are now in the process of registering their centre. In addition, Ms Tsoni requests assistance from the Fire department to teach the children how to escape from a fire in their homes or at the ECD centre.

    (Organisation: Kayamandi ECD Forum – Kayamandi.ECDforum@gmail.com)

    Cape Winelands District Municipality will refer this matter to their Fire Services department.

24. Ms Anna Kruger would like to know how they can, (or in partnership with), improve culture development in their different communities.

    (Organisation: e'Bosch Erfenis Projek (e'Bosch Heritage Project – admin@ebosch.co.za / 081 363 9762)

    Cape Winelands District Municipality will refer this matter to the Provincial Department of Cultural Affairs and Sport.

25. Mr Ivor Collins requests information regarding the next phase of development of the MOD centres at their school and when will the department pay the school a visit.

    (Organisation: Paulus Joubert Secondary School – maori10@webmail.co.za / 083 346 3889)

    Cape Winelands District Municipality will refer this matter to the Provincial Department of Cultural Affairs and Sport.

DRAFT

IDP.4 ADDITIONAL QUESTIONS

After the exhibitions some additional questions was asked:

1. Mr Collins thanked the Rural and Social department for all their hard work and support over the years.
   (Organisation: Paulus Joubert Secondary School – 083 346 3889)

2. Mr Barens stated that their school has a cycling track academy for learners, the challenge however is to maintain the track. Mr Barens requests assistance in this regard.
   (Organisation: Paulus Joubert Secondary School - 073 599 7022)
   Cape Winelands District Municipality will refer this matter to the Provincial Department of Cultural Affairs and Sport.

3. Ms Adams requests assistance for her aftercare centre. She needs training to assist learners with their school work in the afternoon. She also requests financial assistance to be able to give the learners food.
   (Organisation: Rural Forum – 072 564 0790)
   Cape Winelands District Municipality will refer this matter to the Western Cape Education Department.

IDP.5 WAY FORWARD

The Municipal Manager, Mr Henry Prins, thanked each and every one for their valuable inputs. He explained that all the concerns will be recorded and feedback will be provided.

IDP.6 CLOSING

Councillor Du Plessis closed the session and wished everyone a safe journey home.

CAPE WINELANDS DISTRICT MUNICIPALITY

ACTION MINUTES OF IDP PUBLIC PARTICIPATION MEETING OF THE CAPE WINELANDS DISTRICT MUNICIPALITY HELD ON MONDAY, 25 NOVEMBER 2019 AT BREEDE VALLEY TOWN HALL

Present:

Community organisations, NGO's, NPO's and businesses from the Breede Valley, Langeberg and Witzenberg area.

IDP.1 OPENING & WELCOME

Ms Natalie Fortuin opened the day and welcome all present.

IDP.2 PURPOSE

Ms Bianca Daries, explained the purpose of the day. The fact that it is important for all stakeholders to be part of this important process so that service delivery can take place.

IDP.3 EXHIBITIONS

All stakeholders present had the opportunity to visit the departmental exhibitions in the hall. Ask relevant questions regarding projects and support. Some questions was answered on the day and the other questions will be referred to the relevant departments.

DRAFT

1. Mr Freek Masimala requests assistance for families in Avianpark, Worcester, who lost all their furniture and clothes. He would like to know how Breede Valley Municipality can assist them.
   (Organisation: Khanyisa Community Development Organisation – freek.masimala@gmail.com / 060 407 5358)
   Cape Winelands District Municipality will refer this matter to Breede Valley Municipality.

2. Ms Belinda Ameterra has the following concerns:

   3.1) Stray dogs walking around in the area.
   3.2) Open space of land between Roodewal and Hexpark is problematic.
   3.3) Aftercare for released prisoners (youth and adults)
   3.4) Problem/concern regarding gender diversity.

   (Organisation: Khulumani, S.A.N.T.A, JICS – ameterracw@gmail.com / 079 550 9816)
   Cape Winelands District Municipality will refer this matter to Breede Valley Municipality, SPCA, Cape Winelands Municipal Health Services.

3. Ms Stepheny Brown would like to enquire if there is possibly any general work available at the fire station. Ms Brown is deaf.
   (079 783 6887 – please sms)
   Cape Winelands District Municipality will refer this matter to Breede Valley Fire Services and CWDM Fire Services.

4. Pastor Mark Petersen requests a presentation regarding personal hygiene.
   (Organisation: Touwsrivier Clinic Committee – 065 970 3545)
   Cape Winelands District Municipality will refer this matter to their Municipal Health Services division.

DRAFT

5. Mr Christian Nkosi would like to know if it is acceptable for people to sleep and live in their shops. There is no ablution facilities available.
   (christian.nkosi7@gmail.com / 071 198 7795)
   Cape Winelands District Municipality will refer this matter to Stellenbosch Municipality.

6. Mr Aldridge Frazenburg requires investigation regarding Dassonberg Road, Franschoek. According to Mr Frazenburg this road is full of potholes and cannot be used.
   (Organisation: Stellenbosch Municipality – aldridge.frazenburg@stellenbosch.gov.za)

   Cape Winelands District Municipality will refer this matter to their Technical Department.

7. Mr Joffrey Jack would like to know why Cape Winelands gave Boland Rugby R100 000 for Sports Awards.
   (Organisation: Breede Valley Municipality – jjack@bvm.gov.za / 072 956 2047)
   Cape Winelands District Municipality will refer this matter to their Rural and Social department.

8. Mr T.C Botha request assistance regarding firefighting resources eg. Fire fighting vehicles and equipment.
   (Organisation: Breede Valley Fire Department – tbotha@bvm.gov.za / 082 924 6514)
   Cape Winelands District Municipality will respond to this matter.

DRAFT

9. According to Ms Stephany Brown most deaf school's highest qualification is grade 9. Ms Brown would like to enquire whether the department cannot accommodate the deaf people in this regard.
   (Organisation: 063 761 9275 sms only)
   Cape Winelands District Municipality will refer this matter to the Western Cape Education Department.

10. Mr Freek Masimala would like to know why it takes so long to establish the CPF, CSF and neighbourhood watches in Avianpark, Worcester.
   (Organisation: Khanyisa Community Development Organisation – freek.masimala@gmail.com / 060 407 5356)
   Cape Winelands District Municipality will refer this matter to Department of Community Safety.

11. Mr Japie Visser are in need of ablution facilities for their cricket club.
   (Organisation: Hartwig Lions Cricket Club – japievisser42@gmail.com / 078 646 3310)
   Cape Winelands District Municipality will refer this matter to their Rural and Social Department.

12. Ms Shayma Fredericks requested signage board to rural schools in the Cape Winelands area, this is a real need for the public.
   (Organisation: Western Cape Education Department – Shayma.fredericks@westerncape.gov.za)
   Cape Winelands District Municipality will refer this matter to their Tourism department.

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13. Ms Elmarie de Lange requests assistance with pamphlets and posters.
    (Organisation: ACVV Trippeltoontjies – 072 202 0047)
    Cape Winelands District Municipality will refer this matter to their Rural and Social Department.

14. Ms Belinda Ameterra requests aftercare facility for training of ex-offenders in different skills.
    (Organisation: S.A.N.T.A , JICS – 079 550 9816)
    Cape Winelands District Municipality will refer this matter to their Rural and Social Department.

15. Worcester House of Hope requests sign language posters and "It's my life DVD).
    Cape Winelands District Municipality will refer this matter to their Rural and Social Department.

16. Pastor M Mngqkana requests assistance with an event on 19 January 2020.
    (Organisation: Zwelethemba Miniters – 072 358 7335)
    Cape Winelands District Municipality will refer this matter to their Rural and Social Department.

17. Mr Robin Roux would like to know if Cape Winelands can assist in monthly testing of aftercare patients. (drugs)
    (Organisation: Road to recovery – robinroux@gmail.com)
    Cape Winelands District Municipality will refer this matter to their Rural and Social Department.

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18. Mr Isidore Ndimah requests a meeting between Roux Park Deaf Football Club, SAFA Winelands, Cape Winelands Sport Council and CWDM Rural and Social department. The Roux Park Deaf Football Club is affiliated with SAFA-Winelands. They need assistance as their team participate in national matches in South Africa. Their next match is taking place in August 2020.

    (Organisation: NID – isidore_7@yahoo.co.uk)

    Cape Winelands District Municipality will refer this matter to their Rural and Social Department.

19. Ms Tanya Carstens would like to know what projects has been identified by CWDM and the budget for those projects.

    (Organisation: Cape Winelands Farmworkers Sport Rec Ass. – tanya.carstens82@gmail.com / 084 271 7516)

    Cape Winelands District Municipality will refer this matter to their Rural and Social Department.

20. Mr Pieter Verhoog requests First Aid course for soccer coaches.

    (Organisation: Worcester Distrkte Sokker – pcverhoog58@gmail.com 082 787 9201*)*

    Cape Winelands District Municipality will refer this matter to their Rural and Social Department.

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IDP.4 ADDITIONAL QUESTIONS

After the exhibitions some additional questions was asked:

21. Mr B Sofuthi requests assistance for ECD centres. He also thinks this exhibitions must be taken to the community. It was a good idea.

(Organisation: Zwelethemba Youth Development Forum – 061 018 9490)

Cape Winelands District Municipality will refer this matter to their Rural and Social department.

22. Ms Alexis Murray has no matric. Ms Murray needs assistance in obtaining her matric as she only has skills training experience. Ms Murray is deaf.

(Organisation: NID assistant teacher – 065 956 3006 sms only)

Cape Winelands District Municipality will refer this matter to Western Cape Education Department.

23. Mr Robin Roux would like to enquire if there is any budget set out for substance abuse in the Western Cape.

(Organisation: Aftercare support group – robinroux088@gmail.com / 078 604 5089)

Cape Winelands District Municipality will refer this matter to the Department of Social Development.

24. Mr A.R Botes has the following concerns:

2.1) A school in Touwsriver is very neglected and should be looked after by department.
2.2) Certain roads are not tarred in Touwsriver.
2.3) Rugby field neglected, in need of fencing and club house.
2.4) Request that Breede Valley Municipality assist with land for crèche and structures.

(Organisation: Ward council member, Touwsriver – A.Rbotes@yahoo.com / 073 197 1590)

Cape Winelands District Municipality will refer this matter to Breede Valley Municipality, Western Cape Education Department and Cape Winelands Technical Department.

IDP.5 WAY FORWARD

Ms Bianca Daries, thanked each and every one for their valuable inputs. She also reiterated the fact that the stakeholders have ample time to forward their concerns or issues, before May 2020 when we will be going to council to approve the 3rd Review IDP.

IDP.6 CLOSING

Ms Bianca Daries closed the session and wished everyone a safe journey home.

- IDP/Budget Consultation meetings to be held on 15 and 21 April 2020.
- Mayoral Business Breakfast to be held on 6 April 2020.

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2.2 IDP / Budget Public Participation Road Map

CWDM IDP/BUDGET Road Map for Public Participation 2019/20

MUNICIPALITY	VENUE	Public Participation DATES	IDP/Budget Consultation DATES
PUBLIC PARTICIPATION			
Stellenbosch	Wards	18 – 26 September 2019	7 – 22 April 2020
Drakenstein	Wards	15 Sept – 10 Oct 2019	5 – 30 April 2020
Witzenberg	Wards	1 – 15 Oct 2019	1 – 16 April 2020
Breede Valley	Wards	Oct 2019	30 March – 20 April 2020
Langeberg	Wards	TBC	TBC
DISTRICT CONSULTATION MEETINGS			
CWDM Public Participation Meetings	Worcester and Stellenbosch	18 and 25 November 2019	
CWDM IDP/Budget Consultation Meetings	Worcester and Paarl	15 and 21 April 2020	
Mayoral Business Breakfast	TBC	6 April 2020	
BUDGET PROCESS			
Financial analysis	CWDM Office Stellenbosch	September 2020	December 2020
Programmes, Projects & Preliminary Capital Budget	CWDM Office Stellenbosch	September 2020	December 2020
Priorities and Outputs	CWDM Office Stellenbosch	September 2020	December 2020
Operating Budget	CWDM Office Stellenbosch	September 2020	December 2020
Final Approval of IDP, PMS and Annual Budget	CWDM Office Stellenbosch	May 2020	

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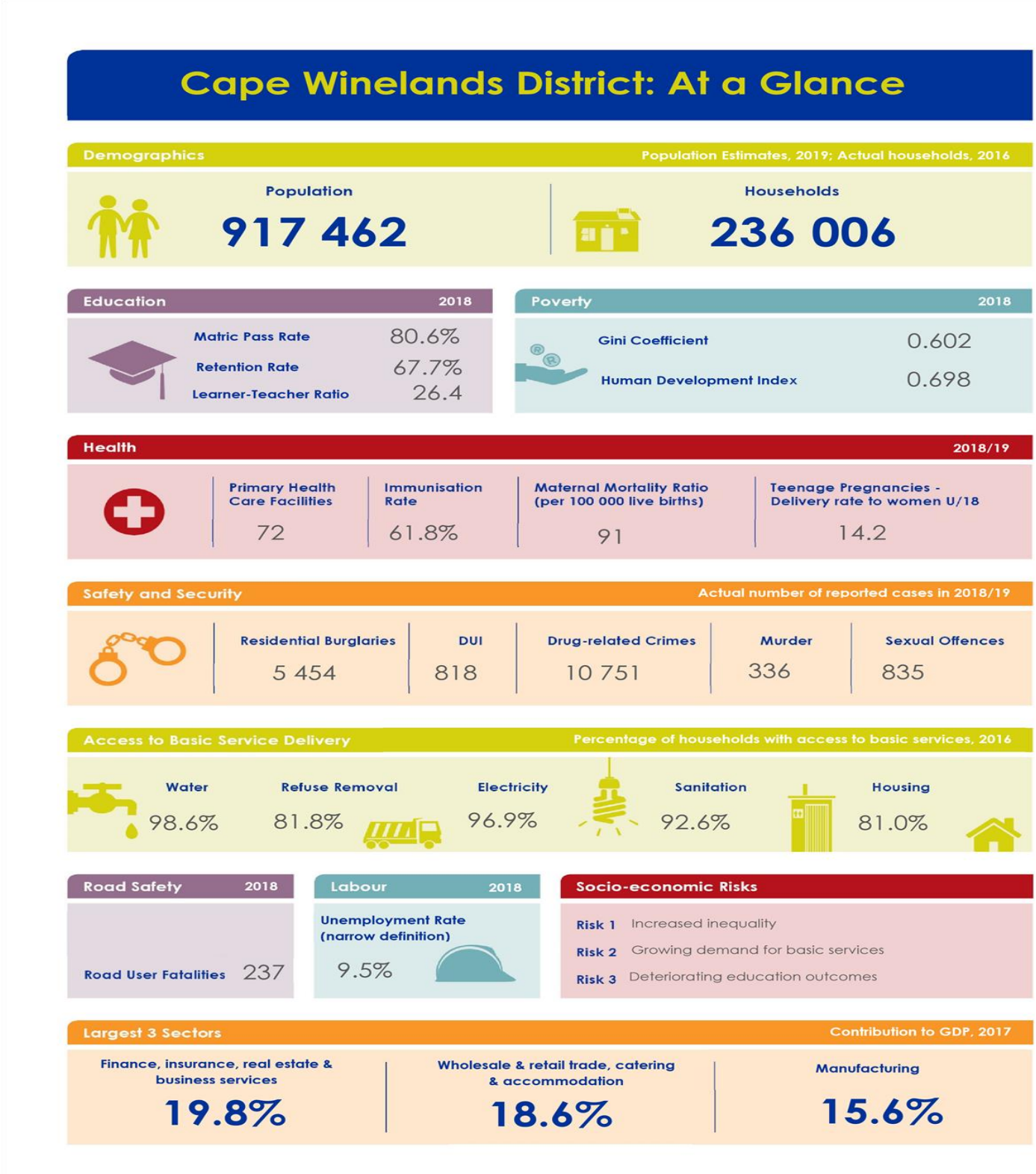
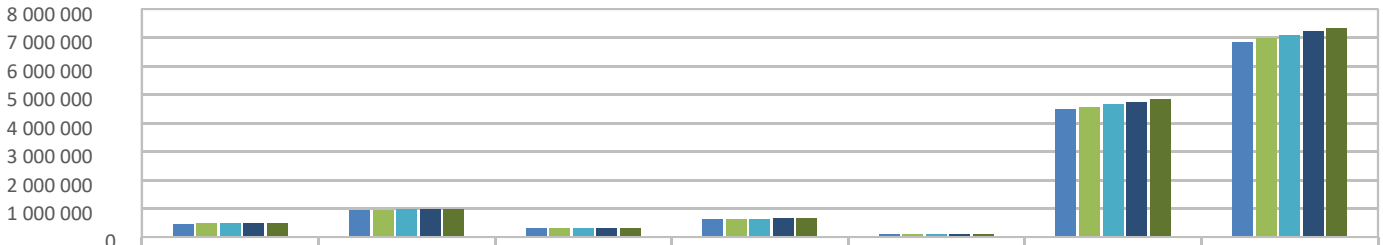
3.1 Cape Winelands Socio-Economic Snapshot



2019 Socio-economic Profile: Cape Winelands District Municipality

POPULATION



	West Coast	Cape Winelands	Overberg	Garden Route	Central Karoo	City of Cape Town	Western Cape
2019	455 881	917 462	299 841	622 664	73 218	4 475 207	6 844 272
2020	464 346	933 947	305 496	627 252	73 333	4 563 456	6 967 832
2021	472 794	950 578	311 214	631 564	73 394	4 651 842	7 091 387
2022	481 257	967 284	317 053	636 320	73 581	4 739 448	7 214 942
2023	483 550	975 614	319 293	643 134	74 757	4 842 149	7 338 498

With a population of 917 462 in 2019, the Cape Winelands District (CWD) is by far the most populated municipal district (with the exception of the metro) in the Western Cape. This total is expected to grow to 975 614 by 2023, equating to an average annual growth rate of 1.5 per cent which is slightly lower when compared to the Western Cape average annual growth rate of 1.8 per cent across the same period.

All Districts: Sex Ratio (SR), 2019 – 2023					
Municipality	**2019**	**2020**	**2021**	**2022**	**2023**
City of Cape Town	97.3	97.5	97.6	97.8	97.9
West Coast	98.2	98.3	98.4	98.4	98.4
Cape Winelands	**97.7**	**97.6**	**97.6**	**97.5**	**97.7**
Overberg	101.7	101.5	101.4	101.3	101.8
Garden Route	94.4	94.	94.0	93.9	92.9
Central Karoo	92.4	92.1	91.7	91.6	91.4
Western Cape	**97.3**	**97.4**	**97.4**	**97.5**	**97.5**

2019 Socio-economic Profile: Cape Winelands District Municipality

The overall sex ratio (SR) depicts the number of males per 100 females in the population (Moultrie et al., 2013: 9). As per above table, there are less males than females in the CWD

as well as the Western Cape in general. The SR for the CWD remains mostly stable towards 2023.

Overberg is the only district with more males per 100 females.

POPULATION DENSITY

Colour Code	Population per km²
	0 – 10
	11 – 20
	21 – 30
	31 – 40
	41 - 50
	50+

Amidst rapid urbanisation across the Western Cape, population density figures will aid public sector decision makers to mitigate environmental, individual health and service delivery risks.

In 2019, the population density of the Cape Winelands District (CWD) was 43 persons per square kilometre. In order of highest to lowest, the various local municipal areas in the CWD compare as follows:

- Stellenbosch 224 people/km²
- Drakenstein 185 people/km²
- Breede Valley 49 people/km²
- Langeberg 26 people/km²
- Witzenberg 13 people/km²



2019 Socio-economic Profile: Cape Winelands District Municipality

PUBLIC INFRASTRUCTURE SPEND

Successfully leveraging infrastructure investment as a catalyst for broad-based economic growth and development can however only be achieved through combined and complimentary contributions from all public sector spheres as well as the private sector.

The OPMII compared the 2019/10 MTREF infrastructure commitments made by the Western Cape Government (WCG) within the geographical jurisdiction of a local municipality to the capital budget contributions made by the various local municipalities themselves. As the provincial and municipal financial years do not fully align, the municipal capital budget information was sourced from the approved 2018/19 MTREF budgets. The 2019/20 municipal capital budget spend detailed in the OPMII therefore referred to the outer year estimates and not actual committed funds.

With the approval of the 2019/20 MTREF municipal budgets, Provincial Treasury is for the first time able to compare actually 2019/20 provincial and municipal infrastructure budget commitments.

PROVINCIAL INFRASTRUCTURE SPEND

Provincial infrastructure spend within the geographical boundaries of the CWD municipal area will amount to ***R764.3 million*** across the 2019/20 MTREF.

Cape Winelands District: Provincial Infrastructure Investments, 2019/20 MTREF (R'000)				
Vote	**2019/20**	**2020/21**	**2021/22**	**Total**
Health	2 042	11 217	336	**13 595**
Human Settlements	23 580	11 310	-	**34 890**
Transport and Public Works	208 595	220 548	286 685	**715 828**
Total	**234 217**	**243 075**	**287 021**	**764 313**

2019 Socio-economic Profile: Cape Winelands District Municipality

Provincial infrastructure commitments towards the CWD will mainly be directed towards the road transport and public works function. An amount of R715.828 million over the MTREF will be applied towards general re-gravelling projects and routine maintenance works. These allocations will contribute to the maintenance of the strategic advantage of the road network. Allocations of R34.890 million will also be made towards the housing function over the MTREF. An amount of R13.595 is also attributed to health infrastructure projects over the 2019/20 MTREF.

MUNICIPAL INFRASTRUCTURE SPEND

As per schedule A5 in the approved 2019/20 budget, the CWD Municipality's capital budget will amount to ***R96.2 million*** across the 2019/20 MTREF.

Cape Winelands District Municipality: Capital Budget, 2019/20 MTREF (R'000)				
Functional Classification	**2019/20**	**2020/21**	**2021/22**	**Total**
Governance and Administration	12 610	10 034	3 069	**25 713**
Community and Public Safety	15 898	6 677	7 501	**30 076**
Economic and Environmental Services	14 143	17 120	9 120	**40 383**
Total	**42 650**	**33 831**	**19 690**	**96 171**

Given its function as a category C local government establishment, the Municipality is not responsible to provide a basket of basic services, hence no allocations are made towards trading services. Allocations made above are rather directed towards the Municipality's administrative functions relating to health services, planning and development as well as disaster management.

2019 Socio-economic Profile: Cape Winelands District Municipalit

CAPE WINELANDS DISTRICT MUNICIPALITY: PLANNED AND ESTIMATED PROVINCIAL EXPENDITURE FOR INFRASTRUCTURE FOR THE MTEF PERIOD 2020/21 – 2022/23

The infrastructure projects and related capital projects are in various stages of implementation, with some being in the planning phase, others in implementation with construction happening, and some are in the process of being finalized and therefore in the 'close-out' phase. The information may be subject to change, depending on fiscal constraints and the availability of resources. The Provincial and National allocations summary for your Municipality will also follow.

Summary: Cape Winelands District Municipality

Department	Number of Projects	Value			
		New Infrastructure Asset	Upgrades, Additions, Maintenance, Rehabilitation	Infrastructure transfers & Other	Total Value
Education	8	281000	21000	0	302000
Environmental Affairs & Development Planning	1	0	2820	0	2820
Health	49	77612	162114	44958	284684
Human Settlements	49	0	0	787383	787383
Social Development	1	0	0	180	180
Transport & Public Works	33	0	0	2423461	2423461
Total MTEF Period	**141**	**358612**	**185934**	**3255982**	**3800528**

**All amounts rounded to R'000*

To follow:

Annexures A: Table showing the list of Provincial Infrastructure Investment Projects in the Cape Winelands District for the MTEF period 2020/21 – 2022/23

Annexure B: Maps showing the spatial distribution of Provincial Infrastructure Investment projects in the Cape Winelands District for the MTEF period 2020/21 – 2022/23

Source: Western Cape Government: Provincial Treasury. Overview of Provincial and Municipal Infrastructure Investment 2020. ISBN: 978-0-621-48192-1. Published March 2020.

Annexure A

List of Provincial Infrastructure Investment Projects in the Cape Winelands District Municipality for the MTEF period 2020/21 – 2022/23

Department	Project Programme Name	Infrastructure type	Municipality	Nature of Investment	2020/21 MTEF	2021/22 MTEF	2022/23 MTEF	TOTAL 3 YEARS
Education	DTPW073/2014: Dal Josaphat PS CWXXS1	Mega Primary Schools	Drakenstein Municipality	New infrastructure assets	10000	25000	25000	60000
Education	DTPW017/2015: P.C. Peterson PS	Mega Primary Schools	Stellenbosch Municipality	New infrastructure assets	6000	0	0	6000
Education	DTPW075/2013: Stofland PS	Mega Primary Schools	Breede Valley Municipality	New infrastructure assets	5000	0	0	5000
Education	DTPW050/2014: Waveren SS	Mega Secondary Schools	Witzenberg Municipality	New infrastructure assets	25000	25000	0	50000
Education	Tulbagh HS	Mega Secondary Schools	Witzenberg Municipality	Upgrades and additions	6000	0	0	6000
Education	Worcester Prep School	Mega Primary Schools	Breede Valley Municipality	Upgrades and additions	5000	5000	0	10000
Education	Agricultural	Mega Secondary Schools	Stellenbosch Municipality	New infrastructure assets	25000	90000	45000	160000
Education	Aviation	Small Primary Schools	Stellenbosch Municipality	Upgrades and additions	5000	0	0	5000
Health	CH810013 : De Doorns - De Doorns CDC - HT - Upgrade and Additions	Health Technology	Breede Valley Municipality	Non Infrastructure	0	0	100	100
Health	CH810032 : Gouda - Gouda Clinic - HT - Replacement	Health Technology	Drakenstein Municipality	Non Infrastructure	1000	1050	0	2050
Health	CH810074 : Paarl - Paarl CDC - HT – New	Health Technology	Drakenstein Municipality	Non Infrastructure	0	0	4000	4000

Source: Western Cape Government: Provincial Treasury. Overview of Provincial and Municipal Infrastructure Investment 2020. ISBN: 978-0-621-48192-1. Published March 2020.

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Department	Project Programme Name	Infrastructure type	Municipality	Nature of Investment	2020/21 MTEF	2021/22 MTEF	2022/23 MTEF	TOTAL 3 YEARS
Health	CH810101 : Worcester - Avian Park Clinic - HT - New	Health Technology	Breede Valley Municipality	Non Infrastructure	1000	1500	1500	4000
Health	CH810162 : Wellington - Windmeul Clinic - HT - Upgrade and Additions (Alpha)	Health Technology	Drakenstein Municipality	Non Infrastructure	1500	0	0	1500
Health	CH810183 : De Doorns - Orchard Clinic - HT - Upgrade and Additions (Alpha)	Health Technology	Breede Valley Municipality	Non Infrastructure	616	0	0	616
Health	CH810210 : Ceres - Ceres CDC - HT - General upgrade, extension and maintenance	Health Technology	Witzenberg Municipality	Non Infrastructure	1000	1000	0	2000
Health	CH810218 : Paarl - Dalevale Clinic - HT - General maintenance (Alpha)	Health Technology	Drakenstein Municipality	Non Infrastructure	800	200	0	1000
Health	CH810224 : Stellenbosch - Cloetesville CDC - HT - General maintenance (Alpha)	Health Technology	Stellenbosch Municipality	Non Infrastructure	1000	2416	0	3416
Health	CH810225 : Tulbagh - Tulbagh Clinic - HT - Structural repair	Health Technology	Witzenberg Municipality	Non Infrastructure	1200	200	0	1400
Health	CH810228 : Wellington - Saron Clinic - HT - General maintenance and upgrade (Alpha)	Health Technology	Drakenstein Municipality	Non Infrastructure	700	0	0	700
Health	CH810254 : Ceres - Bella Vista Clinic - HT - General maintenance (Alpha)	Health Technology	Witzenberg Municipality	Non Infrastructure	500	500	0	1000

Source: Western Cape Government: Provincial Treasury. Overview of Provincial and Municipal Infrastructure Investment 2020. ISBN: 978-0-621-48192-1. Published March 2020.

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Department	Project Programme Name	Infrastructure type	Municipality	Nature of Investment	2020/21 MTEF	2021/22 MTEF	2022/23 MTEF	TOTAL 3 YEARS
Health	CH820002 : De Doorns - De Doorns Ambulance Station - HT - Replacement	Health Technology	Breede Valley Municipality	Non Infrastructure	300	0	0	300
Health	CH820032 : Bonnievale - Bonnievale Ambulance Station - HT - Upgrade and Additions incl wash bay	Health Technology	Langeberg Municipality	Non Infrastructure	100	0	0	100
Health	CH830034 : Montagu - Montagu Hospital - HT - Rehabilitation	Health Technology	Langeberg Municipality	Non Infrastructure	0	0	1000	1000
Health	CH830044 : Robertson - Robertson Hospital - HT - Acute Psychiatric Ward and New EC	Health Technology	Langeberg Municipality	Non Infrastructure	0	0	1000	1000
Health	CH830114 : Ceres - Ceres Hospital - HT - New Acute Psychiatric Ward	Health Technology	Witzenberg Municipality	Non Infrastructure	415	50	0	465
Health	CH830122 : Stellenbosch - Stellenbosch Hospital - HT - Hospital and Stores Repairs and Renovation	Health Technology	Stellenbosch Municipality	Non Infrastructure	0	0	2000	2000
Health	CH840061 : Worcester - Worcester Hospital - HT - Relocation of MOU	Health Technology	Breede Valley Municipality	Non Infrastructure	500	655	1000	2155

Source: Western Cape Government: Provincial Treasury. Overview of Provincial and Municipal Infrastructure Investment 2020. ISBN: 978-0-621-48192-1. Published March 2020.

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Department	Project Programme Name	Infrastructure type	Municipality	Nature of Investment	2020/21 MTEF	2021/22 MTEF	2022/23 MTEF	TOTAL 3 YEARS
Health	CI810013 : De Doorns - De Doorns CDC - Upgrade and Additions	PHC - Community Day Centre	Breede Valley Municipality	Upgrades and additions	1285	8660	10434	20379
Health	CI810032 : Gouda - Gouda Clinic - Replacement	PHC - Clinic	Drakenstein Municipality	New infrastructure assets	7422	8592	830	16844
Health	CI810074 : Paarl - Paarl CDC - New	PHC - Community Day Centre	Drakenstein Municipality	New infrastructure assets	2387	5456	13978	21821
Health	CI810074-0001 : Paarl - Paarl CDC - Enabling work incl fencing to secure new site	PHC - Community Day Centre	Drakenstein Municipality	Upgrades and additions	1000	3000	7366	11366
Health	CI810079 : Prince Alfred Hamlet - Prince Alfred Hamlet Clinic - Replacement	PHC - Clinic	Witzenberg Municipality	New infrastructure assets	1	0	0	1
Health	CI810085 : Robertson - Robertson CDC - New	PHC - Community Day Centre	Langeberg Municipality	New infrastructure assets	0	0	1	1
Health	CI810100 : Wolseley - Wolseley Clinic - Replacement	PHC - Clinic	Witzenberg Municipality	New infrastructure assets	440	0	0	440
Health	CI810101 : Worcester - Avian Park Clinic - New	PHC - Clinic	Breede Valley Municipality	New infrastructure assets	8574	16019	10	24603
Health	CI810162 : Wellington - Windmeul Clinic - Upgrade and Additions (Alpha)	PHC - Clinic	Drakenstein Municipality	Upgrades and additions	171	1562	82	1815
Health	CI810179 : Worcester - Empilisweni Clinic - Upgrade and Additions (Alpha)	PHC - Clinic	Breede Valley Municipality	Upgrades and additions	0	0	108	108

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Source: Western Cape Government: Provincial Treasury. Overview of Provincial and Municipal Infrastructure Investment 2020. ISBN: 978-0-621-48192-1. Published March 2020.

Department	Project Programme Name	Infrastructure type	Municipality	Nature of Investment	2020/21 MTEF	2021/22 MTEF	2022/23 MTEF	TOTAL 3 YEARS
Health	CI820002 : De Doorns - De Doorns Ambulance Station - Replacement	Ambulance/EMS station	Breede Valley Municipality	New infrastructure assets	12259	1642	0	13901
Health	CI820032 : Bonnievale - Bonnievale Ambulance Station - Upgrade and Additions incl wash bay	Ambulance/EMS station	Langeberg Municipality	Upgrades and additions	27	0	0	27
Health	CI830034 : Montagu - Montagu Hospital - Rehabilitation	Hospital - District	Langeberg Municipality	Refurbishment and rehabilitation	723	2260	9887	12870
Health	CI830044 : Robertson - Robertson Hospital - Acute Psychiatric Ward and New EC	Hospital - District	Langeberg Municipality	Upgrades and additions	861	6748	13679	21288
Health	CI830114 : Ceres - Ceres Hospital - New Acute Psychiatric Ward	Hospital - District	Witzenberg Municipality	Upgrades and additions	3812	216	416	4444
Health	CI830120 : Ceres - Ceres Hospital - Hospital and Nurses Home Repairs and Renovation	Hospital - District	Witzenberg Municipality	Refurbishment and rehabilitation	610	4596	12674	17880
Health	CI830122 : Stellenbosch - Stellenbosch Hospital - Hospital and Stores Repairs and Renovation	Hospital - District	Stellenbosch Municipality	Refurbishment and rehabilitation	643	13073	12300	26016
Health	CI840023 : Paarl - Paarl Hospital - Acute Psychiatric Unit	Hospital - Regional	Drakenstein Municipality	New infrastructure assets	1	0	0	1

Source: Western Cape Government: Provincial Treasury. Overview of Provincial and Municipal Infrastructure Investment 2020. ISBN: 978-0-621-48192-1. Published March 2020.

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Department	Project Programme Name	Infrastructure type	Municipality	Nature of Investment	2020/21 MTEF	2021/22 MTEF	2022/23 MTEF	TOTAL 3 YEARS
Health	CI840053 : Worcester - Worcester Hospital - Fire Compliance	Hospital - Regional	Breede Valley Municipality	Refurbishment and rehabilitation	2996	8024	123	11143
Health	CI840061 : Worcester - Worcester Hospital - Relocation of MOU	Hospital - Regional	Breede Valley Municipality	Refurbishment and rehabilitation	378	7685	5	8068
Health	CI840089 : Paarl - Paarl Hospital - New Obstetric Theatre in Maternity Unit	Hospital - Regional	Drakenstein Municipality	Upgrades and additions	1368	1535	97	3000
Health	CI860023 : Worcester - WCCN Boland Campus - Nurses Accommodation at Erica Hostel, R & R	Nursing College	Breede Valley Municipality	Refurbishment and rehabilitation	1	0	0	1
Health	CI860024 : Worcester - WCCN Boland Campus - Additional Nurses Accommodation - Erica Hostel	Nursing College	Breede Valley Municipality	Upgrades and additions	155	0	0	155
Health	CI860025 : Worcester - WCCN Boland Campus - Training Facility at Keerom	Nursing College	Breede Valley Municipality	Upgrades and additions	1994	5417	16143	23554
Health	CO810074 : Paarl - Paarl CDC - OD QA - New	Organisational development	Drakenstein Municipality	Non Infrastructure	130	130	0	260
Health	CO810085 : Robertson - Robertson CDC - OD QA - New	Organisational development	Langeberg Municipality	Non Infrastructure	0	0	50	50
Health	CO810090 : Stellenbosch - Kayamandi Clinic - OD QA - Upgrade and Additions (Alpha)	Organisational development	Stellenbosch Municipality	Non Infrastructure	0	0	100	100

Source: Western Cape Government: Provincial Treasury. Overview of Provincial and Municipal Infrastructure Investment 2020. ISBN: 978-0-621-48192-1. Published March 2020.

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Department	Project Programme Name	Infrastructure type	Municipality	Nature of Investment	2020/21 MTEF	2021/22 MTEF	2022/23 MTEF	TOTAL 3 YEARS
Health	CO810101 : Worcester - Avian Park Clinic - OD QA - New	Organisational development	Breede Valley Municipality	Non Infrastructure	0	100	0	100
Health	CO860078 : Worcester - Winelands & Overberg District HT Hub - Infrastructure Support	Capacitation, project and SCM support	Breede Valley Municipality	Non Infrastructure	1373	1879	2002	5254
Health	CO860082 : Worcester - Winelands & Overberg District Maintenance Hub - Infrastructure Support	Capacitation, project and SCM support	Breede Valley Municipality	Non Infrastructure	3292	3609	3491	10392
Social Development	Emmanuel Touwsrivier	ECD Centre	Breede Valley Municipality	Infrastructure transfers - Current	180	0	0	180
Human Settlements	Breede Valley: Worcester: New Mandela Square - 1800	Municipal project: Top Structures	Breede Valley Municipality	Infrastructure transfers - Capital	3250	0	0	3250
Human Settlements	Breede Valley: Worcester: Transhex - 2546 Services IRDP Ph1	Municipal project: Services	Breede Valley Municipality	Infrastructure transfers - Capital	133080	0	0	133080
Human Settlements	Breede Valley: Worcester: Zwelethemba: Erf 1 North of Mandela: 2000 Sites - UISP	Municipal project: Planning	Breede Valley Municipality	Infrastructure transfers - Capital	3000	6000	6000	15000
Human Settlements	Breede Valley: Worcester: Fisher Street: 307 Sites - IRDP	Municipal project: Planning	Breede Valley Municipality	Infrastructure transfers - Capital	0	0	1000	1000

Source: Western Cape Government: Provincial Treasury. Overview of Provincial and Municipal Infrastructure Investment 2020. ISBN: 978-0-621-48192-1. Published March 2020.

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Department	Project Programme Name	Infrastructure type	Municipality	Nature of Investment	2020/21 MTEF	2021/22 MTEF	2022/23 MTEF	TOTAL 3 YEARS
Human Settlements	Breede Valley: Worcester: Avian Park: Albatros Str - Rem Erf 1 - 900 - IRDP	Municipal project: Planning	Breede Valley Municipality	Infrastructure transfers - Capital	0	0	2000	2000
Human Settlements	Drakenstein: Paarl: Vlakkeland - IRDP 959 Ph1 2500 Ph2	Municipal project: Services	Drakenstein Municipality	Infrastructure transfers - Capital	44720	71250	113000	228970
Human Settlements	Drakenstein: Paarl: Mbekweni - 400	Municipal project: Planning	Drakenstein Municipality	Infrastructure transfers - Capital	1200	0	0	1200
Human Settlements	Drakenstein: Paarl, Lovers Lane: 168 Sites	Municipal project: Services	Drakenstein Municipality	Infrastructure transfers - Capital	2000	7080	0	9080
Human Settlements	Drakenstein: Paarl, Chester Williams: Planning 139 Sites - UISP	Municipal project: Services	Drakenstein Municipality	Infrastructure transfers - Capital	2000	5340	0	7340
Human Settlements	Drakenstein: Paarl: Simondium Erf 115 - 400 - IRDP planning	Municipal project: Planning	Drakenstein Municipality	Infrastructure transfers - Capital	2000	0	0	2000
Human Settlements	Drakenstein: Lantana (84)	Municipal project: Top Structures	Drakenstein Municipality	Infrastructure transfers - Capital	4750	0	0	4750
Human Settlements	Drakenstein: Siyahlala (243)	Municipal project: Top Structures	Drakenstein Municipality	Infrastructure transfers - Capital	1300	0	0	1300
Human Settlements	Drakenstein: Fairylands (250)	Municipal project: Top Structures	Drakenstein Municipality	Infrastructure transfers - Capital	2080	0	0	2080
Human Settlements	Drakenstein: Schoongezicht - 347 sites - IRDP	Municipal project: Services	Drakenstein Municipality	Infrastructure transfers - Capital	11220	0	0	11220

Source: Western Cape Government: Provincial Treasury. Overview of Provincial and Municipal Infrastructure Investment 2020. ISBN: 978-0-621-48192-1. Published March 2020.

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Department	Project Programme Name	Infrastructure type	Municipality	Nature of Investment	2020/21 MTEF	2021/22 MTEF	2022/23 MTEF	TOTAL 3 YEARS
Human Settlements	Mbekweni roofing	Municipal project: Top Structures	Drakenstein Municipality	Infrastructure transfers - Capital	5000	0	0	5000
Human Settlements	Paarl Dignified Informal Settlements UISP (298)	Municipal project: Planning	Drakenstein Municipality	Infrastructure transfers - Capital	2000	6000	6000	14000
Human Settlements	Langeberg: McGregor: 531 Services: Planning Fees	Municipal project: Top Structures	Langeberg Municipality	Infrastructure transfers - Capital	7540	0	0	7540
Human Settlements	Langeberg: Robertson: Robertson Heights Erf 2981 - 106	Municipal project: Top Structures	Langeberg Municipality	Infrastructure transfers - Capital	0	11340	0	11340
Human Settlements	Langeberg: Bonnievale: Boekenhoutskloof - 563 - UISP	Municipal project: Planning	Langeberg Municipality	Infrastructure transfers - Capital	375	13440	0	13815
Human Settlements	Langeberg: Montagu: Mandela Square Remainder Erf 937: Planning 269 Sites - IRDP	Municipal project: Planning	Langeberg Municipality	Infrastructure transfers - Capital	375	10380	0	10755
Human Settlements	Langeberg: Robertson Nkqubela	Municipal project: Top Structures	Langeberg Municipality	Infrastructure transfers - Capital	0	22360	0	22360
Human Settlements	Stellenbosch: Klapmuts: 1067 Services: IRDP	Municipal project: Services	Stellenbosch Municipality	Infrastructure transfers - Capital	15540	0	0	15540
Human Settlements	Stellenbosch: Longlands - 106 - IRDP	Municipal project: Services	Stellenbosch Municipality	Infrastructure transfers - Capital	4640	11180	0	15820
Human Settlements	Stellenbosch: Jamestown 162 Services & 162 T/S IRDP	Municipal project: Top Structures	Stellenbosch Municipality	Infrastructure transfers - Capital	0	500	0	500

Source: Western Cape Government: Provincial Treasury. Overview of Provincial and Municipal Infrastructure Investment 2020. ISBN: 978-0-621-48192-1. Published March 2020.

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Department	Project Programme Name	Infrastructure type	Municipality	Nature of Investment	2020/21 MTEF	2021/22 MTEF	2022/23 MTEF	TOTAL 3 YEARS
Human Settlements	Stellenbosch: De Novo - 1300	Municipal project: Planning	Stellenbosch Municipality	Infrastructure transfers - Capital	6700	6000	0	12700
Human Settlements	Stellenbosch: Idas Valley: 450 - IRDP	Municipal project: Services	Stellenbosch Municipality	Infrastructure transfers - Capital	8570	0	0	8570
Human Settlements	Stellenbosch: Kayamandi Zone 0 - 541 Services UISP	Municipal project: Services	Stellenbosch Municipality	Infrastructure transfers - Capital	10680	23140	9000	42820
Human Settlements	Stellenbosch: Kayamandi: 1000 sites - UISP	Municipal project: Services	Stellenbosch Municipality	Infrastructure transfers - Capital	1000	0	0	1000
Human Settlements	Stellenbosch: Franschoek: Lamotte Old Forest Station: 442 Sites - IRDP	Municipal project: Planning	Stellenbosch Municipality	Infrastructure transfers - Capital	1000	1200	0	2200
Human Settlements	Stellenbosch: Kayamandi: Enkanini - 1300 Sites: UISP	Municipal project: Planning	Stellenbosch Municipality	Infrastructure transfers - Capital	4279	0	0	4279
Human Settlements	Stellenbosch: Northern Extension: 5200 Sites - IRDP	Municipal project: Planning	Stellenbosch Municipality	Infrastructure transfers - Capital	7000	7000	48000	62000
Human Settlements	Stellenbosch: Cloetesville FLISP: 380 Sites - IRDP	Municipal project: Planning	Stellenbosch Municipality	Infrastructure transfers - Capital	0	1000	0	1000
Human Settlements	Witzenberg: Ceres: Vredebes - 454 IRDP	Municipal project: Top Structures	Witzenberg Municipality	Infrastructure transfers - Capital	35000	40100	3000	78100
Human Settlements	Witzenberg: Wolseley: Pine Valley Extention - 560 - IRDP	Municipal project: Planning	Witzenberg Municipality	Infrastructure transfers - Capital	650	3000	6500	10150
Human Settlements	Witzenberg: Tulbagh: Erven 1366 & 1435-1443 - 225 - IRDP	Municipal project: Planning	Witzenberg Municipality	Infrastructure transfers - Capital	746	0	730	1476

Source: Western Cape Government: Provincial Treasury. Overview of Provincial and Municipal Infrastructure Investment 2020. ISBN: 978-0-621-48192-1. Published March 2020.

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Department	Project Programme Name	Infrastructure type	Municipality	Nature of Investment	2020/21 MTEF	2021/22 MTEF	2022/23 MTEF	TOTAL 3 YEARS
Human Settlements	Witzenberg: Ceres: Nduli: 188 Sites - UISP	Municipal project: Planning	Witzenberg Municipality	Infrastructure transfers - Capital	1558	11280	0	12838
Human Settlements	Robertson Nkqubela erf 136 (150)+27	Municipal project: Planning	Langeberg Municipality	Infrastructure transfers - Capital	11310	0	0	11310
Environmental Affairs and Development Planning (Cape Nature)	Vrolijkheid Sewerage Upgrade	Nature Reserves	Langeberg Municipality	Upgrades and additions	2820	0	0	2820
Transport and Public Works	CYCC-Lindelani	Secure Care Centres	Stellenbosch Municipality	Refurbishment and rehabilitation	5000	27190	41595	73785
Transport and Public Works	Modernisation Elsenburg - Main Building Phase 2 (Labs)	Office Accommodation	Stellenbosch Municipality	Refurbishment and rehabilitation	0	0	1200	1200
Transport and Public Works	Modernisation Elsenburg - Main Building Phase 1	Office Accommodation	Stellenbosch Municipality	Refurbishment and rehabilitation	15978	0	0	15978
Transport and Public Works	C820 Roberston-Bonnievale	Blacktop/Tarred Roads	Langeberg Municipality	Refurbishment and rehabilitation	4000	0	0	4000
Transport and Public Works	C749.2 PRMG Paarl-Franschoek	Blacktop/Tarred Roads	Drakenstein Municipality	Refurbishment and rehabilitation	0	140000	153000	293000
Transport and Public Works	C921 Annandale Road	Blacktop/Tarred Roads	Stellenbosch Municipality	Refurbishment and rehabilitation	2000	0	0	2000
Transport and Public Works	C974 Somerset West-Stellenbosch safety improvements	Bridges	Stellenbosch Municipality	Upgrades and additions	0	0	20000	20000

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Department	Project Programme Name	Infrastructure type	Municipality	Nature of Investment	2020/21 MTEF	2021/22 MTEF	2022/23 MTEF	TOTAL 3 YEARS
Transport and Public Works	CW DM regravel	Gravel roads	Cape Winelands District	Refurbishment and rehabilitation	24000	24500	25275	73775
Transport and Public Works	Maintenance Cape Winelands	Blacktop/Tarred Roads	Cape Winelands District	Maintenance and repair	102166	110798	112619	325583
Transport and Public Works	C914 Spier Road phase 3	Blacktop/Tarred Roads	Stellenbosch Municipality	Refurbishment and rehabilitation	0	0	50000	50000
Transport and Public Works	Haasekraal DM	Gravel roads	Cape Winelands District	Upgrades and additions	12050	0	0	12050
Transport and Public Works	C751.2 TR23/3 Gouda-Kleinbergrivier	Blacktop/Tarred Roads	Drakenstein Municipality	Refurbishment and rehabilitation	3000	0	0	3000
Transport and Public Works	C818 Ashton-Montagu	Blacktop/Tarred Roads	Langeberg Municipality	Refurbishment and rehabilitation	240000	50000	7000	297000
Transport and Public Works	Rawsonville DM	Gravel roads	Cape Winelands District	Upgrades and additions	6000	0	0	6000
Transport and Public Works	Wansbek DM	Gravel roads	Cape Winelands District	Upgrades and additions	0	0	24400	24400
Transport and Public Works	C914.2 PRMG Spier Road	Blacktop/Tarred Roads	Stellenbosch Municipality	Refurbishment and rehabilitation	65000	5000	0	70000
Transport and Public Works	C1092 PRMG Somerset West-Stellenbosch	Resealing	Stellenbosch Municipality	Refurbishment and rehabilitation	86000	0	0	86000
Transport and Public Works	C1029 Hermon-Gouda reseal & rehabilitation	Resealing	Drakenstein Municipality	Refurbishment and rehabilitation	2000	0	0	2000
Transport and Public Works	C1089 Worcester-Roberston	Resealing	Langeberg Municipality	Refurbishment and rehabilitation	3000	0	0	3000
Transport and Public Works	Maintenance CW DM	Routine Maintenance	Cape Winelands District	Maintenance and repair	62455	65580	68855	196890

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Department	Project Programme Name	Infrastructure type	Municipality	Nature of Investment	2020/21 MTEF	2021/22 MTEF	2022/23 MTEF	TOTAL 3 YEARS
Transport and Public Works	C1120 Pearl Valley	Blacktop/Tarred Roads	Drakenstein Municipality	Upgrades and additions	10000	80000	100000	190000
Transport and Public Works	C1102 PRMG Reseal Windmeul	Resealing	Drakenstein Municipality	Refurbishment and rehabilitation	155000	110000	0	265000
Transport and Public Works	C1080 Stellenbosch reseal	Resealing	Stellenbosch Municipality	Refurbishment and rehabilitation	2000	0	0	2000
Transport and Public Works	Nuy Station DM	Gravel Road	Cape Winelands District	Upgrades and additions	0	15400	4600	20000
Transport and Public Works	Drakenstein DM	Gravel Road	Cape Winelands District	Upgrades and additions	4000	11800	0	15800
Transport and Public Works	C1105 PRMG Du Toit's Kloof Pass	Resealing	Drakenstein Municipality	Refurbishment and rehabilitation	0	15000	100000	115000
Transport and Public Works	C1116 PRMG Ceres - Touwsrivier	Resealing	Witzenberg Municipality	Refurbishment and rehabilitation	0	0	75000	75000
Transport and Public Works	C1102 Reseal Windmeul	Resealing	Drakenstein Municipality	Refurbishment and rehabilitation	0	0	4000	4000
Transport and Public Works	C1128 Worcester-Wolseley	Resealing	Witzenberg Municipality	Refurbishment and rehabilitation	18000	1000	0	19000
Transport and Public Works	C1091 Ashton-Swellendam	Resealing	Witzenberg Municipality	Refurbishment and rehabilitation	40000	1000	0	41000
Transport and Public Works	C1142 Rehab Simondium reseal	Resealing	Drakenstein Municipality	Refurbishment and rehabilitation	0	0	80000	80000
Transport and Public Works	C1140 Reseal De Droons	Resealing	Breede Valley Municipality	Refurbishment and rehabilitation	0	20000	2000	22000

Source: Western Cape Government: Provincial Treasury. Overview of Provincial and Municipal Infrastructure Investment 2020. ISBN: 978-0-621-48192-1. Published March 2020.

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Department	Project Programme Name	Infrastructure type	Municipality	Nature of Investment	2020/21 MTEF	2021/22 MTEF	2022/23 MTEF	TOTAL 3 YEARS
Transport and Public Works	C749.2 PRMG Paarl-Franschoek	Blacktop/Tarred Roads	Drakenstein Municipality	Refurbishment and rehabilitation	15000	0	0	15000
TOTAL					**1363746**	**1187632**	**1249150**	**3800528**

**All amounts rounded to R'000*

Source: Western Cape Government: Provincial Treasury. Overview of Provincial and Municipal Infrastructure Investment 2020. ISBN: 978-0-621-48192-1. Published March 2020.

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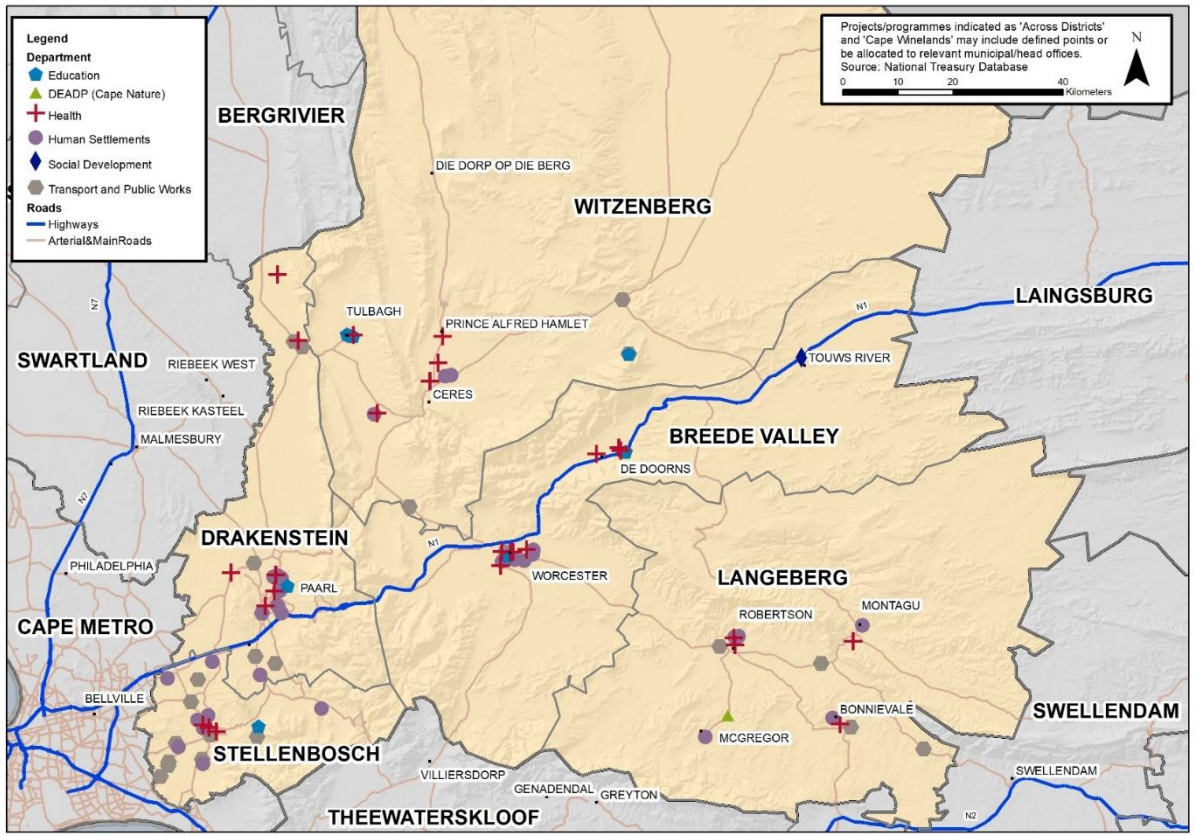
Maps showing the spatial distribution of Provincial Infrastructure Investment projects in the Cape Winelands District Municipality for the MTEF period 2020/21 – 2022/23



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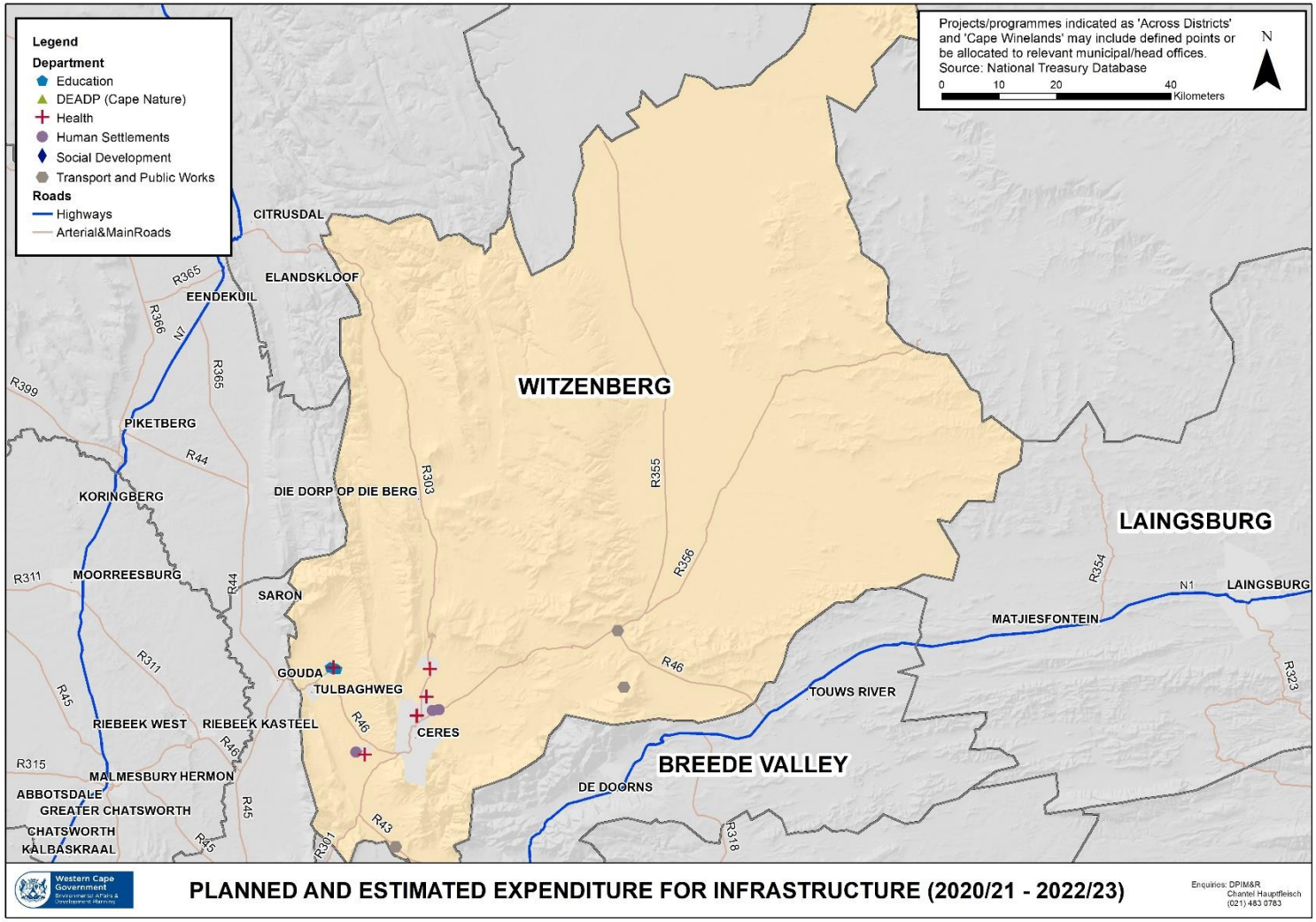

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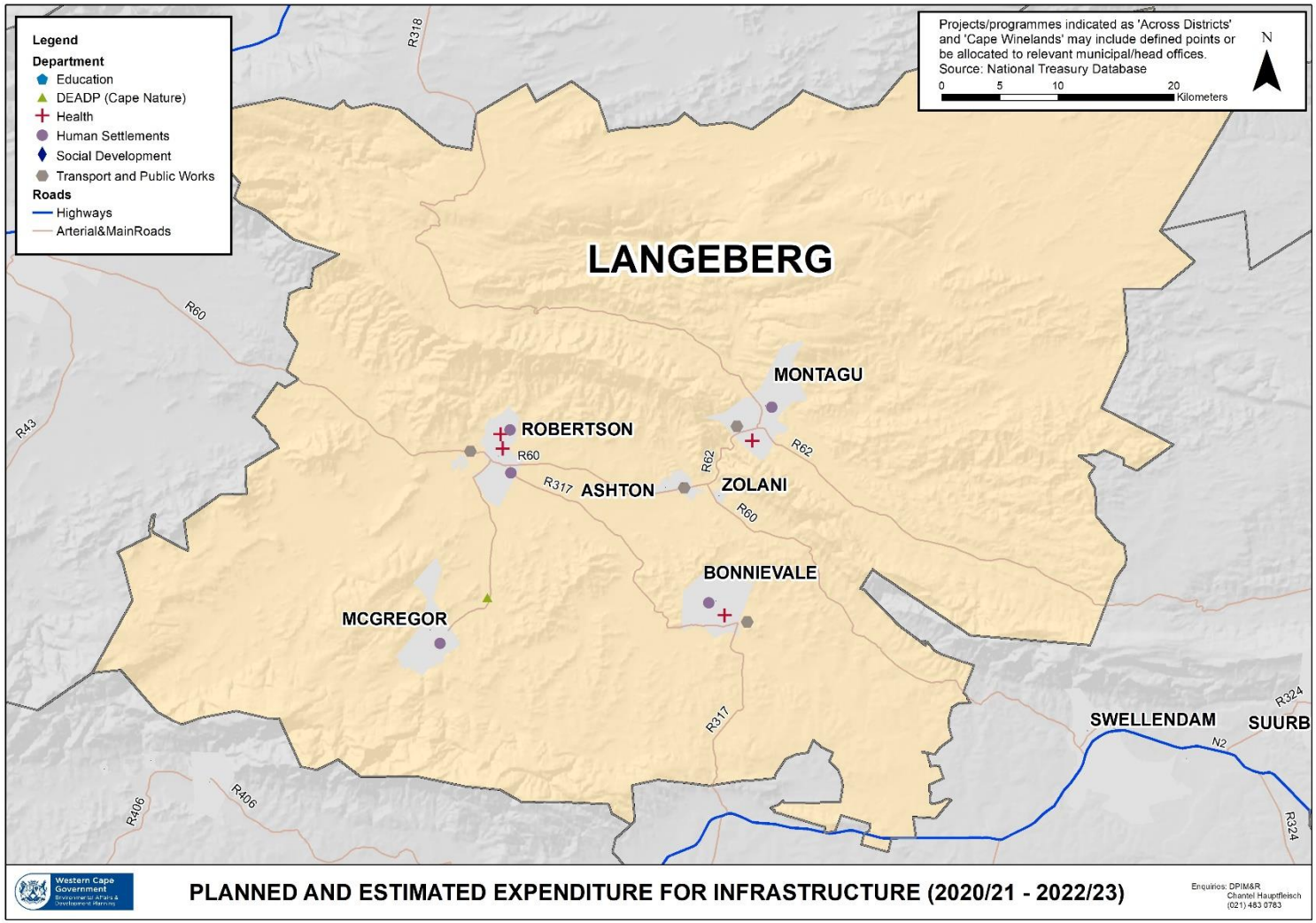

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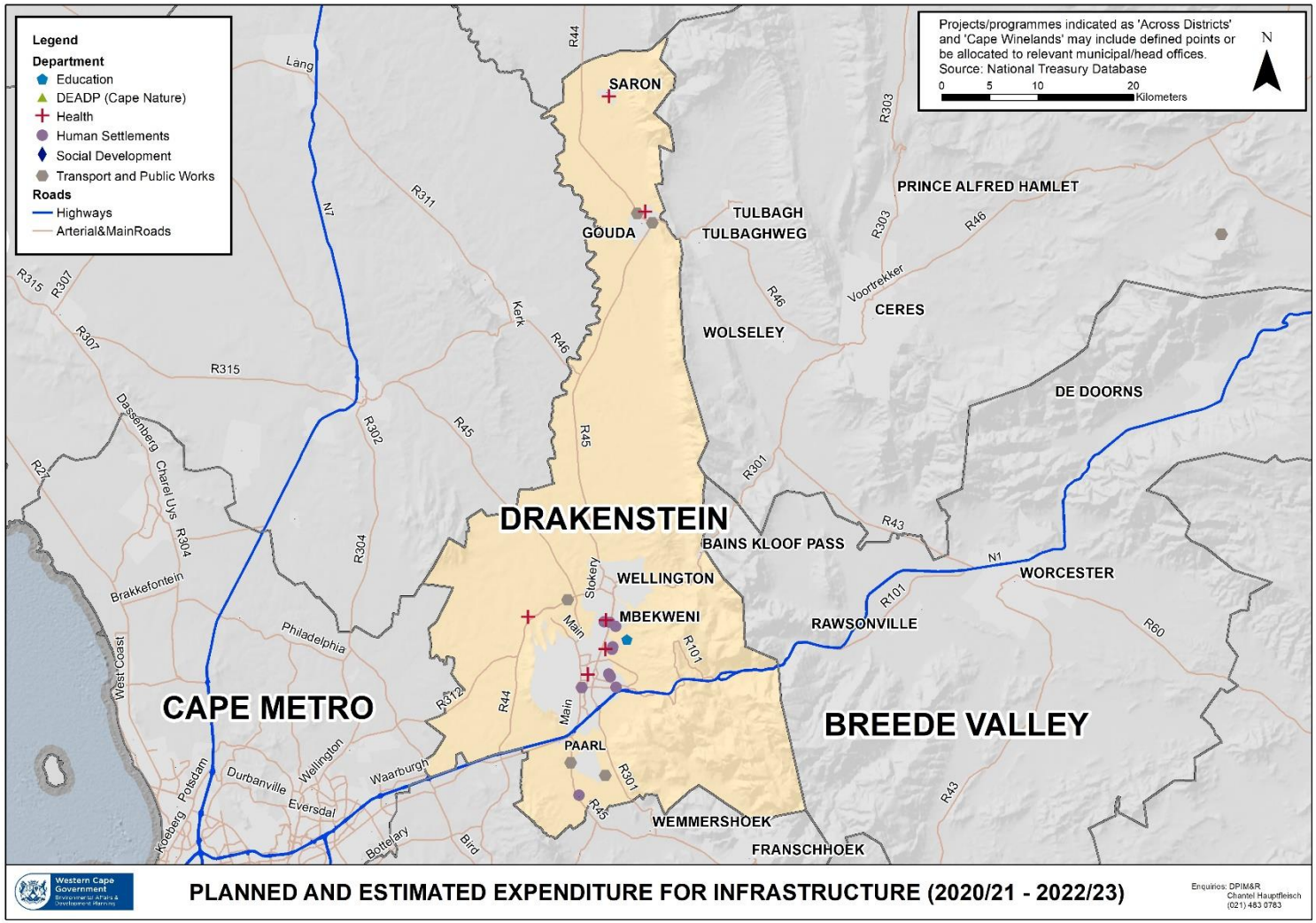

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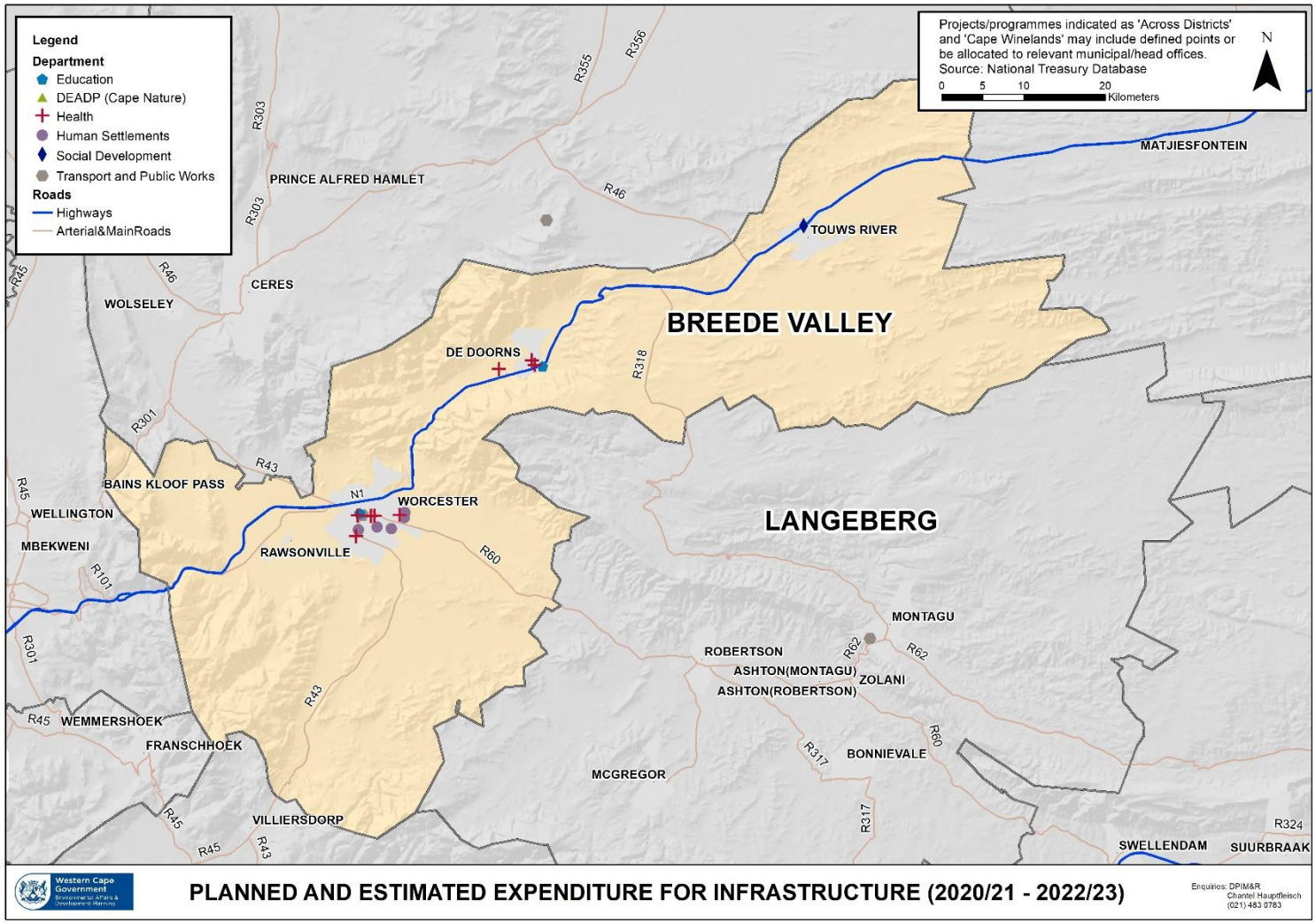

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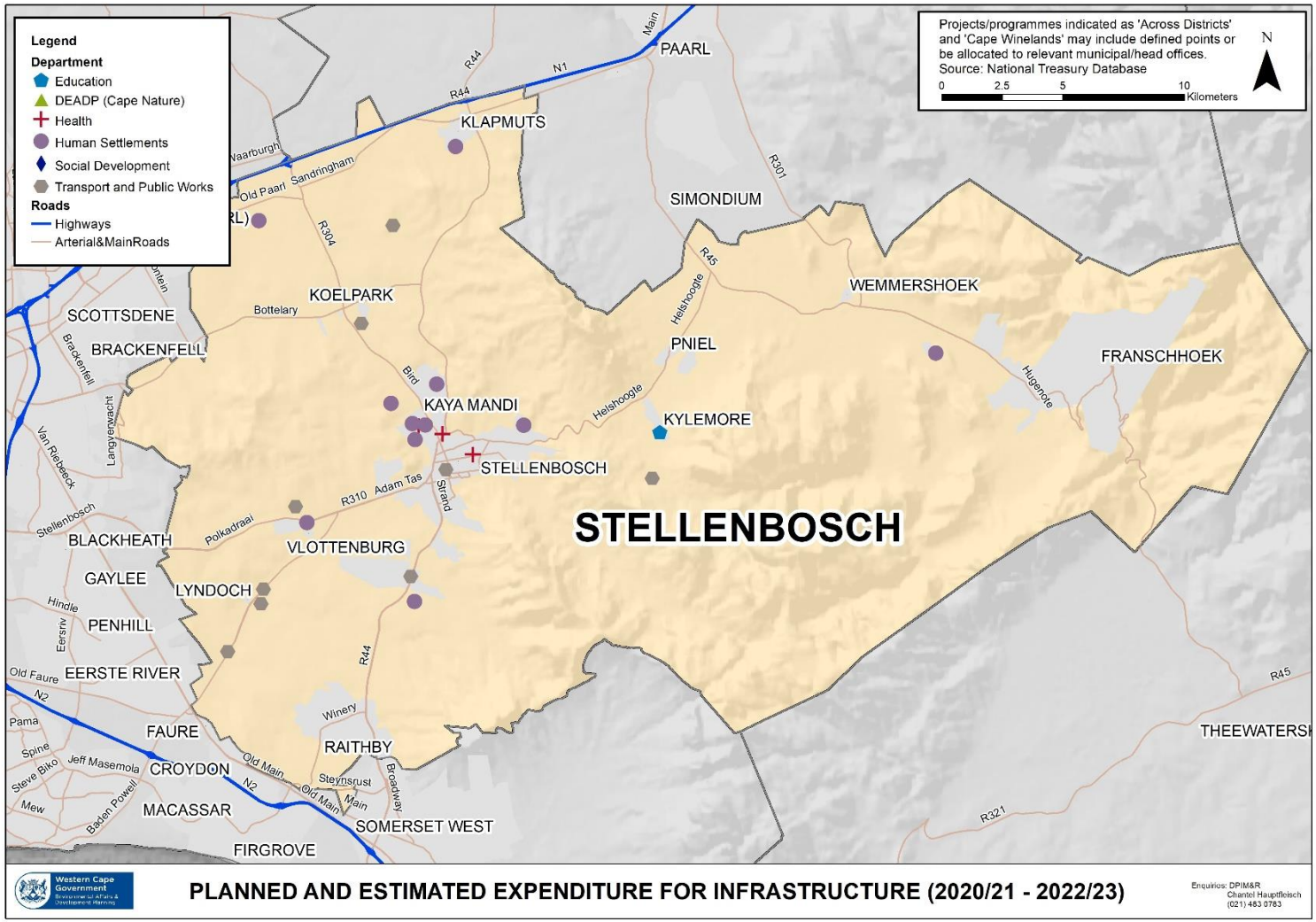

Source: Western Cape Government: Provincial Treasury. Overview of Provincial and Municipal Infrastructure Investment 2020. ISBN: 978-0-621-48192-1. Published March 2020.

3.2 Status of Cape Winelands plans and policies

Section	Statutory Plans	Status
Spatial Planning	District Spatial Development Framework	Approved by Council May 2019
	Non-Statutory Plans	**Status**
	Climate Change Strategy	Approved by Council May 2019
Regional Economic Development	**Statutory Plans**	**Status**
	Regional Local Economic Development Strategy	Approved by Council May 2019
Emergency Services	**Statutory Plans**	**Status**
	Disaster Management Plan	Approved by Council May 2019
Infrastructure Planning and Project Implementation	**Statutory Plans**	**Status**
IDP	IDP Framework	Approved by Council October 2016 (5 year plan)
	Process Plan	Approved by Council August 2019
	IDP	2nd Review IDP Adopted by Council 27 May 2019.
Budget	Financial Plan	Approved by Council May 2019.
	Budget	Approved by Council May 2019.
ICT	Employment Equity Report	15 January annually
	Workplace Skills Plan	30 April annually
	Non-Statutory Plans	**Status**
	ICT Disaster Recovery Plan	Approved by Municipal Manager and ICT Steering Committee, May 2018

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4.1 JOINT DISTRICT APPROACH (JDA)

Background



- **20 August 2019**
  - President's Coordinating Council (PCC) endorsed a new district-based model for development
  - synchronise planning by all spheres of government
  - involve citizens and civil society
  - in the development of South Africa's 44 municipal districts and eight (8) Metros

- **<u>21 August 2019</u>**
  - Cabinet approved this Khawuleza ("hurry-up") District Coordination Service Delivery Model
  - follows overwhelming support by various government structures

- **<u>3 Pilots currently</u>**
  - OR Tambo District Municipality in Lusikisiki which has elements of **rural spatial development**
  - eThekwini Municipality in Durban with **urban spatial development** elements
  - Waterberg District in Lephalale which has elements of **mining spatial development**

- Across the 44 districts and 8 Metros in the country, all developmental initiatives will be viewed through a **district-level lens**
- Development will be pursued through **single, integrated plans per district** – **one district, one plan** – that will outline the roles of each sphere of government as well as communities and civil society sectors
- This **shift in planning** is expected to:
  - Narrow the distance between citizens and government and engender active participation by citizens in development
  - Enable long-term planning
  - Provide responses to immediate "burning" issues
  - Change the face of rural and urban landscapes by ensuring complementarity between urban and rural development, with a deliberate emphasis on local economic development
- The district-driven model is directed at **turning plans into action**, and ensuring **proper project management and tracking**

- **<u>Other Intergovernmental engagements regarding the JDA:</u>**
  - 11 June 2019 – PCF in George
  - 29 July 2019 – MinMay at Goudini Spa, Worcester
  - 2 and 3 September 2019- PTM/MM retreat in Oudtshoorn
  - 10 September 2019 - PCF in Velddrif
  - 5 November 2019 – Western Cape JDA workshop/launch at Goudini Spa, Worcester

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PROVINCIAL GOVERNMENT WESTERN CAPE VISION INSPIRED PRIORITIES (VIPs)



INNOVATION & CULTURE

SAFE – EFFICIENTLY MOBILE – PROSPEROUS – SKILLED AND GROWING – HEALTHY – INCLUSIVE AND COMPETITIVE PROVINCE

Our Process Followed

- CWDM **JDA Coordination Interface Team leader** was appointed late in October 2019
- All Municipal Managers invited to **one-on-one discussions**
- The DLG hosted a **Provincial JDA Workshop/Launch** on 5 November 2019
- The **CWDM Coordination Interface Team** (provincial and municipal coordinators) had an **introductory meeting** on 19 November 2019 and another on 26 November 2019 for those not able to attend
- The following **draft governance documents** were distributed and comments requested from the CWDM Coordination Interface Team:
  - Terms of Reference
  - Process Plan
  - District Profile
  - JDA Implementation Plan
- Further technical engagements with relevant municipal officials only on 2 December 2019 to refine the JDA Implementation Plan and capture the context / background per municipal priority and key initiative of focus areas
  - A District Coordination Forum (DCF) meeting on 6 December 2019 further assisted with refinements of some documents

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- The DCF was followed by discussions between the CWDM Mayor, CWDM MM, CWDM Team Lead, CWDM JDA Coordination Interface Team Leader (the core JDA Project Team) and Ms Helena Jacobs, DEA&DP on 12 December 2019 which assisted in further refining some documents.
- January 2020 – February 2020 - discussions between the Senior Management Teams of CWDM and the Local Municipalities:
  - Stellenbosch Municipality – Monday 20 January 2020
  - Drakenstein Municipality - Tuesday 21 January 2020
  - Breede Valley Municipality - Wednesday 29 January 2020
  - Langeberg Municipality - Tuesday 04 February 2020
  - Witzenberg Municipality - Monday 17 February 2020

- Further to meeting of 12 December 2019, was recognised that political counterparts also need to meet to buy into this new approach
- To date, only CWDM to Drakenstein MAYCO engaged – on Tuesday 18 February 2020 – other such political engagements scheduled for March 2020
- All in all – following a very inclusive and consultative approach that will lead to:

  (1) Co-planning

  (2) Co-budgeting

  (3) Co-implementation

- **The objective** of the Cape Winelands Joint District Approach is to:
  - Inclusively unlock the diverse but promising potential of the region; and
  - Enhance joint service delivery in close co-operation with the 5 local municipalities

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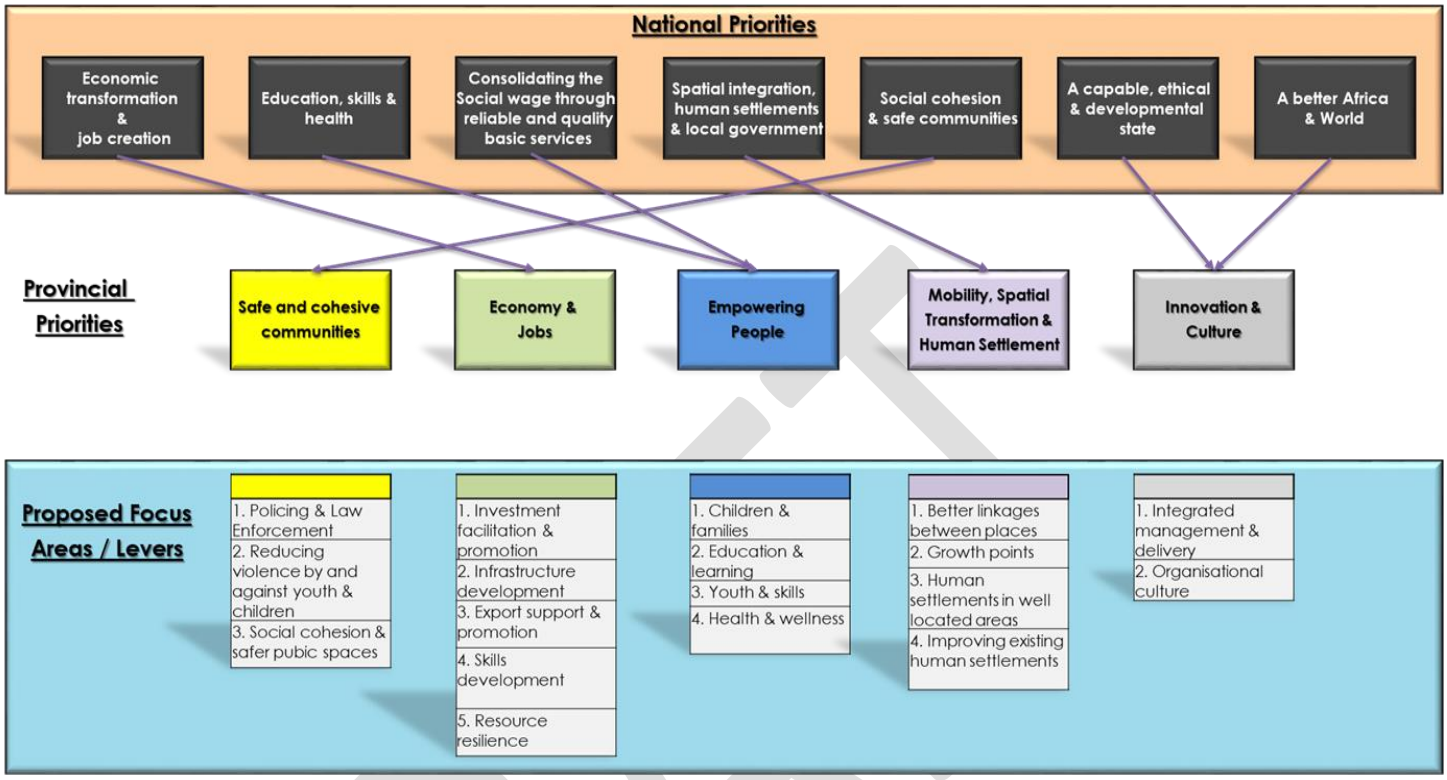
Where we are now

STRATEGIC LINKAGES



Project 1. **Waste Management**

Project 2. **In-migration and urbanisation / Infrastructure Management**

Project 3. **Climate change / Water Management**

Project 4. **Community Safety**

5. Additional Focus Areas added at the various meetings (further down the pipeline):
   - Job Creation & Poverty Relief
   - Education & Health needs
   - Social impact specific to Youth
   - Data Management
   - IGR Structure Alignment

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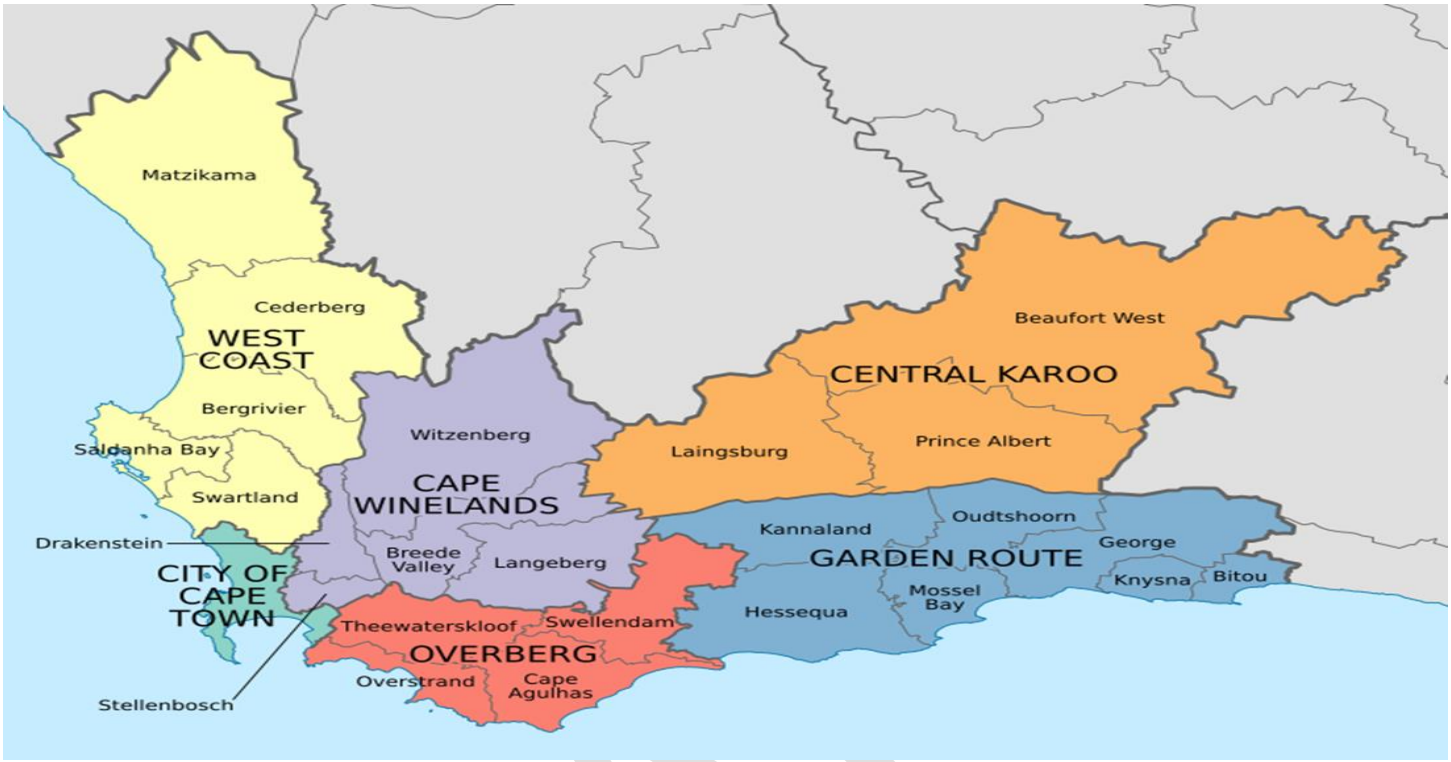
Lessons Learnt



- Bite-sized and pragmatic projects versus longer term focused projects (e.g. linked to 2030 NDP)
- Current projects versus a project that could assist with the development of a 'new' co-planning, co-budgeting and co-implementation model (e.g. bottom-up)
- Silo approach – very obvious – everywhere – within Municipalities, within Provincial Government departments, between Provincial Government and Municipalities
- Catalytic / strategic projects for the whole District
- Operational plan for "other" projects
- Risks associated for all involved

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Existing operationally-focused support plans –

- PGWC DLG's Support and Capacity Building Unit has already developed a General Support Plan for some Municipalities to address requests linked to operationally-focused support. These **will continue**.
- It is also proposed that **matters remaining** - as identified in previous provincial – municipal planning engagements **be closed off** in a similar way (JPI, WoSA, etc.)
- In the same way **operational support actions** already provided by other provincial departments will **continue**.
- These actions could be **generally and briefly reported on to the DCF** when progress reports are compiled on the Municipal Single Implementation Plan.
- **Meeting fatigue** (one person responsible for more than one function; expected to be in number of different meetings)
- **Compromise**/give-and-take – consider others' viewpoints and ways of working
- **Communication** is key – for all to have the same understanding
- Level of **awareness, commitment and/or attitude** is different for various role-players
- **Relationships** are critical – evident from various discussions with the administrations of local municipalities

The Way Forward

- **Meeting dates for 2020** have been set and communicated to the **JDA Coordination Interface Teams**, as requested but will only happen if required (and only with necessary technical officials)
- **Planned workshop** with **Mayors and MMs** on:
    - ToRs
    - Strategic Linkages
    - Process Plan
    - JDA Profile
    - JDA Implementation Plan

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- **Planned workshop** for the JDA Coordination Interface Team on all updated documents listed above (28 February 2020)
- Finalise the draft documents and **obtain sign off by all Councils**
- Once **projects** have been **identified** on the JDA Implementation Plan **project teams and leaders will be agreed on** to direct implementation
- **IDP and TIME Engagements** to further inform Operational and JDA Implementation Plans
- A preparatory meeting will be held in March 2020 to draft a progress report for the **next DCF on 20 March 2020**
- The proposed integration between the JDA and **Growth Potential Study**
- The **proposal** that CWDM JDA be considered as the **pilot site** in developing a co-planning, co-budgeting and co-implementation model from a new project perspective

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4.2 COMMUNITY SAFETY

What is Community Safety?

The Cape Winelands and the country as a whole are facing various issues with regards to safety within communities. Crime rates as well as unemployment rates are rising and causing many issues within communities. The Western Cape Department of Community Safety (DoCS) aims to promote professional policing through effective oversight as in the legislation, the capacitation of safety partnerships with communities and other stakeholders (whole-of-society) and promote safety in all public building spaces. The Department of Community Safety has approached the district municipality Disaster Management to assist in the improvement of Community Safety within the Cape Winelands. Communities are faced with many challenges and it has become a priority for the council to assist in this regard.

The Department of Community Safety has provided funds in support of the District Municipality for the roll-out of various safety projects that would assist with Community Safety within the Cape Winelands. The funds that have been provided are to be distributed among the five local municipalities that fall under the Cape Winelands which are namely Breede Valley Municipality, Drakenstein Municipality, Langeberg Municipality, Stellenbosch Municipality and Witzenberg Municipality. The District Municipality has briefed the local municipalities about the vision of the Department of Community Safety and requested the local municipalities to provide proposals of projects that will assist in improving community safety within the various municipal areas. The available funds will be allocated to the municipalities based on their needs and requirements.

Community Ward Safety Forum or Committee

Apart from the current funding that will be allocated to the local municipalities, a longer term goal or project of the District municipality would be to have safer communities. This will be done by the establishment of a Community Ward Safety Forum or Committee. The purpose of the establishment of this Ward Safety committee or structure would be to address issues on a ward level within the various municipal areas. It is envisaged that these committees will consist of various role-players that may already have a safety role within the local municipal areas. The buy-in of the South African Police Service among others will be of primary importance to make this project a success.

District Safety Plan

The District Safety Plan was developed with the assistance of the Western Cape Government which is expected to provide an integrated Enforcement, Education and Engineering Plan which responds to a detailed Evaluation of the strategic and operational environment. The plan has been developed at district level with the aim to make a difference at local level where the involvement of all stakeholders are critical. The District Safety Plan for the Cape Winelands was presented and approved by the council of the Cape Winelands District Municipality Council on the 30th of January 2020.

4.3 SANTAM

Santam has expressed interest in entering into a co-operation agreement with the Cape Winelands District Municipality for capacity building through their Business Adopt-a-Municipality initiative. This initiative commenced in 2013 where it supported five municipalities across South Africa. Due to the success of this they have reached out to other municipalities to assist them in this regard thus they have approached the Cape Winelands District Municipality. Drought, floods, fire and social conflict are some of the major risks that are affecting communities across the district. This collaborative initiative aids in strengthening capacity with an aim of reducing the impact of disasters in our communities which is one of the key functions of Disaster Management. Santam would also like to assist the District Municipality with Disaster Management and Fire related awareness efforts. The district municipality has requested Santam to assist them with high level marketing techniques and the developing of awareness materials. Santam has purchased smoke alarms as well as Personal Protective Equipment (PPE) and other firefighting equipment for local municipalities in an effort to reduce the amount of property losses.

The setting up of a control room a possibility in the Breede Valley municipal area. It has been confirmed that there are cameras that have been installed along the N1 in that area as well as on the farms as the farmers are being robbed of their produce. The cameras on the N1 are functional however the monitoring of the camera are a challenge and the control room is to full at SAPS.

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SASRIA

Another partner of Santam is SASRIA, an insurance company that deals with all the claims from government/government entities. It has come under the attention of SASRIA that a lot of their expenditure towards paying of claims have come out of the Cape Winelands area. The amount of money that has been spent has become a matter of concern for SASRIA. In 2018 there was a huge peak of the amount of claims that were reported which was worth R10 545 9090 Million however it decreased in 2019 to R6 507 050 this is still a matter of concern for Sasria. Thus, they were looking for a way in which they can prevent the amount of claims that are being paid by attempting to address the issues that are leading to people committing the criminal activities. Most of the claims were affected because of trucks that are being looted while driving on the N1 at De Doorns. There was a lot of social unrest in De Doorns which could be of the main causes as to why so many claims were made. Sasria is therefore currently conducting workshops in order to carrying out a Social Risk Assessment in De Doorns to assess the social issues that are taking place in the area and that are causing these criminal activities to take place on the N1 at De Doorns. By conducting the Social Risk Assessment (SRA) they will be able to determine what mitigation can take place within the area in order to address the issues that are causing people to regress into participating in criminal activities.

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4.4 CAPE WINELANDS DISTRICT SPATIAL DEVELOPMENT FRAMEWORK 2019-2024

STRATEGIC CONTEXT:

The Cape Winelands Spatial Development Framework identifies eighteen (18) key focus areas for intervention that are spread across four chapters (refer to table 1 below);

Chapters:	Key Focus areas:
A. DEMOGRAPHICS AND BUILT ENVIRONMENT:	1. Population growth & migration 2. Hierarchy of towns 3. Growth potential of towns 4. Municipal services financial model 5. Integrated district public transport network 6. Cultural landscapes: Sense of place 7. Water infrastructure 8. Energy & telecommunications infrastructure 9. Solid waste disposal 10. Disaster management
B. DISRTICT SPACE ECONOMY:	11. Economic growth sectors 12. Municipal space economy linkages 13. Agri parks
C. BIODIVERSITY & ECOSYSTEMS: SERVICES	14. Biodiversity 15. Ecosystem services 16. Invasive alien species 17. Cape Winelands Biosphere Reserve
D. CLIMATE CHANGE:	18. Rain and temperature

The key focus areas were chose based on the functions of the Cape Winelands District Municipality in terms of Section 84 (1) of the Municipal Structures Act (117 of 1998), assigned functions i.e. Disaster Management and relevant issues and concerns that have an impact on the Cape Winelands District and broader Cape Metropolitan Functional Region landscape.

Cognisance is also given to the structural deficiencies that was highlighted by the Greater Cape Metro Regional Spatial Implementation Framework (GCM RSIF) which are;

- Pervasiveness of socio-spatial segregation,
- Sprawling and low-density multi-nodal network of settlements,
- Mismatches between where people live and work,
- Isolated concentrations of poverty severed from economic opportunities, and
- Underinvestment in public transport and freight infrastructure, making the region inaccessible to most residents and inefficient for business to operate in.

These challenges must be addressed, although site specific and at a lower scale than the CWDM SDF's strategic focus, strategies will none the less be proposed to deal with these structural deficiencies that are evident throughout the CWDM.

Strategically, in the context of **human settlements**, the emphasis is on considering the functionality of settlements, their economic growth potential, migration and urbanisation challenges (bulk services, transport modes, solid waste disposal etc.) and the creation of a framework in which rational decisions can be made in terms of capital investment and social support programs.

The **district space economy** chapter highlights the strength of economic growth sectors that are located within the urban space economy, it also acknowledges the importance of the primary sector (agriculture). The industries that performs strongly in the urban space economy has backward linkages to agriculture. Strategically, this chapter emphasise the importance of integrated planning and the coordination of public sector investment within the urban space economy. The agri parks programme from the National Department of Rural Development and Land Reform will be implemented in each district municipality. In the case of the CWDM, the agri hub will be located in Ceres (Witzenberg Municipality). Various other towns were selected as farmer productions support unit points. The farmer production support unit points are aligned to poverty pockets. According to the Draft Rural Development Plan (19/12/2016) various projects were proposed for the farmer production support unit points. The CWDM SDF supports the proposed investment into the farmer production support unit points and agri hub (Ceres, Witzenberg Municipality) from a strategic perspective.

Biodiversity conservation remains a challenge in the CWDM area. Rapid urbanisation, agricultural expansion and the impact of climate change poses a major threat to the Cape Floristic Region as well as ecosystem sources (water, air, biodiversity and soil). The CWDM area consist of Fynbos, Succulent Karoo, Albany Thicket an Afro-temperate Forest biomes. The CWDM SDF spatially reflects the important areas for protection and refers users to the Western Cape Biodiversity Spatial Plan and its accompanying handbook.

The impact of **climate change** has already been felt with the recent and potential ongoing drought as well as rain surges that causes flooding. From a land use planning perspective various site-specific measures needs to be put in place as well as disaster risk related systems that relates more to adaptation to anticipated and un anticipated occurrences. Strategically, adaptation and mitigation measures are prioritised.

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In conclusion, the purpose of the Cape Winelands Spatial Development Framework 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;
- Develop a spatial logic that guides public and private-sector investment;
- Ensure the social, economic, built and environmental sustainability of the area, and
- Formulate proposals to redress the spatial legacy of apartheid;

PRINCEPLES OF THE CWDM SDF:

The CWD SDF adopts the principles of the Spatial and Land Use Planning Act (16 of 2013, which are;

Spatial Justice: A socially just society is one that embraces the qualities of equity, solidarity and inclusion. Whilst equal opportunity targets everyone in the community, social justice targets marginalised and disadvantaged groups. Inclusionary settlements focus on the public realm rather than on private enclaves; support civic interaction and equitable access throughout the public environment; and make urban opportunities accessible to all, especially the poor. Inclusionary economies have low barriers to entry, do not discriminate between the formal and informal sectors, and take active measures to empower those previously restricted in their access to the means of production. Past spatial imbalances are redressed by improving access to, and use of, land.

Spatial Sustainability: Land development should be spatially compact, resource- frugal, compatible with cultural land scenic landscapes, avoid alienating productive landscapes, and not compromise the functionality of ecosystems.

Spatial Resilience: Resilience is about the capacity of regions to withstand shocks and disturbances such as climate change or economic crises, and to use such events to catalyse renewal, novelty and innovation. The focus is on creating complex, diverse and resilient spatial systems that are sustainable in all contexts.

Spatial Efficiency: Efficiency relates to the form of regional settlements and use of resources compaction as opposed to sprawl; mixed- use as opposed to mono-functional land uses; residential areas close to work opportunities as opposed to dormitory settlement; and prioritisation of public

transport over private car use. When a settlement is compact higher densities provide thresholds to support viable public transport, reduce overall energy use, and lower user costs as travel distances are shorter and cheaper. Spatially efficient economies are more productive as they minimize business transaction costs and maxsimise outputs. Spatially compact city-regions provide for the fluid exchange of ideas, goods and services, which establishes an enabling environment for businesses and households to operate in.

Spatial Governance: Effective governance of city-regions is based on collaboration and coordination, integration and alignment, and transparency. Planning is evidenced based, informs the budgeting process, and spatial targets are incorporated into public investment programmes.

VISION, MISSION AND OBJECTIVES:

The Cape Winelands District Spatial Development Framework as a sector plan of the Cape Winelands District Integrated Development Plan (CWD IDP) adopts the CWD IDP's vision which is "A unified Cape Winelands of Excellence for sustainable development", mission, "All structures of the Cape Winelands co-operate together towards effective, efficient and economically sustainable development".

The objectives of the CWD SDF are;

- To improve the quality of life for the people of the region by ensuring principle led responses
- To plan in advance by considering future population growth, economic and climatic changes
- To manage the impact and exposure of external and internal threats to growth and development
- To restructure urban settlements through compaction and densification
- To promote sustainable resource use and responsible rural development
- To improve and conserve the district's natural environment

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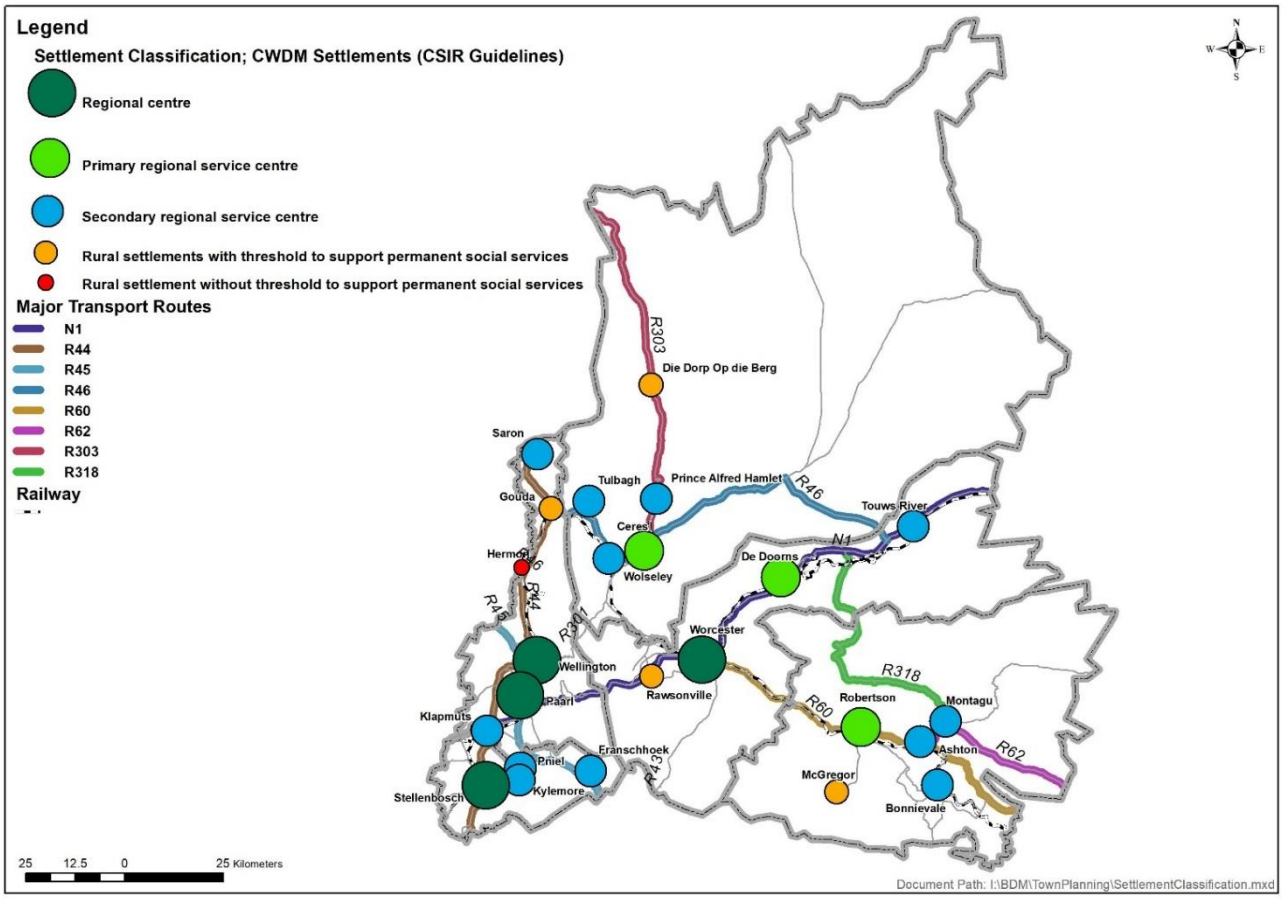
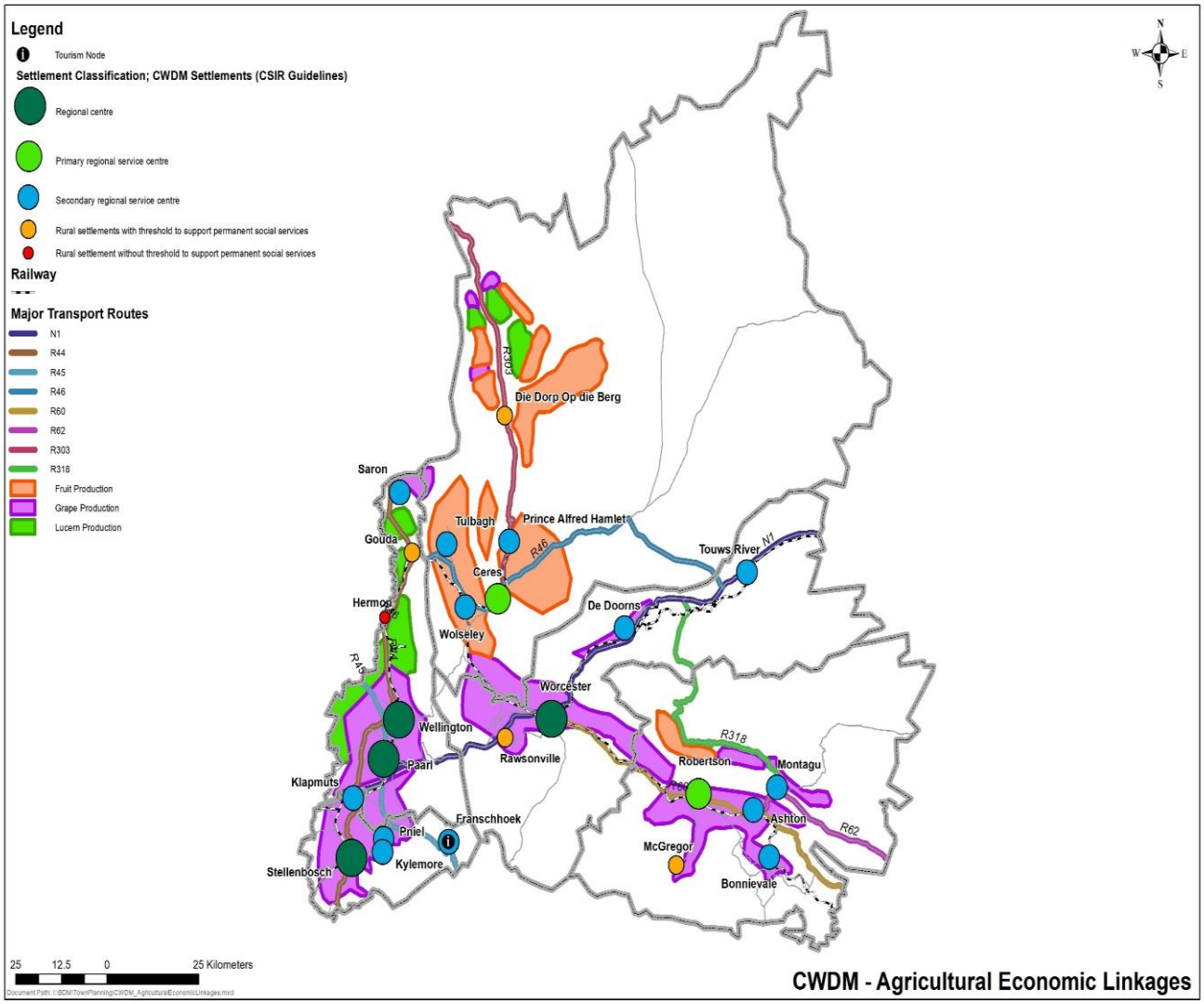
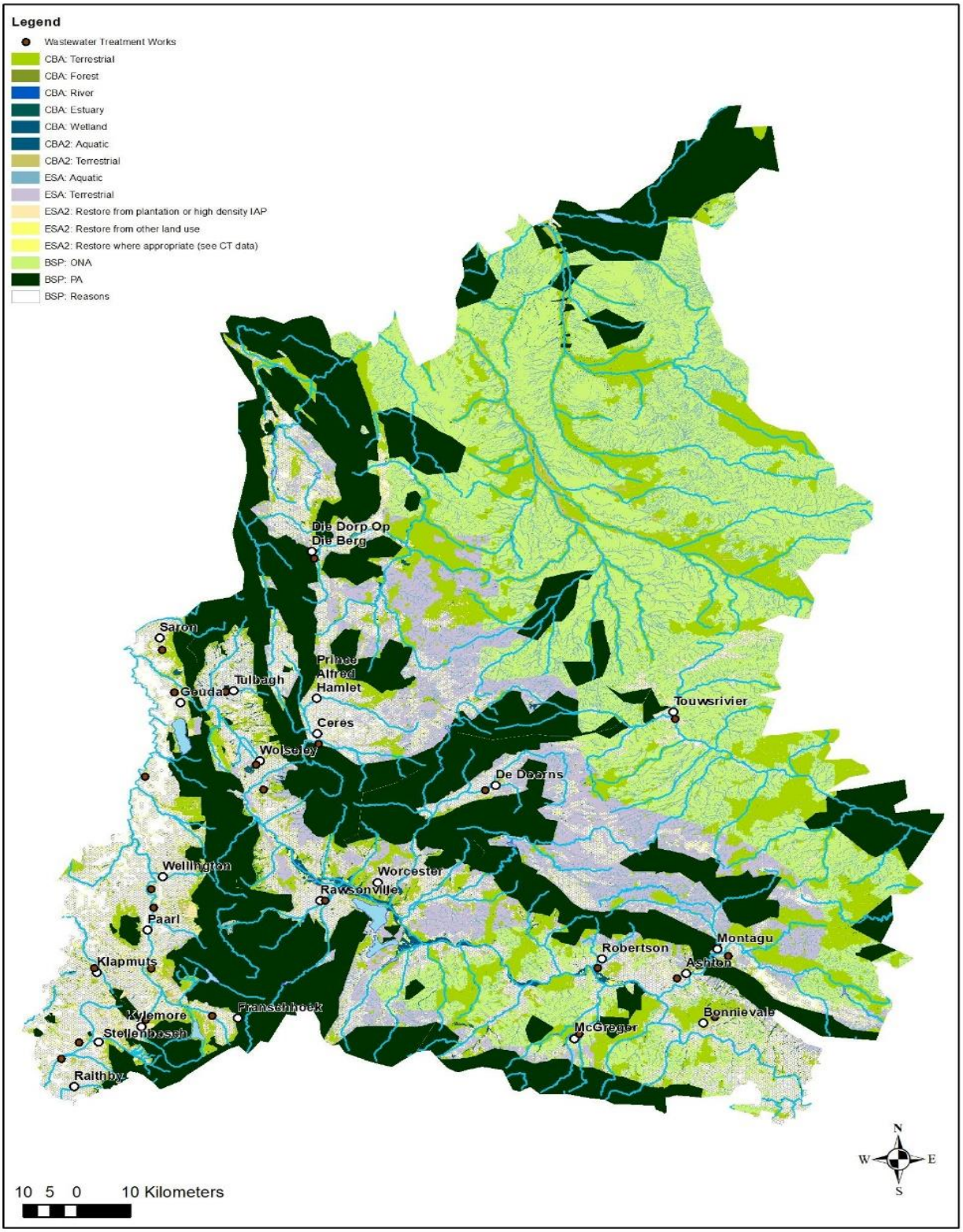


The map indicates CWDM Settlement Classifications 2016 (based on Community Survey). The N1 rail and road corridor and the Breede River Valley corridor are two major strategic corridors in the CWDM, and they are major distributors of people, goods and services from the CWDM to other municipalities within the Western Cape, to other provinces. These major corridors are supported by other major roads (R44, R45, R46, R318, R303, R60, and R62) which distribute goods and services to the people within the district municipality.



The map indicates CWDM Economic linkages, connecting routes, Settlements Classifications and tourism corridors (MERO, 2017).



The map indicates areas important for the protection of biodiversity and ecosystem services (WCBSP 2017).

4.5 MAINSTREAMING CLIMATE CHANGE IN THE CAPE WINELANDS DISTRICT MUNICIPALITY

A) CLIMATE CHANGE ADAPTATION SUMMARY REPORT

The Cape Winelands District Municipality recognises climate change as a threat to the environment, its residents, and to future development. Therefore, measures should be implemented to reduce or eliminate carbon emissions and enhance greenhouse gas sinks (mitigation) (Böckmann, M 2015). However, due to lag times in the climate and biophysical systems, the positive impacts of past and current mitigation will only be noticeable in the next 25 years (Jiri, O 2016). In the meanwhile, adaptation is regarded as inevitable and a necessary response to the changes that are projected to take place in the District. Cape Winelands District Municipality has therefore prioritised the development of a Climate Change Vulnerability Assessment and Climate Change Response Plan.

The Climate Change Vulnerability Assessment and Response Plan was developed through the Local Government Climate Change Support (LGCCS) program (http://www.letsrespondtoolkit.org/), led by the Department of Environmental Affairs. The LGCCSP is part of the International Climate Initiative (IKI) and is supported by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of The Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB).

Through this program key climate change vulnerability indicators for the Cape Winelands District Municipality were identified. These indicators demonstrate areas that may be at high risk of climate change impacts.

A summary of the key vulnerability indicators is provided in the table below.

Table 1: Key Vulnerability indicators for Cape Winelands District Municipality

No:	Sector:	Name Indicator Title:	Exposure Answer:	Sensitivity Answer:	Adaptive Capacity Answer:
5	Agriculture	Change in viticulture (grapes) production	Yes	High	Low
6	Agriculture	Change in fruit production	Yes	High	Low
10	Agriculture	Increased risks to livestock	Yes	High	Low
12	Biodiversity and Environment	Loss of High Priority Biomes	Yes	High	Low

No:	Sector:	Name Indicator Title:	Exposure Answer:	Sensitivity Answer:	Adaptive Capacity Answer:
14	Biodiversity and Environment	Increased impacts on environment due to land-use change	Yes	High	Low
28	Human Settlements, Infrastructure and Disaster Management	Loss of industrial and labour productivity	Yes	High	Low
29	Human Settlements, Infrastructure and Disaster Management	Increased impacts on strategic infrastructure	Yes	High	Low
30	Human Settlements, Infrastructure and Disaster Management	Increased impacts on traditional and informal dwellings	Yes	High	Low
31	Human Settlements, Infrastructure and Disaster Management	Increased isolation of rural communities	Yes	High	Low
36	Water	Decreased water quality in ecosystem due to floods and droughts	Yes	High	Low
37	Water	Less water available for irrigation and drinking	Yes	High	Low

Based on the key indicators identified in the table above, the following sub-projects and actions are prioritised as a response to each of the indicators.

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1.1 Agriculture

The Cape Winelands District Municipality's agricultural sector will be adversely affected by climate change. Increased temperatures, drought, and the increase in frequency and severity of storm events will impact on the crops that can be grown and potentially result in a loss of livestock.

The following key agricultural indicators, sub-projects and actions were identified:

Project:	Sub-Project:
Manage the change in viticulture (grapes) production	Commission research and improve understanding of climate change impacts on viticulture production.
	Optimise climate resilient land-uses of existing agricultural areas.
	Promote knowledge generation, knowledge sharing, stakeholder participation and raise awareness regarding alternative agricultural production in the western and southern Cape.
	Promote knowledge generation, knowledge sharing, stakeholder participation and raise awareness regarding viticulture in new growth areas.
Manage the change in fruit production	Generate and share scientific, social and indigenous knowledge that will minimise the loss of areas suitable for the growth of fruit.
	Identify climate resilient land-uses that will support new agricultural opportunities that will minimise the new areas and new crops thus reducing climate change impacts on current agricultural potential.
	Implement evidence-based monitoring initiatives that feed into the management systems for fruit production.
Manage increasing risks to livestock	Promote knowledge generation, knowledge sharing, stakeholder participation and raise awareness regarding the decline in suitable areas for the growth of fruit.
	Research and improve understanding of climate change impacts on fruit.
	Strengthen management plans, to enable continuous monitoring and the ability to effectively respond to change.
	Commission research and improve understanding of how climate change impacts livestock and land availability.
	Develop a framework that will assist and educate farmers with adjusting to reduced rainfall.
	Generate and share scientific, social and indigenous knowledge that will assist with adapting to the reduction in herbage yields.
	Improve collaboration and partnership on existing programs (e.g. LandCare Programme, EPWP and River Health Programmes).
	Strengthen management plans, to enable continuous monitoring of water and herbage availability for livestock.

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1.2 Biodiversity and Environment

Climate change predictions include the shifting of biomes across South Africa.

The following key biodiversity indicator, sub-project and actions were identified:

Project:	Sub-Project:
Manage Loss of High Priority Biomes	Implementation of fire breaks in local municipalities (Langeberg) by 2022 through the Disaster Management Unit.
	Identification/Inclusion of high priority biomes in local Spatial Development Frameworks during the review process.
Manage Increased impacts on environment due to land-use change	Develop programmes to diversify community livelihoods strategies to earn income from activities such as ecotourism and other non-farming activities.
	Incentivize small scale farmers to practice sustainable and conservation agriculture
	Incorporate sustainable land use management and planning into other sectors' plans.
	Research and improve understanding of land use change in the municipality.
	Strengthen institutional capacity to deal with pressure on land use change.

1.3 Disaster Management, Infrastructure and Human Settlements

Climate change will affect Disaster Management, Infrastructure and Human Settlements in several ways in Cape Winelands District Municipality. Increases in the severity of storm events and an increase in flooding will damage infrastructure which may result in a loss of industrial productivity and service delivery. The impacts of storm events will particularly affect communities located in informal settlements, on flood plains and where there is poor drainage infrastructure. In addition, communities in rural areas that depend on subsistence farming may be unable to grow crops that they have grown in the past due to the changing climate. It is predicted therefore, that there will be an increase in rates of rural-urban migration. Rural communities may also become more physically isolated due to extreme events impacting on key infrastructure.

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The following key human settlement indicators, sub-projects and actions were identified:

Project:	Sub-Project:
Manage potential loss of industrial and labour productivity.	Research and implement water efficiency projects in industrial processes.
Manage potential increased impacts on strategic infrastructure.	Implement a water augmentation project that will help reduce reliance on surface water and seek alternative sources of water (e.g. recycling of water).
	Upgrade and maintain storm water infrastructure so that it considers extreme weather events such as flooding.
	Upgrading and maintenance of road infrastructure.
Manage increased impacts on traditional and informal dwellings	Develop and upgrade informal settlements.
	Partner with research institutions to implement a research project to develop a model aimed at achieving sustainable informal settlements with lower risk exposure.
Manage potential increased isolation of rural communities.	Build Climate change resilient road infrastructure that serves as a link for rural areas.
	Develop economic nodes and improved service provision in rural areas to improve connectivity.
	Identify alternative access routes to rural communities.
	Identify local responses that will reduce isolation of rural communities.
	Identify roads at risk of flooding and erosion and prioritise those for upgrading and maintenance.
	Implement flood drainage systems that will reduce impacts on rural roads.

1.4 Water

Water resources are the primary medium through which climate change impacts will be felt by South Africans (Schulze et al., 2014). Climate change will affect Cape Winelands District Municipality's water accessibility, quantity, and quality (Parikh, J 2007) through drought, reduced runoff, increased evaporation, and an increase in flood events.

The following key water indicators, sub-projects and actions were identified:

Project:	Sub-Project:
Manage decreased water quality in ecosystem.	Invasive aquatic weeds removal and management in Berg and Breede Rivers by the Cape Winelands District Municipality, B municipalities, DOWA, property/landowners and water user associations. Continuous clearing should be done annually between September and April. The specific area to be targeted is between the R45 and Herman.
Manage the quantity of water available for irrigation and drinking.	Cape Winelands District Municipality to facilitate research into the re-use of wastewater within the District Municipality, with B-municipalities indicating which towns should be included in the research. The economic viability and quantities are important selection criteria. The replenishment of aquifers by infusion of purified waste water should form part of the research. Implementation by relevant Engineering Departments of B-municipalities.
	Cape Winelands District Municipality to facilitate the assessment of existing infrastructure for water storage. Implementation by Engineering Departments of B-municipalities.
	Increase alien clearing in catchments located throughout the entire District and B municipalities in partnership with Department of Water and Sanitation and the LandCare Programme.

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4.5 CAPE WINELANDS REGIONAL SOCIO-ECONOMIC DEVELOPMENT STRATEGY

Introduction

The Cape Winelands District Municipality have recently adopted the Cape Winelands Regional Socio-Economic Development Strategy (CW-RSEDS). The main objective of the strategy is to identify key social and economic challenges of the Cape Winelands region and to develop strategies and interventions to try to overcome those challenges.

The Cape Winelands Regional Socio-Economic Development Strategy's (CW-RSEDS) core focus is to outline how the Cape Winelands District Municipality will invest in its people and how it will create an enabling environment in which business can develop, grow and thrive by fostering greater investment that will increase job growth and alleviate poverty.

After careful analysis of the data to determine the status quo of the local economy and identify development needs, pressing issues were identified as key focus areas, and unique capabilities and skills were considered. Policies and legislation were also reviewed and considered. The strategy was developed to serve both regional and broader economic growth plans, as well as to be aligned to provincial and national economic growth plans and the applicable policy and legislative frameworks.

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The Strategic Goals, Priorities and Drivers for the CW-RED Strategy are:

STRATEGIC GOAL 1	STRATEGIC GOAL 2	STRATEGIC GOAL 3	STRATEGIC GOAL 4	STRATEGIC GOAL 5
Growing and Thriving Entrepreneur-ship and Innovation	**Working Towards Building Safe, Healthy, Active and Productive Communities Together**	**Facilitating Investment Attraction, Retention and Opportunities**	**Environmental Protection that Promotes Sustainable Development and Economic Growth**	**Culture, Diversity and Vibrant Places**
OVERARCHING PRIORITY: Build and Strengthen Partnerships and Collaboration *Driver 1:* *Mobilising Resources for Social, Economic and Rural Development in the Cape Winelands District*				
Priority 2: Productive Communities	**Priority 3:** Increased Business Growth through facilitating Inclusive Economies	**Priority 4:** Competing in the Global Market	**Priority 5:** Inclusive Economic Growth	**Priority 5:** Inclusive Economic Growth
Driver 6: *Support for Small Business* ***Driver 7:*** *Support Sector Development* ***Driver 8:*** *Promoting Innovation and Diversification*	***Driver 2:*** *Building Resilient Families and Communities* ***Driver 3:*** *Healthy Communities* ***Driver 4:*** *Investment in Skills and Employability* ***Driver 5:*** *Promoting and Building Inclusiveness*	***Driver 9:*** *Facilitating Investment Attraction* ***Driver 10:*** *Business Retention and Expansion for higher growth sectors*	***Driver 11:*** *Uplifting Rural Places, Economy and People*	***Driver12:*** *Tourism Planning and Management* ***Driver 13:*** *Championing Tourism Growth, Product Development and Innovation* ***Driver 14:*** *Invest in Tourism Skills and Development* ***Driver 15:*** *Effective Destination Marketing* ***Driver 16:*** *Promote Inclusive Tourism*

Strategic Goal 1: Growing and Thriving Entrepreneurship and Innovation

Businesses create employment for local residents, provide families with livelihoods and ignite local economic development. In addition to creating employment and capital formation, a strong and diversified business sector can assist to mitigate the area's dependence on the agricultural sector.

The focus of economic development is therefore to create an enabling environment for the private sector to prosper and facilitate the growth and formalisation of the informal sector.

Strategic Goal 2: Working Towards Building Safe, Healthy, Active and Productive Communities Together

The role of the Municipality is one of support, facilitation and creating an enabling environment. Co-ordinating efforts and co-operation between all spheres of government and the various NPOs and NGOs can not only prevent duplication of programmes, but through concentrated efforts, significantly enhance the impact of interventions and programmes. The Municipality cannot, and should not, attempt to replace or duplicate the work done by NPOs and NGOs, but must rather aim to maximise the benefits of these private sector initiatives.

Strategic Goal 3: Facilitating Investment Attraction, Retention and Opportunities

In order to attract foreign investment and capture the advantages thereof, government should establish support infrastructure and be committed to a pro-business (private sector) attitude. The local workforce should be well-trained, basic infrastructure should be in place and international links should be fostered. Potential investors are also attracted by good governance and capable market institutions. Key aspects of Cape Winelands District investment attraction, retention and opportunities is Business Retention and Expansion, Investment Opportunities and Creating Competitiveness.

Business Retention and Expansion seeks to understand the business environment of the locality by looking at business obstacles and challenges as well as unrealised business opportunities.

Investment Opportunities looks at the development of appropriate tools to market Cape Winelands as an investment destination. The tool will therefore communicate the advantages of investing in Cape Winelands.

Creating Competitiveness

Productivity is an important determinant of competitiveness and it relates to how governments utilises it human, capital and natural resources. Improving productivity and innovation is key to creating a competitive environment. Improving competitiveness does not require new resources but rather using current resources at its' optimal level.

Strategic Goal 4: Environmental Protection that Promotes Sustainable Development and Economic Growth

Rural Development for the Cape Winelands tries to address three elements:

Environmental Sustainability - An emphatically "Green" approach to development in the Cape Winelands will play a major role in attracting global and national investment which is increasingly environmentally conscious, not to mention the major implications for long term sustainability of investment given the delicate and sensitive nature of the landscape and riverine ecologies of the Winelands.

Diversifying the Rural Economy -A healthy and dynamic agricultural sector is an important foundation for rural areas and its economy when it generates economic linkages to other economic sectors. However, the need to diversify rural economies is also needed to ensure overall sustainability. Therefore, rural development resources should be prioritised towards employment creation and opportunities in non-agricultural activities and services.

Improving access to opportunities for Rural Communities -Rural dwellers are still facing challenges in access to basic services and economic opportunities. It is important that when planning is done by government it should take into consideration rural people and include elements that address the urban-rural divide. The lack of access that is still prevalent in rural communities inhibits the opportunity that rural communities have to improve their economic and social wellbeing.

Strategic Goal 5: Culture, Diversity and Vibrant Places

The Cape Winelands tourism sector presents tremendous opportunities for growth and development. The Cape Winelands believes that it's in our cultural diversity that we can best enhance the visitor experience in the district. The focus is on people rather than places, i.e. dine with the locals, hear their stories, and rediscover their rich cultural heritage.

It is to the people of the Cape Winelands, their stories, their books, their poems, their paintings, their theatre performances, their vision for their tourism businesses, their story-telling, their music and songs, their culinary creations, their wine-making talents, their arts and crafts and their business innovation talents alike, that the District wants to share with its visitors.

The tourism industry in the Cape Winelands District Municipality therefore has an important role to play in attaining the region's goals for growth and job creation. Having the potential to attract revenue and stimulate private- and public-sector investment in the region, the tourism industry is people-orientated and very labour intensive, creating employment opportunities in the community**.**

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IMPLEMENTATION

The overall CW Regional Socio-Economic Strategy includes the following individual Strategy Plans:

- Economic Development and Investment Strategy;
- Tourism Strategy
- Social Development Strategy; and
- Rural Economic Development Strategy.

Each of the strategies mentioned above is accompanied with a series of action plans that have been developed.

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CAPE WINELANDS AGRI-PARK

INTRODUCTION

The National Development Plan (NDP) confirmed that agriculture is the primary economic activity in rural areas and has set out specific objectives and milestones for the sector, in terms of achieving an inclusive rural economy by generating one million new jobs by 2030 i.e. an additional 643 000 direct jobs and 326 000 indirect jobs in the agriculture, agro-processing and related sectors by 2030. This view is reinforced with the New Growth Path (NGP), the Industrial Policy Action Plan (IPAP) and other Government polices to achieve radical economic transformation and improving service delivery in the agriculture value chain.

As a result, the DRDLR launched the Agri-Parks Programme on 24 June 2015, after a pronouncement by President Jacob Zuma in his State of the Nation address. The purpose of the Agri-Parks programme is to integrate rural poor people and emerging farmers into the value chains by creating jobs in production, processing or marketing of the produce through three (3) basic units:

- The Farmer Production Support Unit (FPSU)
- Agri-Hub Unit (AH)
- The Rural Urban Market Centre Unit (RUMC)

AGRI-PARK (AP) IN THE CWDM

The Agri-Park is included in the Cape Winelands District Rural Development Plan (2017) to facilitate rural economic transformation (RETM). A basic unit of the Agri-park is the FPSU and the one Household one Hectare (1HH1H) programme and had been implemented in 3 municipalities within the CWDM as follows:

<u>WITZENBERG:</u>

- The Abattoir was acquired through Land Reform Branch
- Abattoir is situated in the Schoonvlei area in Ceres
- Logistics Project for 1 truck also approved for beneficiaries in Ceres

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DRAKENSTEIN:

- The land for the 1HH1H project in Saron has been identified
- The land is TRANCRAA land and Council resolution is needed to transfer the land to the beneficiaries
- 92 Beneficiaries for 50 hectares of land

STELLENBOSCH:

- Stellenbosch Municipal Council approved the 1HH1H programme on Farm 502 BH that consists of 65 hectares of Municipal Commonage adjacent to the Annandale Road, Lynedoch, Stellenbosch
- 10 Beneficiaries who farms independently on 5-hectare allotments
- An advertisement has been placed for a further 175.41 hectares of land to accommodate a further 13 beneficiaries as part of the Agri-Park programme

These are the programmes that will be supported for the 2020/2021 financial year as well by DRDLR in consultation with the CWDM.

BENEFITS TO THE CWDM

- The Agri-Parks programme can contribute towards economic growth and development, job creation, entrepreneurship and skills development
- It contributes further to the development mandate of local government and the division: socio-economic development at the CWDM
- It can also strengthen intergovernmental relations and align priorities and needs of local communities
- It can further contributes towards working together of community structures and betterment of community members
- Assist with improving communication and working relationships between the DRDLR and District Municipalities
- Thus, the CWDM should continue to proceed with implementation of this programme in all 5 municipalities.

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CHAPTER 5: PRIORITIES AND KEY INTERVENTIONS

This section of the IDP provides a more detailed exhibition of what interventions will contribute significantly to the attainment of our undertaking that all structures of the Cape Winelands will co-operate together towards effective, efficient and economically sustainable development.

COMMUNITY DEVELOPMENT AND PLANNING SERVICES DEPARTMENT

The CDPS department's broad economic development priorities is linked to its Departmental High Opportunity Society Strategy.

DEPARTMENTAL STRATEGIC AND PRE-DETERMINED OBJECTIVES

STRATEGIC OBJECTIVE 1:				
Creating an environment and forging partnerships that ensure social and economic development of all communities, including the empowerment of the poor in the Cape Winelands District.				
PDO 1: **Provide a comprehensive and equitable Municipal Health Service including Air Quality Management throughout the CWDM**	**PDO 2:** **Ensure coordination of multi-disciplinary and sectoral disaster risk reduction through integrated institutional capacity for Disaster Risk management, Disaster Risk Assessment and Response and Recovery**	**PDO 3:** **Effective planning and coordination of specialized fire-fighting services throughout the CWDM**	**PDO 4:** **To facilitate environmentally sustainable economic development planning through the development and maintenance of strategic partnerships, investment attraction, retention and opportunities, SMME support and development, skills development and information knowledge management**	**PDO 5:** **To facilitate, ensure and monitor the development and empowerment of the poor by graduating people out of poverty, social inclusion and improving the livelihood of the poor, vulnerable groups, rural farm dwellers and rural communities**

DEPARTMENTAL TURNAROUND STRATEGY: HIGH OPPORTUNTY SOCIETY

In our departmental turnaround strategy ("**High Opportunity Society")** the collective focus of our attention was and is on the facilitation of capital formation and opportunities. This includes:

- Ensuring the optimal functioning of our fire-fighting; municipal health; disaster management and spatial planning functions;
- Creating an enabling environment in which businesses can thrive and grow our economy;
- Linking and facilitating access to economic opportunities for vulnerable groups; and
- Continued support for social capital formation.

ECONOMIC OPPORTUNITIES PROGRAMME

Providing and facilitating access to opportunities for the vulnerable to help facilitate the Cape 2040 vision of "everyone that wants to work is able to work" and higher "entrepreneurial rates".

RURAL ECONOMIC GROWTH PROGRAMME

Working with our strategic partners (Local Municipalities, Local Tourism Associations, farmers, sports federations, cultural organisations, the Cape Winelands Biosphere Reserve, etc.) to help grow the District economy:

ECONOMIC COMPETITIVENESS PROGRAMME

Working with our Local Municipalities to create an enabling environment in which business can thrive by facilitating investment into the District as well as supporting export opportunities.

ECONOMIC SKILLS DEVELOPMENT PROGRAMME

Having an education expands the range of options open to an individual, thereby creating opportunities to live a fulfilling life. In the Cape Winelands District 72.8% people do not have matric. The primary sectors that traditionally absorbed low-skilled labour are declining. In addition, it is very difficult to teach people skills if they do not have a solid educational background.

SOCIAL CAPITAL INVESTMENT PROGRAMME

The key objective of Socio-Economic Development is developing the people in a region with the view of establishing a better life for all. Ensuring that the inhabitants of an area are healthy, skilled, safe and productive enables economic development and thus enhances the quality of life of the local community.

TOURISM SECTORAL INTERVENTION PROGRAMME

The Cape Winelands District is known for its scenic beauty, diverse landscapes, rich cultural heritage, and high-quality agricultural land – it is one of the most visited regions for domestic and international tourists, and world renowned for its fine wine estates and restaurants. The Cape Winelands presents tremendous opportunities for Tourism growth and development.

THE DEPARTMENTAL HIGH OPPORTUNITY SOCIETY STRATEGY ACHIEVEMENTS TO DATE

WAY FORWARD

The 2020/21 financial will be the last year of implementation of the departmental turnaround strategy. The department will utilise the 2020/21 financial year to develop its new departmental strategy.

PRE-DETERMINE OBJECTIVE 1.2: Ensure coordination of multi-disciplinary and sectoral disaster risk reduction through integrated institutional capacity for Disaster Risk management, Disaster Risk Assessment and Response and Recovery

Disaster Management capacity at certain of the local municipalities remains a challenge with the implementation of the Disaster Management function. In the 2019/2020 financial year, the Cape Winelands Disaster Management Centre (CWDMC) assisted under capacitated local municipalities with the placement of an Intern to provide assistance with implementing the basic requirements of Disaster Management. This capacity would be funded by the Cape Winelands for two years after which municipalities will have to establish capacity for Disaster Management.

In continuing with its assistance to Local Municipalities, the CWDMC will be establishing satellite Disaster Management Centres in both Langeberg and Witzenberg Municipalities. These Satellite Disaster Management Centres will be utilised for the co-ordination of incidents and the implementation of prevention, mitigation and recovery actions within the municipal area. During the 2019/2020 financial year, the CWDMC also assisted four municipalities with the provision of the Uniti system for reporting, communication, incident management and risk assessment tool. This support will continue in the 2020/2021 financial year.

The Safety at Sports and Recreational Events Act, No. 2 of 2010, puts a number of requirements on both the event organiser and the municipalities. On a weekly basis across our District, numerous events are taking place. In an effort to ensure the safety of residents and visitors at these events, the CWDMC intends to roll out Event Safety Training for both municipal officials and event organisers.

With the conclusion of the multi-year Ward Based Risk Assessment project, the CWDMC now moves into a review phase. With the provision of additional capacity at the local municipalities, this annual reviewing of the Risk Assessment can take place in-house. A Risk Assessor training course will take place during the 2020/2021 financial year to capacitate officials and role-players in the Ward Based Risk Assessment methodology and participatory risk assessment methods.

The CWDMC is also embarking on an innovative way to utilise mobile phones for monitoring risks and identification of risks. This will be done through the development of an app that will be linked to the Uniti system.

The CWDMC will continue with the roll out of the multi-year Community Safety Initiative with the aim of improving the safety of communities in the District.

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PRE-DETERMINE OBJECTIVE 1.3: Effective planning and coordination of specialized fire-fighting services throughout the CWDM

In terms of the Local Government Municipal Structures Act: Section 84, the Cape Winelands District Municipality is mandated to deal with specialised firefighting services such as mountain and veld fire services. As regard to Integrated Fire Management, it is accepted that this Act allocates the primary regulation and management of veld fires to the District Municipality.

The Fire Services of the Cape Winelands District Municipality (CWDM), CapeNature and the Winelands Fire Protection Association (WFPA) entered into a memorandum of agreement and established a fire workgroup with the objective in which the parties agree to co-operate in the optimization of their organization's resources for systematically and expeditiously managing veld fires in the CWDM area.

The Workgroup aims to streamline the efforts of natural resource managers, agriculture and fire managers through an integrated approach to ensure improved fire management throughout the District by ensuring awareness of the realities faced by the different role-players.

It is important that we have these types of engagements so that we assess our state of readiness in dealing with major veld fires and to work together to improve systems which help prevent and reduce the risk of devastating veld fires.

Continual engagement with all role-players will be undertaken during the Veld Fire Season to ensure that pertinent matters that may arise are addressed with the necessary attention and consideration to urgency.

Veld fires are a major hazard to the Cape Winelands District and have the potential of developing into a disaster or catastrophic situation.

Due to the very high number of fires and major fires generally experienced during the summer season, special preparedness planning and organizing is required. Pre-incident planning provides significant advantages to incident commanders and emergency responders, allowing them to capture critical information before an incident actually occurs.

Fire has been identified as a critical risk as no community is immune to the consequences of fire. As risks cannot be entirely prevented, effective evaluation and planning is necessary to minimize loss of life and property. Veld fires are among the main contributors of economic, social and environmental threats in the Winelands.

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A serious challenge of the Fire Services Division is the shortage of staff. The operational financial needs are addressed in the proposed operational budget of the Division of the Fire services.

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PRE-DETERMINE OBJECTIVE 1.4: ***To facilitate environmentally sustainable economic development planning through the development and maintenance of strategic partnerships, investment attraction, retention and opportunities, SMME support and development, skills development and information and knowledge management.***

The Local Economic Development Strategy focus relates to how the district can facilitate accelerated economic growth. It understands that businesses create employment for local residents, provide families with livelihoods and ignite local economic development. Therefore, the focus of the Local Economic Development Strategy is on creating an enabling environment for the private sector to thrive and facilitate the economic growth.

The Investment Attraction, Retention and Opportunities Strategy specifically focus on how an enabling environment for competitiveness can be created as well as how existing businesses can be supported through Business Retention and Expansion Programmes, as they are the primary engine of growth in a locality.

The Cape Winelands District Municipality is the Regional Tourism Organisation (RTO) for the Cape Winelands Tourism Region. It is expected that the CWDM provides regional leadership and coordination and works with industry partners, such as the Local Tourism Associations, to grow tourism through activities like strategic planning, research, product development, training and marketing. The Tourism Strategy demonstrates how the CWDM will grow tourism in the Cape Winelands together with its tourism partners.

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PROJECTS

Growing and Thriving Entrepreneurship and Innovation

SUPPORT SMALL BUSINESS DEVELOPMENT

It is understood that local economic development is based on the concept that wealth in localities is created not by government but by the private sector. Businesses depend on having favourable local business environment to create that wealth and prosperity. Municipalities have a central role in creating the favourable business environment for business success.

- Continue with **Entrepreneurial Seed Fund Project.** Investing in small business by 'Grow your own' through provision of seed funding for small businesses. The Entrepreneurial Seed Fund programme has been a partnership programme between the CWDM and its five local municipalities. Through a selection process promising and locally-driven start-up SMMEs working primarily in historically disadvantaged areas within the District are selected.

- Continue with **Training and mentorship project.** The CWDM training and mentorship programme was developed to assist the SMMEs that were receiving Entrepreneurial Seed Funding from the municipality through providing business training and one-on-one mentorship to these SMMEs.

- **Support Informal Sector Project.** Support local municipalities in their work with informal traders. Furthermore, investigate and facilitate programmes in support of formalising the informal sector.

SUPPORT SECTOR DEVELOPMENT

There is a need to develop targeted sector strategies with relevant stakeholders and role-players to that identify investment opportunities, trade development needs, research and commercialisation potential, workforce needs in the Cape Winelands District. A few strategic sectors have been identified during the strategy development process.

ACTION PLAN: SUPPORT WINE TOURISM IN THE CAPE WINELANDS

VinPro has commissioned a wine tourism strategy that outlines a number of interventions to grow wine tourism. According to VinPro (2017) "Wine Tourism, which is about the delivery and experience of a variety of tourism related activities within or around wine producing regions or routes, is a significant revenue generator for the South African economy and has the potential to provide many new business and employment opportunities. Wine Tourism already contributes in excess of R6 billion to the GDP annually and with a national wine tourism strategy and coordinated plan, the aim is to increase that to R16 billion by 2025".
The Cape Winelands District is ideally placed to exploit the economic opportunities that wine tourism presents.

- **Wine Tourism Collaboration Programme.** Continue to work with organisations such as VINPRO, WESGRO and Wines of South Africa (WOSA) to support innovative developments and programmes in wine tourism.

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PROMOTE INNOVATION AND DIVERSIFICATION

It is understood that the most successful businesses continually strive to improve on their products and services and continually also search for new markets for their products and services. It is important for governments to recognise this business creativity and support business innovation. It is therefore crucial that municipalities support services to promote diversification (when businesses develop new markets) and innovation (when businesses design new products/services).

Giving media exposure to good businesses. Local newspapers and radio stations are usually eager to feature businesses that are creating new jobs. The municipality can facilitate that these businesses get good media exposure.

ACTION PLAN: GROW THE CREATIVE ECONOMY

In an increasingly globalised and urbanised world, uniqueness and authenticity are key competitive advantages for tourism destinations. At the heart of cultural tourism is a deep commitment to the splendour of place, genuineness of its communities and the tales that gives it life and differentiate it from other places. Tourism related to or driven by cultural interests and activities is a robust and growing subset of the tourism industry as a whole.

- **Grow the creative economy.** The Cape Winelands is home to many artists, writers, dancers, designers, musicians, chefs, and all sorts of talented and interesting people who have chosen to live, create and play in the District. The District and its community's benefits from having these creatives in our midst. The Cape Winelands needs to support this cultural ecosystem that enables creativity to prosper. We need to promote the Cape Winelands District as a **cultural destination** of note.

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Facilitating Investment Attraction, Retention and Opportunities

FACILITATING INVESTMENT ATTRACTION

Developing the Cape Winelands District's competitive profile will depend on leveraging existing strengths, building on the area's existing assets and seeking out high-impact opportunities in identified sectors.

ACTION PLAN: ESTABLISHING AN INVESTMENT DESK

- **Establishing an investment desk.** Establishing a "One Stop Shop" to deal with potential investors is a popular option for many investment destinations. A "One Stop Shop" is an investment service that aims to facilitate seamless investment and reduce red-tape and inefficiencies for potential investors. Such a "One Stop Shop" to promote and facilitate investment and the establishment of new businesses, could be set up in the Cape Winelands District/Cape Winelands Local Municipal area. A key component of the one-stop-shop service is the creation of a post for a dedicated investment facilitation professional. The investment facilitator's main responsibility would be to provide a single contact for investors wishing to do business in Cape Winelands. The skills of such an investment professional can be leveraged to engage potential investors on a one-on-one basis.

ACTION PLAN: CONTINUATION OF LOCALLY-DRIVEN BRE PROGRAMME FOR TOURISM SECTOR

Cape Winelands BRE for the Tourism Sector Project.
Since the CWDM did not have the resources necessary to implement a continuous approach, the locally driven was utilized which placed the implementation in the hands of the community. The Local Tourism Associations (LTAs) were chosen by the tourism community to be the implementing agents for the CW BR&E programme for the Tourism Sector.

ACTION PLAN: TRADE INVESTMENT

The Cape Winelands District Municipality is fulfilling its role as the facilitator of creating an enabling environment for business participates in trade shows/expos/missions as a means to provide a platform for businesses within the District to market their products and services to buyers/consumers and investors and thus creating competitiveness.
The CWDM objectives in participating in trade shows/expos/missions is to engage in generic marketing of the Cape Winelands as an investment and tourism destination. For participating SMMEs it is to:

- Increase sales of products/ services represented on the Cape Winelands District Municipality's stand by participating SMMEs;
- Obtain market intelligence and gauge response to the District as an Investment destination as well as to the various products/services on offer; and
- Penetrate new markets for the District's products and services by the participating SMMEs on the Cape Winelands District Municipality's stand.

- **Trade Investment Project.** Continue to explore in collaboration with WESGRO new markets for Cape Winelands products and services. Continue to provide a platform for SMMEs in the district to penetrate new markets for their products and services.

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Promoting Culture, Diversity and Vibrant Places

According to the UNDP (2015) there are many definitions of inclusive economic growth however within these definitions there are common traits, such as: "Growth is inclusive when it takes place in the sectors in which the poor work (e.g. agriculture); occurs in places where the poor live (e.g. undeveloped areas with few resources); uses the factors of production that the poor possess (e.g. unskilled labour); and reduces the prices of consumption items that the poor consume (e.g. food, fuel and clothing)... [therefore] ... inclusive economic growth is not only about expanding national economies but also about ensuring that we reach the most vulnerable people of societies".

TOURISM PLANNING AND MANAGEMENT

The Cape Winelands District Municipality is the Regional Tourism Organisation for the Cape Winelands Tourism Region. As a RTO, the CWDM plays an important role in supporting this competitive and sustainable tourism region. It is expected that the CWDM provides regional leadership and coordination and works with industry partners, such as the Local Tourism Associations, to grow tourism through activities like strategic planning, research, product development, training and marketing.

ACTION PLAN: EFFECTIVE FORUM MEETINGS

- **Provide the Tourism Voice at RTO meetings** at provincial level. Continue to promote tourism interests within the province by being at the table when discussions take place about provincial and regional tourism initiatives.
- **Review of Cape Winelands LTA Forum meetings.** The Cape Winelands Local

INVEST IN TOURISM SKILLS AND TRAINING

The capacity of all persons working in tourism should be developed in order to build a skills-base that enhances the tourist's experience at all levels in the value chain. It is essential that emerging businesses and newcomers in the industry are sufficiently and appropriately equipped to contribute to the brand and the overall visitor experience.
Community-wide initiatives to create awareness regarding tourism and the importance of hospitable behaviour are essential.

ACTION PLAN: PROMOTE SERVICE EXCELLENCE

- ***Enhance visitor experience and address skills gaps through training programmes aimed at specific- as well as general tourism skills.*** Utilise the CWDM database to identify community members that require assistance with training and product development. Skills training are essential for the development of tourism. Computer training, First Aid training, Introduction to wine, Customer care training, Events Management and Culinary training has all been identified as being beneficial for the tourism industry and will be offered by CWDM to enhance the skills level of the unemployed and the youth.
- Tourists are increasingly demanding online access and the capacity to engage through social media and high service standards is a part of their visitor experience. Many tourism businesses are lagging behind in terms of digital excellence. Continue to **support training and advice that encourages digital excellence** across the Tourism sector in the Cape Winelands.

Tourism Forum meeting sets the platform where government officials and Local Tourism Officials discuss and plan collaborative to market and develop tourism in the Cape Winelands. It is recommended that a review be done to enhance the functioning and effectiveness of the forum in order for tangible results to emerge from actions.

- **Champion Linkages to other RTO Regions.** Identify projects where a cross-regional approach would be beneficial to enhance visitor experience. For example, in developing new routes that cross municipal boundaries.

ACTION PLAN: TOURISM STATISTICS AND INFORMATION

Strategy relies on cutting-edge research and market intelligence to inform and guide decision-making. The quality of the decision-making is directly linked to the accumulated intelligence from markets, insights from partners and stakeholders. Information and analysis to inform insights and strategy need to be very current.

- **Assist in gathering reliable tourism statistics.** Local Tourism Associations and individual stakeholders need to collaborate to obtain statistical data needed for more effective tourism planning, implementation and development.
- **Tourism Research.** Engaging in tourism research is expensive but it is needed to stay ahead of the competition. The Cape Winelands District will as far as possible look at how research can be done in partnership with the private sector.

EFFECTIVE DESTINATION MARKETING

Destination marketing is important because tourism regions, like any other business, needs a good marketing strategy that will enable it to build a brand, attract new tourists and hopefully encourage and maintain repeat visitors.

ACTION PLAN: MARKETING THE CAPE WINELANDS

- **Utilise different marketing tools.** Continue using traditional media to market the Cape Winelands but also look to newer marketing tools.
    - **Continue with Tourism Media Educationals project.** Working in collaboration with Local Tourism Associations to market the region and its hidden gems. Concentrating not only on places and attractions but also specific themes.
    - **Tourism Month project.** Expand Tourism Month to acknowledge the importance of tourism in the region. Encourage the involvement of emerging businesses in developing products with regional appeal and showcase them on the various platforms during the month of September.
    - **Address the seasonality of tourism to the region.** Counteract seasonality through specific campaigns and events offered during the off-peak seasons. Develop lesser-known destinations through special packages that are more affordable and aimed at the domestic market.
    - **Events Calendar.** Cape Winelands is a leading major events destination in South Africa. Building an iconic events calendar though targeted private and public investment is

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ACTION PLAN: DIGITAL EXCELLENCE IN TOURISM MARKETING

In line with global trends, technology plays an increasingly important role in tourism. Technological advances have altered how travel services are procured and consumed (NTSS, 2017). Visitors are increasingly turning to the internet as a source of information and using travel blogs and travel advisory websites (NTSS, 2017). Tourists also communicate with other travellers on various online platforms. Due to the preferences of the current market, online marketing of the region is very important and should enjoy priority. Service delivery of local Visitor Information Centres are also important, especially in enhancing the experience of visitors already in the area. Visitor information Centres (Tourism offices) should be positioned as knowledgeable and informed centres, and be easy to find through clear signage and directions.

- **Digital Excellence in tourism marketing project.** Increase focus on digital marketing of the Cape Winelands district.
- Create amazing short **destination videos**. In the last few years the world has been moving toward videos. Videos are great because they convey a huge amount of information in a small amount of time just like a picture tell a thousand words.
- **Mobile technology** – from numerous surveys conducted internationally, it is now generally known that the majority of millennials would rather text than make a call. From tourism trends we know that they travel more frequently than any other generation before them. It becomes therefore crucial that we need to make the most of mobile tourism marketing. It is important to tell our marketing story where consumers want to see it the most and that is on mobile. Continued support and innovation for the **Tourism Town mobile Apps and the Cape Winelands Routes and Events App.**

needed to remain a leading events destination.

PROMOTE INCLUSIVE TOURISM

ACTION PLAN: CONTINUED FOCUS ON ROUTE DEVELOPMENT PROGRAMMES

The development of themed tourism routes is an important tourism tool in attracting visitors. Joining a number of tourism attractions into one themed route leads to a better offering for tourists whereas each individual attraction does not have the same potential to draw tourists. Full participation of disadvantaged people in the tourism economy will provide meaningful opportunities for partnerships and collaboration, creating new economic development and growth.

Inclusive tourism seeks to integrate poor and marginalised communities in the tourism value chain through active entrepreneurial participation. Reducing poverty by developing value chain linkages between the tourism industry and local producers of goods and services in the district.

- ***Explore support measures to foster growth among emerging tourism enterprises****.* Negotiating with LTAs for *w*aiving LTA membership fees for the first year, will allow emerging businesses to enter into the tourism industry and becoming sustainable, whilst receiving all the related benefits of being a member of a Local Tourism Association.

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PRE-DETERMINE OBJECTIVE 1.5: ***To facilitate and ensure the development and empowerment of the poor by graduating people out of poverty, social inclusion and improving the livelihood of the poor, vulnerable groups, rural farm dwellers and rural communities***

The Social Development Strategy for the CWDM is develop in specific reference to opportunities for social cohesion, self-reliance of vulnerable groups and sustainable livelihoods. The Cape Winelands Social Development Strategy is aimed at:

- Inclusion – putting marginalised people at the centre of development;
- Social Cohesion – strengthening the community fabric so that people can work together and collaborate; and
- Social Investment - facilitating the continued investment in the people of the Cape Winelands region.

The Rural Economic Development Plan focuses on economic, social and environmental sustainability in rural areas of the Cape Winelands District. The key driver of the Cape Winelands Rural Economic Development Strategy centres around uplifting 'Rural Places, Economy and People'**.** It advocates for continued support for projects that improve competitiveness, encourage diversification of the rural economy, improve quality of life in rural areas and that protect and enhance the natural environment.

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PROJECTS

Working Towards Building Safe, Healthy, Active and Self-Reliant Communities Together

BUILDING RESILIENT FAMILIES AND COMMUNITIES

PROGRAMME: FAMILIES AND CHILDREN

The project aims to strengthen the capacity of families and communities to care for and protect children. Families are the corner stone of communities. Dysfunctional families lead to dysfunctional communities. The family has been and continues to be the principal institution in society, playing a vital role in socialization, nurturing and care, as well as determining the conditions of social reproduction. Interventions to support vulnerable families are vital in alleviating abuse, neglect and poverty. This project is implemented in partnership with Government Departments, Civil Society organizations, and NGO's and Faith Based organisations.

Victim Empowerment project. Victim empowerment is an approach to facilitate access to a range of services for all people who have individually or collectively suffered harm, trauma or material loss due to violence, crime, natural disaster human accident or through socio-economic conditions. It aims to restore the loss or damages. Victim empowerment programmes focus taking control, having a voice, being heard, be recognized and respected as an individual. These initiatives focus on empowering people but especially, women and children with information and skills. Through these types of programmes they learn to understand and mange emotions, set and achieve positive goals feel and show empathy for other. It also teaches them to establish and maintain positive relationships and make responsible decisions.

HEALTHY COMMUNITIES

PROGRAMME: COMMUNITY SUPPORT

Non-Profit organisations and Community Based organisations are facing various challenges and financial constraints. Cape Winelands District Municipality provide funding to support civil society organisations in rendering services which have a direct and immediate impact on the well-being of disadvantaged communities at a grass-roots level. The funding maximises the poverty alleviation impact of community organisations across the Cape Winelands municipal district. This programme also enhances the capacity of beneficiary organisations to render service that will contribute to the achievement of the strategic objectives of Cape Winelands District Municipality.

PROGRAMME: ELDERLY

Cape Winelands District Municipality strives to maintain and protect the status, wellbeing, safety and rights of older persons. This project also aims to promote and create an enabling environment for the elderly to participate actively in a healthy lifestyle, wellness and cultural activities. Cape Winelands District Municipality acknowledge the valuable contributions that elderly persons have made in communities across the district.

Golden Games Project. Cape Winelands District Municipality in partnership with Service centres, Cape Winelands District Elderly Forum, Drakenstein Municipality, Stellenbosch Municipality, Breede Valley Municipality, DSD and DCAS successfully hosted a District Golden games event on the 30th of April 2019 in Breede Valley. The purpose of the event was to sensitise elderly people of their rights, human dignity and take

Educational Excursions Project. Learners of rural schools are afforded opportunities to embark on educational excursions which enhanced learning outside of the classroom. They are mostly from low income households which cannot afford the fees attached to educational excursions but through the support of the municipality, they can attend the excursions.

Holiday Projects. During school holidays, young children, especially in impoverished communities, have very little or no recreational space where they can give expression to their need for positive socialisation and interaction with their peers. This places them at risk of being drawn into negative activities such as, youth criminality, increase in substance abuse and risky sexual behaviour. Holiday programmes were implemented in partnership with civil society organisations to ensure the safe keeping of children during school holidays. The programme included a variety of educational and recreational activities which are provided in a safe environment to learn, interact and enjoy. It covered important topics such as crime prevention, teenage pregnancy, and drug abuse, anti-bullying and addressing challenges facing children and young people during puberty.

Fetal Alcohol Prevention Project. Foetal Alcohol Syndrome (FAS) is the leading cause of mental disability in South Africa. Children with Foetal Alcohol Syndrome are born with a lifelong disability, which affects their physical growth and development, their mental ability, behaviour and social skills. The effects of substance abuse have a devastating impact on the lives of children and the Cape Winelands District Municipality aims to implement a programme which prevents parents from abusing substances and to decrease the rate of children that are born with Foetal Alcohol. A Pregnant Women Mentorship programme was implemented in partnership with FASFacts. The objective of the programme is to prevent the increase of FAS by assisting girls and adult women part in competitive sport. The formidable spirit that the elderly persons demonstrate when they defy age and challenge themselves to play sport, is truly inspiring for younger persons.

More Living Active Age Project. Recreational and cultural tours were implemented as part of the More Living Active Age Programme for the elderly in our district. These tours provided the elderly with opportunities to research on the socio-economic, cultural and historical developments that has taken place as well as the significant impact the history and developments had on the underprivileged communities and the elderly. The support of Cape Winelands District Municipality created opportunities for elderly persons to visit recreational and historical landmarks. Some Elderly persons have never been out of their residential areas due to financial constraints and the municipality provided them with the opportunity.

PROGRAMME: HIV AND AIDS PROGRAMME

HIV and AIDS impact on the sustainability of communities and their development conditions. The implementation of interventions is crucial in ensuring that the vulnerability of infected and affected persons is decreased. HIV/AIDS awareness campaigns, World Aids day, HIV/Aids &Male circumcision; HIV & breastfeeding and 16 Days of Activism against the Abuse of Women and Children are implemented in partnership with the Multi Sectoral Action Team (MSAT) structures in each B-Municipal area. These programmes focus on reversing the effects of the HIV/AIDS pandemic and support to infected and affected families in the district.

making the decision not to drink any alcohol when they will be pregnant, or when they plan to become pregnant.

Diapers. The Division Rural and Social Development of the Cape Winelands District Municipality focuses on building and maintaining social capital through access to programmes and services. Department of Health is currently busy with Health and Hygiene awareness programme at senior centres within the Cape Winelands District. Some of the challenges was the need for adult diapers. The successes of these programmes are based on the strong and vibrant partnership with national and provincial government

Substance Abuse Rehabilitation Programme. Substance abuse is defined an overutilization of drug that leads to temporay /permant impairment of the person physical, emotional and psychological wellbeing. The effects of substance abuse on the health, work productively and social well-being of the person have an enormous toil on the overall being of the person.

Sanitary Ware. Cape Winelands District Municipality (CWDM) in partnership with Department of Education in our district encourage the nation that education as a tool for a better future. Both CWDM and DOE ensure that the education of young girls is not hindered because of lack of the basic necessity of feminine hygiene products, they visited rural schools across the district to handover sanitary towels packs.

INVESTMENT IN SKILLS AND EMPLOYABILITY

Skills development is identified as one of the priority needs for sustainable development in rural communities within the Cape Winelands District Municipality. Violence, social isolation and low education levels makes young unemployed women more vulnerable and increases their risks of sexual exploitation. Economic empowerment opportunities reduce conditions of

HIV/Aids Awareness Programmes. HIV/Aids awareness campaigns were held across the District which included programmes such as, World Aids day, HIV/Aids & Male circumcision; HIV & breastfeeding. A HIV/Aids awareness programme was implemented for Foster parents.

First 1000 Days Programme. The project activity formed part of the province's campaign to raise awareness of the crucial first 1 000 days of your child's life. The first 1 000 days in a child's development, starting from conception, moving through pregnancy, birth, and after the first 2 years of life, are crucial for securing a child's bright future. The most important aspects of the First 1000 days programme are health and nutrition, which both mom and baby need; love and attention that baby's needs, and all the support that the mom needs; and play and stimulation that babies need for learning as well as the protection of a safe environment.

16 Days of Activism Project. The Municipality facilitates joint planning and collates the inputs of all partners to produce a District calendar of events that are implemented across the district. The calendar provides a 16-day window of opportunity in communities for intense awareness-making and education to reduce levels of women and child abuse. Catalytic Events includes the Launch of the 16 Days Campaign, World Aids Day and the International Day for People with Disabilities. The objectives of the 16 days of Activism Campaign Against Women and Child Abuse are to change behaviour through public awareness & education on the rights of people living with HIV/AIDS and those who are HIV positive; to generate awareness to the incidence of violence against women and children; to highlight the stories of survivors of gender-based violence and the impact that the campaign has had on their lives; to create awareness around the link between HIV/AIDS and gender-based violence

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vulnerability and improve the resilience of young women. Young people are the important focus and a priority because the lack of skills development contributes to increasing unemployment rate amongst youth in rural areas.

Driver's License Training Project. Cape Winelands District Municipality in partnership with the Health, Education, Social Development sector departments and Drakenstein Municipality embarked on an Integrated Governmental Relations programme for 15 interns in the Drakenstein area. The programme afforded the participants the opportunity to obtain a Driver's License. Training consisted out of 10 (ten) Practical driving lessons and a Driver's License test.

First Aid Training Level 1 & 2. The lack of skills development effects sustainable development in the rural communities of the Cape Winelands District. Violence, social isolation and low education levels make young, unemployed youth more vulnerable and increase their risks of sexual exploitation and drug abuse. The Municipality has identified the need to empower young people by providing First Aid Level 1 & 2 Training

PROGRAMME: YOUTH

Young people are at the heart of the future of South Africa and they are facing many challenges in modern day society. There is great benefit in investing in young people by creating pathways for accelerated development. When young people can claim their right to health, education and decent working conditions, they become a powerful force for economic development and positive change.

PROGRAMME: WOMEN

Although Government has made significant progress in empowering women in the political, public and educational spheres, the marginalization of poor women severely compromises progress. Women development programmes are implemented in partnership with various stakeholders during August (Women's Month) and throughout the financial year. The purpose of the event is to recognize the role played by women of South Africa to remember the march by more than 20 000 women to the Union buildings in 1956.

Human Trafficking Awareness programme. The human trafficking workshop is organised by Cape Winelands District Municipality and the facilitation is done by Local Government. The human trafficking is well received by all the communities as it is really an eye opener. It teaches not only women and children are being taken it also involves babies and young children. The workshop was so informative and there was a follow up.
These two sessions will need a follow up workshop with farm workers and more children. We are planning to rollout more on youth month and after hours for people who are working late. We also supported with transport and morning coffee. There are recommendations by the local government of need to informing high school learners as they are the easily targets because they are being offered jobs overseas and all your travelling are paid. A motivational programme of Worcester House of Hope for women was supported.

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Grade 10-12 Support Project. Activities like career exhibitions, Matric Motivation programmes and Spring-school programmes are supported to enhance opportunities for Grade 10 - 12 Learners. Secondary schools from across the district are afforded the opportunity to participated in Career Exhibitions. Through the Career Exhibitions they gained information to make appropriate career choices. This programme was implemented in partnership with Department of Education, Tertiary institutions and Financial study aid institutions. **Grade 12 Top Achievers.** The Grade 12 Top Achievers is an annual event that the CWDM host in partnership with the Department of Education. The event celebrates the top matriculant at each school in the CWDM and is held annually to recognise not only the hard work and dedication of the top student, but also that of their educators and parents. **Life Skills and Youth Camps.** Cape Winelands District Municipality (CWDM) partners with DSD, GCIS and various stakeholders to host Job Readiness and Life Skills Camps. The project focuses on the holistic skills development of young people to prepare them for adulthood and make them employable, positive, and encourage healthy decisions. Programme included life skills, character development, leadership training, entrepreneurship and skills development. **Youth Month Project.** Cape Winelands District Municipality believe that there is great benefit in celebrating and investing in young people by creating pathways for accelerated development.	**PROMOTING AND BUILDING INCLUSIVENESS** Cape Winelands District Municipality aims to improve the livelihoods of people with disabilities and to address social barriers that exclude them from the various systems of society. Accessibility is important to achieve the principles of full inclusion, equality and participation in mainstream society. PROGRAMME: PERSONS WITH DISABILITIES **International Day for Persons with Disabilities Project.** On 3 December every year, the Cape Winelands District Municipality in partnership with Government Departments and NGOs in the Disability Sector, commemorates the International Day for Persons with Disabilities. Events are implemented in the five Local Municipalities of the Cape Wineland District.

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Environmental Protection that Promotes Sustainable Development and Economic Growth

RURAL PLACES

The key driver of the Cape Winelands Rural Economic Development Strategy centres around uplifting **Rural Places, Economy and People.** Continued support for projects that improve competitiveness, encourage diversification of the rural economy to improve community resilience, improve quality of life in rural areas and that protect and enhance the natural environment.

There is a need for balanced rural development that not only takes into account support for agriculture but also the non-farm rural economy to achieve better pro-poorest outcomes.

Water is an essential resource for the economic development of rural communities. The continuous improvement of water management practices and technologies as well as decreased consumer usage can help ensure the availability of reliable, quality water supplies over time. Maintaining strong partnerships with landowners, farmers, industries, businesses as well as communities, is key to sustaining our rural economy.

- **Water Resource District Coordination.** Continue to enable partnerships, district-based solutions and information sharing to enhance effective water management practices and promote long-term sustainable water supplies.

RURAL PEOPLE

ACTION PLAN: STRENGTHEN OPPORTUNITIES IN RURAL AREAS

Funding was provided to support sports and cultural organisations in implementing mass participation sports and cultural events. The funding maximised the participation of healthy lifestyles impact of community organisations across the Cape Winelands Municipal district. This programme also enhanced the capacity of beneficiary organisations to render services that will contribute to the achievement of our strategic objectives. The programme provides opportunities to vulnerable groups to advance to local, provincial and national sport and cultural programmes.

Business against Crime Tournament. CWDM in partnership with Breede Valley Municipality, SAPS Department of Education, De Jagers Outfitters and other local businesses joined hands in the fight against crime that is consuming the Youth of today. Rugby and Netball tournaments were implemented as an alternative recreational programme where learners of gang infested areas could participate in a safe environment.

Vlakkie Cricket. Vlakkie Cricket programmes provide opportunities for vulnerable groups in communities to participate in mass sport in the wider community of the Cape Winelands region. That change the social cohesion amongst communities and it allow so many youngsters, families. Men and women to participate in attend to be active and to make the communities a better place to live.

Dominoes and Tug-of-War Tournaments. Dominoes and Tug-of War Tournaments were held in Saron Drankenstein area.The purpose of the tournament was to provide an opportunity for the respective farming communities to participate in sports and to socialise. These programme promotes social cohesion and strengthen relations between farmers and farm workers.

RURAL ECONOMY ACTION PLAN: DIVERSIFYING OUR RURAL ECONOMY ➢ **Support small farmers' project.** Continue to support small farmers within the district. ➢ **Support Small and Medium Agro-Enterprises (SMAEs) Project.** Value-added processing and manufacturing give Cape Winelands producers and agri-businesses exponential benefit from the raw products and services they produce. Facilitate rural diversification through small and medium agro-enterprises (SMAEs) and employment in the rural non-farm economy can help to build resilient livelihoods in rural areas. Value-addition for agricultural products will seriously be considered to advance diversification of the rural economy. ➢ **Trade Export Project.** Assist rural businesses with capitalising on opportunities in new local, domestic and international markets.	**Easter Tournaments.** Cape Winelands District Municipality implemented various Easter Tournaments in partnership with various Rugby, Netball, Vlakkie Cricket and Soccer clubs. The tournaments were held in Witzenberg, Stellenbosch,Drakenstein and Breede Valley which formed the highlight on the social calendar of people in the rural areas. Vlakkie Cricket. These tournaments enhance social cohesion and aim to address crime in the respective communities. Winning teams received trophies and medals. **Clubs Supported.** A number of Clubs and organization are supported to honour their league games across the district. Rugby clubs, Soccer clubs and NPO's supported are supported through this programme **Drama Festival.** The Cape Winelands Drama Festival is a drama development programme of the Western Cape Government's Department of Cultural Affairs and Sport and is presented in partnership with the Cape Winelands District Municipality's Department of Community Development and Planning Services. This programme has been particularly successful in the CWDM, as partnerships were also forged with Stellenbosch Municipality, Langeberg Municipality and Breede Valley Municipality, as well as with professional artists, tertiary institutions and the private sector. This facilitated the growth of the drama programme at various levels and provided the youth with opportunities to learn from and be guided by professionals in the field. A Cape Winelands Drama festival was implemented to where various groups competed for the best drama performance. The collaboration with Cape Winelands District municipality ensured the successful presentation of the adjudication showcase. The drama festival finale was hosted in Witzenberg town hall on the 16th of February 2019. Approximately plus minus 450 people took park in this event

5.2 Strategic Objective 2:

Technical Services

5.2.1 PRE-DETERMINED OBJECTIVE 2.2: *To implement sustainable infrastructure services.*

CAPE WINELANDS DISTRICT MUNICIPALITY: REGIONAL WASTE DISPOSAL SITE

It is the intention of Cape Winelands District Municipality to provide and/or to obtain funding for the construction and operation of one regional landfill site in Worcester. It also wishes to investigate the appropriate mechanism for the management of this landfill site, as well as the facilities that would be associated with these regional landfill sites. These facilities could include aspects such as the following:

- A materials recovery facility
- A builders' rubble processing facility
- A garden waste processing facility, including a possible composting facility
- A public drop-off and recycling centre.

Since the provision of these waste management services would be deemed to be new services and possibly extensions to existing services, the Municipal Systems Act (as amended) requires that an investigation be undertaken in terms of Section 78 of this Act. Without pre-empting the outcome of the Section 78 investigations, it is anticipated that a likely outcome of the investigation will be that:

i) the provision of funding for the construction of the landfill sites and associated facilities would best be undertaken by the Cape Winelands District Municipality, as it is likely to obtain funding at a lower cost of capital than the private sector, and
ii) that the management of the landfill site and associated facilities be undertaken by the private sector due to competitive elements introduced in the management contract and the greater efficiencies that the private sector may be able to achieve.

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5.2.2 PRE-DETERMINED OBJECTIVE 2.3: *To increase levels of mobility in the whole of the CWDM area.*

We are in the final phase of the project to verify taxi routes in Drakenstein area, recommendations to be made to the Operating License Authority for consideration of issuing additional licenses.

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CHAPTER 6: SUPPORT TO LOCAL MUNICIPALITIES – FINANCIAL IMPACT (2020/21)

All projects, planning initiatives and programmes are implemented within the jurisdiction areas of the applicable local municipality's or district wide, as illustrated in the following table:

District Wide Support		
Type of support	**Deliverable**	**Financial Impact**
Subsidies – Water & Sanitation	Number of farms serviced	R 1 000 000
Environmental Health Education	Number of theatre performances	R 445 537
Clearing of road reserves	Number of km cleared	R 2 090 000
Rural infrastructure support	Provision of water services to schools	R 500 000
Renewable Infrastructure – Rural Areas	Solar systems supply to farmers	R 1 000 000
Upgrading of Sport Facilities	Number of Sport Facilities upgraded	R 2 512 000
Entrepreneurial Seed Funding	Number of SMME's supported	R 1 000 000
Business Retention Expansion Programme	Number of action plans for tourism sector	R 700 000
Investment Attraction Programme	Number of projects implemented	R 480 000
Small Farmers Support Programme	Number of small farmers supported	R 500 000
SMME Training and Mentorship	Number of processes implemented	R 1 500 000
Tourism Business Training	Number of training and mentoring sessions	R 950 000
Tourism Educational	Number of educational	R 300 000
Tourism Month	Tourism month activities	R467 000
Township Tourism	Number of SMME's linked with formal economy	R 500 000
LTA Projects	Number of LTA's participating	R 450 000
Tourism Events	Number of tourism events	R 650 000
Sport Tourism Winter Campaign	Campaign implemented	R 109 000
EPWP Invasive Alien Management Programme	Number of hectares cleared	R 2 148 000
HIV/AIDS Programme	Number of HIV/AIDS Programmes Implemented	R 137 500
Elderly	Number of Active Age programmes implemented	R 342 240
Disabled	Number of interventions implemented which focus on the rights of people with disabilities	R 390 000

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District Wide Support		
Type of support	**Deliverable**	**Financial Impact**
Community Support Programme	Number of Service Level Agreements signed with community based organisations	R 400 000
Families and Children (Substance Abuse)	Programmes and support for vulnerable children Provision of sanitary towels Support for ECDs	R 601 500
Early Childhood Development	Number of Early Childhood Development Toolkits distributed	R 200 000
Sport, Recreation and Culture Programmes	Number of programmes	R 3 489 920
Youth	Number of youth development programmes	R 696 000
Women	Number of awareness programmes	R 111 890
Sidewalks and Embayment's	Number of sidewalks and Embayment's completed	R 2 555 600
Road Safety Education	Number of Road Safety Education programmes	R 1 398 000
River rehabilitation (EPWP)	Hectares cleared	R 360 000
Skills Development (EPWP)	Number of skills development initiatives implemented	R 300 000

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CHAPTER 7: ORGANISATIONAL PERFORMANCE SCORECARD (PER STRATEGIC OBJECTIVE) AND FINANCIAL PLAN

CAPE WINELANDS DISTRICT MUNICIPALITY – STRATEGIC OBJECTIVES:	
Office of the Municipal Manager:	Strategic Support to the organisation to achieve the objectives as set out in the Integrated Development Plan through: • A well-defined and operational IDP Unit; • A well-defined and operational Performance Management Unit; • A well-defined and operational Risk Management Unit; • A well-defined and operational Internal Audit Unit; and • A well-defined and operational Communication Unit.

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CAPE WINELANDS DISTRICT MUNICIPALITY: PREDETERMINED OBJECTIVES	
1.1	Provide a comprehensive and equitable Municipal Health Service including Air Quality Management throughout the area of the Cape Winelands District Municipality.
1.2	Ensure coordination of multi-disciplinary and sectoral disaster risk reduction through integrated institutional capacity for Disaster Risk management, Disaster Risk Assessment and Response and Recovery.
1.3	Effective planning and coordination of specialized fire-fighting services throughout the area of the Cape Winelands District Municipality.
1.4	To facilitate environmentally sustainable economic development planning through the development and maintenance of strategic partnerships, investment attraction, retention and opportunities, SMME support and development, skills development and information knowledgement.
1.5	To facilitate, ensure and monitor the development and empowerment of the poor by graduating people out of poverty, social inclusion and improving the livelihood of the poor, vulnerable groups, rural farm dwellers and rural communities.
2.1	To comply with the administrative and financial conditions of the Western Cape Government roads agency function agreement.
2.2	To implement sustainable infrastructure services throughout the area of the Cape Winelands District Municipality.
2.3	To increase levels of mobility throughout the area of the Cape Winelands District Municipality.
2.4	To improve infrastructure services for rural dwellers throughout the area of the Cape Winelands District Municipality.
2.5	To implement an effective ICT support system.
3.1	To facilitate and enhance sound financial support services.
3.2	To strengthen and promote participative and accountable Governance.
3.3	To facilitate and enhance sound strategic support services.

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NO.	STRATEGIC OBJECTIVES
SO 1	Creating an environment and forging partnerships that ensure social and economic development of all communities, including the empowerment of the poor in the Cape Winelands District.
SO 2	Promoting sustainable infrastructure services and a transport system which fosters social and economic opportunities.
SO 3	Providing effective and efficient financial and strategic support services to the Cape Winelands District Municipality.

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BUDGET ALLOCATION FOR 2020/2021 FINANCIAL YEAR

1.	To create an environment and forge partnerships that ensures the health, safety, social and economic development of all communities including the empowerment of the poor in the Cape Winelands District through economic, environmental and social infrastructure investment	**R145 090 189**	1.1	Provide a comprehensive and equitable Municipal Health Service including Air Quality Management throughout the CWDM.	**R42 205 581**
			1.2	Ensure coordination of multi-disciplinary and sectoral disaster risk reduction through integrated institutional capacity for Disaster Risk management, Disaster Risk Assessment and Response and Recovery	**R7 353 423**
			1.3	Effective planning and coordination of specialized fire-fighting services throughout the CWDM	**R60 456 933**
			1.4	To facilitate environmentally sustainable economic development planning through the development and maintenance of strategic partnerships, investment attraction, retention and opportunities, SMME support and development, skills development and information knowledgement.	**R21 870 146**
			1.5	To facilitate, ensure and monitor the development and empowerment of the poor by graduating people out of poverty, social inclusion and improving the livelihood of the poor, vulnerable groups, rural farm dwellers and rural communities.	**R13 204 106**
2.	Promoting sustainable infrastructure services and a transport system which fosters social and economic opportunities.	**R174 237 848**	2.1	To comply with the administrative and financial conditions of the Western Cape Government roads agency function agreement.	**R124 078 933**
			2.2	To implement sustainable infrastructure services.	**R9 333 976**
			2.3	To increase levels of mobility in the whole of the CWDM area.	**R9 119 374**
			2.4	To improve infrastructure services for rural dwellers	**R12 748 983**
			2.5	To implement an effective ICT support system.	**R18 956 582**
3.	To provide an effective and efficient financial and strategic support services to the Cape Winelands District Municipality.	**R126 201 115**	3.1	To facilitate and enhance sound financial support services	**R25 952 748**
			3.2	To strengthen and promote participative and accountable IGR and governance.	**R40 472 509**
			3.3	To facilitate and enhance sound strategic support services	**R59 775 858**
Total		**R445 529 152**			**R445 529 152**

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BUDGET ALLOCATION FOR 2021/2022 FINANCIAL YEAR

1.	To create an environment and forge partnerships that ensures the health, safety, social and economic development of all communities including the empowerment of the poor in the Cape Winelands District through economic, environmental and social infrastructure investment	**R145 735 841**	1.1	Provide a comprehensive and equitable Municipal health Service including Air Quality Management throughout the CWDM.	**R44 807 154**
			1.2	Ensure coordination of multi-disciplinary and sectoral disaster risk reduction through integrated institutional capacity for Disaster Risk management, Disaster Risk Assessment and Response and Recovery	**R7 743 776**
			1.3	Effective planning and coordination of specialized fire-fighting services throughout the CWDM	**R61 371 222**
			1.4	To facilitate environmentally sustainable economic development planning through the development and maintenance of strategic partnerships, investment attraction, retention and opportunities, SMME support and development, skills development and information knowledgement.	**R18 528 191**
			1.5	To facilitate, ensure and monitor the development and empowerment of the poor by graduating people out of poverty, social inclusion and improving the livelihood of the poor, vulnerable groups, rural farm dwellers and rural communities.	**R13 285 498**
2.	Promoting sustainable infrastructure services and a transport system which fosters social and economic opportunities.	**R184 242 978**	2.1	To comply with the administrative and financial conditions of the Western Cape Government roads agency function agreement.	**R132 643 356**
			2.2	To implement sustainable infrastructure services.	**R9 671 195**
			2.3	To increase levels of mobility in the whole of the CWDM area.	**R9 269 117**
			2.4	To improve infrastructure services for rural dwellers	**R13 336 505**
			2.5	To implement an effective ICT support system.	**R19 322 805**
3.	To provide an effective and efficient financial and strategic support services to the Cape Winelands District Municipality.	**R129 854 048**	3.1	To facilitate and enhance sound financial support services	**R27 543 327**
			3.2	To strengthen and promote participative and accountable IGR and governance.	**R40 507 895**
			3.3	To facilitate and enhance sound strategic support services	**R61 802 826**
Total		**R459 832 867**			**R459 832 867**

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BUDGET ALLOCATION FOR 2022/2023 FINANCIAL YEAR

1.	To create an environment and forge partnerships that ensures the health, safety, social and economic development of all communities including the empowerment of the poor in the Cape Winelands District through economic, environmental and social infrastructure investment	**R150 660 852**	1.1	Provide a comprehensive and equitable Municipal health Service including Air Quality Management throughout the CWDM.	**R47 465 117**
			1.2	Ensure coordination of multi-disciplinary and sectoral disaster risk reduction through integrated institutional capacity for Disaster Risk management, Disaster Risk Assessment and Response and Recovery	**R8 134 476**
			1.3	Effective planning and coordination of specialized fire-fighting services throughout the CWDM	**R63 376 976**
			1.4	To facilitate environmentally sustainable economic development planning through the development and maintenance of strategic partnerships, investment attraction, retention and opportunities, SMME support and development, skills development and information knowledgement.	**R19 018 786**
			1.5	To facilitate, ensure and monitor the development and empowerment of the poor by graduating people out of poverty, social inclusion and improving the livelihood of the poor, vulnerable groups, rural farm dwellers and rural communities.	**R12 665 497**
2.	Promoting sustainable infrastructure services and a transport system which fosters social and economic opportunities.	**R190 889 755**	2.1	To comply with the administrative and financial conditions of the Western Cape Government roads agency function agreement.	**R139 242 153**
			2.2	To implement sustainable infrastructure services.	**R10 033 183**
			2.3	To increase levels of mobility in the whole of the CWDM area.	**R9 429 341**
			2.4	To improve infrastructure services for rural dwellers	**R13 653 265**
			2.5	To implement an effective ICT support system.	**R18 531 813**
3.	To provide an effective and efficient financial and strategic support services to the Cape Winelands District Municipality.	**R133 008 470**	3.1	To facilitate and enhance sound financial support services	**R28 296 093**
			3.2	To strengthen and promote participative and accountable IGR and governance.	**R42 400 653**
			3.3	To facilitate and enhance sound strategic support services	**R62 311 724**
Total		**R474 559 077**			**R474 559 077**

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CHAPTER 8: MEDIUM TERM REVENUE AND EXPENDITURE FRAMEWORK

8.1 INTRODUCTION

The application of sound financial management principles for the compilation of the Municipality's financial plan is essential and critical to ensure that the Municipality remains financially viable and that municipal services are provide sustainably, economically and equitably to all communities.

The Municipality's business and service delivery priorities were reviewed as part of this year's planning and budget process. The municipality also strives to deliver sustainable services to its community without overburdening the consumers with excessive tariffs.

The top strategic risks identified by the annual risk assessments can be summarised as follows:

1. Financial viability;
2. Increasing employee costs year-on-year;
3. Lack of succession planning and talent management;
4. Inadequate corporate governance
5. Inadequate contract management;
6. Lack of business continuity in case of an eventuality (ICT); and
7. Climate change

For each of the above risk areas the municipality has put mitigating measures in place aligned to the specific department in the budget. These measures will be implemented over the MTREF period.
Due to the decreasing Equitable Share Allocation the municipality could not budget for a surplus, which will have a negative effect on its Accumulated Surplus. In addressing the key considerations contained in National Treasury's MFMA Circular 74, the following are highlighted in the budget:

- The municipality cut back on capital and operating expenditure related to the upgrading of rural roads (which is the property of the Provincial Government) to maintain accumulated reserves and ensure long term sustainability of the municipality
- Capital projects were spread out over the MTREF to avoid large fluctuations in spending and ensure that priority is given to projects with high importance
- Tariff increases were kept as low as possible to ensure affordability thereof, whilst keeping in mind the cost of delivering services of a high quality.
- The municipality recognizes the importance of cash reserves and therefor strives to maintain a current ratio of not lower than 2.1(Current Assets: Current Liabilities)

In view of the aforementioned, the following table is a consolidated overview of the proposed 2019/2020 Medium-term Revenue and Expenditure Framework

OPERATING BUDGET

YEAR	EXPENDITURE	INCOME	SURPLUS (-) /DEFICIT
2020 / 2021	445 529 152	-444 374 295	1 154 857
2021 / 2022	459 832 867	-458 936 405	896 462
2022 / 2023	474 559 077	-471 350 516	3 208 561

CAPITAL BUDGET

YEAR	EXPENDITURE	INCOME	SURPLUS (-) /DEFICIT
2020 / 2021	29 890 971	-29 890 971	0
2021 / 2022	23 758 100	-23 758 100	0
2022 / 2023	23 047 900	-23 047 900	0

OPERATING BUDGET – REVENUE

The Cape Winelands District Municipality is reliant on Grant funding as its main source of revenue.

This is as a result of the abolishment of the RSC Levi

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The following table reflects the revenue sources for the 2019/2020 to 2022/2023 financial years:

Sources of Income	2019/2020	2020/2021	% Inc./-Dec. Between 2019/20 & 2020/21	2021/2022	2022/2023
Ex Rev: Operational Revenue	-15 306 990,00	-15 180 395,00	-1%	-15 888 405	-16 641 816
Ex Rev: Rental Fixed Assets	-240 000,00	-131 000,00	-45%	-131 000	-131 000
Ex Rev: Agency Services	-125 524 743,00	-123 853 100,00	-1%	-132 368 200	-137 663 900
Ex Rev: Sales Goods and Services	-404 800,00	-404 800,00	0%	-404 800	-404 800
Ex Rev: Service Charges	-150 000,00	-150 000,00	0%	-150 000	-150 000
Ex Rev: Int Divident Rent on Land	-56 500 000,00	-56 000 000,00	-1%	-56 000 000	-56 000 000
Non-Ex Rev:	-240 000,00	-250 000,00	4%	-250 000	-250 000
Non-Ex Rev: Transfers & Subsidies	-244 684 702,50	-248 116 000,00	1%	-253 455 000	-259 820 000
- RSC Replacement Grant	-229 717 000,00	-235 929 000,00	3%	-242 546 000	-248 404 000
- Equitable Share	-2 339 000	-2 512 000	7%	-2 699 000	-2 859 000
- LG Finance Management Grant	-1 000 000,00	-1 000 000,00	0%	-1 000 000	-1 000 000
Financial Management Support (WG_FMGSG)	-280 000,00	-	-100%	0	0
- Fire Services Capacity Grant	-1 046 000,00	-	100%	0	0
- CWDM Integrated Transprot Plan	-1 687 702,50	-900 000,00	-47%	-900 000	-900 000
- Community Development Workers	-148 000,00	-75 000,00	0%	-75 000	-75 000
-Local Government Internship Grant	-232 000,00	-	-100%	0	0
- WC Financial Management Capacity Building Grant	-380 000,00	-401 000,00	6%	0	0
- Subs. DOW.: Hiring of Toilets	-925 000,00	-985 000,00	6%	-1 051 000	-1 120 000
- Expanded Public Works Programme	-1 581 000,00	- 1 503 000	-5%	-	-
- Safety Plan Implementation Grant	- 2 100 000	- 2 100 000	0%	- 2 323 000	- 2 435 000
- Municipal Service Delivery & Capacity Building	- 400 000		-100%		
- Rural Roads Asset Man, System (Dora)	- 2 849 000	- 2 711 000	-5%	- 2 861 000	- 3 027 000
Seta Refund	- 289 000	- 289 000	0%	- 289 000	- 289 000
Total	- 443 340 236	- 444 374 295	0%	- 458 936 405	- 471 350 516

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OPERATING BUDGET – EXPENDITURE

The table below illustrates the operating Expenditure for 2019/2020 to 2022/2023 financial years:

Expenditure Categories	2019/2020	2020/2021	% Inc./-Dec. Between 2019/20 & 2020/21	2021/2022	2022/2023
Employee Related Costs	224 823 766	233 421 264	4%	246 552 207	258 609 456
Remuneration of Councillors	13 322 726	13 940 994	5%	14 881 241	15 901 648
Operational Cost	79 388 799	80 425 816	1%	81 689 084	84 238 120
Contracted Services	56 738 254	59 233 994	4%	57 437 670	55 582 588
Operating Leases	1 029 000	1 029 000	0%	1 029 000	1 029 000
Bad Debt Written Off	1 018 100	750 000	-26%	750 000	750 000
Depreciation and Amortisation	11 941 842	11 955 242	0%	11 955 242	11 955 242
Inventory	35 098 834	29 531 202	-16%	31 097 783	32 220 383
Transfers and Subsidies	12 534 640	15 221 640	21%	14 420 640	14 232 640
Gains and Losses	196 610	20 000	-90%	20 000	40 000
Total	436 092 571	445 529 152	2%	459 832 867	474 559 077

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EMPLOYEE RELATED COST:

Remuneration of Councilors is budgeted for in terms of the Public Office Bearers Act and the approval of the MEC

OPERATIONAL COST:

The decrease in Operational Cost is mainly due to savings identified during the budget process.

CAPITAL BUDGET

The capital budget decreased from R 37 178 471 in 2020/2021 to R 19 998 100 in 2021/2022.

In terms of the MFMA, the Mayor must at least 90 days before commencement of the new financial year, table a draft budget for consideration. The budget must be approved in May 2019 after the completion of the public participation process. The Annual Budget of a municipality must be prepared in terms of Section 17 of the MFMA. Council's Budget must be in line with the Government's spending priorities. Key legal provisions are to be Strictly Enforced.

All grants, including national, provincial and local allocations, should be included in the 2019/20 budget of the municipality as reflected under both the revenue and expenditure budget components. A three year capital and operating budgets for 2019/2020, 2020/21 and 2021/22 MTREF period should be prepared. Reporting requirements for conditional grants must be satisfied.

The budget must be tabled for consultation at least 90 days before the start of the Budget year (Section. (16)(2)) of the MFMA. There must be a clear link between the Budget, IDP and Performance Targets. Municipalities are required to seriously assess their revenue situation and financial health for purposes of determining whether or not they have sufficient revenue and adequate financial stability to fund and deliver on their proposed budget.

The Cape Winelands District Municipality will implement a five-year Medium Term Revenue and Expenditure Framework, aligned to the five-year Integrated Development Plan for the 2019/20 - 2023/24 cycle.

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8.2 TOTAL ACTUAL BUDGET

	2020/2021	2021/2022	2022/2023
Operating Expenditure	416 894 965	435 468 140	451 209 210
Project Expenditure	28 634 187	24 364 727	23 349 867
Sub Total	**445 529 152**	**459 832 867**	**474 559 077**
Capital Expenditure	29 890 971	23 758 100	23 047 900
Total Budget	475 420 123	483 590 967	497 606 977

8.3 COMPARISON BETWEEN THE ADJUSTMENT BUDGET AND THE 2018/2019 BUDGET

	Adjustment budget Feb 2020	2020/2021	% Variance
Operating Expenditure	417 629 518	416 894 965	0%
Project Expenditure	18 463 053	28 634 187	55%
Sub Total	**436 092 571**	**445 529 152**	2%
Capital Expenditure	10 948 827	29 890 971	173%
Total Budget	447 041 398	475 420 123	6%

8.4 FUNDING OF THE BUDGET

Definition of a Reserve:

A reserve is part of retained earnings set aside for a specified purpose, and hence, unavailable for disbursements

The only reserves disclosed in Council's financial statements are the following:

- Capital Replacement Reserve – to finance Property Plant and Equipment
- Revaluation reserve – to offset depreciation on the re-valued portion of building and de-valuation of buildings

(*Both the above reserves are non-distributable reserves*)

Definition of a Provision:

Provisions are made to make future payments towards liabilities that you already have (Future Medical Aid Liability).

	2020/2021	2021/2022	2022/2023
RSC Replacement Grant	-235 929 000	-242 546 000	-248 404 000
Equitable Share	-2 512 000	-2 699 000	-2 859 000
Finance Management Grant	-1 000 000	-1 000 000	-1 000 000
EPWP Incentive	-1 503 000	0	0
Other National Dora Grants	-2711000	-2 861 000	-3 027 000
Provincial Dora Grants	-3 765 000	-3 587 000	-3 410 000
Other income	-17101195	-17 875 205	-18 986 616
Interest Received	-56000000	-56 000 000	-56 000 000
Agency Services:	-123853100	-132 368 200	-137 663 900
Total Budget	-444 374 295	-458 936 405	-471 350 516

8.5 FINANCIAL POSITION

	Adjustment Budget Feb2020	2020/2021	2021/2022	2022/2023
Operating Expenditure	436 092 571	445 529 152	459 832 867	474 559 077
Operating Income	- 443 340 236	- 444 374 295	- 458 936 405	- 471 350 516
(Surplus) / Deficit	- 7 247 665	1 154 857	896 462	3 208 561

8.6 LIQUIDITY AND DEBT- EQUITY RATIO'S

Current Ratio = Current Assets / Current Liabilities

2017/18	2018/19
15.40:1	17:98:1

This ratio indicates that Council's Current Assets exceed its Current Liabilities

Cash Ratio = Cash and Cash Equivalents / Current Liabilities

2017/2018	2018/19
14:60:1	17:05:1

This ratio indicates that Council will be able to honour current payments

8.7 CAPITAL REPLACEMENT RESERVE FOR THE 2019/2020 - 2021/2022 MTREF

Capital Replacement Reserve	2020/2021	2021/2022	2022/2023
Opening Balance	3 680 428	33 789 457	25 031 357
Acquisitions for the year	-29 890 971	-23 758 100	-23 047 900
Contributions to Reserve	60 000 000	15 000 000	15 000 000
Closing Balance	33 789 457	25 031 357	16 983 457

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8.8 KEY PROJECTS

COST CENTRE				DESCRIPTION	Feb-20	2020/2021	2021/2022	2022/2023
	LOCAL ECONOMIC DEVELOPMENT							
1	1004			ENTREPRENURIAL SEED FUNDING	0	1 000 000	500 000	500 000
1	1004			SMALL FARMER SUPPORT PROGRAMME	0	1 000 000	500 960	500 000
1	1004			BUSINESS RETENTION EXPANSION PROJECT	700 000	700 000	700 000	700 000
1	1004			INVESTMENT ATTRACTION PROGRAMME	550 000	480 000	550 000	550 000
1	1004			SMME TRAINING AND MENTORSHIP	0	1 500 000	750 000	750 000
					1 250 000	4 680 000	3 000 960	3 000 000
	TOURISM							
1	1103			TOURISM TRAINING	820 000	950 000	850 000	850 000
1	1103			TOURISM MONTH	30 000	40 000	30 000	30 000
1	1103			MAYORAL TOURISM AWARDS	122000	370 000	122 000	122 000
1	1103			MAYORAL TOURISM AWARDS MEDIA LAUNCH	47000	57 000	47 000	47 000
1	1103			TOURISM EDUCATIONALS	150 000	300 000	150 000	150 000
1	1103			LTA PROJECTS	280 000	450 000	300 000	300 000
1	1103			SPORT TOURISM WINTER CAMPAIGN	105 000	109 000	109 000	109 000
	1103			TOWNSHIP TOURISM	400 000	500 000	400 000	397 000
1	1103			TOURISM EVENTS	527 000	650 000	527 000	527 000
					2 481 000	3 426 000	2 535 000	2 532 000
	LAND-USE AND SPATIAL PLANNING							
1	1521			EPWP INVASIVE ALIEN VEGETATION MANAGEMENT PROGRAMME	1 131 316	2 148 000	1 530 000	1 530 000
1	1521			RIVER REHABILITATION	0	360 000	360 000	360 000
					1 131 316	2 508 000	1 890 000	1 890 000
	PROJECTS AND HOUSING							
1	1330			INFRASTRUCTURE RURAL AREA (REN. ELECT.) FARMERS	747 000	1 000 000	1 000 000	1 000 000
1	1330			PROVISION OF WATER SERVICES TO SCHOOLS: COUNCIL	180 000	500 000	500 000	500 000
1	1330			UPGRADING OF RURAL SPORT FACILITIES	1 108 000	2 512 000	2 512 000	2 512 000
1	1330			CLEARING OF ROAD RESERVES	690 000	2 090 000	1 380 000	1 380 000
					2 725 000	6 102 000	5 392 000	5 392 000
	PUBLIC TRANSPORT REGULATION							
1	1615			ROAD SAFETY EDUCATION	1 148 000	1 398 000	1 398 000	1 398 000
1	1615			SIDEWALKS AND EMBAYMENTS	1 595 600	2 555 600	2 555 600	2 555 600
					2 743 600	3 953 600	3 953 600	3 953 600
	MUNICIPAL HEALTH SERVICES							
1	1441			SUBSIDY: WATER/SANITATION - FARMS	1 000 000	1 000 000	1 000 000	1 000 000
1	1441			ENVIRONMENTAL HEALTH EDUCATION	445 537	445 537	421 117	421 117
					1 445 537	1 445 537	1 421 117	1 421 117
	DISASTER MANAGEMENT							
1	1610			DISASTER RISK ASSESSMENT	263 500	0	0	0
					263 500			
	SOCIAL DEVELOPMENT							
1	1475			HIV/AIDS PROJECTS	151 000	137 500	137 500	117 500
1	1475			ELDERLY	547 640	342 240	342 240	327 240
1	1475		1118	FAMILIES AND CHILDREN	557 200	601 500	601 500	409 900
1	1475			EARLY CHILDHOOD DEVELOPMENT	200 000	200 000	200 000	200 000
1	1475		1018	COMMUNITY SUPPORT PROJECT	400 000	400 000	400 000	400 000
1	1475		551	SKILLS DEVELOPMENT	150 000	150 000	150 000	150 000
1	1475		1113	YOUTH	277 350	696 000	449 000	210 900
1	1475		1125	WOMEN	91 890	111 890	111 890	91 890
					2 375 080	2 639 130	2 392 130	1 907 430
	RURAL DEVELOMPENT							
1	1477			SPORT, RECREATION AND CULTURE	3705820	3 489 920	3 489 920	2 955 720
1	1477			DISABLED	342 200	390 000	290 000	298 000
					4048020	3879920	3779920	3253720
	TOTAL				18 463 053	28 634 187	24 364 727	23 349 867

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8.5 AREAS OF POTENTIAL SAVING

There is a strong strategic understanding that Cape Winelands District Municipality must exercise its functions as a Planning and Co-ordinating authority and not as an Executing authority. Therefore, these areas of potential savings must be contextualized accordingly:

- Don't spend funds on unnecessary items such as:
    - Catering for meetings between officials and officials and councillors;
    - Excessive traveling; and
    - Replacement of old office furniture still in good condition.
- Save on Salary Bill;
- Co-operational agreements between councils;
- Excessive use of stationery;
- Decrease the use of consultants;
- Attend only necessary congresses; and
- Alienate under-utilized buildings.

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CHAPTER 9: MONITORING AND EVALUATION

CWDM Performance Calendar – 2019/20 Financial Year:

No	Activity	Responsible Person	Action Due Date
1.	IDP Update	IDP Office	January/February 2020
2.	Budget Review	Finance	February/March 2020
3.	Review of Organisational KPI	PMS Office	April/May 2020
4.	Individual Scorecards Review	PMS Office/Management	April/May 2020
5.	Organisational KPI (SDBIP) Finalisation and Approval	Mayor	May 2020
6.	Budget approval	Council	May 2020
7.	IDP Approval	Council	May 2020
8.	Performance Agreements reviewed, signed by Executive Management and approved by Mayor	Municipal Manager/Executive Directors/Mayor	May 2020
9.	Monthly Monitoring of Performance (including update of SAMRAS)	PMS Office	Monthly effective 30 une 2020
10.	Quarterly Performance Reporting	PMS Office	15th day following the end of the quarter: • September 2020 • December 2020 • March 2021 • June 2021
11.	Quarterly Performance Report to Council	PMS Office	At the end of each quarter (1st following Council meeting): • September 2020 • December 2020 • March 2021 • June 2021
12.	Internal Audit Report on Performance Management System	Chief Audit Executive/Internal Audit	Internal audit each quarter: • September 2020 • December 2020 • March 2021 • June 2021
13.	Revisit budget and link to SDBIP	PMS Office/Finance	December 2020 - January 2021
14.	Annual Performance Report	PMS Office	31 August 2020
15.	Oversight Report to Council	MPAC	February/March 2020

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QUARTERLY PROJECTIONS OF SERVICE DELIVERY TARGETS AND PERFORMANCE INDICATORS (ORGANISATIONAL KPI's) – draft *(to be read in conjunction with the final approved June 2020 SDBIP)*

STRATEGIC OBJECTIVE 1 - Creating an environment and forging partnerships that ensure social and economic development of all communities, including the empowerment of the poor in the Cape Winelands District															
CWDM PDO	PDO Nr	Outcome Indicator	KPI Nr	Key Performance Indicator	Baseline	Quarterly Targets									
						Target Q1	Actual Q1	Target Q2	Actual Q2	Target Q3	Actual Q3	Target Q4	Actual Q4	Annual Target	Comments
1.1	1.1.1	To administer an effective environmental health management system in order to achieve the environmental health objectives set.	1.1.1.1	Monthly report to PGWC on all MHS matters by the 15th of the following month (Sinjani report).	12	3		3		3		3		12	
	1.1.2	To facilitate effective environmental pollution control through identification, evaluation and/or monitoring to prevent air pollution.	1.1.2.1	Submission of the annual Air Quality Officer Report to PGWC.	1	0		0		0		1		1	
	1.1.3	To improve the livelihoods of citizens in the Cape Winelands District.	1.1.3.1	Number of water and/or sanitation subsidies granted to citizens in the Cape Winelands District.	12	5		5		5		6		21	

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STRATEGIC OBJECTIVE 1 - Creating an environment and forging partnerships that ensure social and economic development of all communities, including the empowerment of the poor in the Cape Winelands District															
CWDM PDO	PDO Nr	Outcome Indicator	KPI Nr	Key Performance Indicator	Baseline	Quarterly Targets									
						Target Q1	Actual Q1	Target Q2	Actual Q2	Target Q3	Actual Q3	Target Q4	Actual Q4	Annual Target	Comments
1.2	1.2.1	To coordinate an effective disaster management division in order to achieve the disaster management objectives set.	1.2.1.1	Number of bi-annual Disaster Management Advisory Forums held.	2	0		1		0		1		2	
1.3	1.3.1	Effective planning and co-ordination of specialized fire-fighting services.	1.3.1.1	Pre-fire season and post-fire season reports submitted to Council for consideration for approval.	2	0		1		0		1		2	
	1.3.2	Build fire-fighting capacity.	1.3.2.1	Number of the officials trained by the CWDM Fire Services Academy.	60	30		0		0		30		60	
1.4	1.4.1	To fulfil a coordinating role in terms of town and regional planning within the Cape Winelands District.	1.4.1.1	Annual review of CWDM's SDF, submitted to Council for consideration for approval.	1	0		0		0		1		1	
	1.4.2	Implement environmental management activities to achieve environmental sustainability.	1.4.2.1	Number of hectares cleared through the EPWP Invasive Alien Vegetation	1800	150		200		0		800		1150	

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STRATEGIC OBJECTIVE 1 - Creating an environment and forging partnerships that ensure social and economic development of all communities, including the empowerment of the poor in the Cape Winelands District															
CWDM PDO	PDO Nr	Outcome Indicator	KPI Nr	Key Performance Indicator	Baseline	Quarterly Targets									
						Target Q1	Actual Q1	Target Q2	Actual Q2	Target Q3	Actual Q3	Target Q4	Actual Q4	Annual Target	Comments
				Management Project.											
	1.4.3	To fulfil a coordinating role in terms of Economic and Tourism Development within the Cape Winelands District.	**1.4.3.1**	Number of LTA Forums coordinated by the CWDM.	6	2		1		2		1		6	
			1.4.3.2	Number of LED Forums coordinated by the CWDM.	4	1		1		1		1		4	
1.5	**1.5.1**	To improve the livelihoods of citizens in the Cape Winelands District.	**1.5.1.1**	Number of ECD centres supported by the CWDM.	20	0		0		0		20		20	
			1.5.1.2	Number of youths who complete the skills development project.	30	5		10		5		10		30	

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STRATEGIC OBJECTIVE 2 - Promoting sustainable infrastructure services and a transport system which fosters social and economic opportunities																
CWDM PDO	PDO Nr	Outcome Indicator	KPI Nr	Key Performance Indicator	Baseline	Quarterly Targets										
						Target Q1	Actual Q1	Target Q2	Actual Q2	Target Q3	Actual Q3	Target Q4	Actual Q4	Annual Target	Comments
2.1	2.1.1	Roll-out and implementation of the maintenance function and activities for proclaimed roads as an agent on behalf of the Western Cape Department of Transport and Public Works.	2.1.1.1	Conclude the annual MOA or addendum with PGWC.	1	0		0		0		1		1	
			2.1.1.2	Kilometres of roads re-sealed.	15	3		3		3		5		15	
			2.1.1.3	Kilometres of roads bladed.	5 000	1 250		1 250		1 250		1 250		5 000	
			2.1.1.4	Kilometres of roads re-gravelled.	12	3		3		3		3		12	
2.2	2.2.1	Coordinate and improve the planning of infrastructure services in the Cape Winelands District.	2.2.1.1	Annual review, and alignment with review outcome, of the IWMP and submit to Council for consideration for approval.	1	0		0		0		1		1	
2.3	2.3.1	Improve pedestrian safety throughout the Cape Winelands District.	2.3.1.1	Annual review, and alignment with review outcome, of the DITP and submit to Council for consideration for approval.	1	0		0		0		1		1	

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			2.3.1.2	Number of sidewalks and/or embayments and/or bus shelters completed or upgraded.	24	6		6		6		6		24	
2.4	**2.4.1**	To improve infrastructure services for citizens in the Cape Winelands District.	**2.4.1.1**	Percentage of project budget spent on rural projects.	90%	5% (cumulative)		20% (cumulative)		40% (cumulative)		90% (cumulative)		90%	
	2.4.2	To improve the livelihoods of citizens in the Cape Winelands District.	**2.4.2.1**	Number of schools assisted with ablution facilities and/or improved water supply.	3	0		1		1		1		3	
			2.4.2.2	Number of solar geysers installed.	166	0		50		50		66		166	
			2.4.2.3	Number of sport facilities upgraded or completed and/or supplied with equipment.	8	2		2		2		2		8	
2.5	**2.5.1**	To improve ICT governance in the Cape Winelands District.	**2.5.1.1**	Annual review, and alignment with review outcome, of the ICT Governance Framework and/or the ICT Strategic Plan and submit to Council for consideration for approval.	1	0		0		0		1		1	

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STRATEGIC OBJECTIVE 3 - Providing effective and efficient financial and strategic support services to the Cape Winelands District Municipality (Chief Financial Officer)																
CW DM PDO	PDO Nr	Outcome Indicator	KPI Nr	Key Performance Indicator	Baseline	Quarterly Targets										
						Target Q1	Actual Q1	Target Q2	Actual Q2	Target Q3	Actual Q3	Target Q4	Actual Q4	Annual Target	Comments
3.1	3.1.1	To compile a budget that is available before the start of the financial year.	3.1.1.1	Compilation of a budget and submitted to Council by 31 May.	1	0		0		0		1		1	
	3.1.2	Transparent and accountable reporting to all stakeholders.	3.1.2.1	Compilation of a mid-year assessment (section 72 report), submitted to Council by 31 January.	1	0		0		1		0		1	
	3.1.3	Fair, equitable, transparent, competitive and cost-effective SCM practices.	3.1.3.1	Submit to Council a report on the implementation of SCM (within 30 days after financial year-end).	1	1		0		0		0		1	
	3.1.4	To promote the financial viability of the CWDM through sound financial management practices	3.1.4.1	Maintaining a sound liquidity ratio as at financial year-end.	3,8:1	0		0		0		3,8:1		3,8:1	
			3.1.4.2	Maintaining a sound solvency ratio as at financial year-end	2,8:1	0		0		0		2,8:1		2,8:1	
3.2	3.2.1	To coordinate functional statutory and other committees	3.2.1.1	Number of Council meetings that are supported administratively	7	1		1		3		2		7	
			3.2.1.2	Number of MAYCO meetings that are supported administratively	9	2		2		3		2		9	

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3.3	**3.3.1**	To capacitate a skilled and competent workforce in order to realise organisational SO's	**3.3.1.1**	Number of WSP submissions to the LGSETA.	1	0		0		0		1		1	
			3.3.1.2	The percentage of CWDM's training budget actually spent on implementing its WSP.	90%	5% (cumulative)		20% (cumulative)		50% (cumulative)		90% (cumulative)		90%	
	3.3.2	Facilitate an administrative function in so far as it relates to labour relations	**3.3.2.1**	Number of Employment Equity report submissions to the Department of Labour.	1	0		0		1		0		1	

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STRATEGIC OBJECTIVE 3 - Providing effective and efficient financial and strategic support services to the Cape Winelands District Municipality (Municipal Manager)																
CWDM PDO		Outcome Indicator		Key Performance Indicator	Baseline	Quarterly Targets										
						Target Q1	Actual Q1	Target Q2	Actual Q2	Target Q3	Actual Q3	Target Q4	Actual Q4	Annual Target	Comments
3.3	3.3.3	To manage the capital funds spent in relation to the receipt thereof for improved service delivery	3.3.3.1	The percentage of CWDM's capital budget actually spent by the end of the financial year	90%	0		0		0		90% (cumulative)		90%	
	3.3.4	To promote a corruption-free CWDM.	3.3.4.1	Establishment of an externally managed corruption hotline	0	0		0		0		1		1	
	3.3.5	To improve the livelihoods of citizens in the CWDM area	3.3.5.1	Number of work opportunities created (in person days) through CWDM's various initiatives	10 000	2000		3000		20000		3000		10 000	
	3.3.6	To transform the work force of the CWDM in terms of representation	3.3.6.1	Number of people from employment equity target groups employed in the 3 highest levels of management in compliance with CWDM's approved Employment Equity Plan	90% (of appointments)	0		0		0		90% (of appointments)		90% (of appointments)	

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CAPE WINELANDS DISTRICT MUNICIPALITY

INTEGRATED WASTE MANAGEMENT PLAN
(3rd Generation)

(*Final Report*)

Compiled by:

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JULY 2015

CAPE WINELANDS DISTRICT MUNICIPALITY

INTEGRATED WASTE MANAGEMENT PLAN

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ABBREVIATIONS

DEA	Department of Environment Affairs
D:EA&DP	Department of Environmental Affairs and Development Planning
DWA	Department of Water Affairs
EIA	Environmental Impact Assessment
Haz	Hazardous
HCGW	Health Care General Waste
HCRW	Health Care Risk Waste
HCW	Health Care Waste
HDPE	High Density Polyethylene
kg	kilogram
kℓ	kilolitre
ℓ	litre
m^3pa	cubic meter per annum
t/a	ton per annum
VWMF	Vissershok Waste Management Facility
CNC	Cape Nature Conservation
IWMP	Integrated Waste Management Plan
JPCE	Jan Palm Consulting Engineers
IPWIS	Integrated Pollutant and Waste Information System
NWMS	National Waste Management Strategy
WCIWMP	Western Cape Integrated Waste Management Plan
IDP	Integrated Development Plan
SDF	Spatial Development Framework
CWDM	Cape Winelands District Municipality

CAPE WINELANDS DISTRICT MUNICIPALITY

INTEGRATED WASTE MANAGEMENT PLAN

EXECUTIVE SUMMARY

INTRODUCTION AND GENERAL DESCRIPTION

The third generation of this Integrated Waste Management Plan (IWMP) has been formulated by Jan Palm Consulting Engineers (JPCE) on behalf of the Cape Winelands District. The second generation IWMP was developed in 2011 and was subsequently commented on and evaluated by the Department: Environmental Affairs and Development Planning (D:EA&DP). This update incorporates the comments and recommendations made on the 2011 IWMP as well as the latest checklist for IWMPs by the D:EA&DP.

The IWMP is a statutory requirement of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) that has been promulgated and came into effect on 1 July 2009 and that has as its goal the transformation of the current methodology of waste management, i.e. collection and disposal, to a sustainable practice focussing on waste avoidance and environmental sustainability. Implementation of this IWMP will be through municipal by-laws and in accordance with an implementation schedule. The IWMP must be incorporated as part of each Municipality's Integrated Development Plan (IDP), but is submitted as a separate document. The IWMP also shows alignment of its goals with the Western Cape IWMP and the National Waste Management Strategy (NWMS 2011).

The primary objective of integrated waste management (IWM) planning is to integrate and optimise waste management, in order to maximise efficiency and minimise the associated environmental impacts and financial costs, and to improve the quality of life of all residents within the Cape Winelands District.

The Plan takes particular note of importance of local authority waste management planning. This document underlines the following principles of the National Waste Management Strategy:

- The prevention of waste generation;
- The recovery of waste of which the generation cannot be prevented, and
- The safe disposal of waste that cannot be recovered

The general topography, geology and hydrogeology of the area is discussed in section 1.3 and the demographic details in section 1.4. The current population estimate of the Cape Winelands is 860 671 people, based on the Census 2011 population of each local Municipality and each respective annual growth rate.

POLICY AND LEGISLATION

All applicable waste management legislation is listed and discussed under section 2 of the IWMP. The latest published legislation have been added in the IWMP update, which mainly consists of Norms & Standards published under the Waste Act since the 2011 IWMP.

EXISTING WASTE MANAGEMENT

Awareness and Education

Apart from each local Municipality's awareness and education initiatives, the District Municipality has ongoing annual awareness and education projects in the form of theatre performances, greening projects, river rehabilitation and EPWP cleaning projects.

Waste Quantities and Types

Where available, weighbridge data from the local Municipalities were included in calculating the total waste generated in the District. From areas where this information is not available, the totals were estimated from using waste generation rates per capita and applied to current and future estimated population figures.

The total waste for the District for 2015 was estimated at 317 639 tonnes with a future estimated total of 348972 tonnes for 2019. This equates to an average waste generation factor of 1.1kg/person/day.

Waste characterisation was based on the 2007 study by the D:EA&DP and the 2012 study by the Stellenbosch Municipality. The percentages and estimated total recyclables are shown below:

Municipality	Paper/Card (t/a)	Plastics (t/a)	Glass (t/a)	Metal (t/a)
Breede Valley	36%	9%	9%	6%
Drakenstein	34%	22%	11%	5%
Langeberg	33%	16%	8%	6%
Stellenbosch	16%	15%	8%	2%
Witzenberg	26%	27%	6%	7%

Municipality	Paper/Card (t/a)	Plastics (t/a)	Glass (t/a)	Metal (t/a)
Breede Valley	14995	3749	3749	2499
Drakenstein	26092	16883	8442	3837
Langeberg	10483	5082	2541	1906
Stellenbosch	17979	16856	8990	2247
Witzenberg	10707	11119	2471	2883
CWDM	80256	53688	26192	13372

The above theoretical figures give a total of approximately 173 509 tonnes per annum, which is 55% of the generated waste stream. It should be noted that this reflects the recyclable portion of the waste stream only as the mathematical representation. The full 58% cannot be seen as recoverable in the practical sense at this stage.

Waste Collection

The District does not render waste collection services as this is a function of the Local Municipalities. The IWMP gives a summary of each Local Municipal solid waste collection service and the level of free basic services rendered.

Waste Management Facilities

The District does not operate any waste management facilities at this stage. All identified waste management facilities such as transfer stations, disposal facilities and recycling facilities are discussed for each Local Municipality.

Identified Gaps

The following gaps were identified in the District

- Public Awareness and Education
- Recycling and waste minimisation
- Area cleaning
- Lack of information regarding waste generation types and volumes
- Aging collection fleet
- Law enforcement
- Disposal sites (condition and operation) and lack of disposal airspace
- Vacant positions in waste management departments

Strategic Objectives

Being a District Municipality and not “owning” any waste, these strategies are more focussed on supporting the local municipalities with their individual strategies and in the event of developing a district landfill, to develop action plans to ensure safe disposal. The District Municipality does not collect waste with the result that strategies for waste avoidance and waste reduction are not really applicable.

The Waste Management Strategic Objectives for Cape Winelands District Municipality on which this Plan is based, commits the municipality to:

- Create an atmosphere in which the environment and natural resources of the region are conserved and protected.

- Develop a communication/information/education strategy to help ensure acceptance of 'ownership' of the strategic objectives among members of the public and industry throughout the municipality and to promote co-operative community action.

- Provide solutions for the three main objectives:
  - The avoidance of waste generation
  - The reduction of waste volumes
  - The safe disposal of waste

IMPLEMENTATION

The IWMP has an implementation plan which is part of 7 main goals. These goals have each been divided into actions and years of implementation with estimated costs in order to achieve the main goals. These goals are:

Goal 1: Awareness and Education

Goal 2: Improve Waste Information Management

Goal 3: Effective Solid Waste Service Delivery

Goal 4: Promote and Ensure Waste Minimisation

Goal 5: Improve Regulatory Compliance

Goal 6: Ensure Safe and Integrated Management of Hazardous Waste

Goal 7: Ensure Sound Budgeting For Integrated Waste Management

MONITORING AND REVIEW

The IWMP acts as a planning guide and requires regular updates and reviews in order to stay relevant, especially the projects for implementation. Each project must be reviewed to measure its success, shortcomings or reasons for failure. The IWMP must be updated to reflect the progress of projects or to adapt strategies. The review will also assist in budgeting for upcoming waste management projects.

As the IWMP is a sectoral plan of the IDP, the following projects are recommended to be included in the IDP:

All implementation actions requiring Capital Expenditure not already contained in the IDP:
- The establishment of the regional integrated waste management facility following the issuing of the license

CAPE WINELANDS DISTRICT MUNICIPALITY

INTEGRATED WASTE MANAGEMENT PLAN

1. PREFACE

1.1 INTRODUCTION

The third generation of this Integrated Waste Management Plan (IWMP) has been formulated by Jan Palm Consulting Engineers (JPCE) on behalf of the Cape Winelands District Municipality to address the challenge of waste management in the District, home to some 860 660 people (Estimated 2015 population, refer to Section 1.4). The second generation IWMP was developed in 2011 and was subsequently commented on and evaluated by the Department: Environmental Affairs and Development Planning (D:EA&DP). JPCE was appointed by the Cape Winelands District Municipality to develop the third generation IWMP for 2015.

The November 2012 assessment report of the 2nd generation, 2011 IWMP is summarised as follows, which identified topics which should be addressed with the new IWMP revision:

- The Introduction and general description requires reference to recommendations made in the assessment report.
- In terms of strategic linkages, the IWMP must make reference to the municipal SDF.
- The plan must show the link with the IDP and what will be incorporated into the IDP.
- The IWMP must be aligned to the Western Cape IWMP and the National Waste Management Strategy of 2011.
- Public participation: The IWMP must follow a public participation process.
- The latest solid waste legislation must be included in the IWMP.
- The latest demographic information must be used from Census 2011.
- The IWMP must indicate the level of free basic services in the District.
- The District needs to ensure that the local Municipalities conduct waste characterisation studies.
- The organisational structure needs to be included in the IWMP.
- The IWMP must indicate how the Municipality intend to implement waste awareness and education with cost implications.
- The District must monitor the local Municipalities and ensure that they register their waste facilities and report to IPWIS.
- Gaps and needs related to solid waste management in the District must be identified.
- The implementation of the plan must show budget and human resources.
- The IWMP should include a monitoring and review programme.

The terms of reference for the development of the Cape Winelands third generation IWMP include a status quo analysis, strategic objectives and an implementation plan.

The IWMP is a statutory requirement of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) that has been promulgated and came into effect on 1 July 2009 and that has as its goal the transformation of the current methodology of waste management, i.e. collection and disposal, to a sustainable practice focussing on waste avoidance and environmental sustainability. Implementation of this IWMP will be through municipal by-laws and in accordance with an implementation schedule.

The development of the IWMP is necessary as it is an integral tool to identify current needs and act as a guide towards sustainable waste management. With regular updates of this document the changing needs as well as progress in the waste management field can be tracked and strategies adapted accordingly. It also provides a framework for budgeting purposes. The IWMP must be incorporated as part of each Municipality's Integrated Development Plan (IDP), but is submitted as a separate document. The IWMP also shows alignment of its goals with the Western Cape IWMP and the National Waste Management Strategy (NWMS 2011).

The primary objective of integrated waste management (IWM) planning is to integrate and optimise waste management, in order to maximise efficiency and minimise the associated environmental impacts and financial costs, and to improve the quality of life of all residents within the Cape Winelands District.

The Plan takes particular note of importance of local authority waste management planning. This document underlines the following principles of the National Waste Management Strategy:

- The prevention of waste generation;
- The recovery of waste of which the generation cannot be prevented, and
- The safe disposal of waste that cannot be recovered

1.2 IWMP DEVELOPMENT

The planning phase of the third generation IWMP included the following:

A project meeting was held at the District offices in Worcester on 17 March 2015, which was attended by the consultant and Mr F. van Eck of Cape Winelands District Municipality. The purpose of the meeting was to discuss the scope of the project and the updating of the IWMP to the 3rd generation and to acquire the necessary information in order to update the IWMP. The scope of the IWMP will follow the D:EA&DP's checklist for Integrated Waste Management Planning. The checklist is attached as **Annexure 1**.

The public participation phase of the development of the IWMP was in the form of advertisements in the local newspapers and Die Burger. The draft document was available at the public libraries and at www.jpce.co.za for the public to view and comment on. The draft IWMP served as base on which to provide comment and input. See **Annexure 3** for the advertisements that were placed. Comment was received from Green Cape after the closure date for comments. However, comments applicable to a District IWMP will be addressed during and as part of the annual IWMP review report.

The participants in the Cape Winelands District IWMP third generation process are Mr F van Eck (Executive Director: Technical Services, Cape Winelands District Municipality), Solid Waste Managers and Waste Management Officers of the local municipalities and Jan Palm Consulting Engineers (Consulting Civil Engineers specializing in Solid Waste Management). During the public comment phase, other participants have the opportunity to contribute to the IWMP development before the release of the final document, e.g. NGO's. The IWMP will form part of the Integrated Development Plan of the Municipality and will have to be approved by Council.

The waste streams and quantities discussed in this IWMP include household waste, garden (green) waste, commercial and industrial waste and builder's rubble. Medical waste and hazardous wastes are also discussed, but quantities are unknown.

1.3 GENERAL DESCRIPTION

Cape Winelands District Municipality is the eastern neighbour of the City of Cape Town and the West Coast District Municipality. It is an area noted for its vineyards, veld flowers, fruit farming and sheep farming.

The Cape Winelands area hosts many industries, but the agriculture and agriculture related industries are the main streams. Tourism is also a fast growing industry in the Cape Winelands.

The Cape Winelands District Municipality was established in December 2000 and includes the local municipalities of Stellenbosch, Drakenstein, Breede Valley, Langeberg and Witzenberg.

Refer to Figure 1-1 for a Plan of the Study Area.

1.3.1 Topography and Climate

The municipal area consists of mountainous topography in the central and eastern regions.

The area falls within the Western Cape Mediterranean climate zone and is known for its hot and dry summer days. Average annual rainfall, mainly during the winter months, is approximately 500 mm.

Winds are seasonal and generally North-west or South-east.

1.3.2 Geology and Hydrogeology

1.3.2.1 Geology

(Refer Figure 1-2)

Figure 1-1 shows the extent of the above area, major towns, roads and surface water features. Paarl and Worcester are the main towns and the Berg and Breede Rivers and Brandvlei Dam are the main surface water features in the area.

Figure 1-2 is a simplified geological map adapted from the 1:500 000 scale hydrogeological map Cape Town (Department of Water Affairs and Forestry). There are seven geological formations present in the area. From oldest to youngest in age these are the Malmesbury Group, intruded by the Cape Granite Suite, Table Mountain, Bokkeveld and Witteberg Groups, Karoo Supergroup and superficial alluvial deposits.

The Malmesbury Group rocks are very old (>600 million years) and have been extensively deformed and reconstituted (metamorphosed). They comprise shale, phyllite and impure sandstones. Some minor dolerite and granitic intrusions (dykes) are present. These rocks give rise to low, undulating topography. Granites of the Cape Granite Suite have intruded into these rocks and form elevated topography such as Paarl Mountain, for example.

The Table Mountain Group (TMG) rocks consist predominantly of resistant quartzitic sandstones and form the characteristic grey, craggy mountains of the Western Cape. Two main formations are present, the upper Nardouw Subgroup and the lower Peninsula Sandstone Formation. These are separated by the Cedarberg Formation, a shaley more easily weathered horizon that forms a prominent green to brown (seasonal) marker band between the grey sandstones. These rocks form the mountainous areas in the central and eastern parts of the study area.

The Bokkeveld and Witteberg Groups comprise alternating shale and sandstone horizons, with shale being more dominant in the former and the latter being generally more quartzitic.

The lower formations of the Karoo Supergroup occur in the north-northwest of the area and comprise rocks of Ecca and Dwyka age. These are mainly shaley and also comprise tillite in the case of the latter.

Alluvial deposits occur mainly along the course of the Berg River from Franschhoek to Hermon and Breede River from south of Ceres to east of Robertson. These reach up to 30 m in thickness and comprise clay, silty sand, sand and boulders.

The study area straddles the western N-S trending and eastern, E-W trending limbs of the Cape Fold Belt. The convergence zone or syntaxis of these two limbs is in the Ceres area. A series of sub-parallel faults trending NW-SE cut across the western part of the area, some of which extend >100 km into the Saldanha and Piketberg areas. In the eastern areas, faulting is predominantly E-W, with the regionally important Worcester Fault bisecting the area.

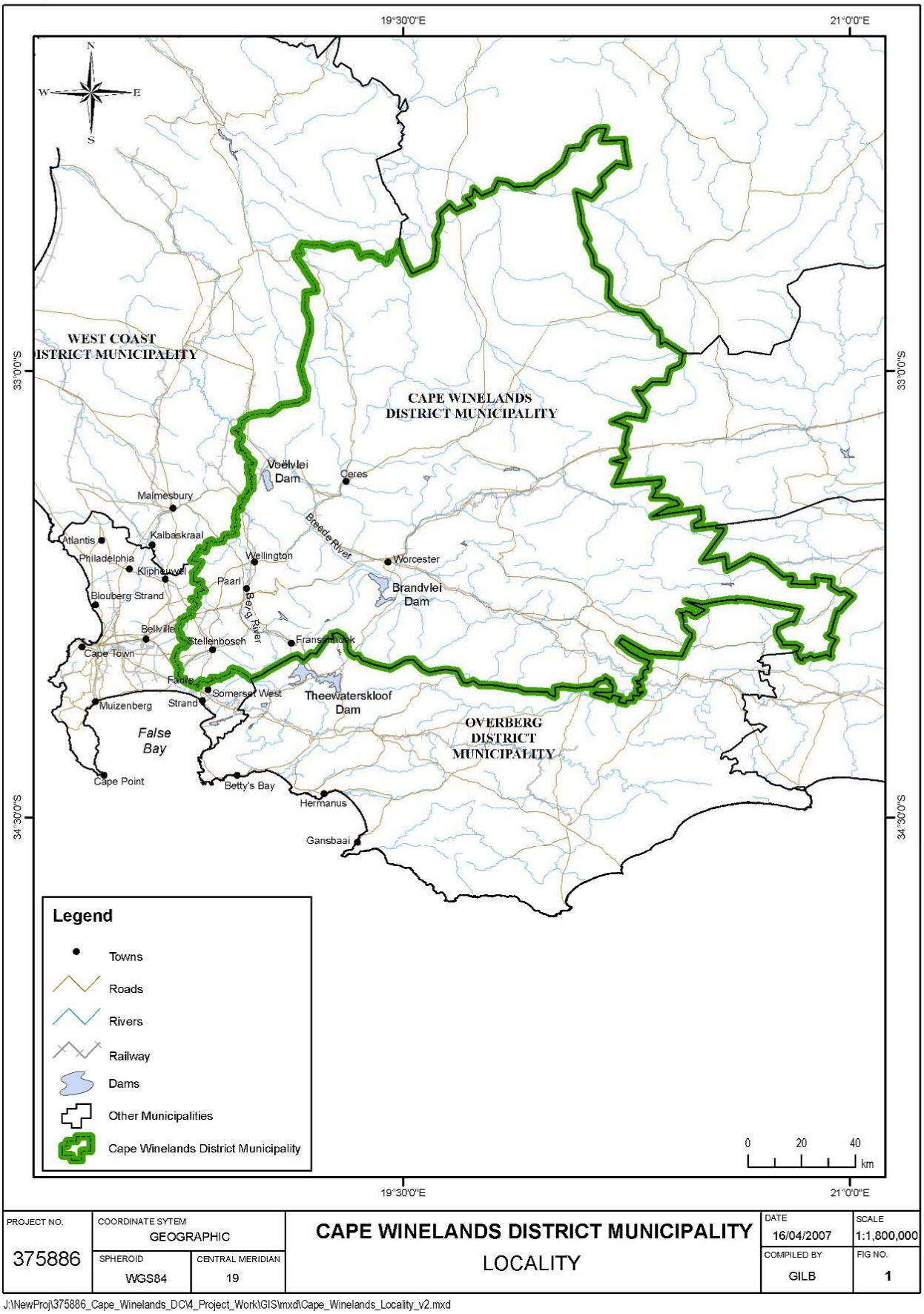
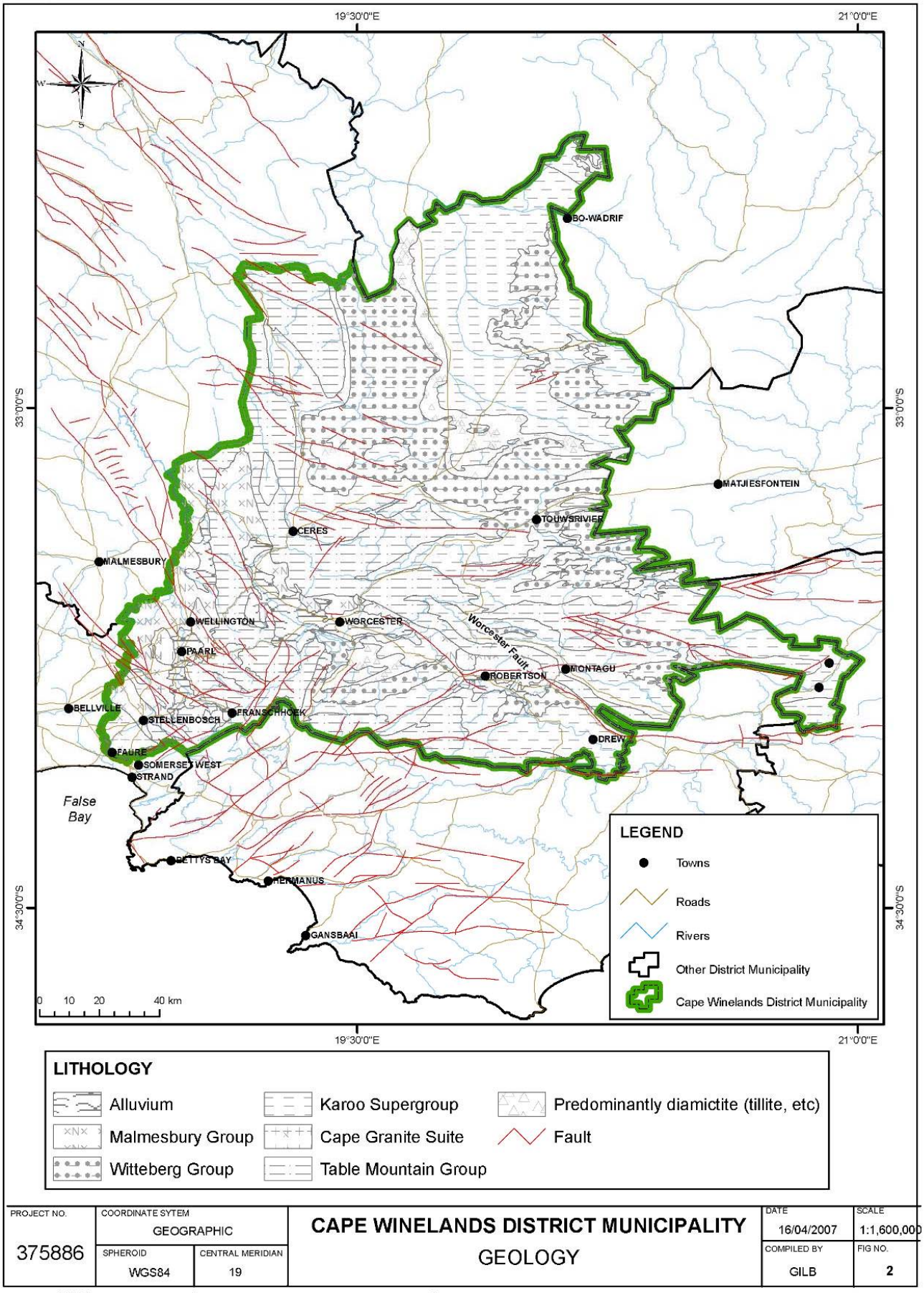


Figure 1-1: Study Area – Cape Winelands District Municipal Area

SRK Consulting
Engineers and Scientists



PROJECT NO.	COORDINATE SYTEM		CAPE WINELANDS DISTRICT MUNICIPALITY	DATE	SCALE
375886	GEOGRAPHIC		GEOLOGY	16/04/2007	1:1,600,000
	SPHEROID	CENTRAL MERIDIAN		COMPILED BY	FIG NO.
	WGS84	19		GILB	2

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Figure 1-2: Geology of Cape Winelands District Municipal Area

1.3.2.2 Groundwater

(Refer to Figure 1-3 and Figure 1-4)

Figures 1-3 and 1-4 are adapted from the Cape Town hydrogeological map referred to above.

In broad terms, any aquifers developed in rocks of the Malmesbury, Table Mountain, Bokkeveld, Witteberg and Karoo rocks will be of the fractured or secondary type. These are shown as shades of green on Figure 1-3. Aquifers developed in the alluvium will be of the intergranular or primary type. These are shown as shades of violet on Figure 1-3. Aquifers developed in the Cape Granite Suite are a combination of fractured and weathered (intergranular) zones and are coloured yellow on Figure 1-3.

The Malmesbury, Karoo and Cape Granite Suite rocks generally have the lowest potential, generally being classified as B2 and D2, respectively, which implies a median borehole yield of 0.1 to 0.5 ℓ/s. However, some very high yielding boreholes have been established in the Malmesbury Aquifer at the Pearl Valley and Val de Vie developments between Paarl and Franschhoek. Sustainable yields of up to 15 ℓ/s have been obtained here.

The Table Mountain Group (TMG) is usually regarded as the major regional aquifer of the Western Cape. In the study area it is uniformly classified as B4, i.e. a median borehole yield of 2.0 to 5.0 ℓ/s. However, much of this aquifer is inaccessible for drilling and exploitation. One of the strongest flowing (125 l/s) and hottest (62^0C) springs emerges from a fault zone in this aquifer at Brandvlei.

The TMG Aquifer of the Wemmershoek area is being investigated by the City of Cape Town to augment water supply to Cape Town. This is designated as Target Area W7. Yields of 100 ℓ/s per borehole have been put forward as being feasible, but it is unlikely that such yields would be sustainable or not cause unacceptable environmental impacts.

The Bokkeveld Group forms locally important aquifers in the Hex, Ceres and Agter Witzenberg Valleys but is a poor aquifer elsewhere. Approximately 20 million m^3/a are abstracted in the Hex Valley. The Witteberg Group generally forms a moderate to poor aquifer.

The alluvial aquifer is well developed in the Rawsonville area to the west of Worcester and ~20 million m^3/a is abstracted from this aquifer. On a local scale the very shallow water table causes problems of waterlogging, e.g. on the east bank of the Berg River between Paarl and Franschhoek. Subsurface drainage systems have had to be installed at developments in this area such as Pearl Valley and Val de Vie.

Groundwater quality is mostly good on account of the relatively high rainfall and therefore recharge and the influence of the TMG Aquifer. Consisting mostly of silica, these rocks contain very pure groundwater with electrical conductivity (EC) mostly <10 mS/m. The drawback with such unbuffered groundwater is that it has a low pH, usually <6, which is aggressive and corrosive. High iron content is also a characteristic aesthetic problem. Over most of the area EC is <70 mS/m, increasing above this in the Malmesbury and Granite Aquifers to the west, i.e. away from the TMG, and also to the east as rainfall and recharge decrease and under the influence of more shaley lithologies.

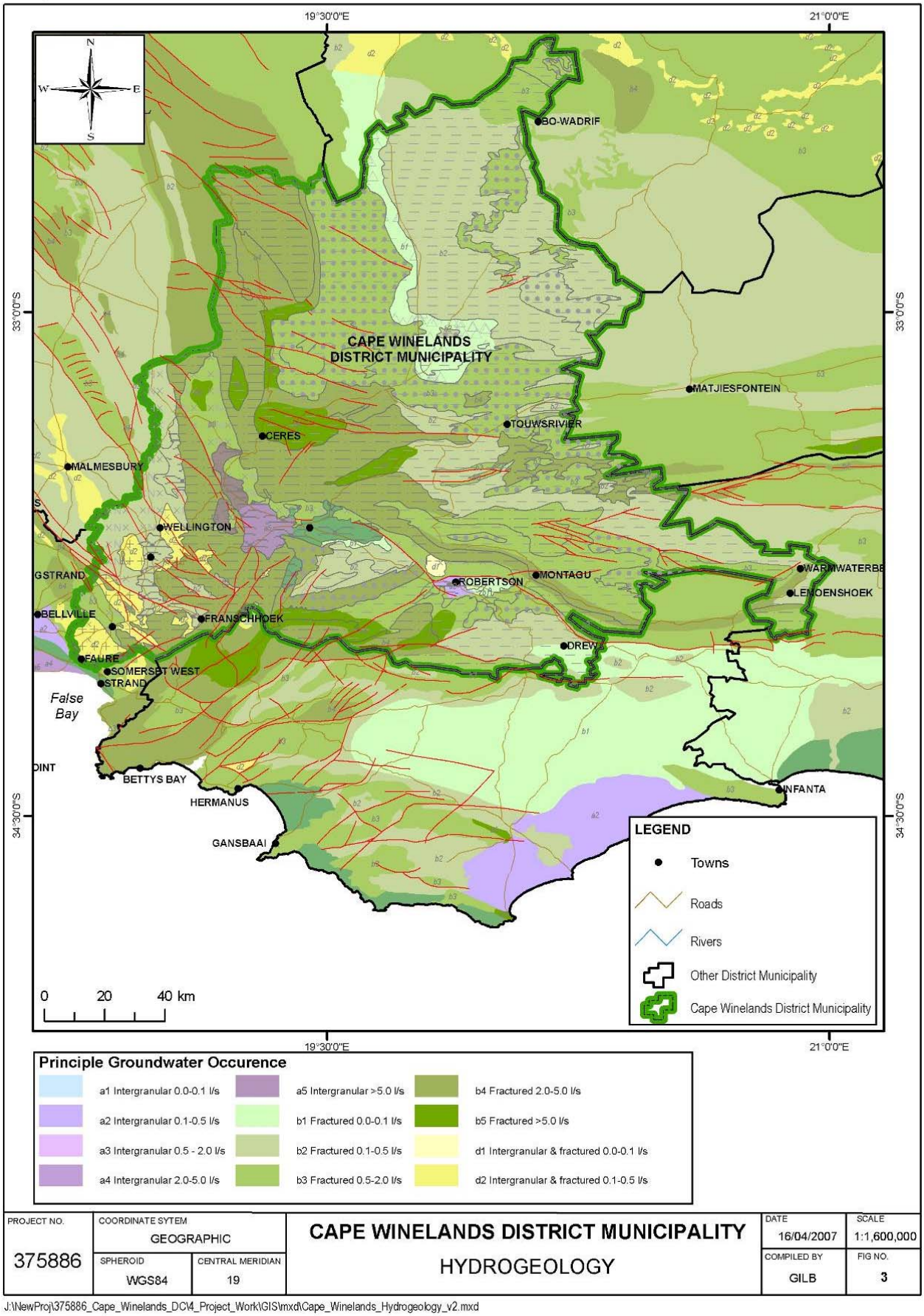


Figure 1-3: Hydrogeology of Cape Winelands District Municipal Area

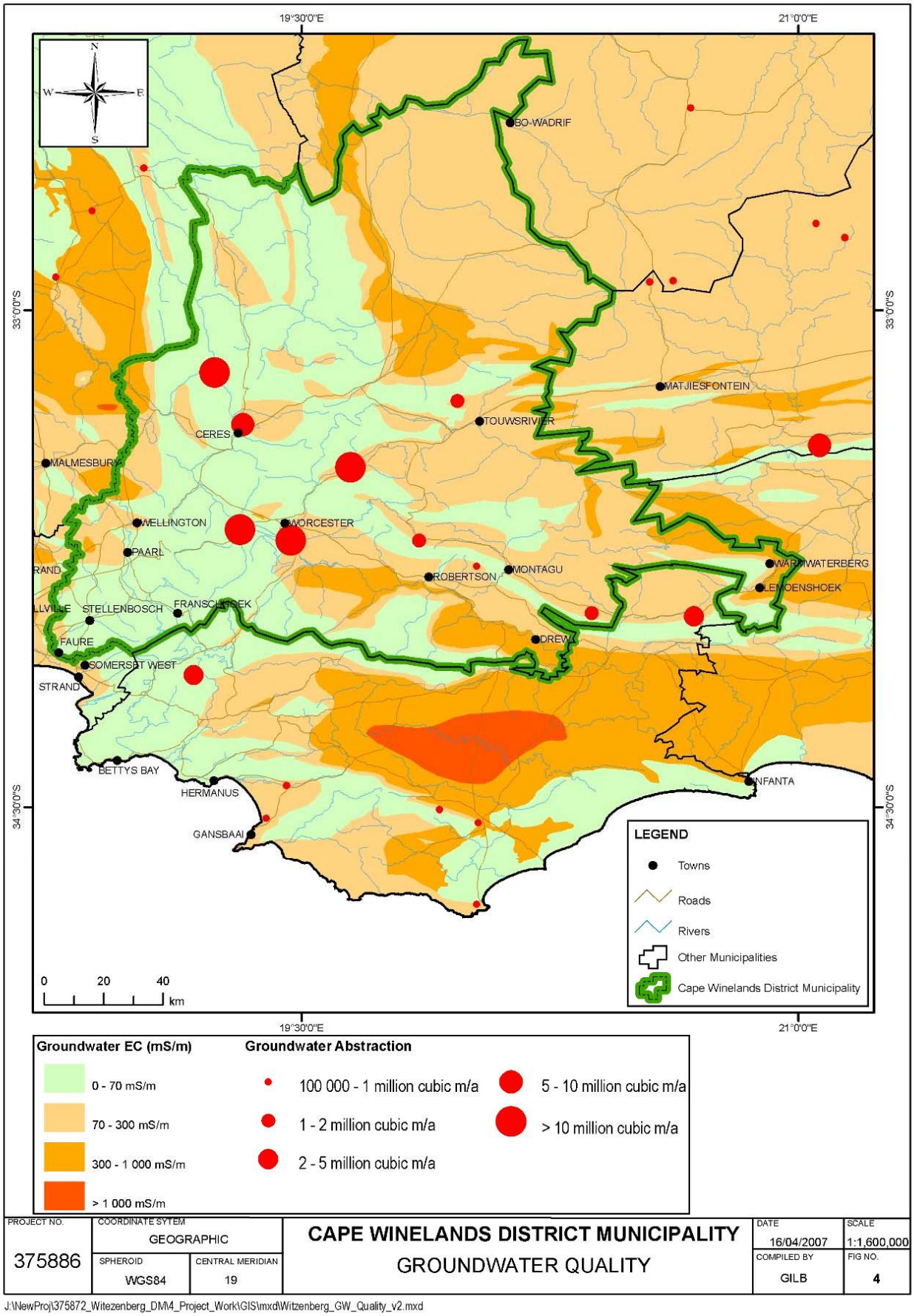


Figure 1-4: Groundwater Quality of the Cape Winelands District Municipal Area

1.4 DEMOGRAPHICS

The statistics relating to population were taken from Statistics SA. The latest 2011 Census population figures were used. The total population of each local municipality with its respective annual growth rate since 2001 is shown in Table 1-1 below. The growth rates were applied to each total to estimate the current and future population of each municipality and the total population for the District.

Table 1-1: Population Figures

Municipality	Growth rate (%)	2011	2015	2020
Breede Valley	1.31%	166836	175751	187569
Drakenstein	2.56%	251268	278003	315456
Langeberg	1.79%	97728	104915	114648
Stellenbosch	2.71%	155733	173313	198105
Witzenberg	2.64%	115950	128688	146595
CWDM		**787506**	**860661**	**962362**

The 2015 number of households in Table 1-2 were estimated from the 2011 figures, with the assumption that the average household size per sub-area would remain constant.

Table 1-2: Population Profile according to Household Income

Municipality	No of Households (2015)	Population (2015)	Average Persons per Household	Very Low and Low Income	Middle Income	High and Very High Income
Breede Valley	44 839	175 751	3.9	53.81%	18.96%	27.23%
Drakenstein	66 046	278 003	4.2	45.70%	18.39%	35.91%
Langeberg	26 995	104 915	3.9	56.86%	19.97%	23.18%
Stellenbosch	48 269	173 313	3.6	52.89%	15.55%	31.56%
Witzenberg	30 444	128 688	4.2	56.65%	20.86%	22.49%
CWDM	**216 593**	**860 671**	**4.0**	**53.18%**	**18.74%**	**28.07%**

From the graph below it can be seen that the population is divided 52% in the Cape Winelands West (Stellenbosch & Drakenstein) and 48% in the Cape Winelands East (Breede Valley, Witzenberg & Langeberg)

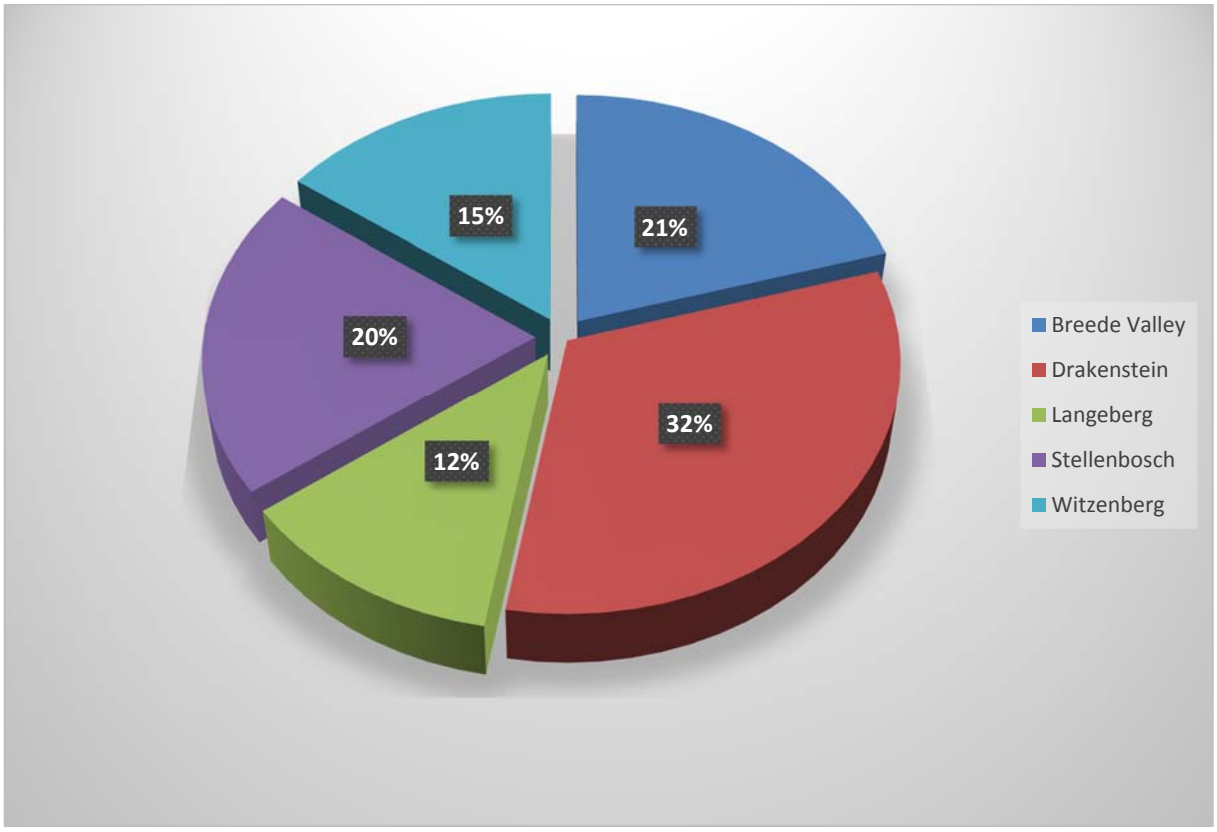


Figure 1-5: Graphical Display of Population Distribution

The Human Development Index for the Cape Winelands District compared to that of the Western Cape and the whole of South Africa is shown in Table 1-3 below.

Table 1-3: Human Development Index

Population Group	Cape Winelands	Western Cape	RSA
Black	0.52	0.58	0.50
White	0.86	0.87	0.88
Coloured	0.66	0.66	0.66
Asian	0.76	0.79	0.76
Total	0.65	0.71	0.59

Source: Cape Winelands District IDP 2014-2015; HIS Global Insight Regional Explorer, 2013

1.5 TRANSPORT INFRASTRUCTURE

The major routes in the Cape Winelands District are the N1, R44, R46 and R60. The R44 connects Stellenbosch with Drakenstein. The N1 connects Drakenstein with Breede Valley. The R60 connects Breede Valley and Langeberg and the R43 connects Breede Valley with Witzenberg. All waste is transported by road.

1.6 STRATEGIC LINKAGES

Western Cape IWMP	NWMS (2011)	CWDM IWMP	CWDM SDF	CWDM IDP
Goal 1: Educate, strengthen capacity and raise awareness in integrated waste management	Goal 4: Ensure that people are aware of the impact of waste on their health, well-being and the environment	Goal 1: Public Awareness & Education	To promote sustainable resource use and responsible rural development	SO1: 1.1.4: A well informed local government that will be able to make evidenced-based decision-making with regard to sectoral interventions
Goal 2: Improve waste information management	Goal 5: Achieve integrated waste management planning	Goal 2: Waste Quantification & Information		
Goal 3: Promote sound, adequate and equitable waste management	Goal 2: Ensure the effective and efficient delivery of waste services	Goal 3: Effective Solid Waste Service Delivery		SO2: Promoting sustainable infrastructure services and transport system which fosters social and economic opportunities
				2.2.1.3: Investigate and planning of regional solid waste disposal sites
				2.2.1.4: Developing/maintain of regional solid waste disposal sites
Goal 4: Mainstream Integrated Waste Management Planning in municipalities and industry	Goal 5: Achieve integrated waste management planning	Goal 4: Promote and Ensure Waste Minimisation	To promote sustainable resource use and responsible rural development	
	Goal 1: Promote waste minimisation, re-use, recycling and recovery of waste	Goal 1: Public Awareness & Education		

Western Cape IWMP	NWMS (2011)	CWDM IWMP	CWDM SDF	CWDM IDP
Goal 5: Mainstream sustainable waste management practices	Goal 1: Promote waste minimisation, re-use, recycling and recovery of waste	Goal 4: Promote and Ensure Waste Minimisation		
	Goal 3: Grow the contribution of the waste sector to the green economy	Goal 3: Effective Solid Waste Service Delivery		
Goal 6: Strengthen the waste regulatory system/framework	Goal 8: Establish effective compliance with and enforcement of the Waste Act	Goal 5: Improve Regulatory Compliance	To improve and conserve the district's natural environment	SO1: 1.1.2 To ensure effective environmental pollution control via the identification, evaluation, monitoring and prevention of the pollution of soil, water and air, in as far as it relates to health; and to institute remedial action accordance with Regulation 37 of the CWDM Municipal Health By-Law.
	Goal 2: Ensure the effective and efficient delivery of waste services			
	Goal 7: Provide measures to remediate contaminated land			
Goal 7: Ensure the safe and integrated management of hazardous waste	Goal 7: Provide measures to remediate contaminated land	Goal 6: Ensure the safe and integrated management of hazardous waste	To improve and conserve the district's natural environment	SO1: 1.1.2 To ensure effective environmental pollution control via the identification, evaluation, monitoring and prevention of the pollution of soil, water and air, in as far as it relates to health; and to institute remedial action accordance with Regulation 37 of the CWDM Municipal Health By-Law.
		Goal 5: Improve Regulatory Compliance		
		Goal 1: Public Awareness & Education		
Goal 8: Facilitate access to funds to implement Integrated Waste Management	Goal 6: Ensure sound budgeting and financial management for waste services	Goal 7: Ensure sound budgeting for integrated waste management	To foster the inclusion of an economic perspective in land use management and land development	SO3: To provide an effective and efficient financial and strategic support services to the Cape Winelands District Municipality

2. BACKGROUND POLICY AND LEGISLATION

The fragmented and uncoordinated way pollution and waste has been dealt with, as well as insufficient resources to implement and monitor existing legislation, contributes largely to the unacceptably high levels of pollution and waste in South Africa. Through the promulgation and implementation of various pieces of policies, legislation, standards and guidelines as well as the implementation of co-operative governance as envisaged in the Constitution this situation will be improved. The current fragmentation, duplication and lack of co-ordination will be eliminated.

Pollution and waste management is not the exclusive preserve of government. The private sector and civil society have crucial roles to play. The fostering of partnerships between government and the private sector is a prerequisite for sustainable and effective pollution and waste management to take place. Similarly, the spirit of partnerships and co-operative governance between organs of state is equally important due to the crosscutting nature of pollution and waste management.

2.1 CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA

In 1996 the new Constitution created the right to the environment as a fundamental right. This fundamental right to the environment ensures everyone's right to an environment that is not harmful to their health or well-being. South African law, the environment and all South Africans have a constitutional right to have the environment protected for present and future generations.

This means that there must be reasonable legal and other measures to prevent ecological degradation, promote conservation and secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

All legislation has to fall within the stipulations of the Constitution. The following sections are of particular relevance where waste is concerned:

- **Section 24(a)**

  Provides everyone the right to an environment that is not harmful to a person's health and well-being.

- **Section 24(b)**

  Provides everyone the right to have the environment protected through reasonable legislative and other measures. The implementation of section 21, 22 and 26 of the Environment Conservation Act, 1989 is such a legislative measure to protect the environment.

- **Section 25**

  Provides for property rights. The Constitution makes provision for both property rights and the right to a healthy environment. A situation may arise in extreme cases where there is a conflict due to rejecting an application for a listed activity from taking place. In such cases it will be up to the court to decide whether the interest of the community (right to a healthy environment) weights heavier than the right of the individual.

- **Section 32**

  Provides the right to access to information. The lack of information is one of the major obstacles in environmental impact management. Provision has been made in the regulations in terms of section 26 of the Environment Conservation Act, 1989, that any report submitted becomes a public document.

- **Section 38**

  Provides *locus standi* or the 'right to get involved" to any member of the public. This means that any member of the public has the right to take appropriate action to prevent environmental damage. This may include taking action against the relevant authority for failing to perform its duties in preventing environmental damage or an individual or authority who is in the process of undertaking listed activities in terms of section 21 of the Environment Conservation Act, 1989, without the necessary authorisation to undertake such activities.

- **Section 41**

  Provides principles for co-operative governance and intergovernmental relations. The Constitution allocates legislative authority as well as executive and administrative powers to all three levels of government. Schedules 4 and 5 determine the functional areas of government. The environment is a cross-sectoral matter and it is therefore important that co-operation between government on all levels is necessary. Furthermore, Chapter 7 of the Constitution of South Africa (Act 108 of 1996) describes the role and responsibilities of Local Government, which include the objectives in Section 152:

"The objects of local government are:

- to promote social and economic development.
- to promote a safe and healthy environment...".

These principles are further developed in the National Environmental Management Act 1998 (Act 107 of 1998).

The Constitution (Act No. 108 of 1996) is relevant to pollution and waste management for two reasons. Firstly, the Bill of Rights (Chapter Two of the Constitution) contains a number of rights relevant to integrated pollution and waste management, to the extent that an Act or particular statutory provision that does not uphold these rights, is unconstitutional. Secondly, the Constitution provides the legal basis for allocating powers to different spheres of government, and is thus relevant to the institutional regulation of integrated pollution and waste management.

Sovereign

The Constitution states that South Africa is a sovereign, democratic State. In terms of environmental management, it is important to recognize that sovereignty includes the ability to limit sovereign powers by entering into international agreements where the need arises.

The Bill of Rights

The most pertinent fundamental right in the context of integrated pollution and waste Management is the Environmental Right (Section 24), which provides that:

"Everyone has the right

(a) to an environment that is not harmful to their health or well-being; and
(b) to have the environment protected, for the benefit of present and future generation through reasonable legislative and other measures that –

(i) prevent pollution and ecological degradation;
(ii) promote conservation; and
(iii) secure ecologically sustainable development and the use of natural resources while promoting sustainable economic and social development. "

This section of the Bill of Rights specifically imposes a duty on the State to promulgate legislation and take other steps to ensure that the right is upheld and that, among other things, pollution and ecological degradation are prevented.

2.2 NATIONAL ENVIRONMENTAL MANAGEMENT ACT

The NEMA provides for co-operative environmental governance by establishing principles for decision making on matters affecting the environment, institutions that will promote co-operative governance and procedures for co-ordinating environmental functions exercised by organs of state; and to provide for matters connected therewith.

As the principal framework act for environmental issues, it has direct relevance to the implementation of the National Waste Management Strategy, one of the key implications being the designation of the DEAT as lead agent for the environment. Chapter 7 of NEMA has important direct implications for the achievement of the NWMS initiative.

The environment as defined in NEMA is the natural environment along with its physical chemical, aesthetic and cultural properties that influence human health and well-being.

NEMA contains the following environmental principles:

- Environmental management must put people and their needs at the forefront, and must serve their interest fairly.

- Development must be socially, environmentally and economically sustainable. This means that the following things must be considered before there is development:

  a) Disturbance of ecosystems and loss of biodiversity
  b) Pollution and degradation of the environment
  c) Disturbance of landscapes and sites where the nation's cultural heritage is found
  d) Non-renewable resources must be used responsibly
  e) The precautionary principle must be applied
  f) Negative impacts must be anticipated and prevented and if they can't be prevented they must be minimized or remedied.

- Environmental management must be integrated. The best practical environmental option must be pursued.
- Environmental justice must be pursued so that there is not unfair discrimination in the way that negative environmental impacts are distributed
- There should be equitable access to environmental resources, benefits and services to meet basic human needs. Special measures may be taken to ensure access for persons disadvantaged by unfair discrimination.
- Responsibility for environmental health and safety of any policy, programme or project must continue throughout the life cycle of a project
- Public participation in environmental decision-making must be promoted. The participation of vulnerable and disadvantaged groups must be ensured
- Decisions must take into account the interests, needs and values of all interested and affected parties. This includes recognizing all forms of knowledge including traditional and ordinary knowledge
- Community well-being and empowerment must be promoted through environmental education
- The social, economic and environmental impacts of the activities must be assessed
- The rights of workers to refuse to do work that is harmful to human health or the environment and to be informed of dangers must be respected
- Decisions must be taken in an open and transparent manner and access to information provided in accordance with the law
- There must be inter government co-ordination and harmonization of policies and laws
- Actual or potential conflicts of interest between organs of state must be resolved through conflict resolution procedures
- Global and international responsibilities relating to the environment must be discharged in the national interest
- The environment is held in a public trust for the people and the use of environmental resources must serve the public interest, and be protected as the people's common heritage
- The polluter must pay for the costs of remedying pollution, environmental degradation and adverse health impacts
- The vital role of youth and women in environmental management must be recognized and their full participation promoted
- Sensitive or stressed ecosystems must receive special attention in planning which might affect them especially when they are subject to significant resource usage and development pressure.

NEMA also stipulates in Section 24 that there must be an environmental impact assessment before any activity or development that needs permission by law and which may significantly affect the environment.

Section 28 places a specific duty of care on every person to prevent, or mitigate and remediate, environmental damage and pollution. Any person, who was responsible for, or directly or indirectly contributed to the pollution, can be held liable. This includes the owner of the land at the time the pollution occurred or their successor in title, a person in control of the land at that time, or any person who negligently failed to prevent the situation.

The public can use NEMA to exercise their rights when they believe that the right procedures were not followed. Therefore it is extremely important to make sure that when there is a proposed development where the municipality is involved e.g. change of land-use – to make sure that the consultant and/or developers follow the right procedures.

The NEMA Environmental Impact Assessment Regulations

Sections 24 and 44 of NEMA make provision for the promulgation of regulations that identify activities that may not commence without environmental authorisation or existing activities in respect of which an application for environmental authorisation is required. In this context, EIA Regulations contained in three General Notices in terms of NEMA (GN R385, 386 and 387) (came into force on 3 July 2006.)

The 2006 Regulations were repealed by the June 2010 EIA Regulations (GN R543). The purpose of the Regulations is to regulate the procedure and criteria as contemplated in Chapter 5 of the Act relating to the submission, processing and consideration of, and decision on, applications for environmental authorisations for the commencement of activities in order to avoid detrimental impacts on the environment, or where it can con be avoided, ensure mitigation and management of impacts to acceptable levels, and to optimise positive environmental impacts, and for matters pertaining thereto.

2.3 NATIONAL ENVIRONMENTAL MANAGEMENT ACT: FEES FOR CONSIDERATION AND PROCESSING OF APPLICATIONS FOR ENVIRONMENTAL AUTHORISATIONS AND AMENDMENTS THERETO (GOVERNMENT NOTICE 28 FEBRUARY 2014)

These regulations apply to the above applications excluding community based projects funded by government grants or applications made by organs of state. The commencement date is 1 April 2014. Payment details are discussed regarding the different applicable fees which are listed as follows:

Application	Fee
Application for an environmental authorisation for which basic assessment is required in terms of the Environmental Impact Assessment Regulations	R2000.00
Application for an environmental authorisation, for which a S&EIR is required in terms of the Environmental Impact Assessment Regulations	R10000.00
Application dealt with in terms of section 24L of the Act	(a) 100% of the most expensive application, namely, R10 000 (Ten Thousand Rand) if S&EIR is triggered and R2000 (Two Thousand Rand) if the basic assessment is triggered;
	(b) 50% of the other application, namely, R5000 (Five Thousand Rand) if the S&EIR is triggered or R1000 (One Thousand Rand) if the basic assessment is triggered)
Amendment of an environmental authorisation on application by the holder of an environmental authorisation.	R2000.00

2.4 ENVIRONMENT CONSERVATION ACT, 1989 (ACT NO. 73 OF 1989)

On 1 July 2009 the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) ("the Waste Act") came into effect. The Waste Act repealed Section 20 of the Environment Conservation Act, 1989 (Act No. 73 of 1989) ("ECA") and introduces new provisions regarding the licensing of waste management activities.

The Environment Conservation Act, 1989 Waste Tyre Regulations (2009) which were published on 13 February 2009 came into effect on 30 June 2009, and makes provision for effective and integrated management of waste tyres in the country. It provides regulations for tyre producers, tyre dealers and waste tyre stockpile owners.

The regulations furthermore require the compilation of industry waste tyre management plans and waste tyre stockpile abatement plans and details the requirements for waste tyre storage areas.

2.5 THE WESTERN CAPE HEALTH CARE WASTE MANAGEMENT AMENDMENT ACT, 2007 (NO 6 OF 2010)

Act 7 of 2007 was amended in 2010 so as to align the terminology with that used in the National Environmental Management: Waste Act, 2008; to define or redefine certain expressions; to delete certain unnecessary definitions; to provide for the issuing of compliance notices; to amend the provisions relating to offences and penalties; to make further provision regarding regulations; to effect certain textual changes; and to provide for matters incidental thereto. The Health Care Management Bill provides for the effective handling, storage, collection, transportation, treatment and disposal of health care waste by all persons in the Province of the Western Cape; and provides for matters incidental thereto.

The object of this Act is to promote integrated health care waste management and thereby—

(a) reduce the risks of health care waste to human health;
(b) prevent the degradation of the environment;
(c) prevent the illegal dumping of health care waste;
(d) promote sustainable development, and
(e) ensure responsible management of health care waste within the Province.

Under this Act a Municipality must:

(a) enforce the relevant provisions of this Act within its area of jurisdiction;
(b) perform audits of generators, transporters, treaters or disposers of health care waste within its area of jurisdiction to ensure compliance with the provisions of this Act;
(c) report annually to the Provincial Minister on the number of incidents of illegal dumping of health care risk waste within its area of jurisdiction, the number of incidents of illegal dumping of health care risk waste pursued in a court of law, and the number of incidents of illegal dumping of health care risk waste successfully convicted in a court of law.

Health Care Waste is produced by hospitals, clinics, physicians, offices, dentists, funeral homes, veterinary clinics and medical- and research laboratories.

Currently only 10-15% of medical waste is considered infectious. The enormous volumes of health care waste requiring special handling and disposal for all infectious and pathological waste are responsible for the current re-evaluation of the terminology for health care waste.

The modern trend in infection control is dictated by the risk posed by the procedure and not by the diagnoses. Thus health care waste is divided into Health Care General Waste (HCGW) and Health Care Risk Waste (HEALTH CARE RISK WASTE). Health Care Risk Waste generally indicates infectious waste, pathological waste, sharps, chemical and pharmaceutical waste, radioactive and cytotoxic waste.

2.6 THE WESTERN CAPE HEALTH CARE WASTE MANAGEMENT AMENDMENT ACT, 2007: WESTERN CAPE HEALTH CARE RISK WASTE MANAGEMENT REGULATIONS, 2013

These regulations were published in the Western Cape: Provincial Gazette Extraordinary 15 March 2013. These are the regulations set out in the Schedule under section 14 of the Western Cape Health Care Waste Management Act, 2007.

The regulations address the requirements for packaging, storage, internal transport, external transport, vehicles, drivers, treatment and disposal of health care risk waste. Furthermore the required training, registration of health care risk waste generators, transporters, treaters and disposers, reporting, auditing and record keeping is discussed. Health care waste management plans must be prepared by those who meet the criteria listed. The required actions regarding compliance notices are also listed.

All addressed forms in the regulations are given in the Annexures:
Annexure 1: Minimum Requirements for health care risk waste containers
Annexure 2: Minimum Requirements for storage of health care risk waste in terms of regulation 3
Annexure 3: Form 1, Minimum Requirements for a tracking document
Annexure 4: Minimum Requirements for information to be contained in a Health Care Waste Management Plan
Annexure 5: Form 2.1, IPWIS registration form for health care risk waste generators, transporters, treaters and disposers

Annexure 6: Form 2.2, Registration Certificate; Form 3.1, Monthly record keeping form for generators; Form 3.2 Monthly record keeping form for transporters, treaters and disposers
Annexure 7: Form 4.1, Compliance Notice; Form 4.2, Compliance certificate

2.7 NATIONAL WATER ACT (ACT NO. 36 OF 1998)

The purpose of the Act is to ensure that the Municipality's water resources are protected, used, developed and conserved in ways which take into account the protection of aquatic and associated ecosystems; that addresses basic human needs; that ensures the reduction and prevention of pollution; and that meets international obligations.

Section 19 of the NWA deals with landowners and users involved in any activity or process which causes, has caused or is likely to cause pollution of water resources. Such landowners and users are obliged to take all reasonable measures to prevent any such pollution from occurring, continuing or recurring. This includes measures to comply with any prescribed waste standard or management practice.

Furthermore, the NWA requires anyone who intends undertaking a water use, as defined, to obtain a licence. The water uses that may be relevant to waste management activities are:

- discharging waste or water containing waste into a water resource through a pipe, canal, sewer, sea outfall or other conduit; and
- disposing of waste in a manner which may detrimentally impact on a water resource.

The applications for permits, licenses and exemptions made before the promulgation of this Act could still be dealt with in terms of the Water Act 1956 (Act No. 54 of 1956).

2.8 NATIONAL ENVIRONMENT MANAGEMENT: AIR QUALITY ACT 2004 (ACT NO. 39 OF 2004)

This Act has been promulgated in order to reform the law regulating air quality in order to protect the environment by providing reasonable measures for the prevention of pollution and ecological degradation and for securing ecologically sustainable development while promoting justifiable economic and social development. It also provides for national norms and standards regulating air quality monitoring, management and control by all spheres of government; for specific air quality measures; and for matters incidental thereto.

The object of this Act is:

a) to protect the environment by providing reasonable measures for-

   (i) the protection and enhancement of the quality of air in the Republic;
   (ii) the prevention of air pollution and ecological degradation; and
   (iii) securing ecologically sustainable development while promoting justifiable economic and social development; and

b) generally to give effect to section 24(b) of the Constitution in order to enhance the quality of ambient air for the sake of securing an environment that is not harmful to the health and well-being of people.

2.9 NATIONAL WASTE MANAGEMENT STRATEGY

The National Waste Management Strategy (2011) presents Government's strategy for integrated waste management for South Africa and is a legislative requirement of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) The purpose of the Strategy is to achieve the objectives of the Waste Act.

The National Waste Management Strategy presents a long-term plan (up to the year 2016) for addressing key issues, needs and problems experienced with waste management in South Africa. The strategy gives effect to the Bill of Rights, Constitution of South Africa, Act 107 of 1998, on the basis of which the people of South Africa have the right to an environment that is not detrimental to their health. Furthermore, the strategy translates into action Government's policy on waste as set out in the Draft White Paper on Integrated Pollution and Waste Management for South Africa (published in 1998).

The objective of integrated pollution and waste management is to move away from fragmented and uncoordinated waste management to integrated waste management. Such a holistic and integrated management approach extends over the entire waste cycle from cradle to grave, and covers the prevention, minimisation, generation, collection, transportation, treatment and final disposal of waste. Integrated waste management thus represents a paradigm shift in South Africa's approach to waste management, by moving away from waste management through impact management and remediation and establishing instead a waste management system which focuses on waste prevention and waste minimisation.

The Strategy is built around a framework of eight goals, as listed below, along with specific goals that must be reached by 2016. All listed targets must be reached by 2016:

Goal 1: Promote waste minimisation, reuse, recycling and recovery of waste.
- 25% of recyclables diverted from landfill sites for re-use, recycling or recovery.
- All Metropolitan Municipalities, secondary cities and large towns have initiated separation at source programmes.

Goal 2: Ensure the effective and efficient delivery of waste services.
- 95% of urban households and 75% of rural households have access to adequate levels of waste collection services.
- 80% of waste disposal sites have permits.

Goal 3: Grow the contribution of the waste sector to the green economy.
- 69 000 new jobs created in the waste sector.

Goal 4: Ensure that people are aware of the impact of waste on their health, well-being and the environment.
- 80% of municipalities running local awareness campaigns.
- 80% of schools implementing waste awareness programmes.

Goal 5: Achieve integrated waste management planning.
- All Municipalities have integrated their IWMPs with their IDPs and have met the targets set in the IWMPs.
- All waste management facilities required to report to SAWIS have waste quantification systems that report information to WIS.

Goal 6: Ensure sound budgeting and financial management for waste services.
- All municipalities that provide waste services have conducted full-cost accounting for waste services and have implemented cost reflective tariffs.

Goal 7: Provide measures to remediate contaminated land.
- Assessment complete for 80% of sites reported to the contaminated land register.
- Remediation plans approved for 50% of confirmed contaminated sites.

Goal 8: Establish effective compliance with and enforcement of the Waste Act.
- 50% increase in the number of successful enforcement actions against non-compliant activities.
- 800 EMIs appointed in the three spheres of government to enforce the Waste Act.

The strategy aims to reduce both the generation and the environmental impact of waste. It presents a plan for ensuring that the socio-economic development of South Africa, the health of its people and the quality of its environmental resources are no longer adversely affected by uncontrolled and uncoordinated waste management. It establishes a waste management system that concentrates on avoiding, preventing and minimising waste and makes provision for waste management services for all by extending an acceptable standard of waste collection, as well as transportation, treatment and disposal services to all communities.

While the long-term objective of the strategy is waste prevention and minimisation, a number of remedial actions such as improved waste collection and waste treatment are required in the shorter term due to prevailing inadequate waste management practices.

The Strategy is an institutionally inclusive strategy because its achievement relies on participation by numerous role-players in the public sector, private sector and civil society.

To implement the Waste Act, government must:
- Draft legislation, regulations, standards and Integrated Waste Management Plans.
- Regulate waste management activities through licenses and enforce their conditions.
- Implement the South African Waste Information System (SAWIS)
- Coordinate waste management activities using a system of Waste Management Officers.
- Give effect to multilateral agreements and ensure proper import and export controls.
- Progressively expand access to at least a basic level of waste services and plan for future needs.
- Facilitate the establishment of a national recycling infrastructure.
- Provide the framework for the remediation of contaminated land.
- Work in partnership with the private sector and civil society.

2.10 WHITE PAPER ON EDUCATION AND TRAINING (1995)

The 1995 *White Paper on Education and Training* states that "environmental education, involving an interdisciplinary, integrated and active approach to learning, must be a vital element of **all levels and programmes of the education and training system**, in order to create environmentally literate and active citizens and ensure that all South Africans, present and future, enjoy a decent quality of life through the sustainable use of resources".

The White Paper advocates environmental education and training **at all levels**. This would include the local government sphere, particularly when it comes to the environmental education & training of government officials and workers.

The education of the youth is the responsibility of national and provincial government. However, the Constitution does state that where the capacity exists, functions can be delegated to local government, and that the spheres of government, while distinctive, are interdependent and interrelated. Local government should support the other spheres of government (such as the national Department of Education, DoE) in areas of its own focus, such as environmental management and sustainable development.

2.11 THE MUNICIPAL SYSTEMS ACT (ACT 32 OF 2000)

This policy outlines the role and responsibilities of local governments as to:

- Provide democratic and **accountable** government for local communities;
- Ensure the provision of services to communities in a **sustainable** manner;
- Promote **social** and economic development;
- Promote a safe and healthy **environment**;
- Encourage the **involvement** of communities and community organisations in the matters of local government, and
- Strive, within its financial and administrative capacity, to achieve the objectives above.

These responsibilities indicate a need for an environmentally educated work force (accountable) as well as an environmentally educated public (involvement). The Municipal Systems Act (32 of 2000) requires municipalities to promote public participation and to build the capacity of residents, councillors and municipal officials to engage in participatory processes. As a means of tracking progress in this area, the executive of a municipality is obliged to report annually on the level of public participation in municipal matters.

Each Municipality must include in its integrated development plan contemplated in Chapter 5 of the Municipal Systems Act, an integrated waste management plan that is consistent with the relevant provincial integrated waste management plan. The annual performance report which must be prepared in terms of section 46 of the Municipal Systems Act must contain information on the implementation of the municipal integrated waste management plan.

2.12 THE MUNICIPAL STRUCTURES ACT, 1998 (ACT NO. 117 OF 1998)

This Act makes provision for the establishment of municipalities in accordance with the requirements relating to categories and types of municipality. It establishes criteria for determining the category of municipality to be established in an area and defines the types of municipality that may be established within each category.

The Act furthermore provides for an appropriate division of functions and powers between categories of Municipality and regulates the internal systems, structures and office-bearers of the municipalities. It also provides for appropriate electoral systems for matters in connection therewith.

2.13 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008) ("THE WASTE ACT")

On 1 July 2009 the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) ("the Waste Act") came into effect. The Waste Act repealed Section 20 of the Environment Conservation Act, 1989 (Act No. 73 of 1989) ("ECA") and introduces new provisions regarding the licensing of waste management activities.

Provision has been made in the form of legislative and regulatory tools to facilitate and ensure implementation of the Act by all spheres of government.

The Waste Act was published to reform the law regulating waste management in order to protect the health of the environment by providing reasonable measures for the prevention of pollution and ecological degradation and for securing ecologically sustainable development.

The purpose of this Act is to protect health, well-being and the environment by providing reasonable measures for –

- the minimisation of the consumption of natural resources;
- the avoidance and minimisation of the generation of waste;
- the recovery, re-use and recycling of waste;
- the treatment and safe disposal of waste as a last resort;
- the prevention of pollution and ecological degradation;
- securing ecologically sustainable development while promoting justifiable economic and social development;
- promoting and ensuring the effective delivery of waste services;
- remediating land where contamination presents, or may present, a significant risk of harm;
- achieving integrated waste management reporting and planning;
- to ensure that people are aware of the impacts of waste on health and the environment;
- to provide for compliance and generally to give effect to section 24 of the Constitution in order to secure an environment that is not harmful to the health and well-being of people.

The interpretation and application of this Act must be guided by the national environmental management principles set out in section 2 of the National Environmental Management Act.

The Waste Act allows for the compilation of a Waste Management Strategy, national, provincial and local standards.

Municipalities must in terms of their by-laws:

- establish service standards and levels of service for the collection of waste;
- may identify requirements in respect of the separation, compacting and storage of waste;
- may identify requirements for the management of waste, including requirements in respect of the avoidance of the generation of waste and the recovery, reuse and recycling of waste;
- the requirements in respect of the directing of waste to specific treatment and disposal facilities.

Each Municipality must include in its integrated development plan contemplated in Chapter 5 of the Municipal Systems Act, an integrated waste management plan that is consistent with the relevant provincial integrated waste management plan.

The annual performance report which must be prepared in terms of section 46 of the Municipal Systems Act must contain information on the implementation of the municipal integrated waste management plan.

Municipalities must also in terms of the Act:

- conduct municipal activities in accordance with the National Waste Management Strategy and any national or provincial norms and standards;
- compile an integrated waste management plan;
- ensure that waste management services are provided within the municipality in a manner which prioritises the recovery, re-use or recycling of waste and provides for the treatment and safe disposal of waste as a last resort;
- designate a waste management officer;
- ensure that provision is made for the management and collection of litter;
- secure compliance with the objects of this Act that are in the domain of the municipality; and
- implement any other measures that are necessary for securing the objects of this Act that are within the domain of the municipality.

Duty to provide collection services - Every municipality has an obligation to progressively ensure that efficient, effective and affordable waste collection services are provided in its area.

A municipality may, by notice, require any person making use of the municipal collection service to separate specified types of waste from the general waste for the purposes of recovery, re-use or recycling.

In terms of Section 19(1) of the Waste Act, the Minister may publish a list of waste management activities that have, or are likely to have, a detrimental effect on the environment. In terms of Section 20 of the Waste Act no person may commence, undertake or conduct a waste management activity except in accordance with the following:

- the requirements or standards determined in terms of Section 19(3) of the Waste Act for that activity; or
- a waste management license issued in respect of that activity, if a license is required.

On 3 July 2009 a list of waste management activities were published. These activities were published in Government Notice 178 in Government Gazette No. 32368 of 3 July 2009. No person may commence with, undertake or conduct these activities unless a waste management license is issued in respect of the activity.

A person who wishes to commence, undertake or conduct an activity listed under Category A must conduct a Basic Assessment process whilst activities listed under Category B requires a Scoping and EIA process to be undertaken.

In terms of Section 49(2) of the Waste Act a decision to grant a waste management license in respect of a waste disposal facility is subject to the concurrence of the Minister responsible for Water Affairs. The Waste Act further specifies that the issuing of a waste management license for a waste disposal facility is subject of the inclusion in the license of any conditions contained in a Record of Decision issued by the Minister responsible for Water Affairs regarding any measures that the Minister responsible for Water Affairs considers necessary to protect a water resource as defined in the National Water Act, 1998 (Act No. 36 of 1998).

2.14 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): LIST OF WASTE MANAGEMENT ACTIVITIES THAT HAS, OR IS LIKELY TO HAVE A DETRIMENTAL EFFECT ON THE ENVIRONMENT. GOVERNMENT NOTICE 37083, 29 NOVEMBER 2013

This notice replaces the 3 July 2009 list of activities that trigger a waste license requirement and because of its impact on financial budgets and budget scheduling, all the activities, quoted verbatim (except where grammatically corrected) from the notice, are listed below:

"GENERAL

No person may commence, undertake or conduct a waste management activity listed in this schedule unless a licence is issued in respect of that activity.

CATEGORY A

3. A person who wishes to commence, undertake or conduct an activity listed under this Category, must conduct a basic assessment process, as stipulated in the environmental impact assessment regulations made under section 24(5) of the National Environmental Management Act, 1998 (Act No. 107 of 1998) as part of a waste management licence application.

Storage of waste

(1) The storage of general waste in lagoons.

Recycling or recovery of waste

(2) The sorting, shredding, grinding, crushing, screening or baling of general waste at a facility that has an operational area in excess of 1000m^2 .

(3) The recycling of general waste at a facility that has an operation area in excess of 500m^2, excluding recycling that takes place as an integral part of an internal manufacturing process within the same premises.

(4) The recycling of hazardous waste in excess of 500kg but less than 1 tonne per day calculated as a monthly average, excluding recycling that takes place as an integral part of an internal manufacturing process within the same premises.

(5) The recovery of waste including the refining, utilisation, or co-processing of the waste in excess of 10 tonnes but less than 100 tonnes of general waste per day or in excess of 500kg but less than 1 tonne of hazardous waste per day, excluding recovery that takes place as an integral part of an internal manufacturing process with in the same premises.

Treatment of waste

(6) The treatment of general waste using any form of treatment at a facility that has the capacity to process in excess of 10 tonnes but less than 100 tonnes.

(7) The treatment of hazardous waste using any form of treatment at a facility that has the capacity to process in excess of 500kg but less than 1 tonne per day excluding the treatment of effluent, wastewater or sewage.

(8) The remediation of contaminated land.

Disposal of waste

(9) The disposal of inert waste in excess of 25 tonnes and with a total capacity of 25 000 tonnes, excluding the disposal of such waste for the purposes of levelling and building which has been authorised by or under other legislation.

(10) The disposal of general waste lo land covering an area of more than 50m^2 but less than 200m^2 and with a total capacity not exceeding 25 000 tonnes.

(11) The disposal of domestic waste generated on premises in areas not serviced by the municipal service where the waste disposed exceeds 500kg per month.

Construction, expansion or decommissioning of facilities and associated structures and infrastructure

(12) The construction of facilities for waste management schedule activity listed in Category A of this Schedule (not in isolation to associated activity).

(13) The expansion of waste management activity listed in Category A or B of this Schedule which does not trigger an additional waste management activity of this Schedule

(14) The decommissioning of facility for a waste management activity listed in Category A or B of this Schedule.

CATEGORY B

4. A person who wishes to commence, undertake or conduct a waste management activity listed under this Category, must conduct a scoping and environmental impact reporting process, set out in the Environmental Impact Assessment Regulations made under section 24(5) of the National Environmental Management Act, 1998 (Act No. 107 of 1998) as part of a waste management licence application contemplated in section 45 read with section 20(b) of this Act.

Storage of hazardous waste

(1) The storage of hazardous waste in lagoons excluding storage of effluent, wastewater or sewage.

Reuse, recycling and recovery of waste

(2) The reuse and recycling of hazardous waste in excess of 1 tonne per day, excluding reuse or. Recycling that takes place as an integral part of an internal manufacturing process within the same premises.

(3) The recovery of waste including the refining, utilisation or co-processing of waste at a facility with a facility that processes in excess of 100 tonnes of general waste per day or in excess of 1 tonne of hazardous waste per day, excluding recovery that takes place as an integral part of an internal manufacturing process within the same premises.

Treatment of waste

(4) The treatment of hazardous waste in excess of 1 tonne per day calculated as a monthly average; using any form of treatment excluding the treatment of effluent, wastewater or sewage.

(5) The treatment of hazardous waste in lagoons, excluding the treatment of effluent, wastewater or sewage.

(6) The treatment of general waste in excess of 100 tonnes per day calculated as a monthly average, using any form of treatment.

Disposal of waste on land

(7) The disposal of any quantity of hazardous waste to land.

(8) The disposal of general waste to land covering an area in excess of 200m^2 and with a total capacity exceeding 25 000 tonnes.

(9) The disposal of inert waste to land in excess of 25 000 tonnes, excluding the disposal of such waste for the purposes of levelling and building which has been authorised by or under other legislation.

Construction of facilities and associated structures and infrastructure

(10) The construction of facilities for a waste management activity listed in Category B of this this Schedule (not in isolation to associated waste management activity).

CATEGORY C

5. A person who wishes to commence, under take or conduct a waste management activity listed under this Category, must comply with the relevant requirements or standards determined by the Minister listed below-

(a) Norms and Standards for Storage of Waste, 2013 or

(b) Standards for Extraction, Flaring or recovery of Landfill Gas, 2013; or

(c) Standards for Scrapping or Recovery of Motor Vehicles, 2013.

Storage of waste

(1) The storage of general waste at a facility that has the capacity to store in excess of 100m^3 of general waste at any one time, excluding the storage of waste in lagoons or temporary storage of such waste.

(2) The storage of hazardous waste at a facility that has the capacity to store in excess of 80m^3 of hazardous waste at any one time, excluding the storage of hazardous waste in lagoons or temporary storage of such waste.

(3) The storage of waste tyres in a storage area exceeding 500m^2.

Recycling or recovery of waste

(4) The scrapping or recovery of motor vehicles at a facility that has an operational area in excess of 500m^2.

(5) The extraction, recovery or flaring of landfill gas."

2.15 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): NATIONAL DOMESTIC WASTE COLLECTION STANDARDS, GOVERNMENT NOTICE 33935, 21 JANUARY 2011

The purpose of this publication is to redress past imbalances in the provision of waste collection services. The provision of waste collection services improves the quality of life of the entire community and ensures a clean and more acceptable place to live and work in. The lack of or poor quality waste collection services can however result in a number of environmental and human health problems.

It is recognised that South Africa is a developing country and the purpose of the setting of standards is to ensure a service to all while complying with health and safety regulations without unnecessarily changing current creative collection processes as long as they function well and deliver a service of acceptable standard to all households. These National Domestic Waste Collection Standards are therefore applicable to all domestic waste collection services throughout the country.

This notice distinguishes between the levels of service relating to waste collection. It further states that equitable waste collection services must be provided to all households within the jurisdiction of the municipality. In areas where travelling distances and the resulting costs may render regular waste collection services impractical, the municipality, through by-laws, must allow for more feasible alternative ways of waste handling, such as on-site disposal.

From here regulations and guidelines on separation at source, collection of recyclable waste, receptacles, bulk containers, communal collection points, frequency of collection, drop-off centres and collection vehicles are given.

Existing Occupational Health and Safety legislation must be adhered to and the general health of waste collection workers must be addressed by ensuring they receive:
(i) regular medical check-ups to ensure their health and well-being;
(ii) appropriate personal protective equipment e.g. gloves, masks, overalls and raincoats, gumboots; and
(iii) on-going training on health and safety issues.

The role of the Waste Management Officer regarding waste awareness and the handling of complaints are prescribed. The municipality must create awareness amongst households about the following:
(i) the types of waste collection services provided;
(ii) separation at source - the removal of recyclables and re-usable waste from the general household waste;
(iii) the potential of composting of some of the household waste and the benefit of such to the household;
(iv) the unacceptability of illegal dumping and littering;
(v) measures to be taken against individuals that litter and dump waste illegally;
(vi) the cost of cleaning up illegal dumping and littering, and the implications on household waste collection rates; and
(vii) the advantages of reporting illegal dumping activities.

The municipality must provide clear guidelines to households about the following:
(i) the different types of waste generated in households;
(ij) separation of non-recyclable and non-reusable household waste from compostable waste and recyclable waste;
(iii) appropriate containers for each type of waste;
(iv) removal schedules for each type of waste; and
(v) what to do with waste other than those waste forming part of the regular schedule of waste collection services.

Awareness raising and guideline communications must be done at regular intervals to ensure that all households are well informed about the issues listed above.

The Waste Collection customer service standards for Kerbside collection are described with respect to collection schedule, interruptions, the replacement of bins, collection during holidays and general points.

2.16 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): NATIONAL WASTE INFORMATION REGULATIONS, GOVERNMENT NOTICE 35583, 13 AUGUST 2012

The purpose of the Regulations is to regulate the collection of data and information to fulfil the objectives of the national waste information system set out in section 61 of the Act.

The Regulations apply uniformly to all persons conducting an activity listed in Annexure 1 of the Regulations. A person who conducts an activity in a province that has an established waste information system in terms of section 62 of the Act and collects the minimum information required by the Regulations must submit the information to the provincial waste information system.

Where a province has developed waste information regulations that are compatible with the Regulations, a person who conducts an activity contemplated in Annexure 1 to the Regulations must comply with the provincial waste information regulations.

2.17 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): WASTE CLASSIFICATION AND MANAGEMENT REGULATIONS, GOVERNMENT NOTICE 36784, 23 AUGUST 2013

The purpose of the Regulations is to regulate the classification and management of waste in a manner which supports and implements the provisions of the Act; to establish a mechanism and procedure for the listing of waste management activities that do not require a Waste Management License; to prescribe requirements for the disposal of waste to landfill; to prescribe requirements and timeframes for the management of certain wastes and to prescribe general duties of waste generators, transporters and managers.

Chapter 2 of the Notice covers Waste Classification and Safety Data Sheets. Chapter 3 covers Waste Management in General, Waste Treatment and Waste Disposal to Landfill. Chapter 4 covers Waste Management Activities that do not require a Waste Management License. Chapter 5 covers the Record Keeping and Waste Manifest System. Chapter 6 covers General Matters which includes Implementation and Transitional Provisions and Offences and Penalties.

Chapter 7 contains the following Annexures:
Annexure 1: Wastes that do not require Classification or Assessment
Annexure 2: Waste Manifest System Information Requirements

2.18 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): NATIONAL NORMS AND STANDARDS FOR THE ASSESSMENT OF WASTE FOR LANDFILL DISPOSAL, GOVERNMENT NOTICE 36784, 23 AUGUST 2013

The purpose of the Norms and Standards is to prescribe the requirements for the assessment of waste prior to disposal to landfill in terms of Regulation 8(1)(a) of the Regulations.

The Standard Assessment Methodology to assess waste for the purpose of disposal to landfill the following are required:

- Identification of chemical substances present in the waste
- Sampling and analysis to determine the total concentrations (TC) and leachable concentrations (LC) of the elements and chemical substances that have been identified in the waste and that are specified in section 6 of the Norms and Standards.

Within 3 years of the date of commencement of the Regulations, all analyses of the TC and LC must be conducted by labs accredited by SANAS. The TC and LC limits must be compared to the threshold limits specified in section 6 of these Norms and Standards. Based on the TC and LC limits the specific type of waste for disposal to landfill must be determined in terms of section 7.

2.19 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): NATIONAL NORMS AND STANDARDS FOR DISPOSAL OF WASTE TO LANDFILL, GOVERNMENT GAZETTE NO 36784, 23 AUGUST 2013

The purpose of the Norms and Standards are to determine the requirements for the disposal of waste to landfill as contemplated in regulation 8(1)(b) and (c) of the Regulations.

Chapter 2 describes and illustrates the Landfill Classification and corresponding minimum engineering design requirements for the Containment Barriers. These are for Class A to Class D landfills. The requirements that are to be included in an application for a waste management license are stipulated.

The waste acceptance criteria for disposal to landfill are summarised as follows:

Waste assess in terms of the Norms and Standards for Assessment of Waste for Landfill Disposal set in terms of section 7(1) of the Act must be disposed to a licensed landfill as follows:

Waste Type	Landfill Disposal Requirements
Type 0	Disposal to landfill not allowed
Type 1	Disposed at Class A landfill or H:h/H:H landfill as specified
Type 2	Disposed at Class B landfill or G:L:B+ landfill as specified
Type 3	Disposed at Class C landfill or G:L:B+ landfill as specified
Type 4	Disposed at Class D landfill or G:L:B- landfill as specified

Waste listed in section 2(a) of Annexure 1 to the Regulations must be disposed as follows:

Listed Waste	Landfill Disposal Requirements
Domestic waste. Business waste not containing hazardous waste or hazardous chemicals. Non-infectious animal carcasses. Garden waste.	Disposed at Class B landfill or G:L:B+ landfill as specified
Post-consumer packaging. Waste tyres.	Disposed at Class C landfill or G:L:B+ landfill as specified
Building and demolition waste not containing hazardous waste or hazardous chemicals. Excavated earth material not containing hazardous waste or hazardous chemicals.	Disposed at Class D landfill or G:L:B- landfill as specified

Unless assessed in terms of the Norms and Standards for Assessment of Waste for Landfill Disposal set in terms of Section 7(1) of the Act and disposed of in terms of section 4(1) of these Norms and Standards, the following waste included in section 2(b) of Annexure 1 to the Regulations must be disposed as follows:

Listed Waste	Landfill Disposal Requirements
Asbestos waste; Expired, spoilt or unstable hazardous products; PCBs; General waste, excluding domestic waste, which contains hazardous waste or hazardous chemicals; Mixed, hazardous chemical wastes from analytical labs and labs from academic institutions in containers less than 100 litres.	Disposed at Class A landfill or H:h/H:H landfill as specified

Waste that has been classified in terms of the Minimum Requirements for the Handling, Classification and Disposal of Hazardous Waste (2nd Edition, 1998; DWAF) prior to the Regulations coming into operation, may be accepted and disposed of as set out below for a period not exceeding 3 years after the date of coming into operation of the Regulations:

Waste	Landfill Disposal Requirements
Hazardous Waste - Hazard Rating 1 or 2	Disposed at Class A landfill or H:H landfill as specified
Hazardous Waste - Hazard Rating 3 or 4	Disposed at Class A landfill or H:h landfill as specified
Hazardous Waste - Delisted	Disposed at Class B landfill or G:L:B+ landfill as specified
General Waste	Disposed at Class B landfill or G:S/M/L:B-/B+ landfill as specified

The Norms and Standards lists prohibitions and restrictions on the disposal of waste to landfill which comes into effect after the timeframes indicated for each waste and activities from the date of the Regulations coming into operation.

2.20 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): FEE STRUCTURE FOR CONSIDERATION AND PROCESSING OF APPLICATIONS FOR WASTE MANAGEMENT LICENSES, TRANSFER AND RENEWAL THEREOF, GOVERNMENT GAZETTE NO 37383, 28 FEBRUARY 2014

These regulations apply to the above applications excluding community based projects funded by government grants or applications made by organs of state. The commencement date is 1 April 2014. Payment details are discussed regarding the different applicable fees which are listed as follows:

Application	Fee
Application for a waste management license for which basic assessment is required in terms of the Act.	R2000.00
Application for a waste management license for which S&EIR is required in terms of the Act.	R10000.00
Application for a transfer of a waste management license in terms of section 52(2) or for the renewal of a waste management license in terms of section 55(2) of the Act.	R2000.00

2.21 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): NATIONAL NORMS AND STANDARDS FOR THE EXTRACTION FLARING OR RECOVERY OF LANDFILL GAS, GOVERNMENT GAZETTE NO 37086, 29 NOVEMBER 2013

The purpose of these Norms and Standards is to aim at controlling the flaring, extraction or recovery of landfill gas at facilities in order to prevent or minimise the potential negative impacts on the bio-physical and socio-economic environments. It describes how these facilities must be designed, operated, monitored and decommissioned

2.22 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): NATIONAL NORMS AND STANDARDS FOR THE SCRAPPING OR RECOVERY OF MOTOR VEHICLES, GOVERNMENT GAZETTE NO 37087, 29 NOVEMBER 2013

These Norms and Standards is applicable to a vehicle scrapping or recovery facility with an operational area exceeding 500m^2 and describes how such a facility must be designed, operated, monitored and decommissioned.

2.23 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): NATIONAL NORMS AND STANDARDS FOR THE STORAGE OF WASTE, GOVERNMENT GAZETTE NO 37088, 29 NOVEMBER 2013

The purpose of these Norms and Standards is to provide a uniform national approach to the management of waste storage facilities, ensure best practice and to provide minimum standards for the design and operation of new and existing facilities. These Norms and Standards are applicable to waste storage facilities that have the capacity to store in excess of 100m^3 general waste continuously or 80 m^3 of hazardous waste continuously.

2.24 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): NATIONAL NORMS AND STANDARDS FOR ORGANIC WASTE COMPOSTING, GOVERNMENT GAZETTE NO 37300, 7 FEBRUARY 2014

These Norms and Standards is applicable to organic waste composting facilities that have the capacity to process in excess of 10 tonnes but less than 100 tonnes of compostable organic waste per day and describes how such a facility must be designed, operated, monitored and decommissioned.

2.25 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): NATIONAL NORMS AND STANDARDS FOR THE REMEDIATION OF CONTAMINATED LAND AND SOIL QUALITY, GOVERNMENT GAZETTE NO 37603, 2 MAY 2014

The purpose of these Norms and Standards is provide a uniform national approach to determine the contamination status of an area and to limit uncertainties about the most appropriate criteria and method to apply in such an assessment. Also to provide minimum standards for assessing necessary environmental protection measures for remediation activities.

2.26 NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO. 59 OF 2008): LIST OF WASTE MANAGEMENT ACTIVITIES THAT HAS, OR IS LIKELY TO HAVE A DETRIMENTAL EFFECT ON THE ENVIRONMENT. GOVERNMENT NOTICE 37604, 2 MAY 2014

The Waste Management Activities List under paragraph 2.15 above has been amended by the deletion of Category B activity 3 (8).

2.27 NATIONAL POLICY FOR THE PROVISION OF BASIC REFUSE REMOVAL SERVICES TO INDIGENT HOUSEHOLDS. GOVERNMENT NOTICE 34385, 22 JUNE 2011

The main criterion for determining the qualifying recipients of Basic Refuse Removal (BRR) services is registration on a municipality's indigent register as provided for by the indigent policy of the municipality.

The following criteria can be used in the absence of or in addition to the main criterion to determine the qualifying recipients of the BRR services:

- Level of income: Monthly net household income of members of less than or equal to *two old age pensions (including children/individuals who may get state grants).*
- Residence status: Everybody residing in the municipality provided their indigent status have been verified.
- Special considerations: All child headed households, households headed by pensioners and people with disabilities
- Value of property (need to note that inherited properties might give false income level status).
- Any other criteria as determined by the specific municipality

A municipality may for practical reasons, declare certain areas or clusters as qualifying recipients of BRR. Examples may include low-income areas and high density, urban informal areas.

- Such declarations have added advantages in terms of administrative feasibility (logistics and costs included) especially where rate collection is challenging.
- A municipality may declare certain low density rural areas as areas where on-site disposal is deemed to be an appropriate waste management option.

If the recipient does not fall under a qualifying indigent area, he/she may register as an indigent at his/her municipality. The municipality must set out certain dates/times for these registrations.

2.28 WHITE PAPER: POLICY ON POLLUTION PREVENTION, WASTE MINIMISATION, IMPACT MANAGEMENT AND REMEDIATION (MARCH 2000)

In line with international trends and our national objectives of efficient and effective management of our nation's resources, priority is given to prevention of waste. Unlike previous policies that focused predominantly on so called "end of pipe" treatment, this White Paper underscores the importance of preventing pollution and waste and avoiding environment degradation.

Effective mechanisms to deal with unavoidable waste will remain necessary, but much greater attention must be directed to the introduction of preventative strategies aimed at waste minimisation and pollution prevention. Ever increasing urban and industrial development throughout the world is leading to levels of pollution, which seriously threaten the natural resources upon which humankind depends for its survival.

Although South Africa has extensive environment, pollution and waste management legislation, responsibility for its implementation is scattered over a number of departments and institutions.

The fragmented and uncoordinated way pollution and waste is currently being dealt with, as well as the insufficient resources to implement and monitor existing legislation, contributes largely to the unacceptably high levels of pollution and waste in South Africa.

The White Paper on Integrated Pollution and Waste Management will result in a review of the existing legislation and the preparation of a single piece of legislation dealing with waste and pollution matters.

Pollution and waste management is not the exclusive preserve of government. The private sector and civil society have crucial roles to play. The fostering of partnerships between government and the private sector is a prerequisite for sustainable and effective pollution and waste management to take place. Similarly, the spirit of partnerships and co-operative governance between organs of state is equally important due to the crosscutting nature of pollution and waste management.

Monitoring and collection of information on pollution and waste generation are crucial for the implementation of pollution and waste reduction measures. Moreover, the sharing of such information and creating awareness about the issues will enable all stakeholders, including communities, to gain a better understanding of the relation between pollution, waste management and the quality of life.

The White Paper proposes a number of tools to implement the objectives of the policy it sets out. The most significant of these is a legislative programme that will culminate in new pollution and waste legislation. This proposed legislation, amongst other things, will address current legislative gaps, and clarify and allocate responsibilities within government for pollution and waste management.

The policy presents seven strategic goals, which are as follows:

Goal 1: Effective Institutional Framework and Legislation
Goal 2: Pollution Prevention, Waste Minimisation, Impact Management and Remediation
Goal 3: Holistic and Integrated Planning
Goal 4: Participation and Partnerships Governance in Integrated Pollution and Waste Management
Goal *5:* Empowerment and Education in Integrated Pollution and waste Management
Goal 6: Information Management
Goal 7: International Cooperation

The role of Local Government

Municipalities will be responsible for providing waste management services, and managing waste disposal facilities. Specific functions to be carried out by municipalities will include:

- compiling and implementing general waste management plans, with assistance from provincial government
- implementing public awareness campaigns
- collecting data for the Waste Information System
- providing general waste collection services and managing waste disposal facilities within their areas of jurisdiction
- implementing and enforcing appropriate waste minimisation and recycling initiatives, such as promoting the development of voluntary partnerships with industry, including the introduction of waste minimisation clubs where possible, regional planning, establishment and management of landfill sites, especially for regionally based general waste landfills.

2.29 PLANNING DOCUMENTS

The Provincial Spatial Development Framework (November 2005)

The PSDF states that there is a concern that a number of waste landfill sites are not properly managed. In addition to the challenges of managing increasing waste volumes and decreasing land available for waste disposal, the Western Cape, along with other Provinces, has to deal with waste management problems caused by inequitable development and inadequate service delivery. Waste issues are often closely associated with poverty, environmental health and social justice issues. The following Policies have particular reference:

RC32 All municipalities shall follow an integrated hierarchical approach to waste management consisting of the following, avoidance/reduce, reuse, recycle, composting, treatment and final disposal. The Waste Management System shall consist of a collection service from the source, (domestic, office or factory) transfer stations and waste disposal sites. (M)

RC33 Waste separation at source shall be mandatory in all domestic households and institutions and businesses including high density and multi-storey buildings from a date to be announced. Initially only organic (vegetable and plant matter) and inorganic (usually dry, cardboard, glass, plastics, paper, builders' rubble) waste shall be separated. (M)

RC34 Material Recovery Facilities shall be established at all Transfer Stations. (M)

RC35 Engage with the raw material and packaging industries and reach agreement to ensure demand for recycled products. (G)

RC36 Every urban settlement should have a Transfer Station within a maximum of 5kms from the town centre, inside the Urban Edge. These Transfer Stations shall be properly managed according to best practice so as to minimise nuisance to surrounding neighbours. They should also be open after hours and on the weekends and their locations shall be well publicised so as to ensure that the community uses them. Furthermore, charges should not be levied on loads brought to transfer stations. Micro enterprises wanting to process waste and trade second hand materials on site should be encouraged. (G)

RC37 Every municipality shall have a Waste Disposal facility site located and operated according to DWAF's minimum requirements that will service the Transfer stations in the urban settlements in that municipality. These sites may or may not be located within the Urban Edge of urban settlements. The main criteria for their location will be to meet satisfactory environmental and transport requirements. (M)

It is the intention of the Western Cape Government to make relevant policies contained in the WCPSDF mandatory in terms of legislation and to include these policies in appropriate legislation. These policies are indicated with a 'M' next to the applicable policy in Chapter 8 of this report. The balance of the policies is indicated with a 'G' to indicate that they are guiding principles. The distinction should be understood as follows:

Mandatory (M) measures refer to 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 that policy.

Guidelines (G) refer to policies that are intended as general developmental goals and whose detailed implementation may vary due to place specific conditions and therefore requiring a certain amount of flexibility in their application.

NOTE THAT THIS SECTION MUST BE UPDATED WHEN THE CURRENT DRAFT PROVINCIAL SPATIAL DEVELOPMENT FRAMEWORK (OCT 2013) IS FINALISED

2.30 INTERNATIONAL TREATIES

This section lists the international agreements to which South Africa has acceded. The following is as described in section 4.10 of the National Waste Management Strategy 2011:

Various international agreements to which South Africa has acceded relate to waste management. A number of non-binding conventions and protocols are also relevant to waste management. This section summarises the main actions in the NWMS related to implementing international agreements.

2.30.1 The Basel Convention

The Basel Convention, adopted in 1989, has the greatest bearing on the Waste Act as it addresses the trans-boundary movement of hazardous wastes and their disposal, setting out the categorization of hazardous waste and the policies between member countries.

DEA is developing MOUs with the International Trade Administration Commission (ITAC) and the South African Revenue Service (SARS) that effectively address the provisions of the Basel Convention.

DEA is considering accession to the amendments to the Basel Convention that ban the import and export of hazardous wastes. DEA is also currently developing a policy on imports and exports of waste that will address this.
DEA and DTI are jointly addressing the import and export control aspects of the Basel Convention, together with the chemical conventions. Control will happen through ITAC permits and SARS tariff codes.

2.30.2 The Montreal Protocol

The Montreal Protocol Treaty, revised in 1999, protects the ozone layer by phasing out the production of several substances that contribute to ozone depletion, with the aim of ozone layer recovery by 2050. This has relevance for waste management in instances where such obsolete products enter the waste stream. DEA will finalise and publish the National Implementation Plan for the Montreal Protocol. The plan will include the development on an Ozone Depletion Substance (ODS) strategy and regulations

will provide for the phasing out of specified substances and their safe disposal. These will be gazetted for public comment in 2012.

2.30.3 The Rotterdam Convention

The Rotterdam Convention promotes and enforces transparency in the importation of hazardous chemicals and whilst it explicitly excludes waste, its implementation may lead to bans on listed chemicals. Some of these chemicals may occur in stockpiles of obsolete chemicals such as pesticides that have been identified as a major waste management challenge. Extended producer responsibility schemes will be used to effectively manage obsolete chemicals.

A study to investigate the extent of manufacture, use, import and export of new chemicals listed in the Rotterdam Convention will determine whether South Africa should ratify the newly added chemicals. This document will be finalised in 2012. A process to identify and ban pesticides and industrial chemicals listed in Annex lll (that South Africa has not yet banned) has started. Responsible departments will finalise arrangements for banning orders in 2012.

2.30.4 The Stockholm Convention

The Stockholm Convention on Persistent Organic Pollutants (POPs), which entered into force in 2004, requires that member countries phase out POPs and prevent their import or export. Parties to the Convention are also required to undertake the following responsibilities:

- Develop and implement appropriate strategies to identify stockpiles, products and articles in use that contain or are contaminated with POPs.
- Manage stockpiles and wastes in an environmentally sound manner.
- Dispose of waste in a way that destroys or irreversibly transforms POPs content.
- Prohibit recycling, recovery, reclamation, direct re-use or alternative use of POPs.
- Endeavour to develop strategies to identify contaminated sites and perform eventual remediation in an environmentally sound manner.

A National Implementation Plan has been developed and it will be reviewed in light of the Waste Act and finalised in 2012.

Furthermore, a study has been initiated to investigate the extent of manufacture, use, import and export of new POPs listed in this convention. The study will determine if South Africa should ratify the newly added POPs. This document will be finalised in 2012.

2.31 MUNICIPAL BY-LAWS

Breede Valley:

In terms of Section 13 of the Local Government Systems Act 2000, (Act 32 of 2000) Breede Valley Municipality made a solid waste by-law dealing with the containment and disposal of solid waste. The by-law was published in the Provincial Gazette Extraordinary 6560 of Wednesday, 22 October 2008.

This by-law needs to be updated to an integrated waste management by-law. This has been recommended in the Breede Valley 2015 IWMP implementation.

Drakenstein:

The Drakenstein Municipal By-laws relating to solid waste management were reviewed since the previous IWMP generation and replaced with their Integrated Waste Management By-law. The Drakenstein Municipality enacted their Integrated Waste Management By-law which was published in the Provincial Gazette Western Cape: 7184 on 4 October 2013.

No by-law revision for Drakenstein is recommended or necessary.

Langeberg:

The Langeberg Municipality's By-laws for the Prevention and Suppression of Nuisances and the Removal of Refuse and Control of Disposal Site was published in the Provincial Gazette Western Cape on 28 May 2010. It is recommended that the Langeberg develop and publish integrated solid waste by-laws.

Stellenbosch:

The Stellenbosch Municipality needs to compile and publish integrated waste management by-laws.

Witzenberg:

It is recommended that the current solid waste by-law of Witzenberg Municipality should be revised to integrated waste management by-laws.

CWDM:

The Cape Winelands District Municipality does not manage waste collection or disposal; therefore do not have Solid Waste By-laws. However, Chapter 8 of the Municipal Health By-laws of the Cape Winelands District Municipality published in the Government Gazette Extraordinary on Monday 15 February 2010 relates to Waste Management and reads as follows:

*"**Part 1: General provisions regarding recovery, storage and disposal of waste***

25. Recovery, storage and disposal of waste

(1) Waste must be recovered, stored, transported and disposed of –
(a) without endangering human health
(b) without the use of processes or methods likely to harm or pollute the environment; and
(c) in a manner that does not create a health nuisance.

(2) A person who contravenes subsection (1) commits an offence.

Part 2: Hazardous Waste

26. Applicable legislation

The Municipality, taking cognizance of the provisions of the Environment Conservation Act, 1989 (Act No. 73 of 1989) the Hazardous Substances Act, 1973 (Act 15 of 1973), the National Health Act, 61 of 2003, and the regulations made under these Acts, adopts the provisions in this Part.

27. Storage of hazardous waste

(1) An empty container in which hazardous waste such as, but not limited to, pesticides was stored is to be treated as hazardous waste, and –

(a) must be stored in such a manner that –
(i) no pollution of the environment occurs at any time
(ii) no health nuisance is created at any time

(b) while being stored on site, must be clearly marked or labelled with the words "Hazardous Waste";

(c) the owner or occupier of the land must fence off the storage area to prevent unauthorised access; and

(d) shall be dealt with as Class 6 waste as described in the Minimum Requirements for the Handling, Classification and Disposal of Hazardous Waste (Second Edition, 1998) as published by the Department of Water Affairs and Forestry and as amended from time to time.

(2) A person who contravenes a provision of subsection (1)(a) to (d) commits an offence."

It is recommended that the District Municipality oversees the development and revision of the local Municipalities' solid waste by-laws (if outdated) into integrated solid waste management by-laws.

3. EXISTING WASTE MANAGEMENT IN CAPE WINELANDS DISTRICT MUNICIPALITY

3.1 AWARENESS AND EDUCATION

The lack of public awareness of the gravity of the problem of sustainable waste management has a significant impact on the effectiveness of the management of waste.

Our poor history of waste management in South Africa means that we pay little attention to our lifestyle insofar as how it affects the environment. However, when an environmental problem is noted and the public are made aware of the need for action, there is no stronger lobby. This has been evident with the Eskom power crisis in recent years. This situation has caused that people in South Africa have looked to alternative sources of electricity from small- to large scale. It is now an almost every-day sight to see people applying electricity saving practices at home. For example, solar panels are frequently seen on roofs (and these panels are becoming more efficient) and hot water geysers are fitted with timers so as not to consume electricity throughout the whole day or are simply switched on and off as needed. Creating awareness of the issue of sustainable waste management may have a similar outcome. With landfill airspace becoming more and more restricted, alternative options minimising or avoiding the need for disposal becomes necessary.

The successful implementation of the Cape Winelands District IWMP will require that all persons within the Municipal boundaries are aware of waste issues as an integral part of the creation of a healthy environment. They should be empowered to play their specific role in the development and implementation of the waste management initiatives.

Public participation is closely linked with education and public awareness. The significant difference between awareness programmes and public participation is that public awareness focuses on disseminating information, whereas public participation aims at obtaining participation, comment, input and feedback from the public.

3.1.1 Public Awareness and Education in the Cape Winelands District Municipality

Apart from each local Municipality's awareness and education initiatives, the following table illustrates the District's planned projects which will create awareness and educate the public about environmental health. Although some of the projects do not address education directly, the planting of trees and river rehabilitation for example, will create awareness and instil environmental consciousness with the public.

Project name	Budget	Unit of measurement	Baseline	Target 2014/2015	Target 2015/2016	Target 2016/2017
Environmental Health Education	R400 000.00	No. of theatre performances	100	80	80	80
Greening Project	R250 000.00	No. of trees planted	1500	1500	1500	1500
River Rehabilitation	R350 000.00	Hectares cleared	New	50	50	50
EPWP Invasive Alien Management Programme	R1 030 000.00	No. of hectares cleared	600	300	300	300

3.2 WASTE QUANTITIES AND TYPES

3.2.1 Methodology for General Waste Survey

The waste quantities in the Cape Winelands District were determined by using weighbridge data (where available) and/or using the latest population statistics with waste generation rates per capita. These factors were applied to the estimated future population figures of each local Municipality to estimate the future waste generation quantities.

3.2.2 Volumes of General Waste generated

Weighbridge data from the Drakenstein, Langeberg and Stellenbosch Municipalities have been used in the waste generation calculations. The Breede Valley and Witzenberg Municipalities will install weighbridges with future developments. Their current waste totals were determined from the population statistics.

The waste generation and quantities in the Cape Winelands District Municipality can then be shown as in **Table 3-1.**

Table 3-1: Waste tonnages calculated for the Cape Winelands District

Municipality	Population (2015)	Waste Gen in Ton/year (2015)	Population (2016)	Waste Gen in Ton/year (2016)	Population (2017)	Waste Gen in Ton/year (2017)	Population (2018)	Waste Gen in Ton/year (2018)	Population (2019)	Waste Gen in Ton/year (2019)	Average Waste Generation Factor for Area in kg/p/d
Breede Valley	175751	42928	178054	43490	180386	44060	182749	44637	185143	45222	0.67
Drakenstein	237150	83950	243221	86100	249448	88304	255834	90564	262383	92883	0.97
Langeberg	73469	33022	74784	33613	76123	34215	77485	34827	78872	35451	1.23
Stellenbosch	173313	115223	178010	118346	182834	121553	187789	124847	192878	128230	1.82
Witzenberg	128688	42516	132085	43638	135572	44790	139151	45973	142825	47186	0.91
CWDM	**788372**	**317639**	**806154**	**325187**	**824363**	**332922**	**843009**	**340849**	**862102**	**348972**	**1.10**

3.2.3 Recoverable Material Volumes

The Department of Environmental Affairs and Development Planning (DEA&DP) commissioned a study in 2007 to determine the characterisation of the disposed waste at various landfills in the Cape Winelands District. From that study, the anticipated average waste composition of each Municipality in the Cape Winelands District can be derived to include the following recyclable materials (by mass):

Table 3-2: Recyclables in waste stream

Municipality	Paper/Card (t/a)	Plastics (t/a)	Glass (t/a)	Metal (t/a)
Breede Valley	36%	9%	9%	6%
Drakenstein	34%	22%	11%	5%
Langeberg	33%	16%	8%	6%
Stellenbosch	16%	15%	8%	2%
Witzenberg	26%	27%	6%	7%

Note that the Stellenbosch Municipality has conducted a waste characterisation study in 2012 and the results are shown in the table above. It is therefore recommended that the other Municipalities in the District conduct waste characterisation studies, based on the method below, or similar to the Stellenbosch study.

The Sustainable Cities Institute (United States) and California Department of Resources Recycling and Recovery recommend that the ASTM standards are followed when collecting samples for waste characterisation to be statistically representative. Their proposed method was developed to obtain characterisation from the disposed waste stream. For Disposal Facility type sampling, which was the case in the above study, a minimum total of 30 samples of 90kg each for the residential sector or 40 samples of 90kg each for the non-residential sector should be used. Another requirement is that the samples to be taken are spread over at least two seasons.

To align a new waste characterisation study for each Municipality with the above guidelines, the following is recommended:

- 30 samples of 90kg each are to be sampled randomly at a disposal facility spread over the year.
- The following schedule is proposed to obtain representative samples from the waste stream: One sample per day, Monday to Saturday, for one week of every second month, starting in January as the first month and November as the last. This will amount to a total of 36 samples spread over all four seasons and every day of the week.
- The requirement for this exercise per disposal facility will then be 5 workers to take samples and categorise waste, employed for a total of 36 days throughout the year. They can be employed as part of the Extended Public Works Programme or the Youth Jobs in Waste where applicable. Working with an average of R120 per person per day, this totals R21,600.00. The team can be led by the Municipality's waste manager and also be trained by him or someone delegated by him. A total of R5,000.00 is estimated if a consultant then reworks the data and reports on the gathered data. This can also be done in-house to limit additional costs.

The 2007 characterisation report is still the best available representation of the Cape Winelands waste stream (with the exception of Stellenbosch). To conduct a waste characterisation study that meets the above statistical requirements will require data collected over an entire year. Until such a study is commissioned and completed, the existing report is used for the purposes of this IWMP.

From the waste composition as reflected in the 2007 report, it can be calculated that the total volume of recoverable materials that are theoretically available in the waste stream will be as indicated in Table 3-3. These characterisation percentages were applied to the waste stream of the permanent population.

Table 3-3: Quantities of Available Recoverable Materials

Municipality	Paper/Card (t/a)	Plastics (t/a)	Glass (t/a)	Metal (t/a)
Breede Valley	14995	3749	3749	2499
Drakenstein	26092	16883	8442	3837
Langeberg	10483	5082	2541	1906
Stellenbosch	17979	16856	8990	2247
Witzenberg	10707	11119	2471	2883
CWDM	80256	53688	26192	13372

The above theoretical figures give a total of approximately 173 509 tonnes per annum, which is 55% of the generated waste stream. It should be noted that this reflects the recyclable portion of the waste stream only as the mathematical representation. The full 58% cannot be seen as recoverable in the practical sense at this stage.

Due to the methods of collection, i.e. the collection of mixed un-separated household waste, a large amount of deterioration and contamination of potentially recoverable material takes place. Post-collection recovery (as is currently the norm in South Africa) implies that only a part of the above tonnages are available for recovery and recycling, due to contamination. For that reason separation at source is considered to be the preferred methodology to increase the volumes and value of recovered materials. Even with source separation some contamination still takes place, but less than mixed bag waste. The Municipalities in the Cape Winelands District implement source separation and are expanding on this service.

Although experience has shown that participation by the public is largely economy driven, the current trend is that separation at source, which implies that recoverable materials are separated by the home owner and "given" to the municipality (or Service Provider) for free, is mainly supported by the middle and higher income groups, whereas the low and very low income groups support buy-back centres or swop-shops where recoverable materials are bought/traded from the residents.

However, recently acquired data (measured quantities in Drakenstein Municipality over 5 years, Overstrand Municipality over 3 years and Swartland Municipality over 10 years) illustrates that the implementation of source separation only leads to a 1% increase in over-all recovered material volume. This small increase may be attributed to the fact that source separation was only implemented in a certain group of neighbourhoods and not throughout the whole of the area where the data was received. If one looks at the statistics per neighbourhood, the increase in material recovery is reportedly 15%. With these relatively small gains in recovery, the Municipality should evaluate the economic feasibility of implementing a source separation system. It is still the preferred collection method, but expensive to implement and would probably receive lower priority as opposed to alternative strategies and action plans that need to be executed by the Municipality in the upcoming years.

Recent statistics obtained from the Drakenstein Municipality show that participation rates are as following: The Middle income group participation rates vary between 12-25% and the High income group participation vary between 35-40%. The low and very low income groups participate at an average of 11-15%.

With the assumed strategy of source separation and "clean" Material Recovery Facilities where the source separated materials are sorted into its various groups and sub-groups, and assuming that middle and high income groups participate at a 45% average and low and very low income groups participate at a 15% average, it can be calculated that the current (2015) recovery volumes will be as indicated in **Table 3-4. Note that these quantities represent what can be expected if only the source separated portion of the waste stream is processed at a "clean" MRF.**

Table 3-4: Calculated Volumes of Recovery of Source Separated Materials

3.2	Participating Waste (t/a)	Paper/Card (t/a)	Plastics (t/a)	Glass (t/a)	Metal (t/a)
Breede Valley	15137	1144	82	599	91
Drakenstein	27047	1931	357	1309	135
Langeberg	18454	1279	177	650	111
Stellenbosch	39057	1312	352	1375	78
Witzenberg	14571	796	236	385	102
CWDM	**114265**	**6462**	**1203**	**4318**	**517**

Assumptions for Source Separation: *45% participation Mid & High Income groups*
15% participation Low & Very Low Income groups

Recovery % actual data from WastePlan: *21% recovery of available Paper and Cardboard*
6% recovery of available Plastics
44% recovery of available Glass
10% recovery of available Metals

3.2.3.1 Paper and Cardboard

Paper and Cardboard form the foundation for any recovery venture, due to the relative stable demand and numerous recycled products made from recovered paper.

Waste paper is transformed from one type to another during the recycling process. The supply and demand for waste paper, although stable, is cyclical in nature, and therefore marketing patterns have to be adapted accordingly.

Some of the factors that contribute to this cyclical demand for recovered paper are:

- difficulty for mills to carry large stock
- periodic mill shut-downs result in fluctuations in demand
- paper stock is considered perishable and thus hazardous to store
- space for storage of stock is limited and costly

Some materials produced with recycled paper pulp include: newspapers, packaging, bags, tissue and towels, corrugated boxes, shoe boxes and files, egg cartons and fruit packing layers.

If paper and cardboard products are clean and separated into different types, significantly higher prices are fetched for the recovered materials.

3.2.3.2 Glass

Glass recovery for recycling has had a very erratic history, due to only one recycler having a monopoly in the market. When the capacity of the kilns is full, the price used to drop dramatically due to an over-supply and no demand. Fortunately this situation has stabilized and a constant market for recovered glass is currently prevailing.

The separation of glass is very successful in separation at source activities since it is easy to identify by the home owners. Recent experience in the City of Cape Town has shown that most home owners whom participate in separation at source also wash their glass products before putting it in the recyclables bag.

3.2.3.3 Plastic

Several types of plastics are typically recycled, i.e. PET (transparent plastic bottles e.g. 2 litre cool drink bottles), HDPE (milk containers), LDPE and mixed plastics. Recycled PET is used in the manufacture of small moulded products, such as handles, sporting goods and furniture. Recycled HDPE is used for producing flowerpots, dustbins and a variety of other containers. Mixed plastics are normally used for the manufacture of outdoor furniture, pallets, and plastic timber.

The recent introduction of a levy on shopping bags has caused the amounts arriving at the landfill to reduce dramatically. Less plastic bags are disposed of, as they are recovered and are now manufactured of better quality and thicker plastic.

In order to recycle plastics using current traditional methodology, it has to be sorted into the various categories, and washed if contaminated by the other wastes. Alternative technologies are currently being evaluated (also in South Africa) that could eliminate the need for sorting of plastics.

3.2.3.4 Metal

Metals are the single most recoverable item in the waste stream. Very little degradation takes place during collection. It follows that a relatively small amount ends up in the waste stream, as all types of metal are removed for re-sale at various stages of the waste handling process.

One of the major components of ferrous wastes is the steel can (95% of all cans in the Metropolitan Areas). Non-ferrous metals such as Aluminium and Copper are very scarce in our waste streams, due to its extremely high salvaging value. These are usually removed at source.

3.2.3.5 Economic Sustainability of Waste Recovery

Although the recovery of materials of value from the waste stream for recycling or re-use is one of the basic operations in future integrated waste management, the question regarding its financial and economical sustainability should always be asked and answered.

Local experience over the last decade has shown that the South African recycling market, or rather the recycled product market, is very small and very susceptible to unforeseen activities, e.g. if one paper mill burns down, the effect on the waste paper market, and the prices, is significant. The South African "market" is simply too small to absorb these types of set-backs.

For this reason it is commendable that D:EA&DP had a study conducted into sustaining the local recycling industry.

But one must consider the economical sustainability and not only the financial sustainability. Economic sustainability considers the whole life-cycle cost and not only the rands and cents of a specific financial year and taking into consideration the avoided costs of airspace saving and also the cost on the environment for the resultant smaller utilisation of virgin resources. An interesting stipulation in the Waste Act, Section 17 (1) (a), is that one may not recover materials from waste if it costs more environmental resources to recover, than it would to dispose of that material – a good example of the total or life-cycle costing principle.

Prices for recovered materials vary greatly from city to city and province to province, from baled to unbaled, from dirty to clean and from material type. External factors also play a significant role such as the oil price, e.g. due to a previous low crude oil price of approximately US$43 per barrel had caused new plastic to be cheaper than recycled plastic – cheaper, not necessarily more economical. The result was that recyclers at that moment (January 2009) could not even give their LDPE plastic away where only a month before it was sold for R1500/tonne.

The above does not imply or insinuate that recovery should not be supported, but that both recovery AND the establishment of a recycled goods market should be supported. This is an aspect that cannot be addressed on a local authority level, but must be addressed on a Provincial and/or National level to optimise economy of scale.

Benefits must also be shared. For example, if a municipality saves airspace and transport cost due to recovery, a portion of that saving (avoided costs) should be passed on to the recovery effort to ensure that it is sustainable. If not, as was proven in SA previously, the recovery effort closes down and the municipality loses its avoided cost saving.

The January 2015 prices for recovered materials delivered in Cape Town are displayed in Table 3-5.

Table 3-5: January 2015 Prices of Recovered Materials in Waste Stream

MATERIAL	PRICE IN RAND/TON FOR BALED MATERIAL
Card board	1000
White Paper	1300
Newsprint	750
Glossy Paper	450
Mixed Paper	580
Metals (Mainly cans)	1300
Glass (All colours, Crushed)	400
Plastic (PET, No 1, White, Blue, Green)	3600
Plastic (PET, No 1, Brown)	1000
Plastic (HDPE, No 2)	3000
Plastic (LDPE, No 4)	2000
Plastic (Polypropylene, No 5)	2500
Plastic (Polystyrene, No 6)	1300

3.3 PRIORITY WASTE STREAMS

3.3.1 Tyres

In accordance with the recently published Norms and Standards of 23 August 2013, no whole waste tyres may be landfilled, effective from the publication date. Tyres that are landfilled, must be quartered. After five years from the publication date no tyres, quartered or otherwise, may be landfilled. The Municipality does not accept waste tyres at the disposal facilities.

3.3.2 Hazardous and Health Care Risk Waste

Little to no recent information on hazardous and health care waste generation, characterisation and disposed/treated quantities are available in the District. It is recommended that in a revision of local by-laws, provision is made for hazardous and health care risk waste generators and transporters to register at the local municipalities and report relevant quantities regularly. Pending the availability of funds, studies need to be conducted to identify hazardous waste generators in the industry in the District to ensure that these types of wastes are correctly handled.

3.4 WASTE AVOIDANCE

3.4.1 Waste Avoidance Background

The following diagram illustrates a simplified version of the well-known waste hierarchy with Avoidance being the most favourable and Disposal the least favourable:

Waste avoidance refers to a pro-active approach by industrial as well as domestic waste producers to minimize the volume of waste, by not creating the waste in the first place.

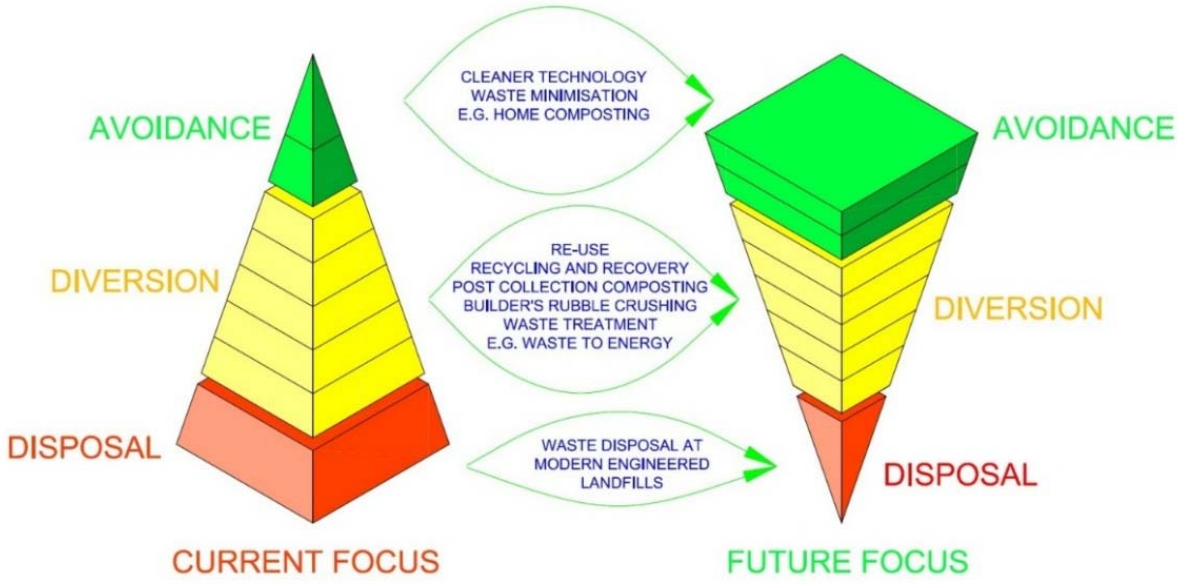


Figure 3-1: Waste Hierarchy

Waste avoidance is a “beginning of the pipe” action that can only work when people understand the full process depicted above.

At the moment waste minimisation through recovery (second tier) is considered a priority in South Africa. Once that can be successfully implemented and the people are educated in the importance of waste reduction, recovery at source (third tier) can be implemented with a reasonable chance of success.

It therefore follows that waste avoidance will be the ultimate and final step in this education process.

On a governmental / legislative level, the introduction of a levy on plastic shopping bags has spurred the production of alternative types of bags, which are re-useable and therefore avoiding the cheap and nasty waste bag that ends up littering our surroundings. However, along with such initiatives must come the required public education surrounding the proper use and impacts of new practices. For example, recent studies have shown that when re-usable bags are used by shoppers, these bags must be regularly washed/cleaned at least once per week. The users of these bags are not in the habit of washing their shopping bags because it was never necessary in the past as the bags were thrown away. Now with the re-usable bags, which are usually left in the car for convenience, that are not cleaned can contain traces of old food and or blood from meat parcels that quickly become breeding grounds for organisms that cause food poisoning. When these unwashed bags are then used to load new groceries into, the food becomes contaminated by the bag and may cause food poisoning in the

persons who eat this food. It is therefore necessary to keep the public aware of such issues to maintain their health while adopting new practices.

In the home, waste avoidance can be practiced by similar efforts where items are used for different purposes than the original intent, possibly suggesting that one purchases alternative products to the norm. Home composting is also considered waste avoidance, as the waste material is converted into a useful gardening resource whilst avoiding the raw product entering the waste stream.

Presently the avoidance of waste in industry has a financial detrimental implication in most cases (e.g. alternative raw products), and only large companies are able to take the leading role through their international experience in this field. Regulatory controls will only be effective if fines result in legal compliance being cheaper than non-compliance. In South Africa, resource and disposal costs are low, providing no financial incentive to reduce consumption or waste in industry. It follows that regulatory instruments are required for implementation on a Municipal level to govern the avoidance of industrial waste in the District.

Regular audits should be conducted by an independent entity on the avoidance practices, to form a basis for applying incentives / penalties.

An important tool for monitoring purposes is a proper Waste Information System (WIS). The District Municipality should ensure that all the local Municipalities report to the IPWIS.

Without a doubt, waste avoidance will become a real and enforced issue in South Africa in the near future, and must be addressed in any Municipal Waste Strategy.

3.4.2 Existing Waste Avoidance in Cape Winelands Municipality

In Cape Winelands, the best place to start implementing waste avoidance would be at the well-established industries on a voluntary basis. A joint venture effort between such industries and the Municipality may be mutually beneficial.

The industry will receive positive advertising of these “green” initiatives through the media, whilst the Municipality will be taking a leading role in South Africa through pro-actively spawning waste avoidance to the benefit of the community and the environment.

The Municipalities can promote waste avoidance by leading by example. Many opportunities exist where small changes can result in waste avoidance. One example is the option to have paperless meetings. If officials have access to laptops or tablets they need not receive the agenda on paper and can keep track and make notes digitally. Wherever it is not necessary to print and use paper, it can be avoided.

Successful waste avoidance will result in further lowering of the demand on the Cape Winelands waste management infrastructure and the functions of collection, recovery and disposal will be done more efficiently by the local municipalities.

Awareness and education plays a crucial role in waste avoidance. Today’s consumerism focussed society causes that waste is created in the home without thinking of the consequences before buying. A very large part of our waste streams can be avoided by an educated and aware public, focussing on the avoidance of waste before minimisation and eventually disposal.

3.5 COLLECTION SYSTEMS

The District Municipality does not render waste collection services to households. An overview of the local Municipalities is given below.

3.5.1 Municipal Waste Collection

It is recommended that all Municipalities in the District review their respective collection fleets regularly so that vehicles that are operating beyond their economic lifetimes can be identified and provision can be made in the budget to replace these vehicles.

The levels of service have been obtained from the Department of Local Government. The latest numbers are currently in draft (December 2014), but will be replaced by the final numbers when they are released. We cannot ascertain the accuracy of the numbers or how they were determined.

3.5.1.1 Breede Valley

The Breede Valley Municipality provides a weekly collection service to its residents in all towns. Waste is collected in black bags and Worcester has started using wheelie bins.

Waste in Touwsrivier is first transported to the MRF and the tailings hauled for disposal to the Worcester landfill on a weekly basis. Waste from De Doorns, Rawsonville and Worcester and its surrounds are transported directly to the Worcester landfill for disposal. Worcester has started practising source separation in one neighbourhood and this is planned to be expanded to more neighbourhoods in 2015.

All formal residential households receive waste collection services. Commercial waste and non-hazardous industrial waste is collected on the same scheduled rounds as above. Household collection is once per week and business waste can be collected more frequently.

Informal housing areas are serviced once per week or more frequently if necessary. The Municipality reports 100% service to these areas. As door-to-door collection is difficult, communal skips are placed at central points from where the private company Mr Skip Hire removes the $3m^3$ skips on a weekly basis. They also provide the $3m^3$ skips. $5m^3$ skips are placed and emptied by Municipal trucks and a tractor.

As a result of the inefficiency of open skips as drop-off points due to their height and being hard to reach for some people to properly dispose their waste into the skip and the problem with wind-blown litter, the Municipality is in the process of replacing the skips with “Mini Drop-offs” that will be enclosed structures built with concrete and polywood. These drop-offs will house skips and bins for waste to be offloaded within easy reach on ground-level and being enclosed, will limit wind-blown litter.

The “Solid Waste and Area Cleaning Block System” is also being planned by the Municipality to implement in the informal settlements. Informal settlements will be divided into different blocks, consisting of 400 to 600 houses each. This system will make use of appointed foremen, via formal quotation or tender, in each block of the settlement. This appointed person will then be responsible for the waste collection and cleansing of the block to which he/she was appointed. The work will include distributing refuse bags, collecting full bags weekly and placing them at the mini drop-offs for collection, cleaning streets, cleaning mini drop-offs and planting trees where requested.

There is currently no collection service to farmers and rural households due to the problem of transport distances and accessibility. Farmers offload their waste at the disposal sites free of charge. In summary, the unserviced areas in the Municipality are the rural areas and farms.

Level of Free Basic Service

Received figures indicate that 7190 out of the 7 315 indigent households receive free basic refuse removal, which is 98%.

3.5.1.2 Drakenstein

Drakenstein has been divided into collection areas that have a fixed day per week when waste is collected. All formal residential households receive waste collection services. Commercial waste is collected on the same scheduled rounds.

At the residences wheelie bins are used with different lid colours to simplify identification of the scheduled collection day. The collection frequency is once per week.

Residences practice source separation. Drakenstein Municipality makes use of a two-bag system and clear bags are used for recyclable waste. The clear bag is filled with mixed recyclables and is collected separately for processing.

Informal housing areas are serviced twice per week. The Municipality reports 100% service to these areas. The refuse bag system is used. Collection of the bags is done as part of EPWP and moved to a central collection point from where it is transported to landfill.

In the rural areas and farms there are three scenarios: If the farm is on a collection route, the farm waste is placed by the owner outside his property boundary from where it is collected by the Municipality. Farmers also transport and offload their waste themselves to the Paarl Transfer Station

or the Wellington Landfill and they make use of the coupon system. Farmers can also apply for the use and service of a waste skip that is placed on his property. He pays a monthly fee and the Municipality collects the filled skip when they are notified.

Level of Free Basic Service

Received figures indicate that 12 429 out of the 12 429 indigent households receive free basic refuse removal, which is 100%.

3.5.1.3 Langeberg

Currently a waste collection service is provided by the municipality for all residents in urban areas. All formal residential erven are receiving a weekly door-to-door collection service. Langeberg practices source separation with the two-bag system. Clear bags are used for recyclables and black bags for general waste.

Residents are required to place their waste in bags or wheelie bins on the sidewalk for weekly collection. The farming community delivers their own waste to landfill, as it is not economically feasible for the Municipality to collect waste at these remote locations.

Level of Free Basic Service

Received figures indicate that 6 932 out of the 7 413 indigent households receive free basic refuse removal, which is 94%.

3.5.1.4 Stellenbosch

All formal residences receive a weekly door-to-door waste collection service. The informal settlements have been provided with mini drop-off facilities to offload their waste and this is collected by the Municipality.

Level of Free Basic Service

Received figures indicate that 4 217 out of the 4 217 indigent households receive free basic refuse removal, which is 100%.

3.5.1.5 Witzenberg

A waste collection service is provided by the municipality for all residents in urban areas. All formal residential erven are receiving a weekly door-to-door collection service.

The Municipality does not collect waste at the remote farming communities, as this would be economically unsustainable. Farming communities deliver their own waste

Level of Free Basic Service

Received figures indicate that 4 572 out of the 4 572 indigent households receive free basic refuse removal, which is 100%.

3.5.2 Public Cleansing

Public Cleansing involves the cleansing of streets (kerbs and gutters), public open spaces (other than parks and storm water ditches) and areas of illegal dumping.

All the local Municipalities in the District provide public cleansing services.

3.5.3 Public Complaints

The contact numbers for complaints for each Municipality are listed below:

Breede Valley: 086 012 1212
Drakenstein: 021 807 4715; 021 807 4751
Langeberg: 023 614 8000
Stellenbosch: 021 808 8111
Witzenberg: 023 316 1854
District Municipality: 086 126 5263

The CWDM records and delegates the incoming complaints to the responsible persons who then report back and this is recorded on the register. The table below provides a summary and translation of the detailed complaints register received at the CWDM for the 2014/2015 financial year. The names of persons involved have not been included in the summary.

Date Created	Date of Incident	Corrective Action Date	Municipality	Category	Complaint Detail Note	Findings
2014/08/06	2014-08-05	2014-08-15	Witzenberg	General Waste	Domestic waste dumping.	Several areas of unsightly conditions within town of Ceres exist. A letter was drafted, accompanied with photos and sent to Witzenberg municipality.
2014/10/20	2014-10-20	2014-10-20	Drakenstein	Illegal Dumping & Littering	Illegal Dumping of Medical waste, household waste and horse manure which are causing bad odours and fly breeding (Health nuisance)	During the investigation the complaint were found to be valid. Photos were taken of the medical waste as well as the improper ways of which they dispose of their household waste and the heaps of straw and manure that were dumped on the fence near Westland farm. The co-owner was present at the time of the investigation and did react to the complaint as follows: (i) Immediately all medical waste was safely collected and removed from the area. (ii) Household waste were picked up (iii) The horse manure with straw to be removed away from the fence and the worker houses and worked into his land. Full co-operation were received from the owner and the area was cleaned within 24 hrs since the complaint was received.

Date Created	Date of Incident	Corrective Action Date	Municipality	Category	Complaint Detail Note	Findings
2014/11/24	2014-11-24	2014-12-05	Witzenberg	General Waste	Homeless persons tearing refuse bags on collection day and leaving the bags open and/or creating littering.	These complaints must be taken up with the Witzenberg Municipality, it is not a District function.
2014/11/27	2014-11-27	2014-11-27	Stellenbosch	General Waste	Waste next to the complainant's property causing odours and flies.	Inspection conducted. Refuse area in a reasonably acceptable condition. Otto refuse containers were too full and refuse in bags were observed on the refuse area floor. Insufficient number of refuse containers contributed to the problem. No perceivable odours were observed during the inspection, but some flies were observed next to the complainant's home. The owner of the property was contacted and he committed to acquiring additional refuse containers to ensure waste was stored in lidded containers at all times.
2014/12/04	2014-10-21	2014-12-17	Breede Valley	General Waste	Complaint regarding refuse not being collected.	The owner was contacted and she assured that the waste will be removed.
2014/08/12	2014-08-11	2014-09-10	Witzenberg	Illegal Dumping & Littering	Heap of rotten potatoes causing odours and flies.	The owner was contacted and agreed to remove the heap before Friday 15 August.
2014/12/08	2014-11-25	2014-12-08	Breede Valley	Building Material	Complaint regarding the backyard of the KFC filled with builder's rubble and black bags.	Complaint was received on 1 Dec 2014. Upon inspection all rubble and refuse was already removed.
2014/08/05	2014-07-31	2014-08-05	Breede Valley	General Waste	Homeless persons sleeping on doorstep of flats, littering and using the area as toilet.	Homeless persons sleep on property of Da Vinci flats and litter on said property. BVM were notified for action on the sidewalks and the owner and body corporate were notified for action on the property.
2014/07/02	2014-07-01	2014-07-02	Witzenberg	Illegal Dumping & Littering	Alleged dumping of sewage from mobile toilets on vacant land on the Farm Klein Pruise.	No dumping of sewage found on the vacant land of the premises.
2014/07/09	2014-06-26	2014-10-06	Stellenbosch	General Waste	Municipal ERF is being used as a dumping site.	Report issued to local municipality.
2014/07/11	2014-05-21	2014-07-11	Breede Valley	Burning waste/Tyres	Complaint regarding thick smoke caused by the burning of tyres.	Two persons were found burning tyres in order to collect the metal contained inside. Persons were informed about the pollution, dangers and unlawfulness of the burning. The firefighters were called to extinguish the fire.

Date Created	Date of Incident	Corrective Action Date	Municipality	Category	Complaint Detail Note	Findings
2014/07/22	2014-07-03	2014-07-22	Drakenstein	Illegal Dumping & Littering	Shop's refuse bins were knocked over by the public, causing nuisance on the neighbour's property.	The shop owners were confronted regarding the situation and instructed to prevent access to the refuse bins by the public and also not to endanger public health in any way.
2014/07/25	2014-07-15	2014-07-25	Drakenstein	Illegal Dumping & Littering	Builder's rubble and other waste being dumped by various persons on open ground.	Builder's rubble was found during inspection. This complaint was given over to the law enforcement official of Drakenstein. The property owner as well as perpetrators were contacted. The CWDM requested the law enforcement official to install "NO DUMPING" signs at the property.
2015/02/09	2015-01-13	2015-02-09	Drakenstein	General Waste	Owner complains that cockroaches are creating a nuisance in front of her property from the drain.	This complaint was forwarded to the Drakenstein Municipality of which the pest control were dispatched to clean the drain.
2014/09/03	2014-09-02	2014-09-17	Stellenbosch	General Waste	Complainant's neighbour's property is overgrown with grass and bushes. Dumping ground for builder's rubble and garden waste. Conditions likely to create nuisances.	Conditions noted as per complaint.
2015/03/06	2015-01-29	2015-03-06	Breede Valley	General Waste	Refuse from the Game Reserve create extremely bad odours and are infected with worms. Removed only once per week.	Meetings with the owners were held and the CWDM and BVM attended meetings. The possible solution to the problem was that the Game Reserve take the waste on Mondays, Wednesdays and Fridays to the transfer station.
2015/03/16	2015-03-13	2015-03-16	Drakenstein	General Waste	The property does not have enough waste containers, causing waste to accumulate outside the containers.	Upon inspection it was confirmed that too little containers were available for the amount of units at the flat complex.
2014/09/10	2014-09-09	2015-02-19	Breede Valley	Illegal Dumping & Littering	That a health nuisance is created on the premises by the occupants. She is the owner of the house. NB. See attached inspection report for the complainant’s attention. No health is constituted.	No health is constituted.

Date Created	Date of Incident	Corrective Action Date	Municipality	Category	Complaint Detail Note	Findings
2014/09/15	2014-09-02	2014-09-15	Langeberg	Illegal Dumping & Littering	A person operates a recycling business from her home within residential area. Neighbours complain that the premise is unsightly and attracts rats to premise and surrounding area.	An inspection was conducted to the premise, accompanied with the councillor on 3 September 2014. The person was informed about the contravention ie. health nuisance. She was given (14) days to minimize the health nuisance by means of the best available method. A follow-up inspection will be conducted on 1 October 2014.

3.6 WASTE REDUCTION

The Polokwane Declaration was formulated in 2001 by members of Government, whereby a commitment to waste reduction, re-use and recycling was made towards achieving the following goals:

- 50% reduction in waste generation and 25% reduction in waste disposal by 2012
- A plan for Zero waste by 2022

In the January 2011 draft Provincial IWMP for the Western Cape it is stated:

"Consequently, since they have the power to adapt the targets in the Western Cape IWMP, DEA&DP has adjusted the unrealistic "25% of waste diverted from landfill sites by 2012", to a more realistic "15% of waste by 2015"."

It is therefore recommended that all Municipalities in the District strives to achieve 15% of waste diversion by 2015.

Waste reduction can be divided into four main categories, i.e.

1) Separation at source
2) Recovery for recycling from post-collected waste
3) Composting of post collected garden waste, and
4) Crushing of builder's rubble

The efficiency of waste minimisation can only be determined through the implementation of a proper WIS as mentioned above. This is necessary to in turn populate the Provincial IPWIS.

This WIS should provide information on an on-going basis regarding the following:

- The quantity, type, quality and sources of materials recovered
- The quantity and quality of compost produced and garden waste processed
- Industrial waste types and volumes, and possible opportunities for waste exchange
- Public education initiatives and data on available literature at public facilities (e.g. libraries, waste minimisation clubs and projects)
- Household awareness campaigns on recycling opportunities
- Waste education (schools level) and training programmes available for the general public, waste workers and officials

3.6.1 Recovery for Recycling

3.6.1.1 Breede Valley

The Breede Valley Municipality operates the Touws River Transfer Station and Material Recovery facility (MRF) in Touws River. The operation of the MRF is done by Beirowplas Recycling CC and they have been awarded the operational contract via a public tender process which expires in 2017.

Beirowplas also collects the source separated recyclables in the Worcester neighbourhood, Paglande, where source separation has been implemented. This service will be expanded to other neighbourhoods from 01/02/2015 when the Beirowplas collection contract has expired. The new service will be rendered by the Municipality.

The clear bags will be provided for free by the Municipality and one clear bag is to be exchanged for a filled clear bag on collection day. The service will initially be expanded to the following neighbourhoods:

- Johnson Park 1, 2
- Worcester West
- Panorama
- Fairway Heights
- Bloekombos
- Van Riebeeck Park
- Hex Park
- Langerug

Residents will each receive a clear bag, pen, fridge magnet and a recycling information pamphlet. Bags will also be available from the solid waste department offices.

After a few months the Municipality will review the service in order to ensure a successful and sustainable implementation process. Based on the review, new neighbourhoods will be identified to where the service can be expanded.

The following is a list of private recyclers in the Breede Valley Municipality:

- Beirowplus Recycling: Petro van Wyk (023) 342 6345
- Mr. Paper: Yolandy Goosen (023) 342 3667
- APD (Association for persons with disabilities): (023) 347 2002

3.6.1.2 Drakenstein

The Drakenstein Municipality operates the Paarl Material Recovery Facility (MRF) adjacent to the Paarl Transfer Station. The Paarl MRF was operated by a private contractor until late in 2013. The Municipality took over the operations since then and plans are in place to appoint a private contractor during 2014/2015. Some recycling also takes place at the Wellington Landfill and is done by the Municipality. The recyclables are sold to various private recyclers. Recycling alone in Drakenstein contributes to 5.6% diversion. This diversion rate excludes garden waste chipping and builder's rubble crushing. Total diversion currently stands at 12% per annum.

The following is a list of private recyclers in the Drakenstein Municipality:

COMPANY	CONTACT PERSON	ADDRESS
Boland Waste	Anelda van Zyl	P O Box 723, Wellington
C.P.Weyers Dienste	Neels	8 Koning Street, Paarl
Cape Waste	Tich Middleton	Donkervliet Street
CL Waste & Scrap Metal	Natasha Parker	5 Planken Street, Plankenburg, Stellenbosch
Enviro Paper & Pulp Suppliers CC	Lee-Ann Ehrenreich	25-27 Alkmaar Street, Dal Josaphat, Paarl
Enviro Smart Waste Management	Sonia Frans	36 Murray Street, Paarl
Green Clean Bin	Pieter De Wit	12 Peter Street, Paarl North
JNA Roofing Boland (Pty)LTD t/a Lucas Thatchers	Janine Thiart	2 Reiger Street, Stellenberg (P O Box 2606)
Len's Metals CC	Michael Rhode	18 EK Green Street, Paarl
Louis	William Louis Deminey	2 Vyfster Hof, Plein Street, Paarl
M Talip	Mogamat Talip	21 Barbarossa Street, Paarl
Ponderosa Pine Trading 34 CC	Dentzel Bocks	
R Chippendal	Riedewaan Chippendale	4 St Omer Street, Charleston Hill, Paarl
Regular Trading 63	Victor Mpela	
Smartwaste	Reg Barichievy	Wegelee Plein
Tanya's Construction and Services	Tanya Tisana	A54 Jabulani Street, Mbekweni, Paarl
Taraka Transport and Recycle	Anzol Pietersen	Drommerdaris Park, Unit 12, Drommedaris Str, Dal Josaphat, Paarl
Thermo Plastics	Frikkie Viviers	Oostbosch Street
Victory Parade Trading (Zeebins)		P O Box 1341, South Paarl
VS Tech CC	Sharline v Schalkwyk Gerhard v Schalkwyk	32 Donkervliet Street
Waste Corp Recycling	Mohammed Fahiem Khan	6 Mont View Avenue, Paarl
Wasteman Holdings (Pty) Ltd	Jeanie Seale	P O Box 219, Eppindust (Wingfield House, Mobile Rd, Airport Industria, CT)
Wasteplan Holdings	-	Sandringham Road, Kraaifontein Industrial Area

COMPANY	CONTACT PERSON	ADDRESS
Wellington Sakekamers	Christine van Wyk	
Xoliswa C Nkala	Xoliswa Nkala	3363 Zingisani Street, Pola Park, Mbekweni, Paarl

3.6.1.3 Langeberg

Recycling is done by the Municipality at the Material Recovery Facilities and through source separation as well as private entities such as Parmalat and Breërivier Recycle. Recycling activities alone currently account for 3% of waste stream diversion. In combination with the composting at the Robertson composting facility, a total of 15% of waste is diverted in Langeberg according to the weighbridge data.

3.6.1.4 Stellenbosch

The Municipality collects source separated waste in Stellenbosch. Recycling is done at the Kraaifontein waste facility and by the private institution for disabled persons Huis Horison. Currently recycling attributes to 1% diversion.

3.6.1.5 Witzenberg

The Witzenberg has no formal waste recovery facilities yet, except the separately fenced recycling area at the Tulbagh landfill. There is however a private company operating a materials recovery facility between Ceres and Prince Alfred Hamlet, sorting source separated wastes and baling it for transport to Cape Town as well as a number of smaller recyclers operating in the Tulbagh area. The private companies in total recover approximately 11% of Witzenberg's waste stream.

3.6.2 Composting

3.6.2.1 Composting Facilities in Cape Winelands

Composting of garden waste at a centralised composting facility requires approximately 350 tons of garden waste per month in order to achieve stand-alone economical sustainability. Composting facilities have been established in Langeberg and Stellenbosch. The other municipalities are currently chipping garden waste.

Organic material that is disposed by landfill and not composted decomposes in the absence of oxygen, that is, anaerobically, and produces methane gas and carbon dioxide while decomposing. These gases are greenhouse gases and must be minimised. Methane is 23 times as effective (bad) as carbon dioxide as a greenhouse gas and all attempts must be made to prevent its generation. During the composting process the decomposition takes place in the presence of oxygen (aerobic) resulting in no methane gas being generated. If the garden waste is simply chipped and used as mulch, it is preferable above disposal by landfill since it will decompose in the presence of oxygen.

3.6.2.2 Home Composting

Home composting in South Africa has traditionally been practiced for the purpose of having an inexpensive and reliable source of compost for the garden. More recently, the realization that composting is a means of conserving resources, saving landfill airspace and the recycling of organic matter, has become the driving force for composting under individuals as well as clubs / associations.

It has been shown that home composting can reduce the waste stream by 20% to 30% if carried out properly. This is a prime example of "reduction at source" or waste avoidance.

This represents probably the only feasible means of composting kitchen waste, as large-scale post-collection composting has proven ineffective on many occasions in South Africa.

Due to a lack of general information conveyed to the private composter in the past, many perceptions of home composting has become that of a stinking pile somewhere in the corner of the garden.

This (and a change in lifestyles) has led to compost becoming a shopping list item to be bought at the supermarket.

Leaflets or other methods of information should be made available to inform the general public of the advantages and "recipe" for making good quality home compost. This should include:

- Bins / container design
- Raw products
- C:N ratio
- Minimum volume
- Preparation
- Moisture content
- Aeration
- Monitoring
- Trouble-shooting

Home composting bins can be bought at selected nurseries throughout the Western Cape. These are normally one of two types. The first type is a moulded plastic bin which comes in two sizes as follows:

- Small – volume approximately 500 litres
- Medium – volume approximately 1000 litres

The second type is one made from chicken wire around a plastic framework. This one is also of approximately 1000 litre capacity. The disadvantage to the chicken wire model is the possibility of leaching, flies and foul odours.

However, it does allow for good aeration, whereas the plastic model may tend to result in anaerobic conditions (rotting) if not manually aerated by turning.

3.6.2.3 Vermicomposting

Vermicomposting refers to the deliberate introduction of earthworms (typically) during early stages of the composting process. These would appear naturally at an advanced stage of natural composting, which would be after stabilization, where macrofauna use some of the microflora as a substrate.

The earthworms have the following beneficial effects on the composting process:

- Reduction of particle size
- Removal of old bacteria, stimulating the growth of new bacteria
- Enriching the compost by excretions high in Nitrogen
- Promotes penetration of oxygen into the compost
- Increases pathogen control
- Produces worm castings, a good soil amendment

Vermicomposting lends itself well to household-sized ventures, as it requires very careful control, but produces very high quality compost in a relative short period of time.

It is a very clean process which does not attract flies.

This type of composting is typically done inside special bins designed for the purpose.

Most kitchen-type wastes can be composted in this manner, although onions, citrus & other acidic foods should be avoided as they can be toxic to the worms.

The worms are also quite sensitive to extreme temperatures, humidity and rain.

Therefore this process does not lend itself to large-scale industrial composting.

Also the ratio of worms: substrate is approximately 1:4; therefore very large amounts of worms are required for the process. The worm mass doubles in approximately 12 weeks.

3.7 WASTE DISPOSAL

3.7.1 Operating Landfills

3.7.1.1 Breede Valley

Breede Valley Municipality currently operate two landfills, the Worcester Landfill (S33°40'49.3'', E19°28'11.0'') south-east of Worcester and the De Doorns Landfill (S33°29'08.0'', E19°41'43.0'') east of De Doorns.

Worcester landfill

The Worcester landfill is permitted in terms of Section 20 of the Environment Conservation Act (Act 73 of 1989) with Permit number B33/2/800/12/P70. The permit states "Class 2" in terms of the Minimum Requirements first edition, but would translate to G:S:B- in terms of the 1998 Minimum Requirements, 2nd Edition or Class B in terms of the Waste Act.

The landfill is operated by the Municipality. No recent audit information about the operation is available, but the Municipality plans to conduct an external audit early in 2015.



Figure 3-2: Google Earth Image of the Worcester Waste Disposal Facility

The site receives general household waste, general commercial and industrial waste, garden waste and builder's rubble. The site does not have a weighbridge at this stage, but the Municipality will start making use of a weigh pad in 2015 to more accurately measure the incoming waste loads for data collection purposes.

The site has many informal salvagers on a daily basis. Efforts to stop this in the past have been problematic. It has since been decided by the Municipality to rather support these individuals. They have been given safety training as well as safety equipment which they must use when they are on site. With the proposed development of a MRF at the landfill, this will be formalised. They are currently managed by:

- Providing them with reflective jackets to be more visible on site
- Providing them with rubber gloves
- Children younger than 18 are not allowed on site
- No dogs, alcohol, etc. are allowed on site
- A register must be signed upon entering the site in the morning

The Municipality plans to erect a boom gate at the site entrance to ensure proper access control. From then on the incoming waste loads will be directed in order to separate garden/green waste, builder's rubble, mixed waste and recyclables into different offloading areas. During September 2014 information letters were distributed to users of the site to inform them of the Municipality's new Integrated Waste Management approach.

Worcester Waste Disposal Facility
Summary Table

Type of facility	Waste Disposal Facility
Licensed/Permitted?	Yes
License/Permit Number	B33/2/800/12/P70
Classification	G:S:B-
Location	S33°40'49.3'', E19°28'11.0''
Estimated Remaining Lifetime	Latest estimate in the 2014 closure provisions report indicate remaining airspace to approximately 2017. This is to be re-evaluated in 2015 with the help of a new topographical survey.
Access Control and signage?	Yes
Externally audited?	No, but planned for 2015
Waste Types Received	General household, commercial and industrial waste, garden waste, builder's rubble

De Doorns landfill

The De Doorns landfill has recently received an operating license as part of the D:EA National Outcome to license all unlicensed facilities. The operation of this facility is poor, no on-site cover material is available and must be purchased and imported and informal salvagers set waste alight daily. Therefore the Municipality plans to close and rehabilitate the facility and replace it with a transfer station/material recovery facility.



Figure 3-3: Google Earth Image of the De Doorns Waste Disposal Facility

The site receives general household waste, general commercial and industrial waste, garden waste and builder's rubble. Accurate disposal quantities are not available.

De Doorns Disposal Facility
Summary Table

Type of facility	Waste Disposal Facility
Licensed/Permitted?	Yes
License/Permit Number	19/2/5/1/B2/3/WL0026/14
Classification	Class B
Location	S33°29'08.0'', E19°41'43.0''
Estimated Remaining Lifetime	Estimated 20 years airspace, but marked for closure due to operational issues.
Access Control and signage?	No
Externally audited?	No, but planned for 2015
Waste Types Received	General household, commercial and industrial waste, garden waste, builder's rubble

Touws River

During the DEA National Outcome 10 to license all unlicensed facilities, a site not used by the Municipality as a disposal site, located to the south of Touws River has been issued with an operating license and classified as a Class B facility. According to the co-ordinates on the issued license, this site is located within 50 metres of the formal residential area and right next to the informal settlement. The license also states that a buffer zone of 200 metres must be established around the site. It is not certain whether this is a mistake in the license, but for this reason alone the Municipality will not be able to be compliant with the license without moving the residential area. This is also not an operated disposal site by the Municipality, but rather an illegal dumping ground. No plans or funds are in place to operate or further develop this site, therefore the way forward will be discussed with the D:EA&DP in order to close and rehabilitate or clear the area of waste.

3.7.1.2 Drakenstein

Drakenstein Municipality currently operates only one landfill, the Wellington Landfill (S33°39'14.8'' E18°59'02.9'') west of Wellington. This landfill was previously developed and used by the former Wellington Municipality. Cell 6, the current cell, was commenced with in August 2000 under the former Wellington Municipality. A permit amendment has since been approved to increase the maximum height of the site to 12m above ground level.

The height has since been increased, but the final phase has not been reached. It is currently estimated that the site will reach capacity in 2019/2020.

Operation of this landfill, which is operated by the municipality, is generally good. Jan Palm Consulting Engineers conducted an external compliance audit in July 2014 to determine if the facility is in compliance with license conditions. Internal monthly audits are conducted by the Municipality. The external audit identified the following partial and non-compliances:

The Wellington Landfill has an operating permit (no. 16/2/7/G100/D4/Z1/P263) from the Department of Water Affairs and Forestry in accordance with the Environmental Conservation Act and has been classified as a G:S:B^+ waste disposal facility. A Waste Management License in terms of Section 20(b) of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) for the height extension as well as to operate a drop-off area, builder's rubble area, recycling area and chipping and composting area on the existing facility was issued to the Drakenstein Municipality in 2012. License Number E13/2/10/1-B3/36-WL0045/10.



Figure 3-4: Google Earth Image of the Wellington Waste Disposal Facility

The site receives general household waste, general commercial and industrial waste, garden waste and builder's rubble. There is a weighbridge at the site and the recorded waste quantities were provided by the Municipality (Discussed under section 3.2.2 of this document). The security has also been improved with the recent completion of the new fencing contract which upgraded the fencing for the Wellington landfill, but informal salvagers still gain access by damaging the security fence and gates.

Wellington Waste Disposal Facility
Summary Table

Type of facility	Waste Disposal Facility, Recycling, Crushing, Composting
Licensed/Permitted?	Yes
License/Permit Number	16/2/7/G100/D4/Z1/P263; E13/2/10/1-B3/36-WL0045/10
Classification	G:S:B+
Location	S 33° 39' 14.8'', E 18° 59' 02.9''
Estimated Remaining Lifetime	Until 2019/2020
Access Control and signage?	Yes
Operating Hours	Monday - Thursday: 08:00 - 16:00. Friday - Saturday: 08:00 - 15:30. Sundays and Public Holidays closed
Externally audited?	Yes
Waste Types Received	General household, commercial and industrial waste, garden waste, builder's rubble

CONDITION	NON-COMPLIANCE /PARTIAL COMPLIANCE	ACTION	TARGET DATE
1.2	The footprint of the garden waste stockpile is not within the Licensed area.	Reduce the garden waste stockpile and use the chippings for erosion protection on the outer landfill slopes.	a.s.a.p.
3.1	The SOP/EPP is not comprehensive.	Update the SOP/EPP according to the requirements as indicated in the License.	a.s.a.p.
6.1.1 (i)	The license holder has not set recycling recovery targets.	Set recycling targets.	a.s.a.p.
7.1.1	The facility perimeter fence is continuously damaged by informal salvagers thereby gaining access to	Improve the site security by employing dog patrols along the fence.	a.s.a.p.

	the site.		
7.2.10	Informal salvagers are reclaiming disposed waste.	Improve the site security by employing dog patrols along the fence.	a.s.a.p.
7.2.12	The site perimeter road is severely damaged during the rainy season.	Improve surface water drainage on site.	When budget is available.
7.2.13	The composting area has not yet been formalized.	Formalise licensed chipping and composting area.	Next financial year.
7.2.14	Ponding occurs on the composting and builder's rubble areas, because they have not yet been formalised.	Formalise composting and builder's rubble areas.	Next financial year.
7.2.22	Some of the outside slopes of the landfill are experiencing erosion due to the elements and foot traffic.	Cover these slopes with garden waste chippings.	a.s.a.p.
9.1.2 (c)	Air quality is not monitored.	Air quality monitoring will be included in future monitoring sessions.	Next monitoring session.
9.2.3	Ground water levels are not recorded during every sampling session.	Record ground water levels during each sampling session.	Next monitoring session.
9.2.5	Ground water samples are not analysed for all the required variables.	Analyse ground water samples for all the required variables.	Next monitoring session.
9.2.7	Leachate samples are not analysed for all the required variables.	Analyse leachate samples for all the required variables.	Next monitoring session.
11.1.1	Internal audits are not submitted to the Director.	Submit internal audits to the Director.	Next audit.

3.7.1.3 Langeberg

Ashton

Langeberg Municipality's municipal solid waste stream is disposed at the licensed G:S:B^- landfill at Ashton (S33 50 10.4 E20 06 04.9). The Landfill was permitted in 1999. The permit number is 16/2/7/H300/D41/Z1/P332.

The Ashton Landfill does not have sufficient capacity and should reportedly reach capacity in 2015. This is taking into account that Langeberg Municipality is currently providing a separation at source service (2-bag system) in all towns as well as a material recovery facility and composting plant to save as much landfill airspace as possible.

Langeberg Municipality commissioned an investigation into the identification of a new municipal site and environmental authorisation was obtained for a location near Bonnievale (farm Stockwell). However, since the Cape Winelands District Municipality also commissioned an investigation into the identification of a regional landfill to serve Breede Valley, Langeberg and Witzenberg municipalities, Langeberg Municipality decided, based on an economic analysis, to support the regional initiative.



Figure 3-5: Ashton Landfill

Ashton Waste Disposal Facility
Summary Table

Type of facility	Waste Disposal Facility, Recycling
Licensed/Permitted?	Yes
License/Permit Number	16/2/7/H300/D41/Z1/P332
Classification	G:S:B-
Location	S33°50'10.4'', E20°06'04.9''
Estimated Remaining Lifetime	Until 2014/2015
Access Control and signage?	Yes, but no signage
Operating Hours	Monday - Fridays: 08:00 - 16:30. Saturdays and Public Holidays: 08:00 – 13:00.
Externally audited?	Yes
Waste Types Received	General household, commercial and industrial waste, garden waste, builder's rubble

Bonnievale

The Bonnievale disposal facility is permitted in terms of ECA 1989. The permit number is 16/2/7/H500/D79/Z1/P304 and was issued 31-07-1998. The classification is G:S:B-.



Figure 3-6: Bonnievale Landfill

Bonnievale Waste Disposal Facility
Summary Table

Type of facility	Waste Disposal Facility
Licensed/Permitted?	Yes
License/Permit Number	16/2/7/H500/D79/Z1/P304
Classification	G:S:B-
Location	S33°55'33.89'', E20°04'50.58''
Estimated Remaining Lifetime	Unknown
Access Control and signage?	Yes
Operating Hours	Monday - Fridays: 08:00 - 16:30. Saturdays and Public Holidays: 08:00 – 13:00.
Externally audited?	Yes
Waste Types Received	Garden waste, builder's rubble

Montagu (Bessiekop)

The Montagu landfill is permitted in terms of ECA 1989 with permit number B33/2/800/45/S/P169 and classification G:S:B-. The permit was issued 27-03-1995.



Figure 3-7: Montagu Landfill

Montagu Waste Disposal Facility
Summary Table

Type of facility	Waste Disposal Facility
Licensed/Permitted?	Yes
License/Permit Number	B33/2/800/45/S/P169
Classification	G:S:B-
Location	S33°47'38.42'', E20°08'04.61''
Estimated Remaining Lifetime	Unknown
Access Control and signage?	Yes
Operating Hours	Monday - Thursday: 08:00 - 16:00. Friday - Saturday: 08:00 - 15:30. Sundays and Public Holidays closed
Externally audited?	No
Waste Types Received	Builder's rubble

3.7.1.4 Stellenbosch

The Stellenbosch Municipality operates one licensed landfill with permit number 16/2/7/G203/D16/Z1/P331 and classified as G:M:B+. A height extension was subsequently issued as an amendment to the permit.

Cell 3 was constructed in 2012 and is currently operational with cell 1 and 2 having reached capacity. It is estimated that the landfill will reach capacity in approximately 4 years (from 2015), depending on the waste diversion measures applied. The process of obtaining a closure license for the site is currently under way.

The Stellenbosch Municipality has received a license to establish an integrated waste management facility directly to the south of the landfill. This facility will include a public drop-off, a material recovery facility and transfer station, a garden waste chipping and builder's rubble crushing area and an area for the temporary storage of household hazardous waste.



Figure 3-8: Google Earth Image of the Stellenbosch Waste Disposal Facility

The site receives general household waste, general commercial and industrial waste, garden waste and builder's rubble.

Stellenbosch Disposal Facility
Summary Table

Type of facility	Waste Disposal Facility
Licensed/Permitted?	Yes
License/Permit Number	16/2/7/G203/D16/Z1/P331
Classification	G:M:B+
Location	S33°56'33.38'', E18°49'12.52''
Estimated Remaining Lifetime	Estimated 4 years
Access Control and signage?	Yes
Externally audited?	Yes
Waste Types Received	General household, commercial and industrial waste, garden waste, builder's rubble

3.7.1.5 Witzenberg

The Witzenberg Municipality operates four licensed landfills. They are the Wolseley, Tulbagh, Prince Alfred Hamlet and Op-die-berg landfills.

Wolseley

The Wolseley permit expired in June 2013 and an application to extend the permit validity was submitted (license variation). However, the 250m buffer around the site was not maintained, with formal and informal housing established inside the buffer. Subsequently, along with the extended permit validity, the operational footprint of the Wolseley landfill was reduced, also reducing the remaining airspace.

Wolseley landfill has not been operational since 2013 and the site infrastructure (fence, entrance control building, etc.) have been destroyed or removed, possibly by the surrounding community not in favour of the landfill.

It is estimated that the Wolseley landfill will have approximately 2 years of operational life left if operations start again.



Figure 3-9: Google Earth Image of the Wolseley Waste Disposal Facility

The site received general household waste, general commercial and industrial waste, garden waste and builder's rubble.

Wolseley Disposal Facility
Summary Table

Type of facility	Waste Disposal Facility
Licensed/Permitted?	Yes
License/Permit Number	16/2/7/H101/D34/Z1/P496
Classification	G:S:B+
Location	S33°24'52.70'', E19°11'02.14''
Estimated Remaining Lifetime	Approximately 2 years from start of operations
Access Control and signage?	When it was operational yes. Requires new fencing and access control.
Externally audited?	When it was operational yes.
Waste Types Received	General household, commercial and industrial waste, garden waste, builder's rubble

Tulbagh

The Tulbagh landfill (33°16'30.27''S, 19°07'56.45''E) is permitted in terms of Section 20 of ECA 1989 and is classified as G:S:B+ with permit number 16/2/7/G100/D6/Z1/P305.



Figure 3-10: Google Earth Image of the current Tulbagh Waste Disposal Facility Footprint

The site is externally audited and the non-compliances are being addressed by the municipality. Groundwater monitoring boreholes have been installed and the height of the waste body has been lowered to comply with the permit. A consultant has been appointed to develop a site management and operation plan in 2015.

Tulbagh Disposal Facility
Summary Table

Type of facility	Waste Disposal Facility
Licensed/Permitted?	Yes
License/Permit Number	16/2/7/G100/D6/Z1/P305
Classification	G:S:B+
Location	33°16'30.27''S, 19°07'56.45''E
Estimated Remaining Lifetime	To be determined
Access Control and signage?	Yes
Externally audited?	Yes
Waste Types Received	General household, garden waste, builder's rubble

Prince Alfred Hamlet

The Prince Alfred Hamlet landfill (33°16'34.82''S, 19°19'29.11''E) is licensed in terms of the Waste Act of 2008 and is classified as G:C:B- with license number 19/2/5/1/B5/11/WL0088/14. The license was issued 02/07/2014.

The license stipulates that garden waste and builder's rubble is allowed to be disposed, recovered or stored at this facility. Skips must be provided at the site where waste that is not allowed to be disposed at the site is to be stored until it is removed and disposed at the appropriate licensed disposal facility.

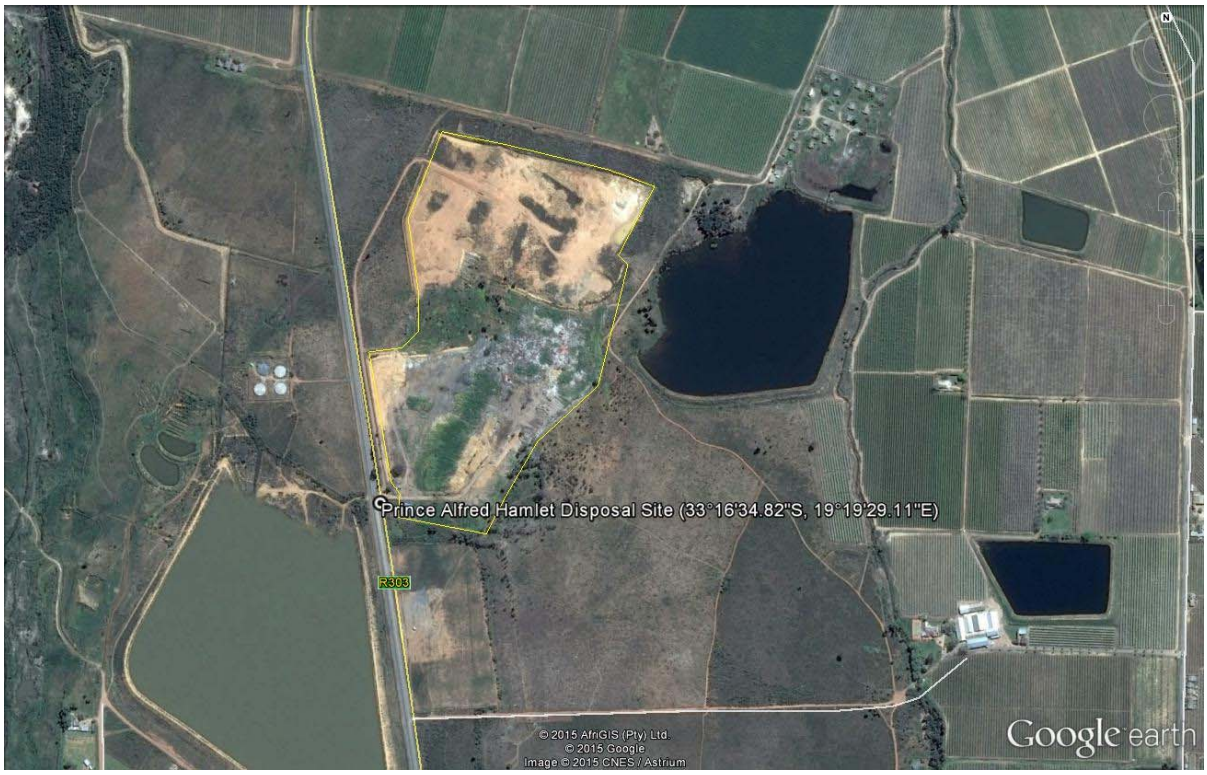


Figure 3-11: Google Earth Image of the Prince Alfred Hamlet disposal facility

Prince Alfred Hamlet Disposal Facility
Summary Table

Type of facility	Waste Disposal Facility
Licensed/Permitted?	Yes
License/Permit Number	19/2/5/1/B5/11/WL0088/14
Classification	G:C:B-
Location	33°16'34.82''S, 19°19'29.11''E
Estimated Remaining Lifetime	To be determined
Access Control and signage?	Yes
Externally audited?	No
Waste Types Received	General household, garden waste, builder's rubble

Op-Die-Berg

The Op-die-berg landfill (33°03'51.3''S, 19°20'00.18''E) is permitted in terms of the ECA 1989 and is classified as G:C:B+ with permit number 16/2/7/H200/D100/Z2/P325.



Figure 3-12: Google Earth Image of the Op-die-berg disposal facility

Op-die-berg Disposal Facility Summary Table

Type of facility	Waste Disposal Facility
Licensed/Permitted?	Yes
License/Permit Number	16/2/7/H200/D100/Z2/P325
Classification	G:C:B+
Location	33°16'34.82''S, 19°19'29.11''E
Estimated Remaining Lifetime	To be determined
Access Control and signage?	Yes
Externally audited?	Yes
Waste Types Received	General household, garden waste, builder's rubble

3.7.1.6 Cape Winelands District

The Cape Winelands District Municipality is in the process to establish a regional landfill for the eastern portion of the Cape Winelands District. This includes the Municipalities of Breede Valley, Langeberg and Witzenberg. The preferred location for the regional site is adjacent to the Worcester landfill.

The license application has been submitted to D:EA&DP and D:WA has issued a Technical Record of Decision, but the District is awaiting the outcome of the application. It is estimated that if approved, the regional landfill will be operational within the next 5 years. This will be a Class B landfill and no hazardous waste will be accepted for disposal.

It is planned that this facility will have a material recovery facility, garden waste chipping area, builder's rubble crushing area, weighbridges and offices. This facility will be registered on and report to IPWIS.

A location for a similar regional disposal facility that would serve the western portion (Drakenstein and Stellenbosch) was investigated, but all proposed sites were rejected as candidates. A solution for the disposal of these two Municipalities must be sought as the Stellenbosch and Wellington landfills are the only operating landfills in this area and no alternatives are available once capacity is reached. The District can co-ordinate alternative disposal options for this part of the District, for example an agreement with the City of Cape Town.

3.7.2 Closed Landfills

The following closed landfills are located in the Cape Winelands District. Each Municipality in the District must ensure that all sites are issued with closure licenses and that rehabilitation provision is made in their respective budget. The rehabilitation cost estimates must be updated annually by each municipality in order to keep up to date with relevant legislation and rehabilitation requirements.

3.7.2.1 Breede Valley

The old Touws River landfill site has been closed and rehabilitated.

The Worcester and De Doorns disposal facilities are still operational, but will need to be closed and rehabilitated in the future.

3.7.2.2 Drakenstein

The following closed disposal sites are located in the Drakenstein municipality. All sites have been issued with closure licenses, except the Boy Louw closed site of which the closure license application is under way. Each site requires to be rehabilitated except the Klapmuts landfill that was rehabilitated according to its closure license.

Gouda

License number: 19/2/5/1/B3/14/WL0031/14
Location: 33°17'55.6''S, 19°01'32.6''E



Figure 3-13: Gouda Landfill

Saron

License number: 19/2/5/1/B3/32/WL0028/14
Location: 33°12'23.4''S, 19°00'37.4''E



Figure 3-14: Saron Landfill

Hermon

License number: 19/2/5/1/B3/40/WL0030/14
Location: 33°26'03.7''S, 18°57'40.1''E



Figure 3-15: Hermon Landfill

Dal Josafat

License number: 19/2/5/1/B3/7/WL0027/14
Location: 34°42'24.7''S, 18°58'38.9''E

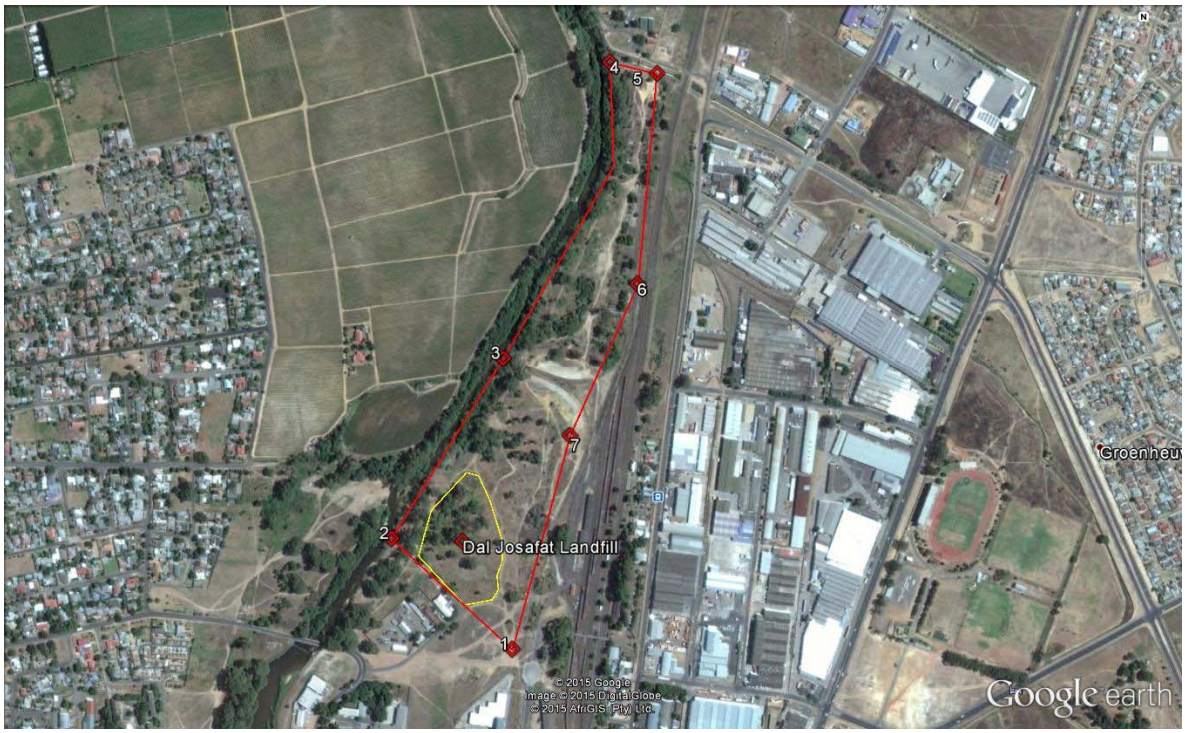


Figure 3-16: Dal Josafat Landfill

Note that the red border is as the site extents are described in the closure license and the yellow border is the actual old waste body.

Orleans

License number: 19/2/5/1/B3/29/WL0029/14
Location: 33°43'13.6''S, 18°59'32.6''E



Figure 3-17: Orleans Landfill

Boy Louw

License number: Application under way (2015)
Location: 33°43'03.8''S, 18°58'19.2''E

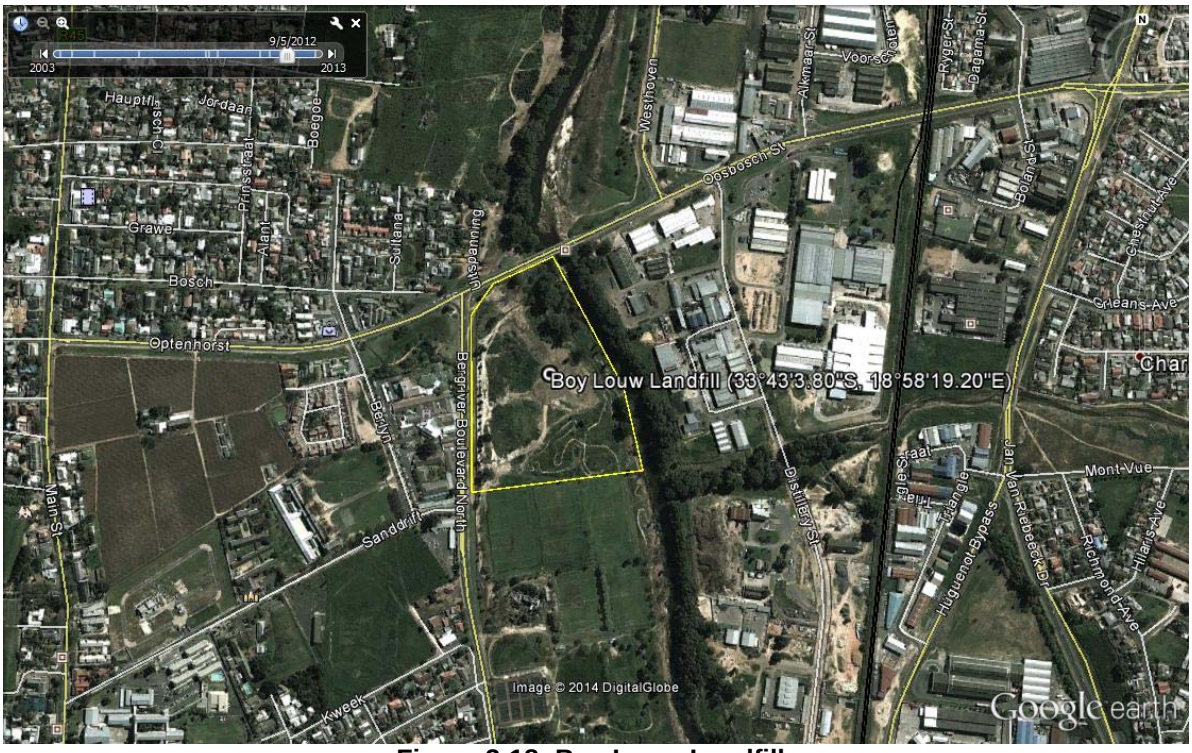


Figure 3-18: Boy Louw Landfill

Klapmuts (Rehabilitation complete)

License number: 16/2/7/W511/B14/Z1/P368
Location: 33°47'15.22''S, 18°50'08.81''E

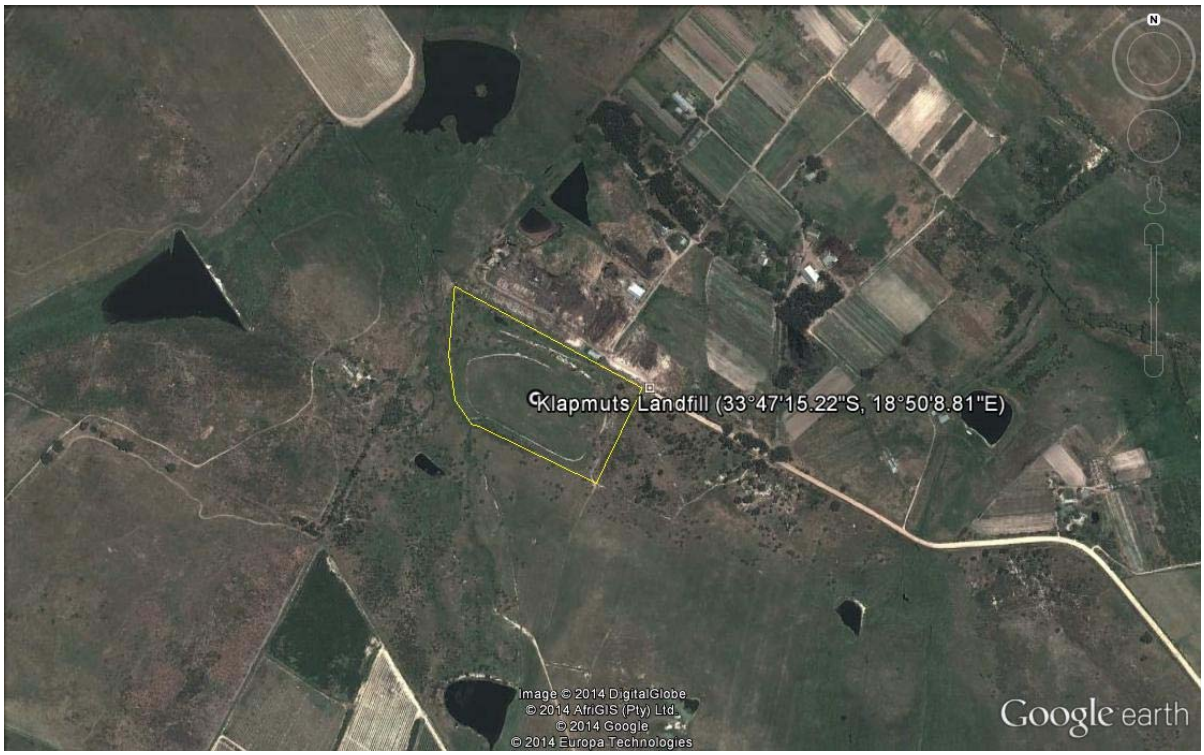


Figure 3-19: Klapmuts Rehabilitated Landfill

3.7.2.3 Langeberg

Robertson (Rehabilitation complete)

The Roberston landfill has been closed and rehabilitated for a number of years.



Figure 3-20: Robertson Rehabilitated Landfill

McGregor

The old closed garden waste site near McGregor (33°57'40.72''S, 19°48'26.7''E) is in the final stage of being issued with a closure license. The license will be issued during 2015 and will provide clarity regarding the rehabilitation requirements. Refer to **Figure 3-28** below.

3.7.2.4 Stellenbosch

The closure license application for the Stellenbosch landfill is currently under way along with the rehabilitation designs. The landfill will then be rehabilitated when the current operational cell has reached capacity, currently estimated at 4 years from 2015.

3.7.2.5 Witzenberg

The closed Ceres disposal site (33°23'16.72''S, 19°19'37.12''E) has been rehabilitated.



Figure 3-21: Ceres Closed Landfill

3.7.3 Waste Transfer Stations and Public Drop-offs

3.7.3.1 Breede Valley

Breede Valley Municipality operates one Solid Waste Transfer Station/Material Recovery Facility (S33°20'30.7''; E 20°01'39.7'') in Touws River. The facility is managed by the private company Beirowplas, who was appointed via a public tender process. Currently, four labourers pick recyclable materials from a conveyor belt.

Waste collection is done by the Municipality and delivered to the facility. The non-recyclable waste that is stored in 30m^3 containers is hauled by the Municipality to the Worcester landfill on a weekly basis.

On average, 9 021kg of recyclable material is diverted monthly.



Figure 3-22: Touws River Transfer Station/MRF

Touws River Transfer Station
Summary Table

Type of facility	Transfer Station / Material Recovery Facility
Licensed/Permitted?	None required/ Directive issued
License/Permit Number	-
Date of issue	-
Classification	-
Estimated Remaining Lifetime	Indefinite with regular maintenance
Access Control?	Site is fenced and has good access control
Externally audited?	No
Waste Types Received	General waste
Requirements	-

3.7.3.2 Drakenstein

Drakenstein Municipality operates one Solid Waste Transfer Station (S 33°43'11.3''; E 18°58'33.4''). The facility was upgraded in 2010 from operating with open top containers to operating with a static compactor into compaction containers.



Figure 3-23: Paarl Solid Waste Transfer Station

Paarl Transfer Station
Summary Table

Type of facility	Transfer Station
Licensed/Permitted?	None required, has ROD
License/Permit Number	-
Date of issue	-
Classification	-
Estimated Remaining Lifetime	Indefinite with regular maintenance
Access Control?	Site is fenced and has good access control
Externally audited?	No
Waste Types Received	General waste
Requirements	-

Public Drop-off Facilities have been provided in Saron (S33 11 20.9; E19 00 25.9), Hermon (S33 26 03.7; E18 57 38.3) and Gouda (S33 17 56.9; E19 01 34.2). These facilities receive only general waste and do not require licensing since the storage capacity is less than 100m^3. Waste is transported from these facilities to the Wellington Landfill.



Figure 3-24: Gouda Drop-off



Figure 3-25: Hermon Drop-off



Figure 3-26: Saron Drop-off Google Earth Image

3.7.3.3 Langeberg

In Langeberg public drop-offs have been provided at Montagu (33°47'34.60''S, 20°08'11.93''E) and McGregor (33°57'44.54''S, 19°48'29.69''E) and a transfer station at Robertson (33°49'15.84''S, 19°52'15.21''E).



Figure 3-27: Robertson Transfer Station



Figure 3-28: McGregor Drop-off



Figure 3-29: Montagu Drop-off

3.7.3.4 Stellenbosch

A transfer station has been provided at Klapmuts (33°48'22.15''S, 18°51'19.81''E).



Figure 3-30: Klapmuts Transfer Station

3.7.3.5 Witzenberg

No transfer stations or drop-offs have been provided in the Witzenberg Municipality, but a transfer station is recommended in order to replace the Wolseley landfill when it is no longer in use.

3.7.4 Disposal Facilities used outside the District Municipality Boundaries

The hazardous waste generated in the Cape Winelands District will be transported to the Vissershok Waste Management Facility (VWMF). It has a H:H operating permit from DWAF. The site is situated some 800m west of the N7 at Vissershok and is operated and audited in terms of its permit conditions.

3.7.5 Contaminated Land

Contaminated land includes all sites discussed under "3.7.2 Closed Sites".

3.8 COSTS OF EXISTING WASTE MANAGEMENT SYSTEM

3.8.1 Financial Summary of Waste Management Services of Cape Winelands District Municipality

The tables below show the totals for the Capital Budget and the Operating Budget for the Cape Winelands Municipality.

Table 3-9: Total Cape Winelands District Municipality Actual Budget and Expenditure

	2012/2013	Adjust. Bud. Jan 2014	2014/2015	2015/2016	2016/2017
Operating Expenditure	270 848 600.00	298 274 306.00	324 960 841.00	337 628 770.00	353 937 641.00
Project Expenditure	70 438 500.00	59 183 259.00	40 792 570.00	34 074 120.00	34 886 374.00
Sub Total	**341 287 100.00**	**357 457 565.00**	**365 753 411.00**	**371 702 890.00**	**388 824 015.00**
Capital Expenditure	11 102 020.00	8 295 622.00	12 482 747.00	7 472 050.00	7 048 300.00
Total Budget	**352 389 120.00**	**365 753 187.00**	**378 236 158.00**	**379 174 940.00**	**395 872 315.00**

Table 3-10: Project specific Budget (Solid waste and related projects)

Description	Adjust. Bud. 2014	Budget 2014/2015	Budget 2015/2016	Budget 2016/2017
Land-use and spatial planning				
EPWP invasive alien vegetation management programme	1 000 000.00	1 000 000.00	1 060 900.00	1 092 730.00
River rehabilitation	-	350 000.00	360 500.00	371 320.00
Projects and housing				
Cleaning of cemeteries	200 000.00	-	-	-
Clearing of road reserves	1 600 000.00	850 000.00	2 884 000.00	2 970 520.00
Municipal Health Service				
Clean-up Campaigns	1 000 000.00	-	1 000 000.00	1 000 000.00
Annual Environmental Health Education Programme	289 000.00	400 000.00	412 000.00	424 360.00
Greening	250 000.00	288 430.00	257 500.00	265 230.00
Waste Minimisation	-	-	-	-

Table 3-11: Total Income

	2012/2013	Adjust. Bud. Jan 2014	2014/2015	2015/2016	2016/2017
RSC Replacement Grant	193 926 000.00	199 744 000.00	205 736 000.00	210 834 000.00	217 159 020.00
Equitable Share	6 945 000.00	9 692 000.00	7 892 000.00	6 215 000.00	6 215 000.00
Finance Management Grant	677 431.00	2 043 315.00	1 250 000.00	1 250 000.00	1 250 000.00
EPWP Incentive	1 214 000.00	1 000 000.00	1 030 000.00	1 060 900.00	1 092 730.00
Other National Dora Grants	-	-	5 000 000.00	-	-
Provincial Dora Grants	1 303 094.00	4 991 607.00	9 820 520.00	5 542 970.00	5 682 273.00
Public Contributions	1 989 950.00	2 587 000.00	604 620.00	622 750.00	641 430.00
Other Income	4 183 164.00	7 987 869.00	38 630.00	4 746 800.00	2 280 001.00
Interest Received	R 24 451 381.00	R 26 250 000.00	R 27 500 000.00	R 28 840 000.00	R 29 705 200.00
Agency Services	R 73 799 198.00	R 91 727 298.00	R 99 267 364.00	R 103 447 362.00	R 107 537 135.00
Total budget	**R 308 489 218.00**	**R 346 023 089.00**	**R 358 139 134.00**	**R 362 559 782.00**	**R 371 562 789.00**

3.9 STAFF COMPLIMENT OF EXISTING WASTE MANAGEMENT SYSTEM

As the District Municipality is not responsible for weekly waste collection, there is not a large labour intensive staff compliment as with the local Municipalities. The waste management responsibilities are divided between the Technical Services Department and the Municipal Health Services Department.

Waste Management Officer:

Chapter 3 of the Waste Act states that:

"10.(3) Each municipality authorised to carry out waste management services by the Municipal Structures Act, 1998 (Act No. 117 of 1998), must designate in writing a waste management officer from its administration to be responsible for co-ordinating matter pertaining to waste management in that municipality.

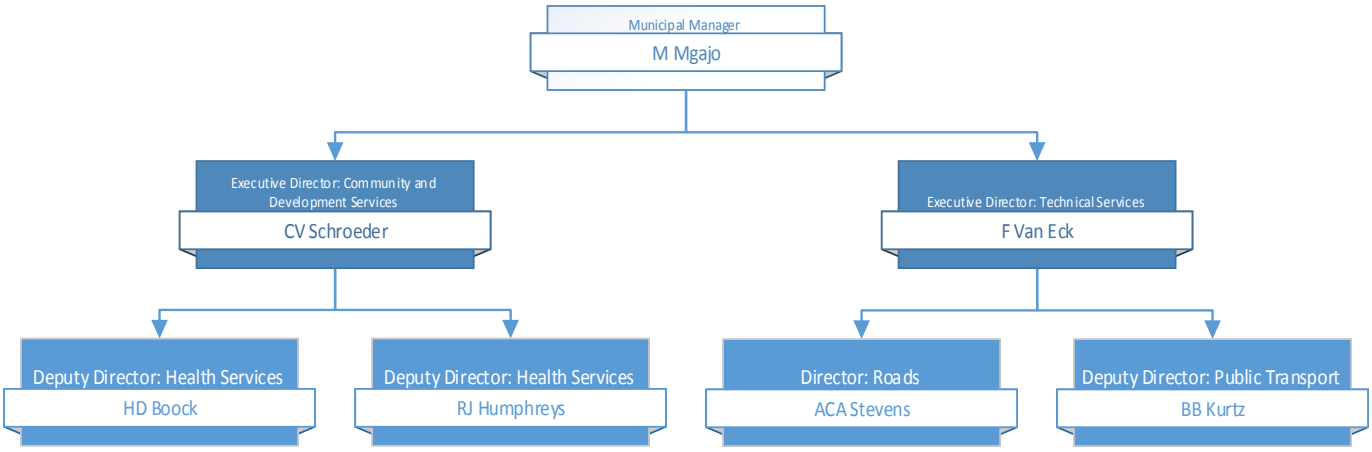
(4) A power delegated or a duty assigned to a waste management officer by virtue of subsection (3) may be sub-delegated of further assigned by that officer to another official in the service of the same administration, subject to such limitations or conditions as may be determined by the municipality.

(5) Waste management officers must co-ordinate their activities with other waste management activities in the manner set out in the national waste management strategy established in terms of section 6 or determined by the Minister by notice in the Gazette."

The designated Waste Management Officer for the Cape Winelands District Municipality is Mr F van Eck who was appointed by Council as required by the Waste Act.

Provision must be made for the continuous training and education of the Cape Winelands waste management employees. Waste management information sharing/capacity-building events such as the Departmental Waste Forum, Waste Khoro and Wastecon should be attended by waste management employees determined by the Municipality.

Only the Macro structure has been included below, as there is no specific solid waste department. The duties are shared between the Technical Services Department and the Municipal Health Services (Under Community Services and Development Planning).



3.10 CURRENT WASTE MANAGEMENT IDENTIFIED GAPS

The following gaps were identified from the status quo of solid waste management in the Cape Winelands District Municipality:

- Public Awareness and Education.

  A large part of the general public appears to be content to put out their waste and then it is somebody else's problem and source separation participation must still be established in all neighbourhoods in the District which prove viable. Concepts such as waste avoidance, waste reduction, etc., are not within their general vocabulary. Public awareness and education must be continued and expanded in all local Municipalities.

- Not all residents are aware of the impacts of waste and the consequences of their littering
- Illegal dumping shows that these offenders are not in sync with the mind-set of sustainable waste management yet

- Recycling and waste minimisation.

  - Recycling initiatives need to be supported in all local Municipalities so that diversion rates in the District can be boosted. Reaching the target of 15% diversion by the end of 2015 will be very hard through recycling alone. Focus must be placed on garden waste chipping/composting as well as builder's rubble crushing. The future implementation of waste to energy in Drakenstein will boost diversion rates significantly.

- Area cleaning.

  - Proper area cleaning has been raised as a concern in some of the local Municipalities and must be brought up to standard.

- Lack of information regarding waste generation types and volumes.

  Accurate information regarding waste quantities are not readily available in all local Municipalities. The lack of weighbridges and waste characterisation are the cause of this.

  - The registration of industry waste generators and health care waste generators and transporters need to be addressed in a revision of the Municipal Integrated Solid Waste By-laws.
  - A new study regarding the waste stream characterisation must be done.
  - Weighbridges need to be installed at the larger waste management facilities.

- Collection Fleet – Age, Condition, Aesthetics, Type.

  Some collection vehicles in the District are likely in service long after the end of their economic lives. Collection vehicles help in creating the public's perception of waste management and need to be aesthetically pleasing.

  - Some vehicles are likely operating beyond their effective lifetimes. These vehicles need to be evaluated to ensure that they are still cost effective and efficient. If not, they need to be replaced. Each local Municipality in the District must ensure that their waste collection fleet is up to standard.

- Law enforcement.

  - The levels of illegal dumping need to be reduced by stricter law enforcement on the perpetrators.
  - The current outdated solid waste by-laws of some local Municipalities need to be updated to Integrated Waste Management By-laws.

- Disposal sites.

  - Some disposal sites in the District require external audits in order to ascertain non-compliances and develop action plans to correct them. Sites that cannot be operated or developed in terms of issued license conditions need to be closed and rehabilitated.
  - Closed disposal sites need to be replaced by solid waste transfer stations.
  - Drop-off and collection points need to be established for the public to deliver their household hazardous waste. The Municipalities must then dispose of this waste at the appropriate licensed facility or use private service providers to do so.
  - Disposal airspace is limited and there is need for the development of a regional disposal site as soon as possible.

- Vacant Positions.

  - Vacant positions in the solid waste management departments need to be filled so that services can be rendered effectively by all municipalities in the District.

Possible negative impacts of identified gaps on health and the environment

- With lack of public awareness and education, the understanding of a sustainable waste management system will be lacking and public littering will increase. With no realisation of the actual impact of waste on the environment, there would be no reason to be environmentally responsible. The environment will be poisoned by uncontrolled waste which will affect the public at large. An uninformed public will also not participate in waste avoidance and recycling efforts, causing pressure on landfill airspace requirements, hence more landfills need to be constructed to the detriment of the environment.
- With lack of information regarding waste generation types and volumes, no control can be exercised over the generators of these wastes and where it is disposed, possibly illegally.
- If the vehicles in the collection fleet are used past their useful lifetimes, they become a financial liability

4. WASTE MANAGEMENT STRATEGIC OBJECTIVES

With the Status Quo of waste management as listed in the previous chapters and the current problems that are experienced by waste management, the way forward is to state the strategic objectives of the District Municipality and then to develop action plans or implementation instruments how to achieve the strategic objectives.

Being a District Municipality and not "owning" any waste, these strategies are more focussed on supporting the local municipalities with their individual strategies and in the event of developing a district landfill, to develop action plans to ensure safe disposal. The District Municipality does not collect waste with the result that strategies for waste avoidance and waste reduction are not really applicable.

The District Municipality is committed to a system of waste management that will see the least possible amount of waste going to modern engineered landfills. This will be achieved through the use of education, law enforcement and material recovery and treatment plants. New and emerging technologies, where applicable and affordable, will also play a part in overall waste management.

The Waste Management Strategic Objectives for Cape Winelands District Municipality on which this Plan is based, commits the municipality to:

- Create an atmosphere in which the environment and natural resources of the region are conserved and protected.

- Develop a communication/information/education strategy to help ensure acceptance of 'ownership' of the strategic objectives among members of the public and industry throughout the municipality and to promote co-operative community action.

- Provide solutions for the three main objectives:
  - The avoidance of waste generation
  - The reduction of waste volumes
  - The safe disposal of waste

4.1 STRATEGIC OBJECTIVES

4.1.1 General

To ensure that Waste Management in the Cape Winelands District complies with South African and International environmental standards so that it is beneficial to industrial and agricultural growth and the public's right to a clean and healthy environment.

4.1.2 Waste Avoidance

To promote the minimisation of the generation of waste.

4.1.3 Waste Reduction

To promote the reduction of all waste so that nothing of neither value, nor anything that can decompose, gets disposed.

4.1.4 Waste Disposal

To store, dispose or treat all waste that cannot be avoided nor reduced at licensed facilities with regular operational and environmental monitoring and in accordance with regulatory requirements.

4.1.5 Definitions

WASTE AVOIDANCE is to avoid material entering the waste stream, e.g. when the generator of the material either re-uses it or gives the material to somebody else as product or raw material. Composting at home is regarded as waste avoidance.

WASTE REDUCTION is to reduce the quantity of waste that has been discarded by its generator, e.g. when recyclable materials are recovered at the sidewalk or at a transfer station, materials recovery facility or landfill. Composting of garden waste at a composting facility is regarded as reduction.

WASTE DISPOSAL is defined as the storage, treatment or disposal of waste at licensed facilities.

4.2 ROLE OF CAPE WINELANDS DISTRICT MUNICIPALITY

The role of the District authority is not easily defined as the collection and disposal of municipal solid waste is a function of the local municipalities. It is only when waste crosses a local municipal boundary that the receiving waste disposal facility or transfer station becomes a District function.

The plans formulated by the Cape Winelands District Municipality are specific to the area and its resources. They reflect the availability of suitable waste management facilities in the region, as well as local market demand for recovered materials. Special care must be taken to cater for the volatility of markets for recovered materials by ensuring that there are other suitable options to fall back on, if required. It is, therefore, highly desirable to be able to switch between waste management methods - further emphasising the hazards of relying too heavily on a single policy option instead of a combination of policies.

The Integrated Waste Management Plan of the Cape Winelands District Municipality is a requirement of the Waste Act and this plan will be carried out through the upcoming years. This plan takes into account the Municipality's legal obligations regarding waste avoidance, recovery, disposal and general management.

The implementation instruments or action plans defined in the following section are laid out in a manner which reflects the waste management hierarchy, putting the emphasis on waste avoidance and minimisation, with specific waste streams looked at in detail.

5. CAPE WINELANDS DISTRICT MUNICIPALITY'S IWMP IMPLEMENTATION ACTIONS, SCHEDULE AND COST ESTIMATES

5.1 IWMP GOAL 1: PUBLIC AWARENESS AND EDUCATION

Goal 1: Awareness & Education						
Objectives/Targets	**Actions/Cost Estimates**					
	2015/2016	**2016/2017**	**2017/2018**	**2018/2019**	**2019/2020**	**2020 AND ON**
Educate, strengthen capacity and raise awareness in integrated waste management. The public will be informed and continually made aware of the impacts of waste on the environment. Municipal staff will receive training and attend forums.	Environmental Health Education					
	400 000.00	TBD	TBD	TBD	TBD	TBD
	Greening Project. Measured by number of trees planted.					
	250 000.00	TBD	TBD	TBD	TBD	TBD
	Cape Winelands Solid Waste employees to attend education seminars and waste forums. Capacity training and education conducted within the Municipality where needed.					
	Costs dependent on number of forums attended as well as costs related to internal training provided by the CWDM.					

5.2 IWMP GOAL 2: IMPROVE WASTE INFORMATION MANAGEMENT

Goal 2: Improve Waste Information Management						
Objectives/Targets	**Actions/Cost Estimates**					
	2015/2016	**2016/2017**	**2017/2018**	**2018/2019**	**2019/2020**	**2020 AND ON**
Ensure the reporting of all waste management facilities to IPWIS. Waste quantification systems to be in place. Registration of hazardous waste generators (industry & medical) and service providers (e.g. transporters).	Ensure that all the local Municipalities conduct waste characterisation studies.					
	Ensure that all local Municipalities have registered their waste management facilities on and reports to IPWIS.					
	No Cost. The District's Waste Management Officer to oversee in co-operation with the Waste Management Officers/Waste Managers of the Local Municipalities.					
		The planned new regional landfill will be equipped with weighbridges to record waste loads. This will be reported to IPWIS.				
		Costs included under Goal 3				

5.3 IWMP GOAL 3: EFFECTIVE SOLID WASTE SERVICE DELIVERY

Goal 3: Effective solid waste service delivery						
Objectives/Targets	**Actions/Cost Estimates**					
	2015/2016	**2016/2017**	**2017/2018**	**2018/2019**	**2019/2020**	**2020 AND ON**
Ensure that waste services are provided in an effective and environmentally responsible manner to all residents in the District.	Construct the planned regional Integrated Waste Management Facility. This is to ensure future disposal airspace in the District for use by the local Municipalities.					
	Civil contractor to be appointed via public tender for the construction. External operator to be appointed via public tender for the operation of the MRF, chipping & crushing area and landfilling. Costs will be determined.					
	River Rehabilitation Project. Measured by amount of hectares cleared.					
	350 000.00	TBD	TBD	TBD	TBD	TBD
	EPWP invasive alien plant management programme. Measured by amount of hectare cleared.					
	1 030 000.00	TBD	TBD	TBD	TBD	TBD

5.4 IWMP GOAL 4: PROMOTE AND ENSURE WASTE MINIMISATION

Goal 4: Promote and Ensure Waste Minimisation						
Objectives/Targets	**Actions/Cost Estimates**					
	2015/2016	**2016/2017**	**2017/2018**	**2018/2019**	**2019/2020**	**2020 AND ON**
Maximise waste minimisation in the CWDM. Monitor and assist local municipalities to achieve recycling and diversion targets. The aim is to consistently divert high percentages of waste from landfill.	The regional integrated waste management facility will include a Material Recovery Facility, Garden Waste Chipping Area and Builder's Rubble Crushing Area which will ensure that the incoming waste stream is diverted as much as is practicable before disposal.					
	Educate the public regarding waste minimisation as part of Goal 1.					

5.5 IWMP GOAL 5: IMPROVE REGULATORY COMPLIANCE

Goal 5: Improve Regulatory Compliance						
Objectives/Targets	**Actions/Cost Estimates**					
	2015/2016	**2016/2017**	**2017/2018**	**2018/2019**	**2019/2020**	**2020 AND ON**
Ensure up-keep with latest legislation and the enforcement thereof relating to solid waste management in the District.	Ensure that all local Municipalities' and the CWDM's solid waste management by-laws are relevant and up to date. Provision should be made in the by-laws so that generators and transporters of hazardous wastes register and report to the Municipalities.					
	No additional costs. Can be done in-house					
			Ensure that the regional integrated waste management facility is internally and externally audited as per the frequency required in the license once operational. Further ensure that license conditions and requirements are met. The cost estimate includes an operational audit, water monitoring and topographical survey.			
			60 000.00	63 600.00	67 416.00	71 460.96

5.6 IWMP GOAL 6: ENSURE SAFE AND INTEGRATED MANAGEMENT OF HAZARDOUS WASTE

<table>
<tr><th colspan="7">Goal 6: Ensure safe and integrated management of hazardous waste</th></tr>
<tr><th rowspan="2">Objectives/Targets</th><th colspan="6">Actions/Cost Estimates</th></tr>
<tr><th>2015/2016</th><th>2016/2017</th><th>2017/2018</th><th>2018/2019</th><th>2019/2020</th><th>2020 AND ON</th></tr>
<tr><td rowspan="4">Provide education and management options for hazardous wastes. Ensure legal compliance by hazardous waste generators and transporters. Ensure the monitoring of the incoming waste stream at disposal facilities.</td><td colspan="6">The public must be informed about household hazardous waste and the avoidance, reduction and disposal options available to them regarding these wastes. This forms part of Goal 1 of this plan.</td></tr>
<tr><td colspan="6">As part of Goal 2 of this plan, the registration and reporting of hazardous waste generators at the local Municipalities will allow the Municipalities as the service authorities to ensure that the waste is stored, transported, treated or disposed as is legally required. The District can oversee and review this.</td></tr>
<tr><td colspan="6">Hazardous facilities: With the construction of the regional disposal facility, provision must be made for the temporary storage of household hazardous wastes from where it will be transported and disposed at the appropriate licensed facility.</td></tr>
<tr><td colspan="6">Monitoring of waste: It must be ensured that waste management employees are familiar with the latest legislation regarding hazardous waste, the identification thereof and the disposal options that are legal. Employees at the future regional waste management facility must be able to identify the received waste loads and prohibit the disposal where required. The incoming waste loads at disposal and waste management facilities must be monitored.</td></tr>
</table>

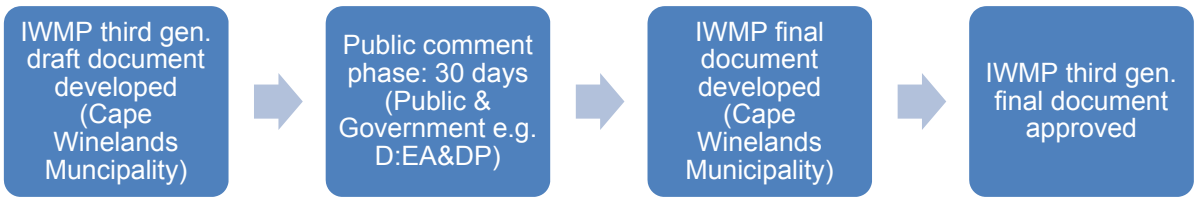
5.7 IWMP GOAL 7: ENSURE SOUND BUDGETING FOR INTEGRATED WASTE MANAGEMENT

Goal 7: Ensure sound budgeting for integrated waste management						
Objectives/Targets	**Actions/Cost Estimates**					
	2015/2016	**2016/2017**	**2017/2018**	**2018/2019**	**2019/2020**	**2020 AND ON**
Ensure that upcoming implementation actions are in the budget. Explore sources of funding.	The Municipality will ensure that there is sufficient provision in the budget for upcoming projects and action items. This can be done with the annual IWMP implementation programme review and project evaluation.					
	The Municipality will explore other sources of funding.					
	The Municipality will as part of Goal 3 ensure that the service delivered is cost efficient.					

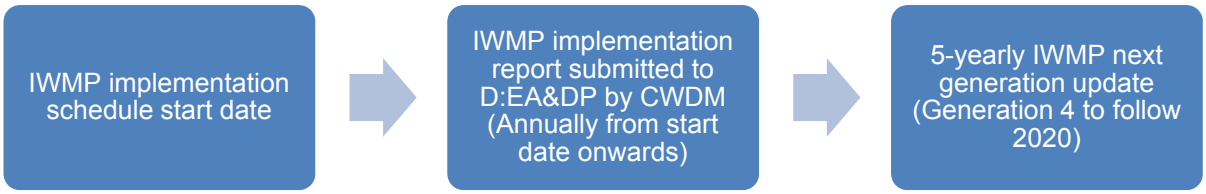
6. IWMP MONITORING AND REVIEW

For the IWMP to be an effective and relevant tool and guide for integrated waste management in the Cape Winelands District Municipality, it will need to be monitored and reviewed. Monitoring relates to the goals and targets set out in the IWMP and whether they are being achieved or pursued. Reviewing relates to the document and the projects themselves which will require regular updates to stay up-to-date, specifically the implementation items of Section 4. The proposed implementation schedule as well as allocated budget may change at any time and these changes, if any, need to be reflected in the reviewed IWMP to avoid confusion.

The following diagram illustrates the initial review cycle when a new IWMP is developed:



The date on which the final IWMP third generation document is approved, must be recorded and will serve as the base date on which further monitoring and review dates are based. This is also the start date of the approved implementation schedule. The following diagram illustrates the review steps that must be followed after the final IWMP is published.



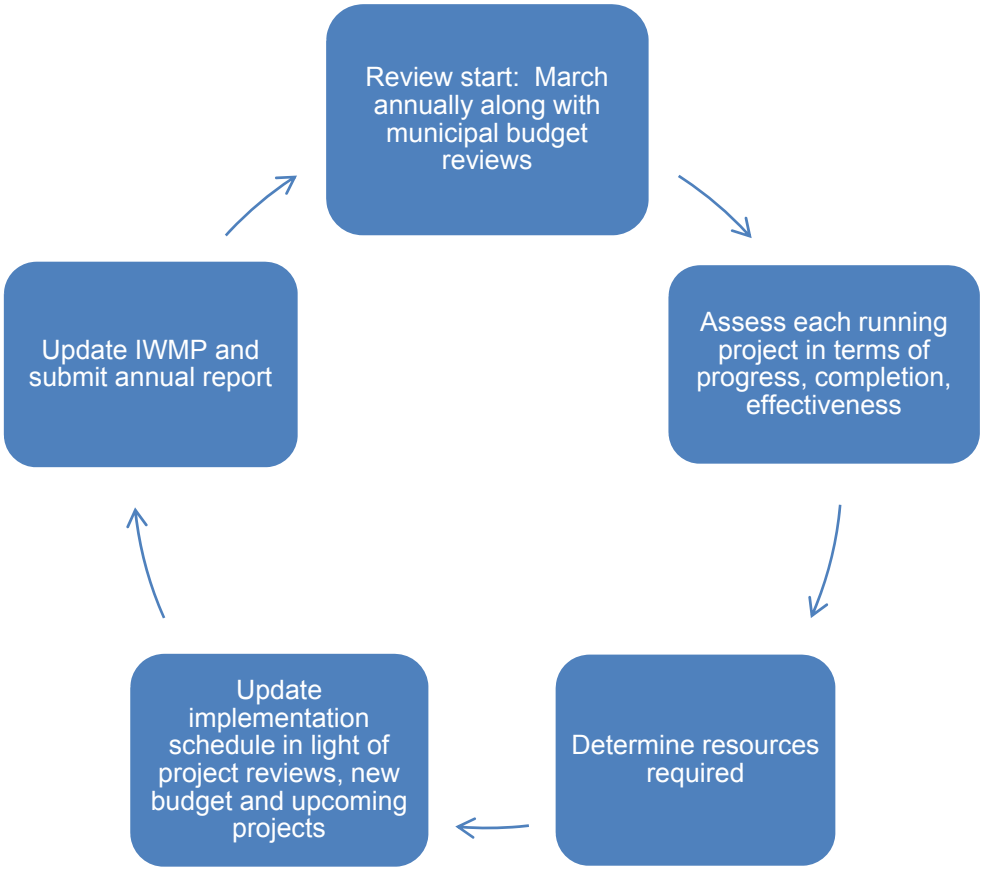
The annual implementation reports will be submitted by the CWDM and will be compiled by Mr van Eck, or to whom the task is delegated by him. The annual report must contain the approved implementation items and dates of the IWMP and the progress thereof of the past year. Based on the progress and possible new budget allocations, the implementation schedule of the IWMP must be updated and included in the annual report. This new implementation schedule must provide for 3 upcoming years from the report date.

The progress of each task on the implementation schedule, if under way according to the schedule for that year, must be summarised and the estimated completion date must be updated. The reasons for the lack of progress or practical difficulties must be stated along with a summarised action plan to adhere to the schedule as close as possible.

The report must further discuss the effectiveness of completed projects. For example, when a new weighbridge has been commissioned, the collected data must be reported on and added to the IPWIS. Also the participation rates of source separation can be monitored along with the public awareness and education campaign. See **Annexure 2** for an example of a project review form which can be used to track the success and effectiveness of the waste management projects and added to the annual report. The projects and progress thereof will be tracked by each project team constantly, meaning that each project is not reviewed only annually, but all progress tracked in order to provide an accurate description in the annual report for submission.

Wherever issues are reported or identified in the projects, these issues must also be evaluated in terms of the relevant legislation and by-laws. It must be stated if there is relevant legislation applicable to the issue and if so, was it the lack of enforcement, for example, that caused the issue. If no relevant legislation exists, it must be noted to adapt the by-laws accordingly in future revisions.

Below is the proposed review cycle of the IWMP and its projects:



7. CONCLUSIONS AND RECOMMENDATIONS

7.1 CONCLUSIONS

The Project Team, with the assistance of Municipal Officials, has undertaken an analysis of the current municipal solid waste management activities within Cape Winelands District Municipality.

The analysis has shown that the Municipalities in the District have through the years committed themselves to the delivery of a collection and disposal service for all its residents. In recent years the more sustainable approach with regard to waste minimisation and reduction has been adopted and is to be expanded in the upcoming years.

The chapters of this Integrated Waste Management Plan report describe the way in which the municipalities are currently conducting solid waste management and how to strategically move towards a sustainable waste management system whereby the focus will shift to the avoidance and reduction of waste rather than to the disposal thereof. It also lists the strategies of the municipality in terms of waste avoidance, waste reduction and waste disposal.

During the process of the implementation of the municipality's IWMP, and arising from the public consultation process that is forthcoming, further input and/or corrections to the report may come to light that will then be added as a revision to the report.

The analysis of the current waste management system has shown the following:

- all formal and informal residential erven are receiving a weekly door-to-door waste collection service
- waste collection services are not available to farms, but farmers offload their household waste themselves or can apply for a service in some of the municipalities
- separation of recyclables at source is done in all municipalities in the District and continues to expand to more neighbourhoods
- collected municipal waste are transported to the local disposal sites, with some of these sites becoming restricted in terms of available disposal airspace

- green waste chipping and builder's rubble crushing activities are practiced throughout the District, with composting being done in Langeberg and Stellenbosch
- most healthcare risk wastes are managed by private contractors
- waste recovery is being done, but needs to expand

With the current waste management system focussing on getting the waste into the waste stream and disposing of it in an acceptable manner, and with the future integrated waste management system focussing on waste avoidance and waste reduction, the municipality requires a set of strategic objectives on how to transform from the current management system to the future management system.

The strategic objectives for integrated waste management in Cape Winelands District Municipality can be summarised as follows:

- To ensure that Waste Management in the Cape Winelands District complies with South African and International environmental standards so that it is beneficial to industrial and agricultural growth and the public's right to a clean and healthy environment.
- To promote the minimisation of the entrance of material of value into the waste stream.
- To promote waste reduction so that nothing of value nor anything that can decompose, gets disposed.

For these strategic objectives to be met, a series of implementation instruments (action plans) will need to be implemented. These implementation instruments as well as time framework within which it should be addressed are described in this report but need to be fully detailed at a later stage. The instruments are the following:

- Public Awareness and Education
- Waste Quantification & Information
- Effective Solid Waste Service Delivery
- Promote and Ensure Waste Minimisation
- Improving Regulatory Compliance
- Ensuring the Safe and Integrated Management of Hazardous Waste
- Ensuring Sound Budgeting for Integrated Waste Management

The above instruments, through implementation via their action plans, will ensure that waste management in the Cape Winelands focuses on avoidance and reduction rather than collection and disposal, but simultaneously maintaining the practical balance between the various waste management functions.

Since the highest priority for transforming the current management system is undoubtedly depending on public acceptance and ownership, the Public Awareness and Education instrument will receive preference in the implementing framework.

7.2 RECOMMENDATIONS

A comprehensive analysis and assessment of solid waste management in the Cape Winelands District has been done and key strategies have been determined to aim the municipality towards sustainable and integrated waste management.

It is therefore recommended that the next stage of the process of implementing the Integrated Waste Management Plan be proceeded with, that entails the consultation process with the public and the development of detail action plans and key performance indicators for future monitoring of the municipality's successes in waste management service delivery.

Public Awareness

The first step in educating the public about waste is to make them aware of any new waste management procedures and facilities available to them.

Another reason to focus on educating the public will cause a greater awareness of waste minimisation. This will reduce waste generation rates which will in turn reduce transport volumes and costs. It is important to also provide feedback to the public of the success of their efforts, for example publishing month to month volumes of waste diverted from being landfilled.

To reduce the contamination of recyclables, the current source separation strategy should be expanded in all local municipalities.

Waste reduction

Expanding the separation at source neighbourhoods and continual use of existing and additional MRF's will ensure the reduction of waste to landfill. The establishment of swop shops will also contribute to waste reduction.

Waste Disposal

When the regional site is established, it must be ensured that it is audited in terms of the license. Regular audits will ensure that the facility is operated correctly and efficiently. Ensuring the correct operations will maximise the results of efforts of waste reduction and recovery and therefore the benefits thereof.

A disposal strategy must be co-ordinated for the western portion of the Cape Winelands District. The Waste to Energy strategy of the Drakenstein Municipality will contribute, but disposal airspace will still become a requirements once the current landfills have reached capacity.

The following items must be included in the Cape Winelands Municipality IDP:

All implementation actions requiring Capital Expenditure not already contained in the IDP:

- The establishment of the regional integrated waste management facility following the issuing of the license

ANNEXURE 1
IWMP CHECKLIST

Western Cape Government
Environmental Affairs and Development Planning

INTERGRATED WASTE MANAGEMENT PLANNING

CHECKLIST FOR THE .....LOCAL MUNICIPALITY

FEBRUARY

2014









The Afrikaans or Xhosa version of this document is available on request.

SECTION 1: GENERIC INFORMATION				
Category of the municipality			A	B	C
Date of Submission				
Name of the municipality				
Section or Department within the municipality responsible for drafting the IWMP				
Contact details of "Responsible Person" in the Municipal Department		Contact details of Alternate contact person from Municipality		
Name:		Name:		
Tel:		Tel:		
Fax:		Fax:		
Cell:		Cell:		
Email:		Email:		

Integrated Waste Management Plan Review Form (IWMP) / Checklist

Please answer the following questions by placing a (**X**) in the appropriate block. Only submit your IWMP for approval once you have answered YES to all the questions below.

CHECKLIST QUESTIONS	YES	NO
SECTION 1 INTRODUCTION AND GENERAL DESCRIPTION		
1.1) Does the Intro and general description includes overall aim, strategic goals and scope, of the IWMP?		
1.2) Does the IWMP indicate the geographical coverage of the plan?		
1.3) Does the IWMP indicate the Geo-physical and Geo-hydrological conditions in the municipality?		
SECTION 2 STRATEGIC LINKAGES		
2.1) Does the IWMP show linkages with the WC IWMP?		
2.2) Does the IWMP show linkages with the SDF?		
2.3) Does the IWMP show linkages with the IDP?		
SECTION 3 PUBLIC PARTICIPATION		
3.1) Is there a detailed public participation program included in the IWMP? (i.e. date, location and amount, number of PP session's, type of PP(newspapers, meetings), (participants)		
3.2) Does the IWMP provide proof of PP i.e. attendance registers, comments received and response given?		
SECTION 4 IWMP STATUS QUO OR SITUATION ANALYSIS		
4.1 LEGISLATION		
4.1.1) Does the IWMP identify all existing legislation and policies, which is applicable to integrated waste management including the local municipal by-laws?		

4.1.2) Does the IWMP indicate which existing local government by-laws that influence waste management practices are currently being reviewed or in the process of being reviewed?		
4.1.3) Does the Status Quo identify any international agreements		
4.2 DEMOGRAPHIC PROFILE		
4.2.1) Does the Status Quo indicate the existing demographic profile of the municipality w.r.t total population of the area,		
4.2.2) Does the Status Quo indicate the existing demographic profile of the municipality w.r.t projected population and growth rate of the area,		
4.2.3) Does the Status Quo indicate the existing demographic profile of the municipality w.r.t population distribution		
4.2.4) Does the Status Quo indicate the existing demographic profile of the municipality w.r.t socio-economic categories including income levels		
4.2.5) Does the Status Quo indicate the existing demographic profile of the municipality w.r.t development profiles		
4.3 WASTE MANAGEMENT COST AND FINANCING		
4.3.1) Does the IWMP include a detailed breakdown of current operational and capital budget?		
4.3.2) Does the IWMP include a detailed breakdown of current operational and capital expenditure?		

The Afrikaans or Xhosa version of this document is available on request.

4.3.3) Does the IWMP indicate the current breakdown of income (e.g. tariffs, fines for waste management)		
4.4 SERVICES AND SERVICE DELIVERY		
4.4.1) Does the IWMP indicate the level of free basic services		
4.4.2) Does the IWMP indicate the level of services to Formal residential houses		
4.4.3) Does the IWMP indicate the level of services to informal settlements.		
4.4.4) Does the IWMP indicate the level of services to farms		
4.4.5) Does the IWMP indicate unserviced areas		
4.5 COMPLIANCE AND ENFORCEMENT		
4.5.1) Does the Status Quo identify licensed and unlicensed waste management facilities and has provision been made for the licensing, closure and rehabilitation of these facilities in the IWMP.		
4.5.2) Does the IWMP indicate if landfill sites, recycling, drop-off and buy-back centers are in compliance with license conditions?		

The Afrikaans or Xhosa version of this document is available on request.

4.5.3) Does the Status Quo provide a summary of waste related complaints (i.e. number and type)		
4.5.4) Does the Status Quo indicate the available annual air space and remaining life expectancy of the waste management facilities.		
4.5.5) Does the Status Quo identify contaminated land (unpermitted landfills prior to ECA) and indicate remediation measures to reduce the risk of harm to health or the environment.		
4.5.6) Does the IWMP address how informal salvaging, if any, on existing landfill facilities are going to be formalized, controlled or eliminated and does the permit/license or environmental authorization make provision for it, or do they indicate if the existing authorizations are to be amended.		
4.6 WASTE CHARACTERISATION		
4.6.1) Does the IWMP include waste generation quantities and types for general and hazardous waste from households		
4.6.2) Does the IWMP include waste generation quantities and types for general and hazardous waste from industry		
4.6.3) Does the IWMP include waste generation quantities and types for general and hazardous waste from business		
4.6.4) Does the IWMP include waste generation quantities and types for general and hazardous waste from Farms		
4.6.5) Does the IWMP include waste generation quantities and types for general and hazardous waste from Other institutions e.g. health care facilities		

The Afrikaans or Xhosa version of this document is available on request.

4.6.6) Does the IWMP include projected waste generation quantities?		
4.7. **WASTE MINIMISATION**		
4.7.1) Does the Status Quo indicate any waste minimisation (reuse, recycling, recovery, treatment) initiatives as mandated in the NEM: WA within your municipal area including private sector initiatives?		
4.7.2) Does the IWMP include waste minimisation quantities and types for general and hazardous waste?		
4.8. **ORGANISATIONAL STRUCTURE AND STAFF CAPACITY**		
4.8.1) In accordance with Chapter 3 of NEMWA has a waste management officer been designated in writing to be responsible for coordinating matters pertaining to waste management in the municipality?		
4.8.2) Does the IWMP indicate the entire waste staff (management, supervisor and labourers) complement including any staff vacancies and plans to fill vacant posts.		
4.9. **WASTE AWARENESS AND EDUCATION**		
4.9.1) Does the IWMP provide information(campaigns) on waste awareness and education		
4.10 WASTE INFORMATION MANAGEMENT		

The Afrikaans or Xhosa version of this document is available on request.

4.10.1) Does the IWMP indicate the Status of registration and reporting of waste management facilities on IPWIS.		
4.10.2) Does the IWMP indicate the use of a waste quantification system?		
5. GAP AND NEED ANALYSIS		
5.1) Does the IWMP indicate a gap analysis (analysis and identification of issues, problems or shortcomings or challenges within the municipality w.r.t waste management.		
6. OBJECTIVES AND TARGETS		
6.1) Does the IWMP set short, medium and long-term objectives and targets? If yes, are these objectives specific/measurable/achievable/realistic/time-based (SMART)?		
7. IWMP IMPLEMENTATION		
7.1) Is there a detailed implementation plan identifying activities together with both human and financial resources and timeframes.		
7.2) Does the Implementation plan address how the IWMP will be integrated with the Integrated Development Plan (IDP)?		
8. MONITORING AND REVIEW		
8.1) Does the IWMP introduce mechanisms to monitor the effectiveness of the implementation of the IWMP and to take corrective actions if the targets are not met?		

Score:

Percentage:

The Afrikaans or Xhosa version of this document is available on request.

ANNEXURE 2
PROJECT REVIEW FORM

CAPE WINELANDS DISTRICT MUNICIPALITY IWMP IMPLEMENTATION PROJECT REVIEW FORM

PROJECT NAME AND DESCRIPTION: ……

……

……

PROJECT COMMENCEMENT DATE: ……

PROJECT COMPLETION DATE: ……

RATE PROJECT OVERALL SUCCESS IN TERMS OF INTENDED PURPOSE: 1 2 3 4 5

REASON(S) FOR SCORE: ……

……

……

IF SCORE = 1-3, LIST THE ACTIONS THAT ARE TO BE TAKEN ALONG WITH TARGET DATES TO IMPROVE SCORE: ……

……

……

……

LIST ALL PUBLIC COMMENTS/COMPLAINTS RECEIVED RE THIS PARTICULAR PROJECT: ……

……

……

HAVE THESE BEEN ADDRESSED: ……

……

ANNEXURE 3
ADVERTISEMENTS

CAPE WINELANDS DISTRICT
MUNICIPALITY • MUNISIPALITEIT • UMASIPALA

DRAFT INTEGRATED WASTE MANAGEMENT PLAN (3rd GENERATION)

Notice is herewith given in terms of section 21 of the Local Government: Municipal Systems Act, 2000 (Act 32 of 2000) that the Draft Integrated Waste Management Plan (IWMP) Third Generation of the Municipality has been developed.

The local community is invited to submit comments in connection with the Draft Plan to the Municipality by submitting such comments on or before 4 June 2015 to the Municipal Manager (For attention Mr F van Eck) at the following address, fax number or e-mail:

JPCE, PO Box 931, BRACKENFELL, 7561, Fax number: (021) 981 0868, info@jpce.co.za

The Council will consider the Draft Plan together with all the comments and representations received. The Draft Plan will be available for perusal during office hours at the offices of the Breede Valley, Drakenstein, Langeberg, Stellenbosch and Witzenberg local municipal offices, at libraries throughout the District and can be downloaded at www.jpce.co.za.

M Mgajo
MUNICIPAL MANAGER

AAAAAA-WS010515

CAPE WINELANDS DISTRICT
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KONSEP GEINTEGREERDE VASTE AFVAL BESTUURPLAN (3de GENERASIE)

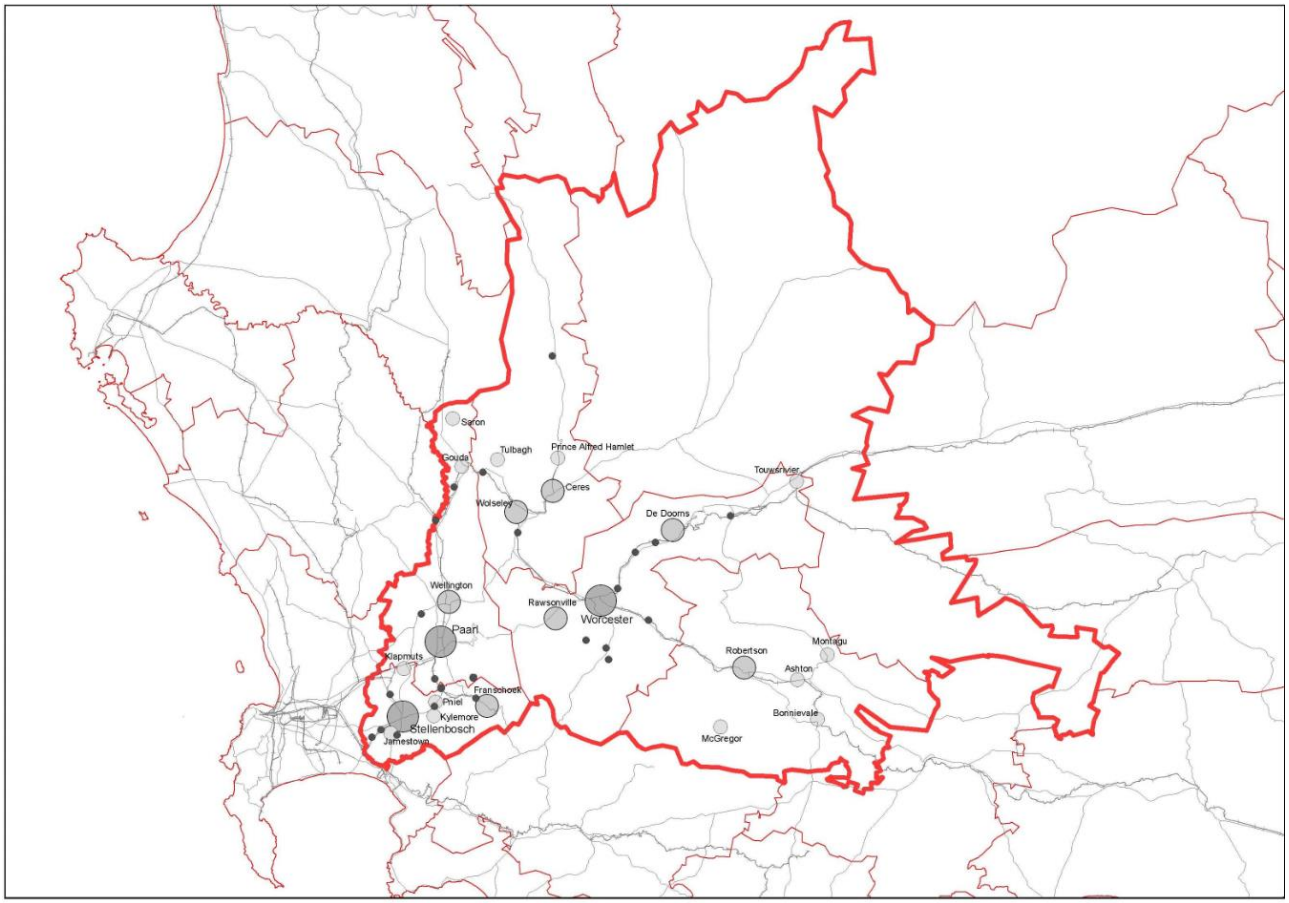
Kennis geskied hiermee ingevolge artikel 21 van die Wet op Plaaslike Regering: Munisipale Stelsels, 2000 (Wet 32 van 2000) dat die Munisipaliteit se Konsep Geintegreerde Vaste Afval Bestuurplan, 3de Generasie saamgestel is.

Die plaaslike gemeenskap word uitgenooi om vertoë met betrekking tot die Konsepplan aan die munisipaliteit voor te lê deur hul vertoë voor of op 4 Junie 2015 te rig aan die Munisipale Bestuurder (vir aandag Mnr F. Van Eck) by die volgende adres of faksnommer:

JPCE, Posbus 931, BRACKENFELL, 7561, Faksnommer: (021) 981 0868, info@jpce.co.za

Die Raad sal die Konsepplan tesame met alle kommentaar of vertoë wat ontvang is oorweeg. Die Konsepplan is gedurende kantoorure ter insae by die kantore van die Breede Vallei, Drakenstein, Langeberg, Stellenbosch en Witzenberg munisipale kantore, openbare biblioteke in die Distrik en op die volgende webwerf: www.jpce.co.za.

M Mgajo
MUNISIPALE BESTUURDER



Cape Winelands
District Integrated Transport Plan
2016 -2021

CAPE WINELANDS DISTRICT
MUNICIPALITY • MUNISIPALITEIT • UMASIPALA

May 2016

Document title:	Cape Winelands District Integrated Transport Plan
Status:	Final Report
Date:	May 2016
Project name:	Review of the District Integrated Transport Plan for the Cape Winelands
Project number:	T01.CPT.000287
Client:	Cape Winelands District Municipality
Client contact:	Bevan Kurtz/ Chwayita Nkasela
Reference:	16/2/2
Drafted by:	Marco Steenkamp, Rory Williams, Gerard van Weele, Gregory Pryce-Lewis
Checked by:	Roy Bowman
Date/initials check:	
Approved by:	Bevan Kurtz
Date/initials approval:	

Royal HaskoningDHV
Enhancing Society Together

Executive Summary

Introduction

This document constitutes the Integrated Transport Plan for the Cape Winelands District Municipality for the five year period from July 2016 to June 2021. This District Integrated Transport Plan (DITP) has been prepared in accordance with the requirements of the National Land Transport Act (NLTA) 2009, and as a designated Planning Authority it is the Cape Winelands District Municipality's responsibility to administer this plan. The DITP contains the the district and local municipalities vision for transport, describes the existing roads and public transport infrastructure and operations, proposes a revised strategy for managing bus and taxi operating licences, discusses the transport needs of the district, and indicates the funding required to address the transport needs.

Local Integrated Transport Plans (LITPs) have also been prepared for four local municipalities in the district, namely Breede Valley, Drakenstein, Langeberg and Witzenberg, as well as, although by a separate process, a Comprehensive Integrated Transport Plan for the Stellenbosch local municipality. The district and local municipalities' Integrated Transport Plans have all been prepared in accordance with the Department of Transport guidelines and minimum requirements for the preparation of Integrated Transport Plans.

Transport Vision and Objectives

Continuity of a vision is necessary to ensure the continued pursuit thereof and for this reason the Transport Vision as stated in the previous Cape Winelands District Integrated Transport Plan (2011-2016) has remained the same, namely "Innovative Mobility". This vision is supported by a mission statement: "A sustainable transport system which provides access for social and economic opportunity". Sustainability should be seen as operations which do not exceed the capacities and capabilities of the natural environment, but which satisfy basic human needs at the same time. This suggests that sustainable transport is a system with low negative environmental impacts yet high positive social value, and which supports efficient economic development. The Cape Winelands District Integrated Transport Plan proposes how to translate these principles into practical applications.

Transport Register

The main factors which influence the demand for transport are population distribution, social needs and economic activity. In the Cape Winelands District, apart from Stellenbosch, Drakenstein municipality has the highest population and Witzenberg municipality has the highest economic growth rate. Population distribution and economic activity are focused around a number of urban centres in each local municipality, namely Paarl and Wellington in Drakenstein, Worcester in Breede Valley, Robertson in Langeberg and Ceres in Witzenberg. There are however a number of smaller towns and settlements within each of these municipal areas, as can be seen in the map on the cover of this report.

The agricultural sector is the dominant economic driver in the Cape Winelands district, and more specifically the horticultural and wine industries. The Western Cape Government has identified the main agricultural produce within the district as wine grapes, with high density concentration along major transport corridors. There are also areas of high agricultural activity such as Witzenberg, with the other areas within the district having moderate activity density. These areas with moderate and high activity densities are along routes connecting main highways.

The public transport modes operating in the Cape Winelands district are minibus taxis and the rail passenger service, while there are some long distance bus services that have stops within the district. These modes are present in all local municipalities, with the exception of Langeberg which does not currently have a rail service. The public transport infrastructure is limited, with a few formal minibus taxi ranks in existence in each local municipality. However, it was also observed in Nduli and Prince Alfred Hamlet (in Witzenberg) and Zolani (in Langeberg), that there are formal minibus taxi ranks which are not being utilised. There are a number of minibus taxi associations in the Cape Winelands district who were consulted with regard to the transport needs of the operators and the passengers.

The non-motorised transport (NMT) infrastructure in the district primarily consists of sidewalks, but a lack of continuity of sidewalks has been identified as a concern. Formal NMT facilities occur sporadically in towns, occasionally linking public

transport embayments. Attention has been given to these concerns in the preparation of a NMT infrastructure framework plan for the district. Implementation of NMT facilties in Ashbury has taken place recently.

Freight transport plays an important role in the movement of agricultural products in the district, but the increasing volumes of long distance heavy vehicles passing through towns situated on main routes, such as Worcester, Robertson and Ashton present problems of traffic congestion, pedestrian safety, noise and air pollution, as well as causing damage to the road surface, requiring more frequent maintenance.

Operating Licence Strategy

The Operating Licence Strategy (OLS) is intended to guide the adjudication of Operating Licence applications within the Cape Winelands area and provide clear guidance to the District Municipality as to which Operating Licence applications should be approved or rejected, and if approved, what conditions should be attached to the approval. It is recommended that the Cape Winelands District Municipality convene an “Operating Licence Recommendations Committee” to evaluate and comment on Operating Licence applications received from the Provincial Regulatory Entity and to co-ordinate responses to the Provincial Regulatory Entity for the local municipalities in its area of jurisdiction.

Transport Needs Assessment

A number of transport needs have been identified within each local municipality through an understanding of the existing situation as well as from consultation with municipal officials and transport operators, and from the public meetings which took place in each local municipality. These needs are aimed at addressing various aspects within the transport sector and include public transport operations and facilities, learner transport, freight movement, non-motorised transport, tourism and the road network.

Funding Strategy

All the local municipalities within the Cape Winelands district, with the exception of Langeberg, have prepared budget estimates for transport projects for the next three financial years. The municipal transport budgets indicate various projects, most of which are road infrastructure projects.

Public and Stakeholder Consultation

Throughout the preparation of this District Integrated Transport Plan stakeholder engagement has taken place through the involvement of the district and local municipal transport officials, as well as Western Cape Government officials who attended the steering committee meetings. Meetings were also held with representatives from the minibus taxi associations in eack local municipality. The general public in each local municipality was also consulted through a public participation process which took place in October/November 2015 and their comments are included in this District Integrated Transport Plan.

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List of Abbreviations

AADT	Average Annual Daily Traffic
CBD	Central Business District
CCT	City of Cape Town
CWDM	Cape Winelands District Municipality
CITP	Comprehensive Integrated Transport Plan
CPTR	Current Public Transport Record
DITP	District Integrated Transport Plan
DTPW	Department of Transport and Public Works
DoT	Department of Transport
EMS	Emergency Medical Services
GIS	Geographic Information System
IATA	International Aviation Transport Association
IDP	Integrated Development Plan
IPTN	Integrated Public Transport Network
IPTNF	Integrated Public Transport Framework
ITP	Integrated Transport Plan
LITP	Local Integrated Transport Plan
LM	Local Municipality
NDP	National Development Plan
NLTA	National Land Transport Act, 2009
NMT	Non-motorised Transport
NPTR	National Public Transport Regulator
OL	Operating Licence
OLS	Operating Licence Strategy
PAH	Prince Alfred Hamlet
PRE	Provincial Regulatory Entity
RNIS	Road Network Information System
SANRAL	South African Nation Road Agency Pty Ltd
SDF	Spatial Development Framework
WCG	Western Cape Government

1 INTRODUCTION

1.1 Background

This report comprises the 5 year Review of the District Integrated Transport Plan 2015/16 – 2020/21 for the Cape Winelands District.

Section 36 of the National Land Transport Act (Act 5 of 2009) requires that all Planning Authorities prepare an Integrated Transport Plan (ITP) covering a 5 year period and updated annually.

This review therefore includes updating the following elements:

- Vision and Objectives
- Current Public Transport Record
- Operating Licence Strategy
- Transport Needs Assessment
- Summary of the Local Integrated Transport Plans
- Funding Strategy and Summary of Proposals
- Public and Stakeholder Consultation

- Local Integrated Transport Plans
  - Transport Status Quo
  - Transport Needs Assessment
  - Transport Improvements Proposal
  - Implementation Budgets and Programmes

The Cape Winelands District includes Drakenstein, Witzenberg, Breede Valley, Langeberg and Stellenbosch local municipalities. Currently, these local municipalities are classified as type 3 planning authorities, with the exception of Stellenbosch which is classified as a type 1 planning authority. For this reason, the Stellenbosch local municipality is required to prepare a Comprehensive ITP (CITP) and the other local municipalities local ITPs (LITPs). The Cape Winelands district municipality is classified as a type 2 planning authority and is therefore required to prepare a District ITP (DITP).

Due to the Stellenbosch municipality being classified as a type 1 planning authority, it will be excluded from the Cape Winelands DITP update, which will only include the executive summary of the Stellenbosch CITP.

Interrelationship between Transport Plans:

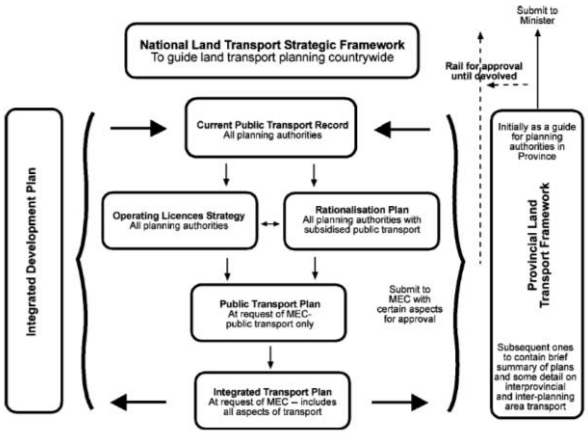


Figure 1-1: Interrelationship between Transport Plans (Source: National Land Transport Transition Act No22 of 2000)

1.1.1 Study Area

As illustrated in Figure 1-2 the Cape Winelands district lies within the Western Cape Province. A full page illustration of the figure can be found in Annexure A.



Figure 1-2 - Western Cape Province

As mentioned previously and illustrated in Figure 1-3 the Cape Winelands district includes the following local municipalities; Drakenstein, Breede Valley, Witzenberg, Langeberg and Stellenbosch.

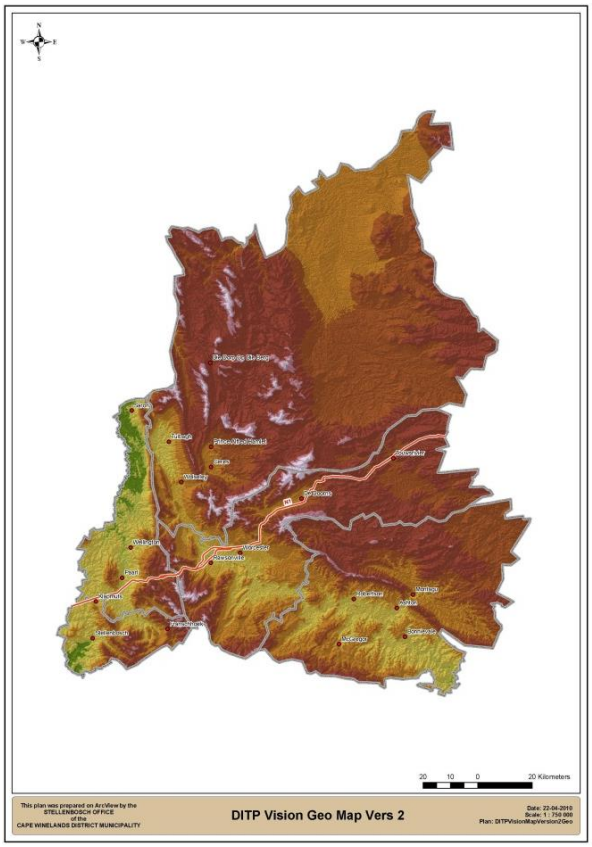


Figure 1-3 - Cape Winelands District Municipality

Drakenstein municipality is considered the most urban of the municipal areas in the study area and this is most likely because it is on the City of Cape Town urban fringe. Witzenberg, Breede Valley and Langeberg are less urban, with the majority of their towns being rural and spatially dispersed within the municipal areas.

1.1.2 Report Layout

This report consists of the following chapters:

- Executive Summary
- Chapter 1: Introduction
- Chapter 2: Vision and Objectives
- Chapter 3: Transport Register
- Chapter 4: Operating Licence Strategy
- Chapter 5: Transport Needs Assessment
- Chapter 5: Summary of the Local Integrated Transport Plans
- Chapter 7: Funding Strategy and Summary of Proposals
- Chapter 8: Public and Stakeholder Consultation

This report consists of the following Annexures containing supporting information:

- Annexure A: Figures
- Annexure B: Tables
- Annexure C: Stakeholder consultation

1.2 Cape Winelands Transport Institutional and Organisational Structure

Figure 1-4 illustrates the organisational structure of the Cape Winelands District Municipality.

The Public Transport Planning and Regulations department in the District consists of a Deputy Director: Public Transport and a transport planner. This unit has been responsible for procuring and managing the DITP review process for the Cape Winelands District Municipality.

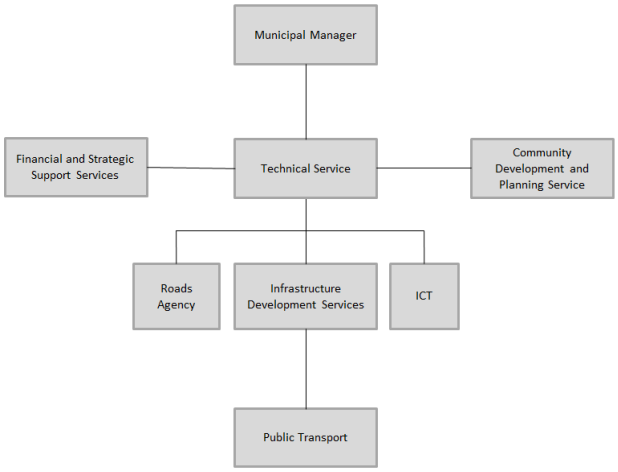


Figure 1-4: Institutional and Organisational Structure

2 VISION, GOALS AND OBJECTIVES

There are a number of overarching policies, visions and strategies within National and Provincial government that are relevant to the Cape Winelands District Municipality and local municipalities. In addition, there are District Municipality documents that inform planning in general and transport planning in particular. Sustainability is also an important component of a transport vision and is addressed below.

2.1 Sustainability in transportation

There are three components to sustainability, namely the natural environment, social activity and economic development. These three components of 'sustainability' should not be seen as being in conflict over the same resources. Instead, the focus should be on the interdependencies between the components (each being dependent on the *full extent and functionality* of the others). The interdependence implies that trade-offs between the components will result in compromised functionality, with subsequent detrimental knock-on effects in the other components.

Accordingly, sustainability should be seen as an operational space which does not exceed the capacities and capabilities of the natural environment, but which fully satisfies basic human needs at the same time. This suggests that sustainable transportation is a system with low negative environmental costs yet high positive social value, and which supports resource efficient economic development.

These principles, translated for practical application in the Cape Winelands District, require the following:

Lowering the carbon intensity of transport, especially freight transport

One of the fundamental concerns relating to transportation is its reliance on transport modes and infrastructure with large greenhouse gas footprints. A path towards more sustainable transportation therefore has to include efforts at reducing the relative carbon intensity of both the infrastructure and operational activities of transportation systems. In the Cape Winelands, the focus will be on finding innovative carbon-efficient ways of providing mass public transport to dispersed rural communities and low density urban settlements, as well as ways to reduce the reliance on road-based freight. Additionally, the District needs to participate in regional and national debates regarding the interprovincial movement of freight and people along the main national corridors.

Improvement in the rural coverage of public transport networks

Access to transport networks is a crucial determinant of human welfare as it represents a crucial connection between people and employment opportunities, social services, recreational facilities etc. With its extensive rural hinterland, the Cape Winelands District is faced with a massive challenge to provide public transport at affordable rates to dispersed and often poor communities. This calls for innovative combinations of old (e.g. non-motorised) and new (e.g. renewable energy, on-demand services, mobile communications) technology and highly efficient network operations.

Integrated public transport systems within towns

As important as connecting rural communities with employment opportunities and social services, is the need to elevate the level of public transport within towns. Towns in South Africa clearly evidence the legacy of segregation planning of the apartheid era. As a result, the circulation of people between active business and social activities, and between places of residence and employment, is inefficient and places a particular strain on the lives and finances of the poor or disadvantaged social groups. To counteract this, an affordable public transport system with adequate schedules and levels of service needs to be instituted in each town. As with the rural systems, it will need to bring an innovative mix of new and existing technologies together.

The internalisation of social, economic and environmental costs into the design and construction of transportation infrastructure

Approaching the development of transportation systems with a cradle-to-grave perspective will ensure that previously overlooked or externalised impacts on people, the economy and the environment are reduced. For example, achieving an extended life-span that reduces the long term maintenance or replacement cost might cost more initially, but brings about long term economic sustainability. As a matter of fact, a new perspective could even result in initial cost savings as more integrated solutions are found that utilise renewable energy, recycle water and materials, and reduce the amount of waste being disposed of. Looking after the

natural environment, people and the local economy will, over time, ensure greater resilience in the face of adverse conditions.

Realisation of local benefits

An integrated transportation system should be about more than just providing people with a means to move people and goods from point A to point B. Investment in transport infrastructure and transportation systems should bring about lasting local benefits that stimulate the local economy and improve the overall welfare of communities. This can be realised by involving local communities in transportation development projects through sourcing of local labour, labour intensive construction methods, social outreach, skills transfer and project detail that provide local scale transportation benefits such as improved pedestrian movement as a spin-off from infrastructure aimed at higher order transport modes.

2.2 National and Provincial Guiding Visions and Strategic Goals

National

Poor access to transport in the rural areas of developing countries constrains economic and social development and contributes to poverty.

According to the Constitution of South Africa, local government has been mandated to "carry out a number of developmental duties" and expresses this mandate as follows:

- Provide democratic and accountable government for local communities
- Provide services in a sustainable manner
- Promote social and economic development
- Promote a safe and healthy environment
- Encourage participation in government

National Development Plan (2011)

The National Development Plan (NDP) provides a vision of South Africa that is without poverty and without inequality by 2030. The NDP proposes working towards this vision by including all members of society to actively contribute to achieving this vision. The objectives of the NDP are:

- Strengthening the links between the economic and social strategies
- An effective and capable government
- Redressing the injustice of the past effectively
- Faster economic growth and increased investment and employment
- Rising standards of education, a healthy population and effective social protection
- Leadership from all sectors in society
- Collaboration between private and public sectors
- An effective and capable government

Provincial

Western Cape Government Strategic Goals

The Provincial Strategic Goals (2015) indicate that the Western Cape Government aims to

> "*provide you, your loved ones and communities with opportunities for jobs, education, growth and development*". Over the next five years the Western Cape Government is committed to:

- Create opportunities for growth and jobs - create an enabling environment to attract investment, grow the economy and create jobs by supporting high growth economic sectors.
- Improve education outcomes and opportunities for youth development - expand quality education across the province and provide opportunities for youth to realise their full potential.
- Increase wellness and safety, and tackle social ills – address health, safety and social ills by supporting healthy communities, a healthy workforce, and healthy families, youth and children.
- Enable a resilient, sustainable, quality and inclusive living environment - improve urban and rural areas through enhanced management of land, an enhanced climate change plan, and better living conditions for all.
- Embed good governance and integrated service delivery through partnerships and spatial alignment - deliver good governance and an inclusive society that increases access to information, in partnership with active citizens, business and institutions.

Department of Transport and Public Works Strategic Plan

The Western Cape Government, Department of Roads and Public Works published its Strategic Pan for 2015/15 – 20119/20 in February 2015. The vision of the Department is:

> "To lead in the delivery of government infrastructure and related services"
>
> The vision is supported by the following strategic goals:

- Maximise empowerment and job creation in the Western Cape
- Manage provincial infrastructure and immovable assets in the Western Cape
- Deliver safe, efficient, integrated transport systems in the Western Cape
- Promote good governance, effectiveness, and efficiency throughout the DTPW

2.3 Cape Winelands District Municipal Vision

A number of informants have previously been used to develop a vision and mission for the Cape Winelands District Municipality, including a range of policy documents. For the full vision as stated in the IDP, refer to Figure 2-1. A summary vision is stated as "A unified Cape Winelands of excellence". The CWDM mission reads, "All structures of the Cape Winelands co-operate together towards effective, efficient and economically sustainable development".

The Cape Winelands mission focuses on a collaborative effort to work towards a more sustainable district.



Figure 2-1: Cape Winelands District Municipality Vision, Mission and Core Values (*Source: IDP 2014 – 2015*)

The strategic objectives of the IDP can be summarised as follows:

- To maintain health and safety of communities
- To facilitate sustainable economic empowerment of all communities
- To support and ensure the development and implementation of infrastructural services
- To provide effective and efficient support services
- To ensure financial sustainability

2.4 Cape Winelands Transport Vision 2011-2016

The previous Cape Winelands DITP stated the vision for transport as:

"Innovative Mobility"

And the Cape Winelands transport vision was further supported by the following mission statement:

"A sustainable transport system which supports the needs of social and economic opportunity"

The findings of the current DITP suggest no reason to amend the vision and mission, and it is noted that these should not be changed frequently without evidence-based reasoning. The vision of the Cape Winelands needs to be informed by the context and how people move.

For a detailed interpretation of the vision for transport, refer to the DITP 2011-2016, section 2.3, which provides analysis of what was working and what was not working in the district as an informant to the vision.

Since the previous vision statement a number of projects have been conducted with the intention of moving towards this vision.

This includes:

- Drafting the Cape Winelands Integrated Public Transport Network Framework
- Updating the Non-motorised Transport Masterplan Framework
- Updating the Safer Journeys to Schools report; and
- Constructing a number of projects to improve transport within the district.

2.5 Strategic Framework

A number of studies have been carried out to inform planning by different transport modes, as summarised below. Some of these are covered in more detail elsewhere in this report, but brief summaries are provided here as informants to the vision for the district.

Safer Journeys to Schools

Owing to increased non-motorised transport (NMT) and learner travel awareness generated by the National Land Transport Transition Act (NLTTA) and the development of the provincial NMT Strategy for the Western Cape Province, the Cape Winelands District Municipality (Cape Winelands) realised the need for a comprehensive policy framework that would address the travel needs of learners. Pendulum Consulting was subsequently appointed by Cape Winelands to develop a policy framework for learner travel in the Cape Winelands.

The primary objective of this policy document is to develop a framework referred to as the Safer Journeys to Schools in the Cape Winelands, to facilitate the implementation of learner travel improvement projects at schools in the Cape Winelands.

Vision:

The vision developed for this policy is to **"improve and create access to opportunities through education".**

Mission:

This can be accomplished through improving the journey to school by providing a safe and comfortable link or connection between home and school.

Objectives:

Objectives in support of the vision and the mission are as follows:

- Improve the level of service (including transport operational level of service, as well as the coordination of transport services) learners and parents are currently experiencing.
- Improve the environment that learners move within between home and school
- Improve comfort and convenience experienced by learners while undertaking the journey between home and school.
- Improve road safety conditions along the route

Areas of Interventions and Strategies

Areas of intervention as listed below and supportive strategies were identified. Actions or programmes in support of the strategies would assist in realising the objectives.

- Engineering/ environmental
- Education, communication and awareness
- Transport service delivery
- Institutional integration
- Traffic law enforcement
- Evaluation and Monitoring

NMT Masterplan Framework

A key transport challenge in most rural districts of SA, including Cape Winelands, is not only the widely distributed nature of towns and the opportunities they provide, but also the low intensity of land uses within towns. These two factors negatively impact on both public transport and NMT (as a mode in its own right and as a feeder to public transport).

IPTN Framework

Currently there is no comprehensive IPTN for the district, but a framework has been prepared in response to needs identified in the previous DITP.

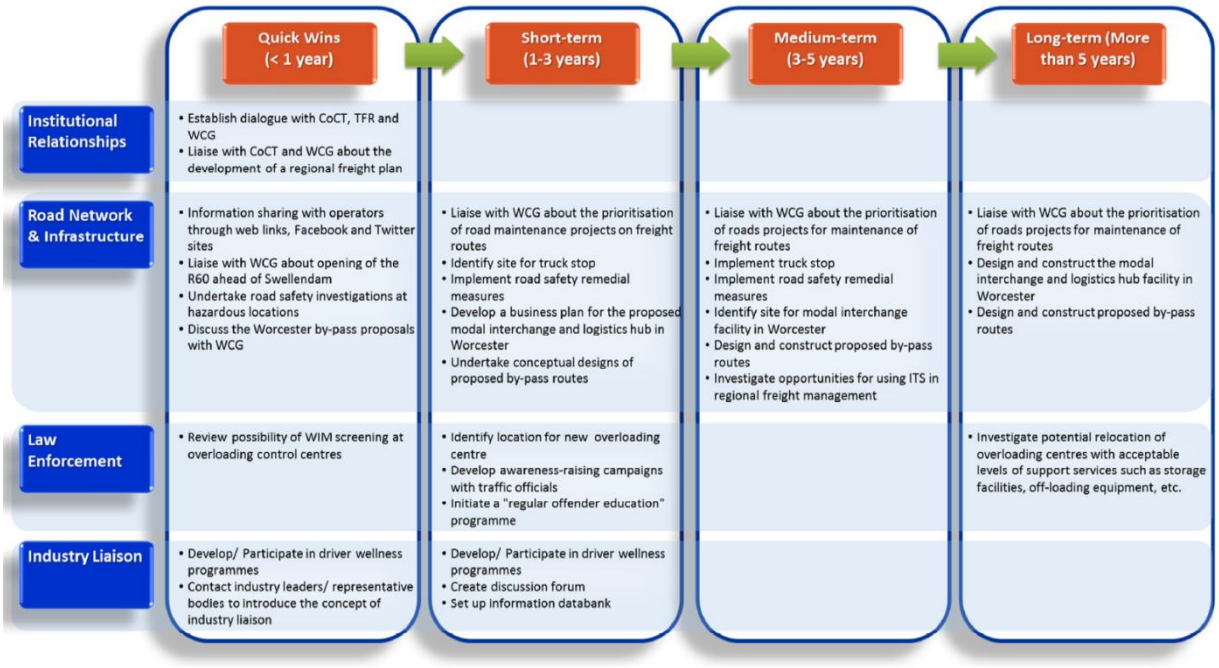


Figure 2-2: Freight Strategy Proposed Transport Improvements

Freight Strategy

The freight strategy as identified in the previous CWDM ITP (2010 - 2015) was prepared in 2011. This freight strategy was a desktop study which indicated that engagement with the stakeholders was required. These engagements took place and transport improvements proposed. These transport improvements are on various institutional levels and over short to long term timeframes.

As indicated the long term improvements include engagement with WCG regarding prioritisation of roads projects for maintenance of freight routes, design and construction of the modal interchange and logistics hub facility in Worcester, and design and construction of proposed by-pass routes. The engagement also included investigation of the relocation of overloading centres with acceptable levels of support services such as storage facilities, off-loading equipment etc.

3 TRANSPORT REGISTER

3.1 Introduction

This chapter illustrates the current status quo of transport within the Cape Winelands District Municipality. This chapter will summarise the Current Public Transport Record that was prepared for the CWDM DITP update, and illustrate information about public transport and general traffic volumes.

3.2 Spatial Development Framework

The Cape Winelands District Municipality is primarily rural with its main economic driver being the agricultural industry and specifically the horticultural industry (including fruits, vegetables, livestock and dairy products). The main towns within the district, such as Paarl, Wellington, Robertson, Worcester and Ceres, have arisen in support of the rural economy. Due to the geographic and demographic makeup of the district, the transport system plays an important role in overcoming the spatial and income divide. The NMT Masterplan Framework (2010) identified a number of functional clusters primarily based on the geographic layout of the district and where the main towns are located. The updated NMT Masterplan Framework (2015) refined these functional clusters by understanding the functional relationship between the towns and grouping the towns accordingly. The improvement of transport within these functional clusters is important to minimise the impact of the spatial structure on daily travel, to allow for better access to opportunities.

The proximity to the City of Cape Town (CCT) also allows for economic interaction to take place between the district and the CCT. There is currently a strong functional (economic) relationship between the Cape Winelands and the CCT.

The CWDM IPTN Framework (2013) illustrates a number of key spatial challenges for each of the local municipalities. (see Table 3-1)

Table 3-1: Key Spatial Challenges

Local Municipality	Key Spatial Challenges
DRAKENSTEIN	Lack of available land for transport and related infrastructure (Huguenot Station Precinct).
	No park-and-ride facility at Huguenot Station.
	Poorly defined transport and public spaces in Paarl Central Business District
	Key nodes (Wellington and Paarl) do not adequately support NMT.
	Poor transport-land use integration in Paarl CBD.
STELLENBOSCH	Lack of integrated settlements within municipality.
	Dispersed rural settlements.
	Derelict and unutilized rail infrastructure (Franschhoek rail connection).
	Inter-city bus facilities are poorly located.
BREEDE VALLEY	Poor transport-land use integration in Worcester CBD.
	Worcester CBD does not adequately support NMT.
	Dispersed and non-integrated public transport facilities or ranks within Worcester CBD (i.e. rail, long-distance bus, taxi).
	Public transport services and facilities are non-existent or limited in rural areas
WITZENBERG	Lack of integrated settlements, particularly at Ceres.
	Dispersed public transport facilities within Ceres CBD.
	Poorly located and underutilized public transport facilities at Ceres.
LANGEBERG	Dispersed public transport facilities or ranks at Robertson CBD – no integration
	Dispersed rural settlements with vast distances between them.
	Poor NMT infrastructure.
	Public transport facilities are limited within the rural settlements (McGregor, and Montagu)

The key findings of the Cape Winelands SDF (2009/10) suggest that the current development path is not sustainable and that spatial restructuring is only possible through investment in infrastructure.

The SDF indicates that each local municipality's growth is different in terms of population and in the economic and revenue generating sectors. This creates different challenges amongst the municipalities. The SDF suggests 30 key spatial proposals which may address these challenges. Of these, two have been identified as key to transport. One is that transport corridors containing both road and rail routes should be developed as primary freight and passenger routes and the other are to increase the ability to commute between higher order and lower order towns.

The SDF findings and key challenges identified in the IPTN framework suggest that different considerations are necessary to plan for each of these local municipalities as the challenges may be similar but the context within which they occur is somewhat different.

3.2.1 Population density and distribution

According to the National Census 2011, as illustrated in Table 3-2, the total population of the Cape Winelands district is approximately 787 490 persons, the majority of which reside in the Drakenstein local municipality. Drakenstein also has the highest population density of the towns in the study area, with the majority of the LM residents residing in Paarl and Wellington.

Table 3-2 - Population within the Cape Winelands District

Local Municipality	Area (km2)	Total Pop.	Pop. density [1]	No of Households
Drakenstein	1538	251262	163	59774
Witzenberg	10753	115946	11	27419
Breede Valley	3833	166825	44	42527
Langeberg	4518	97724	22	25125
Stellenbosch	831	155733	187	43 420
Total	**21473**	**787490**	**427**	**198265**

[1] Density: number of persons per square km

3.2.2 Employment levels and economic activity

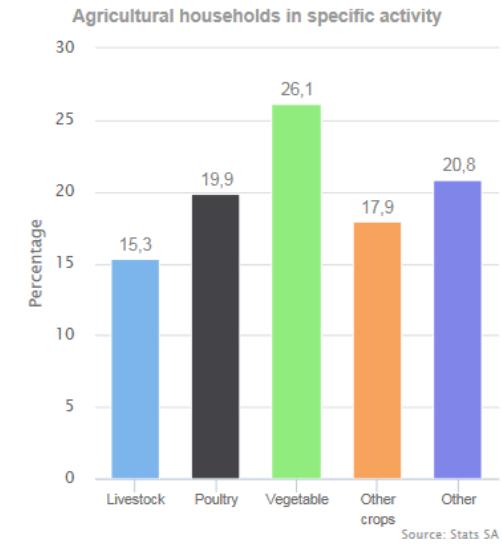
Table 3-3 illustrates the percentage of persons unemployed within each local municipality. It is evident that the local municipality with the lowest growth rate also has the second highest unemployment rate. Conversely, the local municipality with the lowest unemployment rate has the highest growth rate. It is also evident that there is a high youth unemployment rate within the district.

The Western Cape provincial unemployment rate is 24.5% (fourth quarter of 2014) and was the lowest unemployment rate amongst the provinces. Within the provincial context the local municipalities appear to have an unemployment rate lower than that of the province.

Table 3-3: Unemployment rates within the Cape Winelands District

Local Municipality	Unemployment rate	Youth unemployment	Growth rate
Drakenstein	17.6%	24.6%	2.56%
Witzenberg	7.6%	9.9%	2.64%
Breede Valley	14.4%	20.2%	1.31%
Langeberg	11.3%	15.1%	1.79%

The information illustrated in the figures[2] below indicates that the main driver of the Cape Winelands economy is the agricultural sector, specifically in vegetable crops.



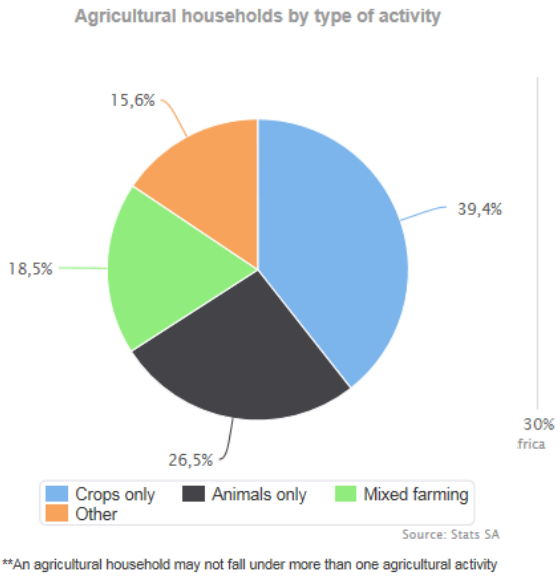


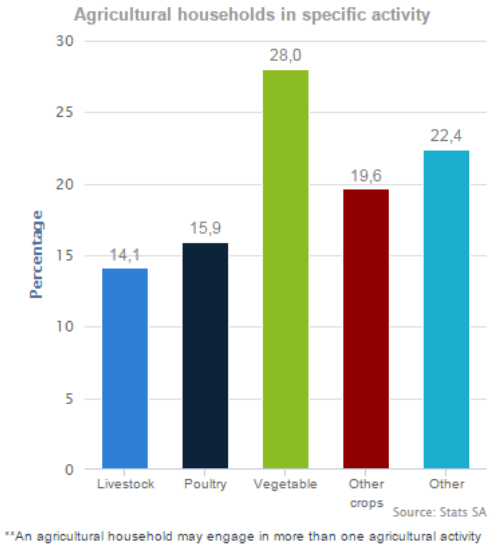
Figure 3-1: Agricultural Statistics - Breede Valley

Figure 3-2: Employment and Household Income - Breede Valley

Figure 3-1 illustrates the agricultural households in a specific activity as well as by type of activity. It is evident from this that a large portion of the activities is in crops. This form of agriculture is the most labour intensive and is a source of employment to the low skilled labour pool.

Figure 3-2 illustrates the number of employed persons as well as the household income. It is evident from these figures that nearly a quarter (22.2%) of households averages an income between R19 601 and R38 200. It is also evident that 12% of households have no income.

[2] Figure 3-1 to Figure 3-8 has been sourced from Statistics South Africa



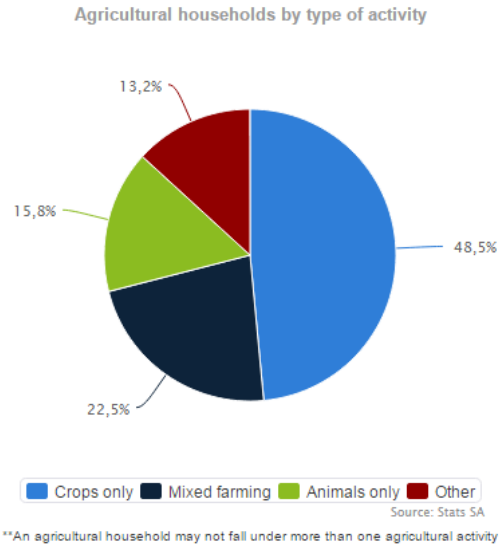
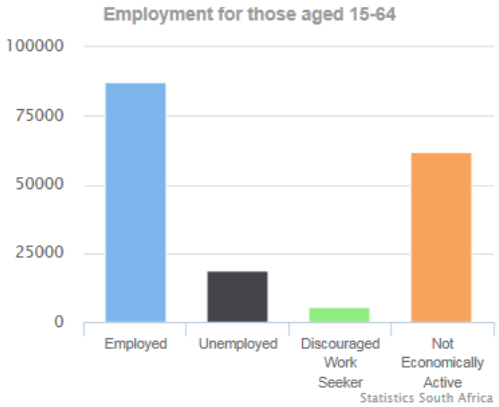


Figure 3-3: Agricultural Statistics – Drakenstein



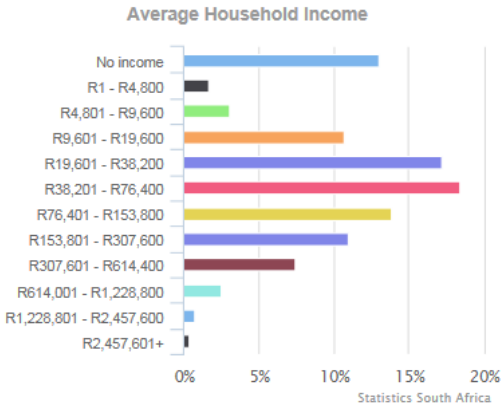


Figure 3-4: Employment and Household Income – Drakenstein

Figure 3-3 illustrates the agricultural households in a specific activity as well as by type of activity. It is evident from this that just under 50% of activity is in crops only.

Figure 3-4 illustrates the number of employed persons as well as the household income. It is evident from these figures that 18.4% of households average an income of between R38 201 and R76 400 per annum. It is also evident that 13% of households have no income which is the highest amongst the local municipalities within the Cape Winelands district.

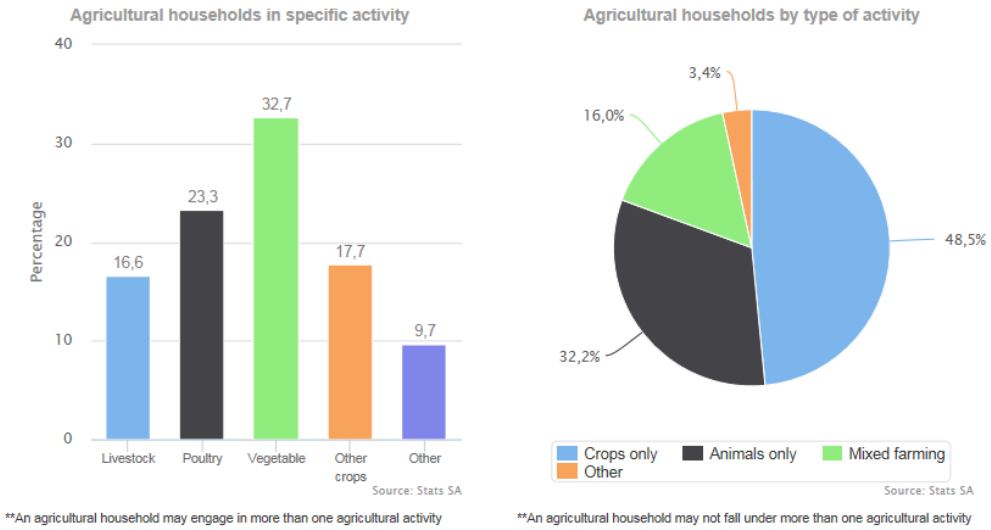


Figure 3-5: Agricultural Statistics – Langeberg

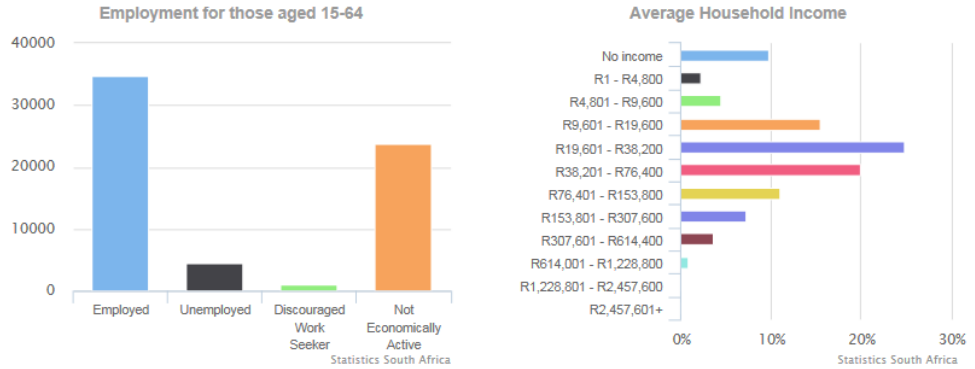


Figure 3-6: Employment and Household Income – Langeberg

Figure 3-5 illustrates the agricultural households in a specific activity as well as by type of activity. It is evident from this that just under 50% of activity is in crops only.

Figure 3-6 illustrates the number of employed persons as well as the household income. It is evident from these figures that nearly a quarter (24.9%) of households average household income of between R19 601 and R38 200. It is also evident that 9.7% of households have no income.

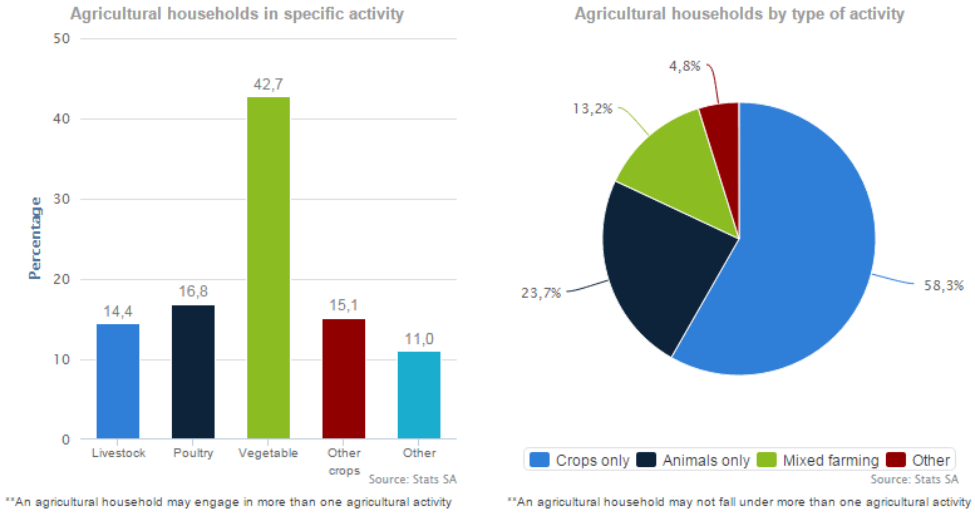


Figure 3-7: Agricultural Statistics – Witzenberg

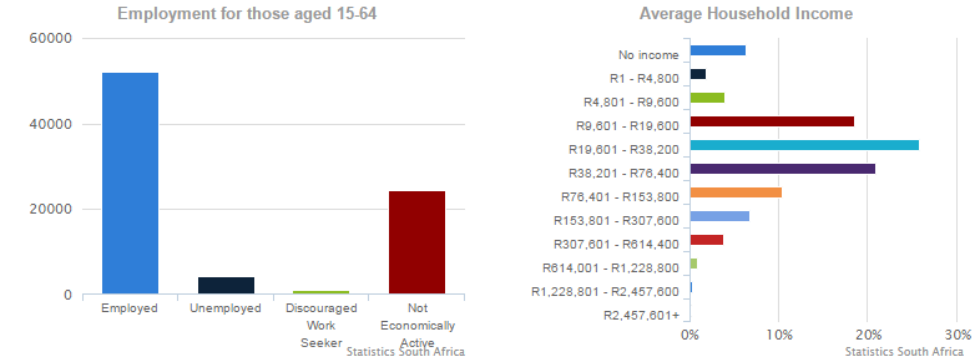


Figure 3-8: Employment and Household Income – Witzenberg

Figure 3-7Figure 3-1 illustrates the agricultural households in a specific activity as well as by type of activity. It is evident from this that the majority of activity is in crops only.

Figure 3-8 illustrates the number of employed persons as well as the household income. It is evident from these figures that the majority (25.8%) of households average an income of between R19 601 and R38 200. It is also evident that 6.4% of households have no income.

The figures above indicate that the majority of produce is from the agricultural sector, which is primarily transported on the road network due to the lack of alternative transport options.

The income levels of the households within the municipality suggest that their affordability is limited and would therefore make use of either NMT or public transport.

3.3 Strategic Transport Corridor

3.3.1 Regional Development Corridors

According to the Western Cape SDF 2014, the rural economy is undergoing transformation as a result of both financial / economic factors, and a policy thrust to diversify rural activity. Government support of rural entrepreneurs can be expected to increase travel on the existing links between the Cape Winelands and Cape Town, and between the Cape Winelands and inland destinations. A rural development corridor is identified linking Ceres, Worcester, Robertson and Swellendam, which has the potential to increase road-based transport in and out of the Cape Winelands. In the long term this has the potential to alter public transport patterns, but this has not been observed yet.

3.3.2 Transport, Activity development and Agricultural corridors

According to the Western Cape Provincial Spatial Development Framework[3] agriculture is the most space extensive economic activity and underpins the economies of all districts outside of Cape Town (within the Western Cape).

It is evident from Figure 3-10 and Figure 3-11 that the Cape Winelands district economy is focussed on the agricultural sector. These figures illustrate that the main agricultural areas are situated along and between the main transport corridors i.e. the N1 and N2.

The main agricultural produce within the district is wine grapes, with medium to low density wine cellars within the district with areas of high density concentration along major transport corridors. There are also areas of high activity density such as Witzenberg, with the other areas within the district having moderate to high and moderate activity density

These areas with moderate and high activity densities are along routes connecting main highways. This suggests that a large number of vehicles transport agricultural input and output between the N1 and N2 via the R60, R62, R43 and R45. The agricultural inputs are therefore also transported along these corridors. Rail freight movement also takes place within the district. Agricultural produce is transported via rail between CCT and Ceres and areas east of CCT.

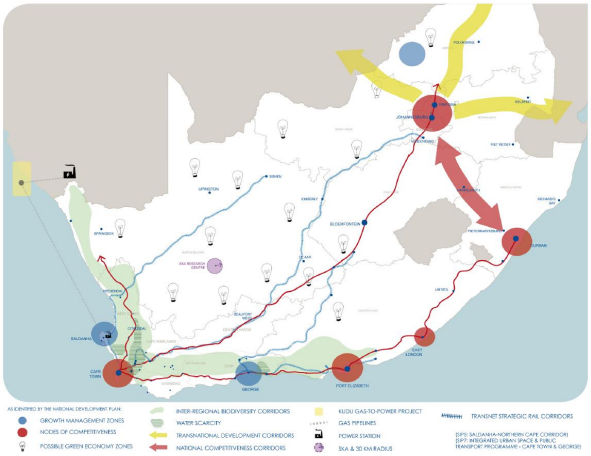


Figure 3-9: Inter- and Intra- Provincial Spatial Initiatives based on NDP and other National Strategies

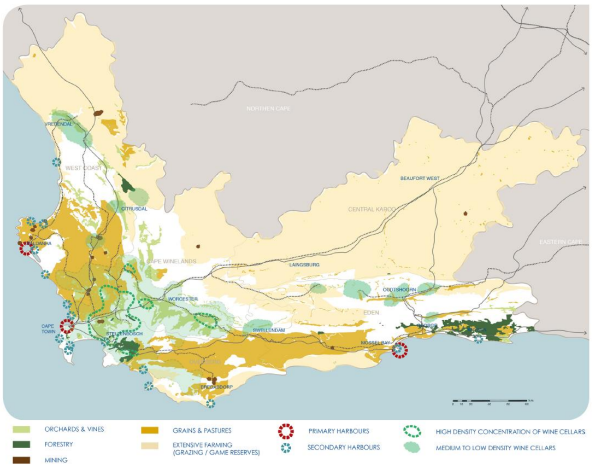


Figure 3-10: Western Cape Province - Primary Sectors (Agriculture, Fishing, Forestry and Mining)

[3] Draft for Public Comment, October 2013

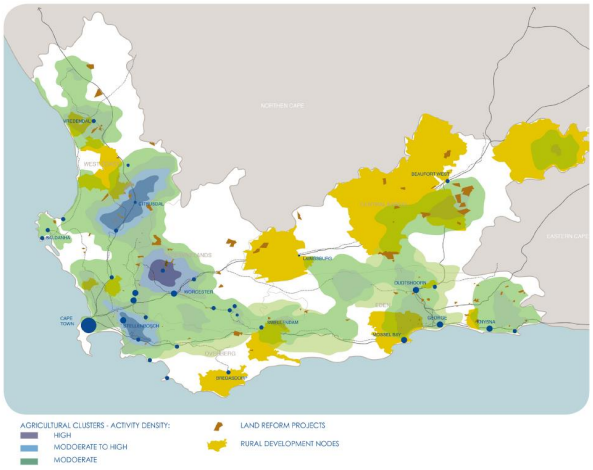


Figure 3-11: Western Cape Province - Locality of Agricultural clusters, Land reform projects and CRDP nodes

3.4 Public Transport Services

3.4.1 Overview of the Public Transport Operations

Within the district are a number of public transport operations, facilities and operators. The primary mode of public transport is minibus taxi as well as limited rail and long distance bus services. The majority of public transport infrastructure provided is for the minibus taxi in the form of formal ranks and can be seen in the four local municipal areas. In towns where there is limited public transport infrastructure, the minibus taxi operators make use of shopping centres/ stores parking areas.

Public transport operations are also concentrated at peak times, with the majority of public transport trips taking place in the morning.

In the main towns of each local municipality there are operations that take place within the town and between neighbouring towns. In the more isolated towns the public transport operations are less frequent and may operate once a week only.

It was also found that in Nduli, Zolani and Prince Alfred Hamlet the existing public transport facilities are not being utilised during the peak, and that operators are more prone to providing a door-to-door service. This may be a result of competition amongst operators, whereby operators are not willing to wait at the public transport facilities for commuters but rather pick them up in order to avoid loss of potential income.

Modal Split

As discussed in the Cape Winelands CPTR, the inbound modal split for road based transport is indicated in a number of tables below. These tables illustrate that the main mode of inbound transport is light vehicles. In some instances the public transport modal share is relatively high as in the case of Montagu, Ceres and Robertson.

Breede Valley Local Municipality

Table 3-4 - Touwsriver inbound modal share (weekday, 06:00 - 08:00)

Light vehicle	Heavy vehicle	Public transport (MBT + Bus)
88.2%	1.8%	10.0%

Table 3-5 - De Doorns inbound modal share (weekday, 06:00 - 08:00)

Light vehicle	Heavy vehicle	Public transport (MBT + Bus)
80.9%	3.7%	15.3%

Drakenstein Local Municipality

Table 3-6 Paarl inbound modal share (weekday, 06:00 - 08:00)

Light vehicle	Heavy vehicle	Public transport (MBT + Bus)
86.5%	1.3%	12.2%

Langeberg Local Municipality

Table 3-7 - Robertson inbound modal share (weekday, 06:00 - 08:00)

Light vehicle	Heavy vehicle	Public transport (MBT + Bus)
60.9%	8.4%	30.7%

Table 3-8 - Montagu inbound modal share (weekday, 06:00 - 08:00)

Light vehicle	Heavy vehicle	Public transport (MBT + Bus)
47.2%	3.9%	48.9%

Table 3-9 - Ashton inbound modal share (weekday, 06:00 - 08:00)

Light vehicle	Heavy vehicle	Public transport (MBT + Bus)
84.6%	2.7%	12.6%

Witzenberg Local Municipality

Table 3-10 - Ceres inbound modal share (weekday, 06:00 - 08:00)

Light vehicle	Heavy vehicle	Public transport (MBT + Bus)
37.8%	3.8%	58.4%

Table 3-11 - Tulbagh inbound modal share (weekday, 06:00 - 08:00)

Light vehicle	Heavy vehicle	Public transport (MBT + Bus)
74.0%	4.2%	21.8%

Regional Modal Splits

The road based modal share for the Cape Winelands district is illustrated in Table 3-12.

Table 3-12 - Regional Modal Share (Weekday, 06:00 - 08:00)

Light vehicle	Heavy vehicle	Public Transport (MBT + Bus)
60.4%	2.8%	36.8%

3.4.2 Minibus taxi operations

Routes and ranks

With the exception of Drakenstein, the majority of minibus taxi operations are inter-town i.e. most trips are between towns and not within towns. This is mainly due to the spatial layout of the local municipalities, with towns being divided such that NMT is not a viable option for commuting between towns, and the size of towns being such that they do not provide enough opportunities for them to be self-contained. For this reason most trips cover long (>5km) distances. It also suggests that commuters do not reside close to their places of employment opportunities.

A large number of the legally operating routes in Drakenstein are internal, with most taking place in Paarl and Wellington.

3.4.3 Rail

The rail operations in the district are both passenger and freight operations. The passenger rail services are operated by Metrorail and Shosholoza Meyl, whereas the freight operations are operated by Transnet Freight Rail.

In terms of passenger operations, a number of services operate in Drakenstein and there is a daily service from the CCT to parts of Witzenberg and Breede Valley. Langeberg however is the only local municipality which does not have a passenger rail service operating.

The Shosholoza Meyl, a long distance rail operator, provides a rail service between CCT CBD and Johannesburg. This long distance service departs from CCT on specific days in the week. The service operates in Drakenstein and Breede Valley, and continues further north-east to Johannesburg.

The freight rail operations take place on a daily basis with freight trains operating on the same railway lines as the passenger operations with the exception of a freight only line extending east of Worcester through the Langeberg municipal area.

More detailed information of the passenger rail services and timetables can be found in the Current Public Transport Record for the Cape Winelands District.

3.4.4 Minibus Taxi Associations consulted

As discussed in the CPTR the minibus taxi association as indicated in Table 3-13 were consulted and provided input into the data collection process.

Table 3-13 Minibus taxi associations consulted

Local Municipality	Stakeholders engaged
Witzenberg	Ceres Taxi Association
	Nduli Taxi Association
Drakenstein	Huguenot Taxi Association
	U.T.A
	Paarl United Taxi Association
	Wellington Taxi Union
	CATA
	CATA Boland
	Franschhoek Taxi Association
	Paarl Alliance Taxi Association
Langeberg	Robertson Taxi association
	Montagu Taxi Association
Breede Valley	Worcester United Taxi Association
	De Doorns Taxi Association

3.5 Public Transport Infrastructure

3.5.1 MBT Transport Facilities

There are a number of formal and informal minibus taxi facilities within the district, some of which are well utilised and others which are not currently being utilised.

More detail on the public transport infrastructure can be found in the CPTR document.

The following formal ranks within the CWDM are not being utilised:

- Prince Alfred Hamlet formal minibus taxi rank
- Nduli formal minibus taxi rank
- Zolani formal minibus taxi rank

The condition and type of facilities available at the formal and informal minibus taxi ranks differ significantly. Some formal facilities have a paved surface, shelter for vehicles and passengers, seating and ablution facilities, whereas other facilities have a paved surface and shelter for vehicles only.

Most of the ranks rely on street lighting to provide the light while in other areas minibus taxis make use of designated parking space at shopping centres (such as Shoprite and Pick n Pay parking in Robertson and the Worcester Mall parking facility in Worcester). .

3.5.2 Bus Transport Facilities

There are currently three long distance commercial bus services that operate through the Cape Winelands district, namely:

- Greyhound
- Translux Bus
- Intercape

All three of these operators primarily travel on the national routes (the N1 and N2) between major city such as Cape Town, Johannesburg, Pretoria and Durban. These operators also offer variations of trip chains, for example from Cape Town via Bloemfontein to Durban, or from Cape Town via Port Elizabeth to Durban.

Greyhound operates between Cape Town and Durban and Pretoria. The bus therefore operates in Paarl, Worcester, Touwsriver and Stellenbosch. The pick-up/ drop-off locations in these areas are:

Paarl Pick-up point:	Monument Shell, Cnr Main and South Street
Worcester Pick-up Point:	Breede Valley City
Touwsriver Pick-up Point:	Loganga Karoo Lodge, C/o Jane and Volschenk Streets
Stellenbosch Pick-up point	Merriman Avenue (opposite Neelsie)

TransLux Bus operates between Cape Town and Durban, East London and Pretoria. The bus therefore operates in Stellenbosch, Paarl, Worcester, Ashton and Robertson. The pick-up/ drop-off locations in these areas are:

Paarl Pick-up point:	Shell Garage, c/o Main and South
Worcester Pick-up Point:	Shell Ultra City
Touwsriver Pick-up Point:	Kom Kyk Motors
Stellenbosch Pick-up point	Stellenbosch Station

Figure 3-12 illustrates the routes on which the Translux Bus operates.



Figure 3-12: Translux Bus Route Map

Intercape operates between Cape Town and Port Elizabeth, Umtata, Durban and Pretoria. The bus therefore operates in Stellenbosch, Paarl, and Worcester. The pick-up/ drop-off locations in these areas are:

Paarl Pick-up point	Monument Motors, C/o Suid Street and Main Street (Shell Garage)
Stellenbosch Pick- up Point	Merriman Ave bus stop under foot bridge (Taxi drop off near Neelsie)
Worcester Pick-up point	Shell Ultra City

Figure 3-13 illustrates the routes on which Intercape currently operates.

The timetable with relevant information for the various routes served by each of the long distance bus operators can be found in the CPTR report.



Figure 3-13: Intercape Bus route map

3.5.3 Rail Transport Infrastructure

It has been noted that the Gouda railway station has been upgraded recently.

The table below summarises the information pertaining to the active railway stations within the district.

Table 3-14: Passenger Railway information

Town	Public Transport facility type	Location
Goudini	Railway Station	Latitude 33°36'28.00"S Longitude: 19°19'0.07"E
Channoves	Railway Station (not currently being used)	Latitude 33°37'32.08"S Longitude: 19°22'32.19"E
Worcester	Railway Station	Baring St, Worcester
Paarl	Paarl Rail Station	C/o Railway and Station St
Paarl	Huguenot Rail Station	C/o Huguenot and Klein Drakenstein Rd
Paarl	Dal Josafat Rail Station	Dommedaris St
Paarl	Mbekweni Rail Station	Dommedaris St (Mbekweni)
Wellington	Wellington Rail Station	Stasie Rd
Malan	Malan Rail Station	Latitude: 33°34'44.00"S Longitude: 18°58'59.08"E
Soetendal	Soetendal Rail Station	Latitude: 33°30'33.22"S Longitude: 18°58'54.17"E
Hermon	Hermon Rail Station	Latitude: 33°26'18.82"S Longitude: 18°58'3.96"E
Voelvlei	Voelvlei Rail Station	Latitude: 33°21'49.11"S Longitude: 19° 1'0.13"E
Gouda	Gouda Station	Stasie St
Tulbagh	Tulbagh Railway Station	Latitude: 33°19'14.19"S Longitude: 19° 5'59.95"E
Artois	Artois Railway Station	Latitude: 33°22'8.87"S Longitude: 19° 9'53.56"E
Wolseley	Wolseley Railway Station	Piet Retief St, Wolseley
Romans River	Romans River Railway Station	Latitude: 33°28'25.58"S Longitude: 19°12'6.68"E
Bree River	Bree River Railway Station	Latitude: 33°31'30.00"S Longitude: 19°12'29.77"E
Botha	Botha Railway Station	Latitude: 33°34'1.33"S Longitude: 19°15'21.70"E

3.6 Roads and Traffic

3.6.1 Major Road Network and condition

Provincial Roads

The condition of the provincial roads was obtained from the Western Cape Government and is illustrated in figure Figure 3-14 and Figure 3-15 below – a larger figure can be found in Appendix A.

It appears that the paved road network is primarily in good – very good condition, however the majority of the gravel road network appears to be fair to poor condition.

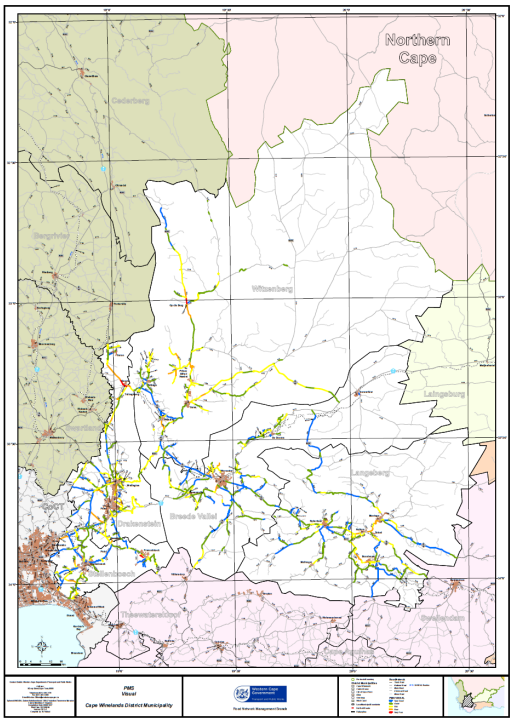


Figure 3-14 Paved Road Condition of Provincial Roads

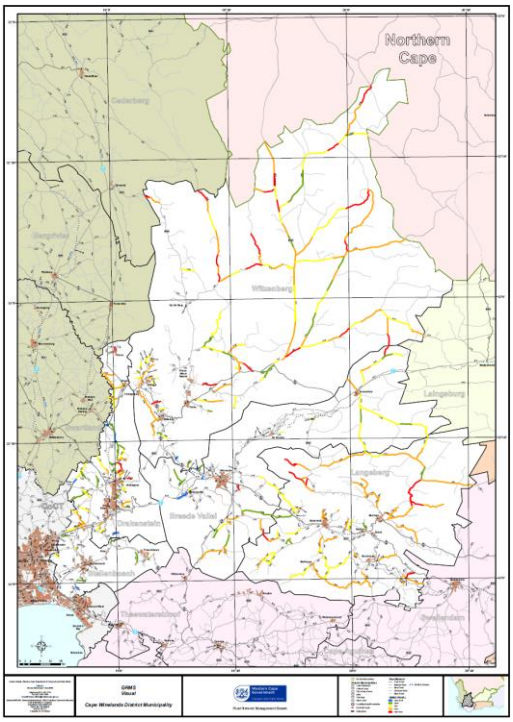


Figure 3-15 Gravel Road Condition of Provincial Roads

The Table 3-15 indicate that total distance of provincial owned road network within the CWDM and 1Table **3-16** indicates the total assets value of provincial owned road network in the district.

Within the district, Witzenberg has the highest distance of provincial owned roads with a total distance of 2167km followed by Langeberg, Breede Valley and Drakenstein.

[4]Table 3-15: WCG Road Network distance

Local Municipality	National Roads	Trunk Road	Main Roads	Divisional Roads	Minor Roads
Drakenstein	72.78	236.24	329.57	309.37	145.93
Breede Valley	184.65	218.38	228.62	369.7	331.65
Langeberg	57.16	180.55	323.44	470.06	484.61
Witzenberg		108.86	417.64	596.19	1045.28

In terms of asset value, Langeberg has the highest asset value with the WCG owned roads totalling approximately R4billion, followed by Witzenberg,

Breede Valley and Drakenstein.

[1]Table 3-16: WCG Road Asset value

	Trunk	Main		Divisional		Minor		Totals	
	Surfaced	**Surfaced**	**Gravel**	**Surfaced**	**Gravel**	**Surfaced**	**Gravel**	**Surfaced**	**Gravel**
Drakenstein	R 774 576 000	R 1 680 709 000		R 875 500 000	R 5 321 000	R 103 375 000	R 83 000	R 3 434 161 000	R 5 404 000
Breede Valley	R 1 342 094 000	R 700 589 000	R -	R 1 376 510 000	R 10 681 000	R 347 956 000	R 2 364 000	R 3 767 150 000	R 13 045 000
Langeberg	R 1 659 872 000	R 1 649 569 000	R 908 000	R 664 747 000	R 7 851 000	R 40 198 000	R 1 176 000	R 4 014 386 000	R 9 934 000
Witzenberg	R 1 045 187 000	R 1 367 618 000	R 17 291 000	R 1 245 610 000	R 12 024 000	R 123 380 000	R 2 573 000	R 3 781 795 000	R 31 888 000

[4]Information as at 3 August 2015

3.6.2 Traffic Volumes

National Roads

The Average Annual Daily Traffic (AADT) and Average Daily Truck Traffic volumes for the National Route 1 (N1) and National Route 2 (N2) were obtained from the South African National Road Agency Limited through their Comprehensive Traffic Observations (CTO).

The ADT volume of the N1 within the district varies between Touwsriver and Paarl. However, the percentage of truck traffic remains constant at approximately 20% of the ADT.

Provincial Roads

According to the Road Network Information System of the Western Cape Government, the AADT for the provincial roads can be broken up into AADT of 100 vehicles and less, between 101 – 300, 301 – 500, 501 – 1500, 1501 – 4500, 4501 – 13500 and 13501 – 40000.

According to the RNIS database, the following major roads in the CWDM accommodate in excess of 13500 AADT;

- R44 in Wellington (Drakenstein LM)
- Champagne St and Piet Retief, (Drakenstein LM)
- Jan Van Riebeek Dr (Drakenstein LM)
- R303 between Ceres and Bella Vista (Witzenberg LM).

Other provincial roads experiencing AADT of between 4501 – 13500 vehicles are:

- R303 between Bella Vista and Prince Alfred Hamlet, sections of the R46 (Witzenberg LM)
- R60 from Ashton in Langeberg to Worcester in Breede Valley
- sections of Van Riebeeck St between Rawsonville and Worcester (Witzenberg LM)
- R45 between Wellington and Hermon.

3.6.3 Road Safety

The road accident information provided by the Western Cape Government indicates the number of injuries and fatalities over the last decade. What is evident from Table 3-17 is that there has been a general decrease from 2009 in the total number of injuries in road related accidents. There is no clear trend in fatalities.

The Drakenstein local municipality experienced the highest number of injuries and is most likely attributed to the high volume of traffic experienced in this municipality (relative to the other municipalities).

Table 3-17: Cape Winelands District Accident Information

Year	Fatalities	Serious Injury	Slight Injury	No Injury	Total
2000	39	156	865	6573	7633
2001	43	189	819	6068	7119
2002	42	171	1074	6944	8231
2003	47	149	903	6310	7409
2004	61	198	962	6775	7996
2005	32	122	878	6752	7784
2006	39	205	904	7792	8940
2007	43	195	942	7606	8786
2008	40	243	946	7953	9182
2009	41	237	996	8650	9924
2010	41	267	962	8471	9741
2011	45	193	1001	7647	8886
2012	50	155	872	7894	8971
2013	39	199	935	8659	9832
2014	45	210	932	9041	10228

3.7 Non-Motorised Transport

A key transport challenge in most rural districts of SA, including Cape Winelands, is not only the widely distributed nature of towns and the opportunities they provide, but also the low intensity of land uses within towns. These two factors negatively impact on both public transport and NMT (as a mode in its own right and as a feeder to public transport).

In many of the district's towns, the challenges for NMT can be summarised as follows:

- Low population densities increasing the need to travel farther than acceptable walking distances, while undermining the financial viability of public transport;
- Low incomes of residents (high levels of unemployment and seasonal work), making public transport unaffordable;
- Settlements structured with low income residents on the periphery, away from travel destinations;
- Lack of continuous pedestrian routes that are both safe and comfortable (often lack of paving forces pedestrians onto road surfaces);
- Poor maintenance of travelled surfaces;

The Cape Winelands NMT Masterplan Framework (2016) sets out a set of guiding principles to address this, and identifies a number of high priority projects. The principles are about both physical connectivity and creating the conditions needed to make walking and cycling more viable as transport options, covering the following areas:

- Accessibility of services and destinations for users of all abilities;
- Connections that are direct and continuous;
- Convenience with appropriate standards, maintenance and lighting;
- Convivial – a network and surrounding properties that is attractive, safe and secure;
- Comfortable and easy to use, with appropriate facilities for rest and shelter; and
- Contextual – a positive character that is clear to use and consistent with neighbourhood character

The recommended improvements take into account the general profile of each town (size, land uses, types of NMT users and the need for travel internally and externally) in order to identify appropriate NMT improvements. Depending on the character of the town and the population's travel requirements, solutions may focus on walking, cycling, public transport or some combination of these. There are some general low-cost measures that are recommended, as well as other more costly capital projects. In some towns there is a need for more extensive area-wide planning. The NMT Conceptual Framework also identifies clusters of towns that are functionally linked as a result of where people live, work, shop and receive social and educational services.

3.8 Learner Transport

In the rural context learner transport is very important because of the spatial divide between residential areas and commercial, academic and social facilities, lack of infrastructure and limited disposable income of the residents. Learner or scholar transport bridges this gap by moving scholars who travel more than 5km.

Table 3-18 indicates the total number of approved learners being transported per local municipality. Table 3-19 indicates the number of benefitting schools in each local municipality.

Breede Valley has the highest number of learners being transported as well as the highest number of schools benefitting. This suggests that the spatial gap between the residents and the schools are significant, considering that Breede Valley only has the 3rd largest population and 2nd largest land area in the district (as indicated in section 3.2).

The school bus routes can be found in Annexure B: School Bus Routes .

Table 3-18: Approved Mainstream Learner Numbers

All learners	Total Approved Mainstream Learner Numbers
Breede Valley Local Municipality	4908
Drakenstein Local Municipality	2413
Langeberg Local Municipality	1976
Witzenberg Local Municipality	3263
Total	12560

Table 3-19: Number of Benefitting schools

All Learner Routes	Total no. of Benefiting Schools
Breede Valley Local Municipality	94
Drakenstein Local Municipality	49
Langeberg Local Municipality	33
Witzenberg Local Municipality	61
Total number of benefiting schools	251

3.9 Freight Transport

The freight system in South Africa is integral to the transport network and operations. Within the CWDM, freight is transported by road based modes as well as rail. Road based freight affects the road condition, road safety and traffic volumes. The road infrastructure is deteriorating rapidly due to overloading coupled with a lack of weighbridge facilities, lack of infrastructure routine maintenance and inadequate law enforcement.

As illustrated in Chapter 1, the Cape Winelands District consists of 5 local municipalities i.e. Stellenbosch, Drakenstein, Witzenberg, Breede Valley and Langeberg. As indicated in Chapter 1, the freight needs of the district are aligned with the Vision, Goals and Objectives. The

primary economic driver in the Cape Winelands district is the agricultural sector. This sector requires seasonal inputs for production and distribution of its produce, transported mainly by road.

The main source of freight information for the Cape Winelands District was extracted from the Cape Winelands Freight Strategy which made use of the Freight Transport Data Bank which was compiled for the Western Cape Department of Transport Roads and Public Works (2006). According to this, the dominant type of road freight moved through the district was agricultural produce, chemicals and perishables.

The Cape Winelands has an extensive road network, including national routes that connect the Western, Northern and Eastern Cape and arterials that connect the district internally and externally with other districts. The Cape Winelands District is situated such that freight movement to the Port of Cape Town from the hinterland would travel through the district.

In Paarl (in Drakenstein), there is a large existing industrial area at Dal Josefat, as well as a newly built Imperial Logistics warehouse which will increase the heavy haul traffic experience in the town. The town also has existing long haul service providers which may add to the heavy haul traffic. Wellington also currently has an industrial area.

Both Paarl and Wellington also have an agri-processing industry with various agricultural farms producing a variety of foods. These goods may be considered input produce or can be transported as end products.

Within the Witzenberg area, the main freight being transported is fresh fruit and vegetables for export. The implication of poorly maintained roads is that it may damage the produce to such an extent that the grading of the produce may be impacted negatively, affecting the selling price. An important route for the transport of freight from Witzenberg to the Port of Cape Town is via the R44, and R46 and connecting with the N1. It has been noted that Ceres has experienced a growth in through traffic of heavy haul vehicles mainly travelling within the Western Cape.

Breede Valley has some of the major freight generators located close to the major road network, such as the Hex River Valley farms. Worcester industrial area also generates freight movement. It has been noted that the heavy haul vehicles often travel through the centre of Worcester. A bypass connecting the R60 to the N1 and connecting the Worcester industrial area has been proposed (eastern bypass).

In the Langeberg area, Ashton, Montagu and Bonnievale all have industrial areas which generate freight that needs to be transported. The main freight movement however, is found on the R62 and R60 from Ashton to Swellendam.

The Cape Winelands Freight Strategy (2012) concludes by stating that the N1 is considered a main freight route, linking the hinterland to the Port of Cape Town for export. There are a number of heavy haul routes currently being used within the Cape Winelands District.

The primary general freight network, based on largest freight volumes within the district, is comprised of the following:

- N1 through route via Worcester
- R44/R46 Somerset West – Stellenbosch – Klapmuts – Wellington – Gouda – Ceres – Touwsriver (N1)
- R60: Worcester- Swellendam
- R43: Wolseley – Worcester
- R45: Franschhoek – Klapmuts
- R304: N1 – Stellenbosch
- R44 Gouda – Piketberg (secondary network)
- R303 Ceres – Prince Alfred Hamlet/ Op-die-Berg/ Citrusdal (secondary network)
- R43 Worcester – Villersdorp – N2 (secondary network)

The main goods being transported are general goods, with abnormal and hazardous goods being transported occasionally.

The quality of the road infrastructure impacts the quality of the fresh produce being transported and can increase vehicle maintenance costs, and therefore has an economic impact.

An update of the Freight Strategy suggests that the strategic freight network should include the R315 (between Robertson via Bonnievale toward the N2), M2 (Polkadraai Rd from Stellenbosch toward Parow in CCT), R310 (Baden Powel Drive between Stellenbosch Arterial and the N2), Annandale Rd and the M23 (Bottelary Rd).

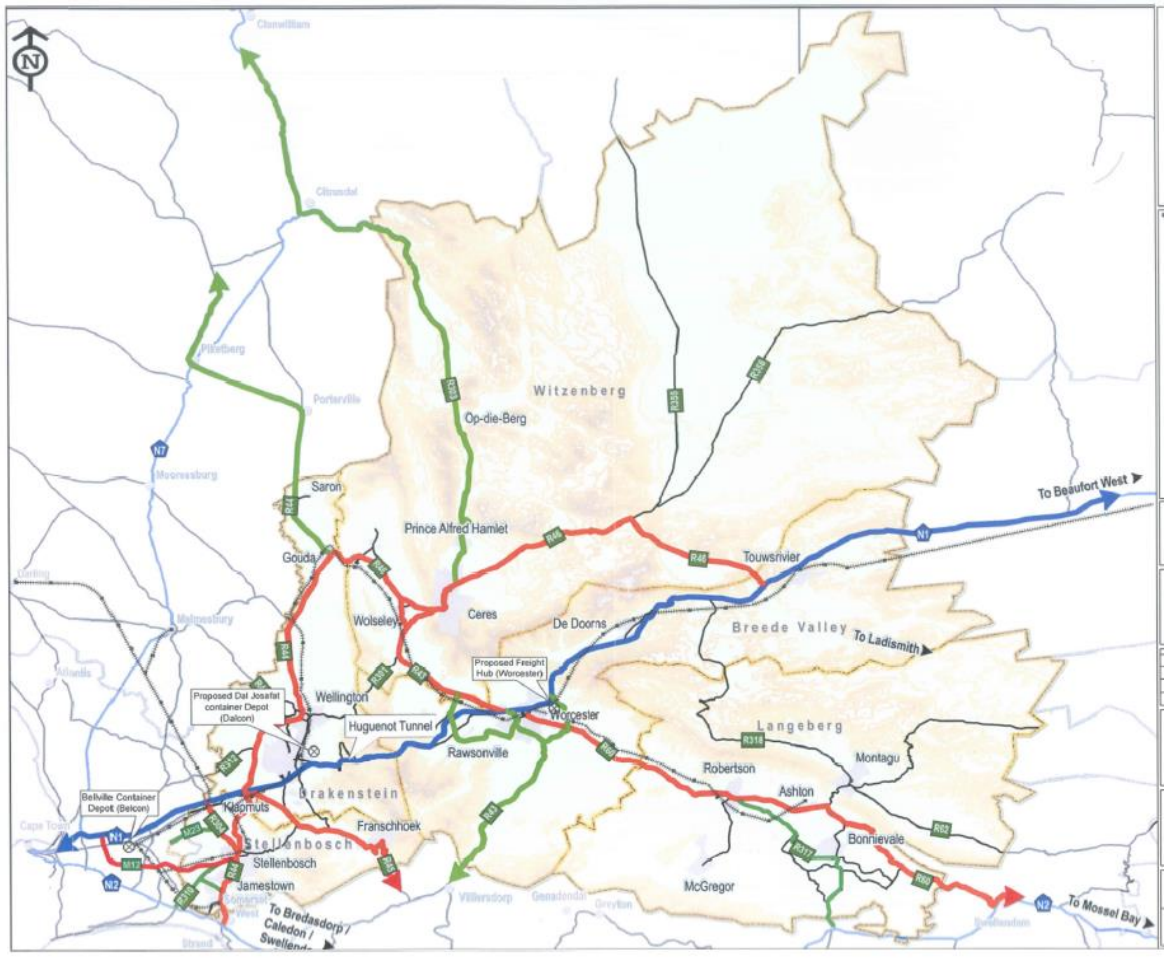


Figure 3-16: Updated Freight Network

As indicated in the Review of the Cape Winelands Freight Transport Strategy (2013), the long term improvements include engagement with WCG regarding prioritisation of roads projects for maintenance of freight routes, design and construction of the modal interchange and logistics hub facility in Worcester, and design and construction of proposed by-pass routes. The engagement also included investigation of the relocation of overloading centres with acceptable levels of support services such as storage facilities, off-loading equipment etc.

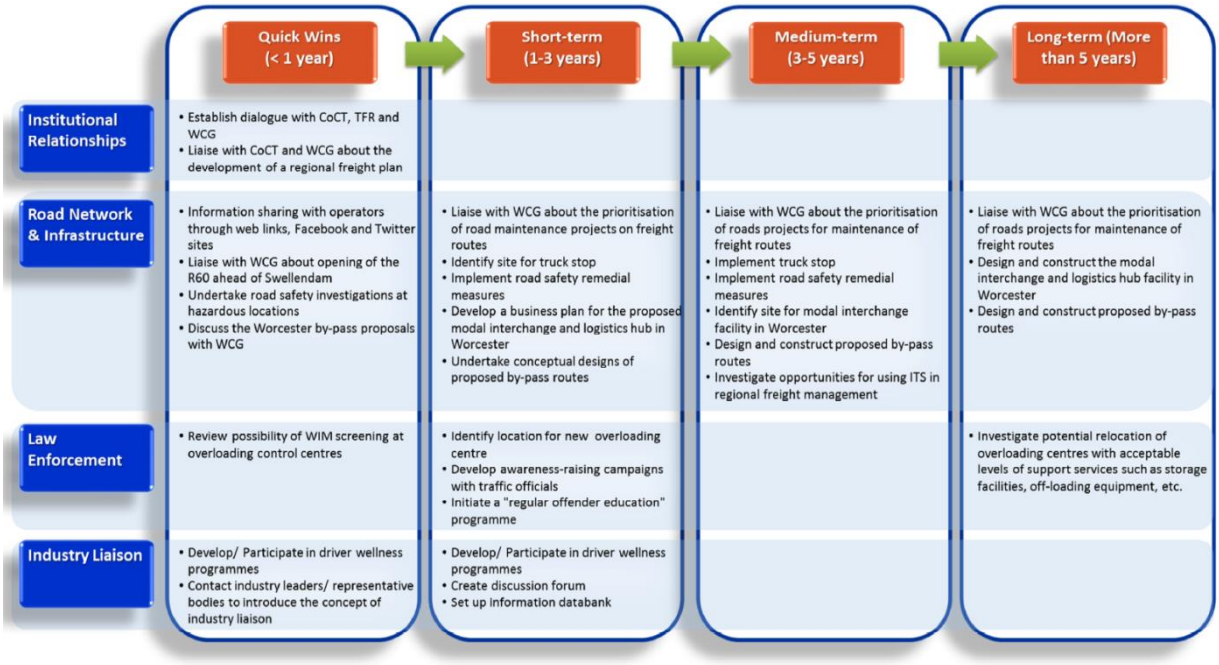


Figure 3-17: Freight Strategy Proposed Transport Improvements

3.10 Air Transport

Currently within the Cape Winelands District, there are three operational airfields, which are located in Robertson, Stellenbosch and Worcester. These facilities are used for civilian and private air travel and have paved and unpaved runways.

The airport in Robertson is located east of the town next to the R60 and is the only registered runway in the Langeberg local municipality.

Table 3-20 illustrates some information regarding the Robertson airport.

Table 3-20: Robertson Airfield details

Item	Description
IATA[5] code	ROD
Latitude	-33.8113
Longitude	19.9067
City	Robertson
Airfield length	1.5 km (paved)
Owner	Langeberg Municipality

The Robertson airfield surface is suitable to accommodate light aircraft such as those used for medical emergencies and law enforcement as well as smaller passenger charter aircraft. The facility is generally used by the flying clubs, emergency services and charter services.

The airfield in Worcester is currently being used for sports flying and private use. One of the main constraints with this airfield is that a portion of the airstrip is gravel and therefore cannot accommodate a variety of air transport services, such as medical services (although there is a helipad at the hospital in Worcester). Currently the airfield is being used by flying clubs and some charter services.

[5] International Air Transport Association

Table 3-21: Worcester airfield

Item	Description
IATA code	No code
Latitude	S 033 deg 40.0’
Longitude	E 019 deg 25.1’
City	Worcester
Airfield length	1.6km (of which 600 m is gravel – 300m at each end of the landing strip)
Owner	Worcester Municipality

3.11 Transport Planning for Tourism

The Cape Winelands district offers a range of tourist attractions and activities. The numerous wine farms and wine tasting events held in the district contribute towards economic development. A number of animal attractions can also be found within the district. The district is also known for its mountain ranges, mountain biking and hiking trails.

Within the district there are private operators which provide transport services as part of tour packages. At this stage no public transport operators provide tourist travel packages. This is an opportunity for the public transport operators to provide services, during the off-peak, to tourists who may want to travel between attractions. However, in order for tourist transport service to take place, an increase in the signage (of tourist activities) and improvement of NMT facilities need to take place.

3.12 Health[6]

The information pertaining to health services transport was obtained from the previous (2013) update of the CPTR reports for the local municipalities within the Cape Winelands district.

The Emergency Medical Service (EMS) is a subsidiary of the Department of Health and is divided into emergency and Healthnet services. Healthnet is not an emergency service, but it provides transport services for patients going to health facilities for medical treatment or to collect medication.

Services provided by the EMS

There are 10 Patient Transport Vehicles (PTVs) servicing health patients in the Cape Winelands district. Table 3-22 lists the locations of sub-stations in the local municipalities and the number of PTVs per sub-station.

Table 3-22 Healthnet sub-stations and PTV's

LMs	Towns (sub-stations)	No of PTV’s
Breede Valley	Worcester	3
	Touwsriver	1
Drakenstein	Paarl	1
Langeberg	Robertson	1
	Montagu	2
Witzenberg	Ceres	2

The service is pre-booked by the hospital or the clinic and the patients are notified of the dates when the service will be available and the location of the collection points within their towns. Table 3-23,

Table 3-24, Table 3-25 and Table 3-26 outlines the collection points for Healthnet services in various towns within Breede Valley, Drakenstein, Langeberg and Witzenberg respectively. Special arrangements, such as collection from home, are made for patients who cannot get to the designated collection point.

Table 3-23 Collection points for Healthnet Services in Breede Valley LM

Collection points	Address
Hexpark Superrette	Hexpark
Maria Pieterse Clinic	Riverview
WPH	WPH
BKH	Brewerskloof Hospital

[6] The section on Health should be considered as part of the next update of the Cape Winelands DITP.

Collection points	Address
Zwelethemba SAPD	Zwelethemba
Rawsonville SAPD	Rawsonville
Avianpark Superette	Avianpark
Maranata Church	Johnsonpark
Mini Mall / Checkers	Avianpark
Worcester Base	Worcester
De Novo	Rawsonville
Nuwerus OAH	Worcester

Table 3-24 Collection points for Healthnet Services in Drakenstein LM

Collection points	Address
Saron Clinic	Hoof Street, Saron
Gouda Clinic	Roos Street, Gouda

Table 3-25 Collection points for Healthnet Services in Langeberg LM

Collection points	Address
Ashbury	Bus stop Ashbury
Montagu	Primary Health Clinic Montagu
Montagu Provincial Hospital	c/o Hospital & Church Street
Zolani Clinic	Zolani
Cogmanskloof Clinic	Ashton
Happy Valley Clinic	Bonnievale
Bonnievale Municipal offices	Bonnievale
Bergsig Clinic	Robertson
Robertson Clinic	Robertson
Nkqubela Clinic	Robertson
Ashbury Bus stop	Ashbury
Montagu Primary Health Clinic	Montagu

Table 3-26 Collection points for Healthnet Services in Witzenberg LM

Collection points	Address
HM Beets Crèche	Lyell Street, Ceres
Ceres Hospital	Rivierkant Street, Ceres
Ceres Base	Voortrekker Road, Ceres
Bella Vista shop	c/o Magnolia & Jacaranda Street
Kruger Shop	Tulp Street, Bella Vista
St Matthews Church	c/o Delta & Mimosa Street, Bella Vista
Tulbagh	
Tulbagh Base Plein Street	Tulbagh
Tulbagh PGS	Steynthal Avenue
Tulbagh Shop	First Avenue, Tulbagh
Wolseley	
Montana Clinic	Church Street, Wolseley
Breerivier Clinic	Wagenboom Kelder
Saron Clinic	Hoof Street, Saron
Gouda Clinic	Roos Street, Gouda

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4 OPERATING LICENCE STRATEGY

4.1 Introduction[7]

The National Land Transport Act (NLTA) No 5 of 2009 (the Act) provides for the process of transformation and restructuring of the national land transport system and includes the regulation of road based public transport. Sections 20 and 23 of the Act provide for the establishment of a National Public Transport Regulator (NPTR) and a Provincial Regulatory Entity (PRE) to consider applications regarding Operating Licences for inter-provincial and intra-provincial transport respectively, subject to the procedures set out in Chapter 6 of the Act.

In the Western Cape Province, the Operating Licence function has been assigned to the Western Cape Government which has established a PRE as required by the Act. Applications for Operating Licences received by the PRE (or by the NPTR) must be referred to the relevant Planning Authority (Municipality) which must then indicate if there is a need for the service in terms of its Integrated Transport Plan. Planning Authorities may recommend that the application be accepted or rejected or may attach conditions to the approval.

If the Operating Licence function has been assigned to a Municipality (Section 11 of the Act), then the Municipality is responsible for deciding on applications for Operating Licences for public transport services in its area of jurisdiction. At this stage the Operating Licence function has not been assigned to the Cape Winelands District Municipality or the Local Municipalities (Breede Valley, Drakenstein, Langeberg, Witzenberg and Stellenbosch) that fall under its jurisdiction and these Municipalities must thus respond and comment on Operating Licence applications referred to it by the PRE.

The purpose and objective of the Operating Licence Strategy (OLS) is to enable the Cape Winelands District Municipality to make recommendations to the PRE based on the policies and strategies contained in its DITP including strategies pertaining to the role of each public transport mode, supply and demand for public transport, the use and capacity of public transport facilities and any plans for the rationalization of the public transport system (e.g. the establishment of an Integrated Public Transport Network).

4.2 The Public Transport System

Route descriptions and route maps showing a number of routes are contained in the Current Public Transport Record that was updated for the Cape Winelands District ITP (2016-2021).

During surveys carried out to determine the utilisation of the routes, it was ascertained that many of the routes were not being operated at the time of the survey and that the routes actually operated did not rigidly follow the official route descriptions contained in the PRE database. Several routes were also surveyed that did not appear to be official routes for which Operating Licences had been issued. Extensions to these routes or other unlicensed routes that may be in operation require consideration for new Operating Licences.

4.3 Policy Framework

The National and Provincial legislation that controls the disposal of Operating Licences for public transport services in the Western Cape is the following:

- National Land Transport Act (No. 5 of 2009)
- Western Cape Road Transportation Amendment Act (No. 8 of 1996)
- Western Cape Road Transportation Amendment Act (No. 7 of 2000)
- Western Cape Regulations on Operating Licences. 2002

The National Land Transport Act (NLTA) lists the responsibilities of Planning Authorities including the preparation of an ITP, which must be made available to the NPTR and PRE, and the making of recommendations in respect of the applications for new Operating Licences. In terms of the Minimum Requirements for the preparation of Integrated Transport Plans (Government Notice R954, 28 November 2014), Integrated Transport Plans must include a Public Transport Plan that focuses on the integration of the public transport network, services and modes and provides the basis for the rationalization and

[7] For more detail on the Cape Winelands District Operating Licence Strategy consult with the Operating Licence Strategy report

restructuring of the public transport system. The ITP must also include an Operating Licence Plan, or Strategy (OLS) that provides clear guidance as to which operating licence applications should be recommended or rejected as well as the conditions that should be imposed in the approval of an Operating Licence by the PRE.

Chapter 6 of the NLTA deals with the process for the application for Operating Licences for new services, contracted services, non-contracted services, renewal, amendment or transfer of Operating Licences.

Section 55 (2) of the NLTA provides that a Planning Authority must indicated if there is a need for public transport service on a route in terms of its ITP, any conditions to be attached to the application and must submit the response to the NPTR or the PRE.

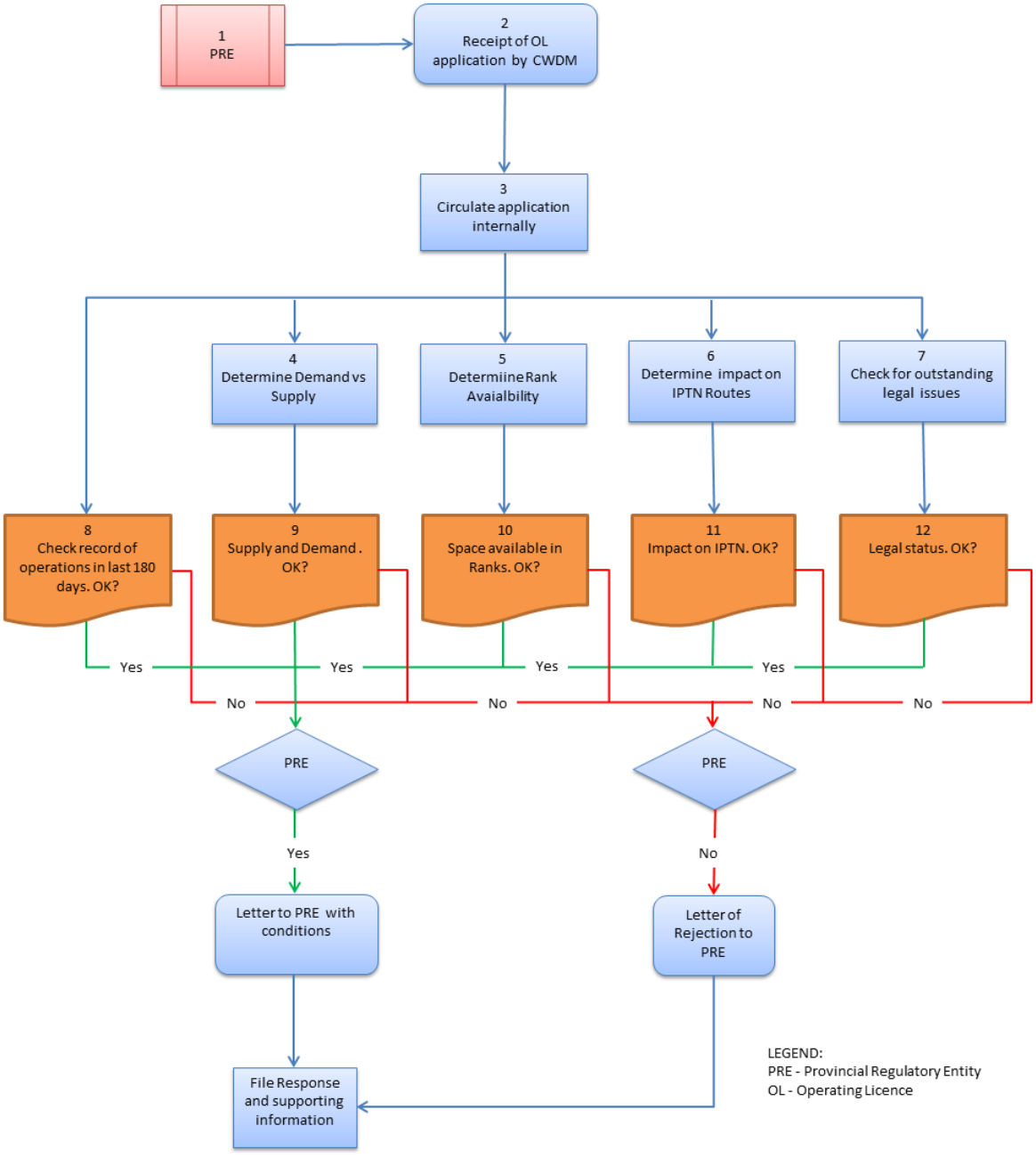
The Western Cape Regulations on Operating Licences, 2002 deals with the procedure, form and content of applications for Operating Licences. The regulations also deal with the submission of Operating Licence applications to Planning Authorities for comment. The Regulations provide that:

- An application must be submitted in writing to the Planning Authority within 30 days of receipt
- The PRE must dispose of the application within 90 days of receipt
- The Planning Authority must:
    - Verify the route details claimed by the applicant
    - In the case of the conversion of a permit to an Operating Licence for a bigger vehicle; submit recommendations, amongst others, on the availability of ranks or terminals or other facilities or spaces for boarding or alighting from, or holding or parking the larger vehicle concerned,
    - Submit any other recommendations or representations it may have in relation to the application
- If the Planning Authority fails to respond within 30 days, the PRE may itself consider the application without the input from the Planning Authority
- In the process of the conversion of radius or area based permits the Board must adhere to the route descriptions, identifications and numbers shown in the ITP. The Planning Authority or the PRE must provide Associations operating along the route or routes in question with adequate information to allow them to give input regarding route descriptions.

4.4 Evaluation Process

When a new application for an Operating Licence is received by the Planning Authority a process should be followed to evaluate the application. The proposed process is shown in Figure 4-1 and is described in more detail in Table 4-1 below

Figure 4-1: Operating Licence Evaluation Process



The proposed Operating Licence evaluation procedure is described in Table 4-1.

Table 4-1: Operating Licence Evaluation Procedure

Item	Title	Procedure	Responsible Department
1.	NPTR / PRE	Application for an OL is submitted in the required format (form 2B) to the NPTR or PRE. The application is submitted to the Planning Authority (Municipality) (PA) within 30 days.	NPTR or PRE
2.	Receipt of OL application by PA	The OL application is received by the PA and is recorded in the appropriate manner for record purposes. The application is sent to the appropriate Department within the PA dealing with Transport Planning and Public Transport to be checked for completeness.	PA Department (Transport Planning and Public Transport)
3.	Circulate application internally	The OL is circulated to the appropriate persons / Departments internally within the PA for comment in respect of : Transport Planning and Public Transport Traffic Services	PA Department (Transport Planning and Public Transport)
4.	Demand and Supply	The OL application is checked against the available survey data of passenger demand on the applicable routes using the procedure detailed in Section 4.3 of the OLS report.	PA Operating Licence Recommendations Committee
5.	Determine Rank Availability	The OL application is checked against the available survey data of rank, terminal or stops capacity serving the applicable routes using the procedure detailed in Section 4.3 of the OLS.	PA Operating Licence Recommendations Committee
6.	Determine impact on IPTN routes	The OL application is assessed as to its impact on the conceptual IPTN routes that are identified in the ITP, or will operate in parallel to or in conflict with any commuter rail services or bus services.	PA Operating Licence Recommendations Committee
7.	Check for outstanding legal issues	The OL is checked against the record of outstanding warrants or convictions, previous convictions relating to the operation of public transport services and the ability of the applicant to operate the service in a manner satisfactory to the public.	PA Traffic Services – in respect of Traffic Offences; Provincial Regulatory Entity – in respect of criminal offences.
8.	Check record of operations in last 180 days	In terms of section 78 of the NLTA, if a licence has not been in use for more than 180 days, the licence can be cancelled. The licence holder must be asked to furnish, in writing, satisfactory reasons why the service has not been operated, after which the licence can be extended for a further 180 days or cancelled.	PA (Traffic Services).
9.	Letter of Approval or Rejection	If all the responses to the evaluation support the approval of the application, a letter of approval is then issued to the NPTR or the PRE with any conditions attached. If the responses do not support the application, a letter of rejection is then issued.	PA Department (Transport Planning and Public Transport)
10.	Letter of Approval or Rejection	A letter of approval or rejection is issued to the applicant and a copy is sent to the PA	Provincial Regulatory Entity

4.5 Summary of Route Assessments

Information on vehicle supply and passenger demand from surveys has been used to evaluate the capacity of the current public transport services and the possible need for additional services according to the demand. The information has been summarised in the following tables:

- Table 4-2: Breede Valley: Operating Licence Requirements and Route Capacities
- Table 4-3: Drakenstein: Operating Licence Requirements and Route Capacities
- Table 4-4: Langeberg: Operating Licence Requirements and Route Capacities
- Table 4-5: Witzenberg: Operating Licence Requirements and Route Capacities

The tables show the following information, based on the surveys:

- The number of vehicle trips (departures) per route
- The size (passenger capacity) of the vehicle
- The number of peak hour passengers per route
- The number of vehicles operating (from the number plate surveys) with Operating Licences
- The registration number of the vehicles operating has been compared to the list of vehicles having current Operating Licences and the number of vehicles without Operating Licences was identified and indicated in the tables.

From the above information, the following has been determined:

- The current service capacity: Number of vehicle trips from number plate survey multiplied by the vehicle capacity (15 for a standard minibus)
- Percentage utilisation: Peak hour passenger volume from surveys divided by the service capacity
- Vehicles operating with Operating Licences: Comparison of the vehicle registration numbers from surveys with data from the PRE

To simplify the calculations, all routes serving common destinations have been clustered. The average route distance has been determined in order to calculate the return journey time. The required number of vehicles to serve the demand based on the return journey time and the peak hour demand from the surveys can be estimated.

The required number of vehicles can be compared to the actual number of vehicles (with Operating Licences) in operation from the surveys to determine the over or under supply of vehicles on the routes. Note that the vehicles without Operating Licences are excluded. An under supply indicates that certain of these vehicles could be eligible for new Operating Licences.

A comparison has also been done to determine the over or under supply of vehicles by comparing the required vehicles to serve a route to the number of vehicles that have been issued with Operating Licences on the PRE database, as well as the over and under supply including the vehicles without Operating Licences.

Note that in several cases the surveys at public transport facilities did not register any trips on certain routes and hence the table indicates “no data”. This may be due to the fact that some routes and facilities are only operated during the fruit harvesting season.

Table 4-2: Breede Valley: Operating Licence Requirements and Route Capacities

A	B	C	D		E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
Route Information					Data from Surveys					Service Capacity				Operating Licence Requirements					
Town	Route Number	Rank	Route Name	Route Length (km one way)	Period	No. of Vehicle Trips from Number Plate Survey	No. of Peak Hour Passsengers from Surveys	No. of Vehicles on Route from Number Plate Survey	Vehicle Capacity	Average Return Journey Time inc. stops and turnaround (20%) - min.	Service Capacity (=FxI)	% Utilisation (=G/K)	Required Vehicles With OLS (Weekday) (Based on Journey Time)	Vehicles Operating with OL's (from Number Plate Surveys)	Over / Under Supply (Based on Survey Excluding Veh. w/o OL's) (= N-M)	Actual OL's Issued	Over / Under Supply (Based on Actual OL's Issued) (= P-M)	No. Vehicles without OL's (= H-N)	Over / Under Supply (Based on Survey Including Veh. w/o OL's) (= H-M)
Worcester	764, H77, H78, N33	U Save	De Doorns - Worcester	37	09:30 - 10:30 (Saturday)	7	69	7	15	67	105	66%	6	1	-5	37	31	6	1
Worcester	834	Spar	Touwsriver - Worcester	78	09:30 - 10:30 (Saturday)	1	12	1	15	119	15	80%	2	0	-2	5	3	1	-1

Table 4-3: Drakenstein: Operating Licence Requirements and Route Capacities

A	B	C	D		E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
Route Information					Data from Surveys					Service Capacity				Operating Licence Requirements					
Town	Route Number	Rank	Route Name	Route Length (km one way)	Period	No. of Vehicle Trips from Number Plate Survey	No. of Peak Hour Passsengers from Surveys	No. of Vehicles on Route from Number Plate Survey	Vehicle Capacity	Average Return Journey Time inc. stops and turnaround (20%) - min.	Service Capacity (=F x I)	% Utilisation (=G/K)	Required Vehicles With OLS (Weekday) (Based on Journey Time)	Vehicles Operating with OL's (from Number Plate Surveys)	Over / Under Supply (Based on Survey Excluding Veh. w/o OL's) (= N-M)	Actual OL's Issued	Over / Under Supply (Based on Actual OL's Issued) (= P-M)	No. Vehicles without OL's (= H-N)	Over / Under Supply (Based on Survey Including Veh. w/o OL's) (= H-M)
Paarl	786, 899	Amstelhof	Shoprite A	4	11:00 - 12:00 (Saturday)	13	169	12	15	21	195	87%	4	4	0	26	22	8	8
Paarl	B23, B25, B26, 963, 641	Chicago	Shoprite A	13	16:30 - 17:30	5	56	5	15	15	75	75%	1	2	1	34	33	3	4
Paarl	786, 899	Huguenot	Amstelhof	3	16:30 - 17:30	2	28	2	15	6	30	93%	1	2	1	26	25	0	1
Paarl	B23, B25, B26, 963, 641	Huguenot	Nederberg via Chicago	5	16:30 - 17:30	3	42	3	15	14	45	93%	1	1	0	34	33	2	2
Paarl	803,767, H93, H94, H95, 993, B98, B99	Shoprite B	Mbekweni	14	16:30 - 17:30	24	371	24	15	12	360	103%	5	0	-5	158	153	24	19
Paarl	943, 970	Shoprite B	Wellington	15	16:30 - 17:30	19	277	19	15	35	285	97%	11	15	4	141	130	4	8
Wellington	943, 970	Wellington	Paarl	12	16:15 - 17:15	32	480	31	15	24	480	100%	13	26	13	141	128	5	18
Paarl	803,767, H93, H94, H95, 993,	Huguenot	Mbekweni	7	16:30 - 17:30	1	14	1	15	12	15	93%	1	0	-1	158	157	1	0

A	B	C	D		E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
Route Information					Data from Surveys					Service Capacity				Operating Licence Requirements					
Town	Route Number	Rank	Route Name	Route Length (km one way)	Period	No. of Vehicle Trips from Number Plate Survey	No. of Peak Hour Passsengers from Surveys	No. of Vehicles on Route from Number Plate Survey	Vehicle Capacity	Average Return Journey Time inc. stops and turnaround (20%) - min.	Service Capacity (=F x I)	% Utilisation (=G/K)	Required Vehicles With OLS (Weekday) (Based on Journey Time)	Vehicles Operating with OL's (from Number Plate Surveys)	Over / Under Supply (Based on Survey Excluding Veh. w/o OL's) (= N-M)	Actual OL's Issued	Over / Under Supply (Based on Actual OL's Issued) (= P-M)	No. Vehicles without OL's (= H-N)	Over / Under Supply (Based on Survey Including Veh. w/o OL's) (= H-M)
	B98, B99																		
Paarl	803,767, H93, H94, H95, 993, B98, B99	Huguenot	Paarl	7	16:30 - 17:30	5	84	5	15	12	75	112%	2	1	-1	158	156	4	3
Paarl	B23, B25, B26, 963, 641	Huguenot	Chicago	4	16:30 - 17:30	2	28	2	15	14	30	93%	1	1	0	34	33	1	1
Paarl	803,767, H93, H94, H95, 993, B98, B99	Shoprite A	Mbekweni	11	11:00 - 12:00 (Saturday)	9	143	9	15	23	135	106%	4	0	-4	158	154	9	5
Paarl	958, B12	Shoprite A	Nederburg	6	16:30 - 17:30	9	132	9	15	15	135	98%	3	3	0	11	8	6	6

Table 4-4: Langeberg: Operating Licence Requirements and Route Capacities

A	B	C	D		E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
Route Information					Data from Surveys					Service Capacity				Operating Licence Requirements					
Town	Route Number	Rank	Route Name	Route Length (km one way)	Period	No. of Vehicle Trips from Number Plate Survey	No. of Peak Hour Passsengers from Surveys	No. of Vehicles on Route from Number Plate Survey	Vehicle Capacity	Average Return Journey Time inc. stops and turnaround (20%) - min.	Service Capacity (=FxI)	% Utilisation (=G/K)	Required Vehicles With OLS (Weekday) (Based on Journey Time)	Vehicles Operating with OL's (from Number Plate Surveys)	Over / Under Supply (Based on Survey Excluding Veh. w/o OL's) (= N-M)	Actual OL's Issued	Over / Under Supply (Based on Actual OL's Issued) (= P-M)	No. Vehicles without OL's (= H-N)	Over / Under Supply (Based on Survey Including Veh. w/o OL's) (= H-M)
Robertson	686	Shoprite	Robertson - Robertson	8	16:30 - 17:30	4	53	3	15	6	60	88%	1	3	2	35	34	0	2
Bonnievale	N37	Bonnievale: Multisave	Robertson - Bonnievale	21	11:00 - 12:00	1	1	1	15	202	15	7%	1	0	-1	15	14	1	0
Robertson	N34	SAPS	Robertson - Bellville	136					15	1306	0	0	0		0	4	4	0	0
Robertson	N35	Pick n Pay	Robertson - Ashton	16	11:00 - 12:00	7	53	7	15	33	105	50%	2	0	-2	18	16	7	5
Ashton	968	Multisave	Ashton Multisave	16	07:00 - 08:00	2	17	2	15	14	30	57%	1	0	-1		-1	2	1
Montagu	725	Montagu Bad St	Montagu - Ashbury	9	16:30 - 17:30	7	96	7	15	11	105	91%	2	4	2	15	13	3	5
Robertson	686	Pick n Pay Nqubela	Robertson - Robertson	4	10:00 - 11:00	9	20	9	15	20	135	15%	1		-1	35	34	9	8

Table 4-5: Witzenberg: Operating Licence Requirements and Route Capacities

A	B	C	D		E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
Route Information					Data from Surveys					Service Capacity				Operating Licence Requirements					
Town	Route Number	Rank	Route Name	Route Length (km one way)	Period	No. of Vehicle Trips from Number Plate Survey	No. of Peak Hour Passsengers from Surveys	No. of Vehicles on Route from Number Plate Survey	Vehicle Capacity	Average Return Journey Time inc. stops and turnaround (20%) - min.	Service Capacity (=FxI)	% Utilisation (=G/K)	Required Vehicles With OLS (Weekday) (Based on Journey Time)	Vehicles Operating with OL's (from Number Plate Surveys)	Over / Under Supply (Based on Survey Excluding Veh. w/o OL's) (= N-M)	Actual OL's Issued	Over / Under Supply (Based on Actual OL's Issued) (= P-M)	No. Vehicles without OL's (= H-N)	Over / Under Supply (Based on Survey Including Veh. w/o OL's) (= H-M)
Wolseley	G47	Wolseley	Wolseley - ceres	16	06:00 - 07:00	1	15	1	15	154	15	100%	3	0	-3	8	5	1	-2
Ceres	898	Bella Vista	Ceres - bella vista	4	16:30 - 17:30	21	294	17	15	38	315	93%	13	15	2	36	23	2	4
Ceres	822, 823, H16	Ceres/ Nduli Rank	Nduli - ceres	7	16:30 - 17:30	22	208	19	15	67	330	63%	16	0	-16	54	38	19	3
Ceres	D66	Vos Street Rank	Prince alfred hamlet - ceres	9	16:30 - 17:30	3	40	3	15	78	45	89%	4	3	-1	9	5	0	-1
Ceres	No route code in PRE database	Vos Street Rank	Ceres - Bokkeveld		16:30 - 17:30	2	14	2	15	116	30	47%	2	0	-2		-2	2	0
Tulbagh	877	Tulbagh (van der Stel)	Tulbagh - Tulbagh Farms	20	16:30 - 17:30	1	16	1	15	192	15	107%	4	0	-4	9	5	1	-3
Tulbagh	875, 878	Tulbagh (van der Stel)	Tulbagh - Tulbagh	8	16:30 - 17:30	3	47	3	15	77	No Data	No Data	No Data	2	No Data	17	No Data	No Data	No Data

4.6 Proposals for Implementation

The Cape Winelands District Municipality has adopted a policy to improve public transport services and the DITP contains a framework strategy for the planning and phased implementation of an Integrated Public Transport Network. The introduction of an IPTN may affect existing bus and minibus taxi services. The proposed preliminary IPTN routes are indicated in the OLS report. Consideration should be give to the phasing out of existing affected Operating Licences and the placing of a moratorium on the approval of new Operating Licences that impact on these routes.

The CWDM is to consider a Chapter 8 investigation as determined by the Municipal Systems Act in order to determine the institutional arrangements for the rendering of the public transport function within its area of juristriction.

A strategy should be developed to rationalise all existing Operating Licences and manage the approval of new Operating Licences to reduce the over supply of services where this may exist. This will assist in reducing congestion at existing ranks and facilities, as well as reducing traffic congestion on routes used by public transport.

Law enforcement is critical to the successful implementation of the OLS and a dedicated team of Inspectors and Law Enforcement Officers is necessary to deal with public transport law enforcement. This will assist to improve the quality of the service and safety on public transport services.

An electronic database should be established and updated regularly to provide easy access to Operating Licence information and route descriptions. This will greatly assist the law enforcement function.

A communication Forum should be established with existing operators to meet regularly on matters concerning the public transport industry including issues and concerns, public transport facilities and law enforcement.

4.7 Financial Implications

The implementation of the proposals set out above will have financial implications for the CWDM. A broad cost estimate of the proposals is contained in Table 4-6.

Table 4-6: Financial Implications

No.	Item	Estimated Annual Cost – Rands				
		2015/16	2016/17	2017/18	2018/19	2019/20
1	Assessment of Operating Licences impacting on future IPTN routes	0	300 000			
2	Chapter 8 Investigation	0	2 500 000	2 500 000		
3	Investigation of the Improvement of Transport Facilities	0	1 000 000	0	0	0
4	Establish Operating Licence Inspectorate	500 000	2 500 000	3 000 000	3 000 000	3 000 000
5	Establish and maintain electronic database of Operating Licences	100 000	50 000	50 000	50 000	50 000
6	Establish a Public Transport Forum including Public Transport Operators	50 000	50 000	50 000	50 000	50 000
	TOTAL	650 000	6 400 000	5 600 000	3 100 000	3 100 000

5 RATIONALISATION PLAN

5.1 Introduction

Although there is no subsidised public transport, apart from the PRASA metro rail system operating in the CWDM, this chapter will summarise the Integrated Public Transport Network (IPTN) Framework that was previously prepared for the Cape Winelands District Municipality, excluding Stellenbosch.

An IPTN Framework was prepared for the Cape Winelands district in 2012 within the current planning and legal context of the district. The intention of the IPTN report is to provide a guiding framework for the alignment of all spheres of government within the district when planning and implementing public transport services.

The Stellenbosch Local Municipality intends to prepare an IPTN for its area during 2016.

5.2 The Cape Winelands IPTN Framework Plan

It is the intention of the CWDM to establish an efficiently operated and integrated public transport system within its jurisdiction. The first step towards this was the development of an IPTN framework for the district. This framework would then provide guidance for the LM within the Cape Winelands district in designing, implementing and managing their local public transport operations.

The framework focussed on various elements which include:

- institutional,
- network and system design,
- vehicle specifications,
- infrastructure and modal integration,
- safety and security,
- intelligent transport system,
- operation contracts and monitoring,
- communication and branding,
- environmental,
- procurement,
- financial,
- and implementation.

Some of the key issues are the following:

Institutional

An effective institutional structure is necessary to manage, administer and operate the Integrated Public Transport Network, with a focus on the role and function of key stakeholders, institutional structure and transition strategy.

Financial

A financial model was developed with the aim of indicating the financial feasibility and affordability of the proposed IPTN. This model consisted of

Implementation

The implementation of the IPTN will be subject to various planning phases of the proposed network. These planning phases are:

Phase 1: Initial detailed planning activities

Phase 2: Industry negotiations and Business Plan

Phase 3: Detail design and development of specifications and tender documentation

Phase 4: Implementation and procurement

A Summary of the IPTN Goals, Objectives and Design Principles are indicated in the table below:

Table 5-1: IPTN Goals, Objectives and Design Principles

IPTN Framework Element	IPTN Objectives	IPTN Feature
Broad Network System Design in terms of routes, infrastructure and operations	To develop an integrated public transport system that will be affordable (less than 10% of personal income spent on transport) and accessible (90% of all passenger groups within 1km of public transport service)	• The IPTN shall consist of a system of road-based regional (trunk) and local (feeder) services to ensure maximum geographic and network coverage. • The IPTN shall cater for the travel needs of commuters within the urban areas, social travel needs between towns, travel needs of learners and the travel needs of farm workers and other rural people over weekends. • Peak and off-peak services between major origins and destinations on the IPTN shall be frequent and shall be provided by the appropriate mode for the corridor demand. • Services shall be available over extended periods including after hours and over weekends. • All services shall be operated according to a fixed timetable. Customer service shall be of a high quality.
Consider and recommend an appropriate Institutional and Organizational Model	To establish an appropriate institutional and organizational structure/model that will allow the IPTN to be effectively controlled by the authorities in terms of quality of services and budgets.	• Public transport quality control oversight shall be done by an independent public transport agency appointed by the relevant municipality/ies. • The system shall be managed by the independent agency through a centralized control centre using Intelligent Transport Systems (ITS) applications. • The Automated Fare Collection system (AFC) and Advanced Public Transport Management System (APTMS) will be managed by an independent operator appointed by the public transport agency.
Develop a model Operational Contract between authorities and operating entities	To control the quality of the IPTN services through the contracting of the private sector for the rendering of the services, including mechanisms to penalize service providers for poor performance.	• Public transport services shall be provided by a contracted entity which shall be appointed through a formal tender process. The operational contract will be for a period of seven to 12 years.
Specify different Vehicle Types appropriate for different services required	To ensure that all vehicles used for both trunk and feeder services are of high quality, well-maintained and safe.	• Sufficient vehicle capacity shall be available to prevent overloading and long queues. • Buses should be equipped with low emission and low-noise vehicle technologies. • Minibus-taxi vehicles should comply with the national specification for recap vehicles.

IPTN Framework Element	IPTN Objectives	IPTN Feature
Positioning, size, geometric layout and key features of IPTN Infrastructure	To develop and implement quality infrastructure that will allow for the effective and smooth operation of IPTN services. This will include measures to give priority to public transport in traffic, facilities required for the maintenance of vehicles as well as facilities that will provide safe and convenient access to the system for the users.	• Road IPTN regional (trunk) and local (feeder) services shall operate mainly in mixed traffic. However, the feasibility of segregated trunk routes along the R44 between Somerset West and Stellenbosch, and along the R301between Wellington and Paarl shall be considered. • Specific arrangements to give priority to IPTN vehicles at congested signalized intersections in Stellenbosch, Paarl, Worcester and Wellington shall be considered where warranted. • Public transport facilities, i.e. termini and stops, shall be convenient, comfortable, accessible, secure and weather protected, and shall facilitate integration between public transport modes and services. • All facilities will be well-maintained and cleaned on a daily basis. • Clear route maps, signage and/or real time information displays shall be available at facilities. • Service providers will be contracted by the public transport agency for security services and facility cleansing services.
ITS and AFC System in terms of functions, technology, equipment, control rooms and personnel	To implement new technologies, such as APTMS and AFC, that will allow for the effective monitoring and control of the system and which will provide the passenger with a cost effective, practical and simple tool to pay for fares.	• Payment of fares shall be made through the use of smart card technology. Fare collection and verification will be done by means of a device installed at the entrance(s) of vehicles. • Fare integration between trunk and feeder services, and between routes, corridors and modes, shall be achieved through automatic fare collection and verification technology.
Marketing initiatives, common marketing material and marketing brand	To improve the image of public transport and to increase user information/knowledge of public transport services.	• The IPTN shall have a distinctive identity or brand.
Integration with other transport modes and integration of network and services across municipal boundaries	To ensure that public transport services, information systems and fare systems of all modes are interconnected as far as is technologically achievable.	• The rail system shall form an integral part of the IPTN. • Public transport facilities, i.e. termini and stops, shall be convenient, comfortable, accessible, secure and weather protected, and shall facilitate integration between public transport modes and services. • Convenient and secure parking facilities for the parking of private cars at termini and stations shall be provided where appropriate to encourage the move to public transport by private transport users.

IPTN Framework Element	IPTN Objectives	IPTN Feature
Enhance NMT Linkages to and around termini, stations and stops	To enhance accessibility and to improve the safety to public transport termini, stations and stops by pedestrians and other types of NMT.	• Improvements shall be made to nearby public space, pedestrian and cycle facilities to support non-motorised access to public transport. • Provision shall be made for special needs passengers such as the disabled, children and the elderly.
Improving Safety and Security of users of facilities and services	To improve safety and security on transport networks and services.	• Security at termini and modal integration stations shall be of a high standard and shall be monitored by means of a system of CCTV cameras. • Service providers will be contracted by the public transport agency for security services and facility cleansing services.
Maximise the positive and minimise the negative Environmental and Socio- Economic implications of the proposed system	To reduce the negative environmental and socioeconomic impact of the IPTN.	N/A
Provide guidance on Tender Options and Structure as part of the implementation process	To provide a legal framework for the delivery of accessible, integrated and competitive public transport services that represent value for money, meet the requirements of users in a growing and complex market, as well as providing a level playing field for all service providers.	N/A
Unpacking the costs of IPTN components and possible funding sources of proposed systems	To provide a stable, sustainable, predictable, reliable and (in particular) appropriate funding sources for the IPTN network and system requirements that are relatively easy to administrate.	N/A
Implementation Strategy	To provide a well thought through and practical phased implementation strategy to be executed over the short, medium and long term in order to meet the above objectives.	N/A

The Drakenstein local municipality is considered the first local municipality within the district to commence with an IPTN process in the manner prescribed in the CW IPTN Framework.

5.3 Stellenbosch IPTN Framework

The Stellenbosch Municipality, as a Planning Authority, is responsible for transport functions in terms of the National Land Transport Act (5 of 2009) including the planning and implementation of an efficient and affordable public transport service network and travel corridors.

There are several implications stemming from this responsibility that the Stellenbosch Municipality must consider. These are:

- Financial implications: The cost of planning, infrastructure provision, purchase of vehicles, operation and maintenance
- The necessity for consultations and negotiations with role-players on issues such as empowerment, training, compensation for loss of jobs or profits, negotiation of operating contracts
- Municipal capacity to plan and monitor the system
- The need for a clear procurement strategy

The elements of an upgraded public transport service network are:

- An integrated route network of short and long distance routes
- New universally accessible vehicles (initially using existing vehicles)
- Integration of rail, bus and minibus services on fixed timetables
- A new ticketing system
- Contracted operators (negotiated contract with existing operators)
- New transport infrastructure : terminals, shelters

Guiding principles for the proposed Stellenbosch public transport service network are:

- Compliance with the Department of Transport guidelines for a Public Transport Network Grant
- Transformation and upliftment of the public transport industry
- To improve public transport services and quality of life of residents
- Phased development of the public transport system
- Financial sustainability

5.4 Provincial Public Transport Institutional Framework

5.4.1 PPTIF Overview

The Western Cape Government has initiated the development of a Provincial Public Transport Institutional Framework (PPTIF) with the primary aim of addressing the key constraints to improving both public and non-motorised transport in the non-Metro areas of the Western Cape, through the development of a refined strategic approach for achieving progress.

This refined approach aims to incorporate lessons learnt through the implementation of public transport improvement initiatives in South Africa, particularly in George and Cape Town.

The PPTIF sought to answer the following core questions:

Table 1: PPTIF Core Questions

Core Questions	PPTIF Response
What technical interventions should be implemented to improve public transport and non-motorised transport in the province?	• Develop a flexible and context specific approach to public and non-motorised transport improvement.
What institutional and organisational structures need to be implemented to drive and manage these improvements?	• Develop enhanced institutional and organisational models.
What will these interventions cost, and how could they be funded?	• Develop a cost model and funding strategy.

5.4.2 Constraints to progress

This section provides an overview of the key constraints to progress that the PPTIF aims to address, including:

- ***Capacity at the municipal level***: Outside of Cape Town and George, municipalities in the Western Cape have limited capacity to perform municipal land transport functions (NLTA s11(c)), including the planning, implementation and management of integrated public transport networks. In addition, national legislation fails to take into account the difference in capacity and resources between metropolitan, local and district municipalities.

- ***A lack of dedicated funding streams for local public and non-motorised transport improvement:*** There are limited funding streams available for public and non-motorised transport improvement and transformation in non-metropolitan areas. National funding is currently directed toward 13 priority cities. This includes both funding for execution of the new transport functions required of local government by the NLTA, and funding to put in place the requisite infrastructure and systems for improved public transport systems. Due to the spatial and economic dynamics of South African settlements, significant operational shortfalls are experienced in public transport improvement initiatives. The ability of local government, and of Provincial Government, to fund these operational shortfalls is very limited to non-existent.

- ***The lack of well-defined or developed approaches to public and non-motorised transport in non-metropolitan contexts:*** National legislation and policy has focussed on the development and implementation of urban Integrated (Rapid) Public Transport Networks in 13 cities. The model which has emerged incorporates high-specification technology, large-scale infrastructure development and full-scale formalisation of the minibus taxi (MBT) industry. An appropriate public transport response for non-metropolitan areas, such as emerging cities, towns, villages and rural areas, has not reached a similar stage of development, with limited clarity on the appropriate way forward in these contexts. The George Integrated Public Transport Network (GIPTN) has been promoted as an example of public transport improvement outside the major urban centres in South Africa. However, the costs of the GIPTN and the implementation and transformation challenges the project has faced suggest that, while this is a useful model in certain locations, it is not viable to roll-out similar initiatives across the country.

- ***The complexity of industry transition:*** The implementation of IPTNs in South Africa has involved a significant transformation of the taxi industry business model. Under the IPTN model, new services are operated by Vehicle Operating Companies (VOCs) made up of former bus and taxi operators. These companies are contracted to Government to provide new services to a higher standard. The legislation limits the duration of these operating contracts to a maximum of twelve years. This transition process is fraught with risk for existing operators and significant resistance has been experienced from the industry. The current taxi industry business model is a reliable way of earning an income for operators, albeit fraught with sustainability challenges for the operators. As a result, it takes a lot of time to get the existing operators to become comfortable with the risks of the new system. It also requires the introduction of significant financial incentives through high compensation packages.

The PPTIF aims to address these constraints to progress through the development of appropriate technical, institutional, organisational and financial models.

5.4.3 Legislative mandate

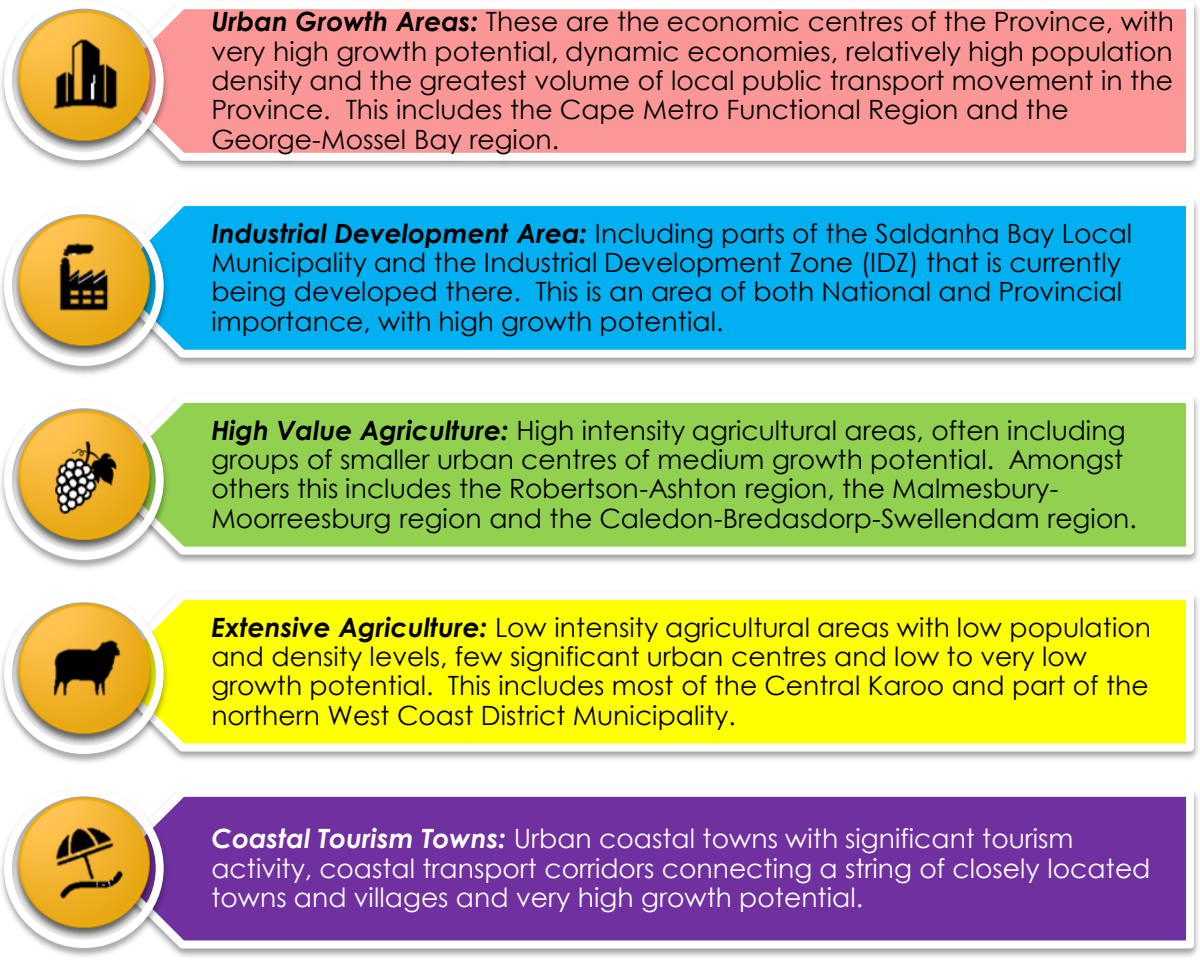
The proposals of the PPTIF are supported by the legal mandate extended to the Western Cape Government through the National Land Transport Act (NLTA, No. 5 of 2009).

The NLTA devolved the majority of land transport functions to local government (see Section 11(c)), including responsibility for planning, managing and implementing local integrated public transport networks.

However, the provincial sphere of government has a mandate to support under-capacitated municipalities (NLTA s11(b)(v); IRFA s35(2)(d)) to perform their land transport functions and is permitted to jointly exercise or perform any municipal land transport function (NLTA s12(1)). Given the lack of capacity of non-Metro municipalities to perform their land transport functions, the Western Cape Government has a legal mandate to support local governments in the implementation of their public transport functions and the rollout of improved public transport initiatives.

5.4.4 PPTIF Categorisation

The PPTIF is built on a thorough understanding of the status quo, issues and needs for public and non-motorised transport in the Western Cape, which vary across the province based on socio-economic and spatial dynamics. Through an extensive status quo analysis five categories were developed to describe the differing contextual dynamics in the Western Cape. The five categories are:



These categories can be used to understand the different types of interventions required to address the specific issues and competencies of different areas of the Western Cape. The Incremental Approach, described below, is a core facet of the PPTIF and can be adapted to different contexts.

5.4.5 The Incremental Approach

The Incremental Approach to public and non-motorised transport improvement was developed in response to the key constraints described above. The approach proposes the staged implementation of improvement initiatives which result in real improvements to the user experience, but in a fashion that reduces the capacity burden on government, lowers the cost of improvement and reduces the risk of transformation to the public transport industry. The manner in which this is achieved is described in the table below.

Table 2: The Incremental Approach

Impact	Description
Demonstrable improvement to public transport user experience	The Incremental Approach focusses on the "low hanging fruit" first in achieving rapid and demonstrable improvement in the transport experience of public transport users. Thus real improvements are achieved in the short term, whilst moving towards a broader, fully integrated network solution over the longer term.
Limits the capacity burden on government	Incremental implementation of improvement initiatives over time provides government with the time to progressively increase capacity and learn through experience, rather than being required to take on full responsibility for managing an IPTN all at once.
Lowers the cost of improvement	The Incremental Approach does not advocate for the rapid and full scale formalisation of public transport. Rather, the focus is on improving the condition for NMT, limited formalization on priority public transport routes, with the network being built up over time as and when the necessary resources become available. In addition, the phased approach aims to limit the need for costly compensation of public transport operators, contributing toward an overall reduction in the cost of system improvement.
Reduces the risk of transformation to the public transport industry	The Incremental Approach lowers the risk to the public transport industry by reducing the risk of each step in the process. The industry's business model is gradually adjusted over time, rather than being fully subsumed. This process inherently lowers risk and enhances the potential of successful engagement and transformation.

The Incremental Approach includes three stages. It is important to note that this approach is not prescriptive. It provides a framework which can be applied to different contexts (different PPTIF categories described above) and adapted accordingly and it provides strategic guidance on what aspects of the transport system should be addressed or improved at what stage.

Stage 1: The aim of Stage 1 is to begin to address some of the critical public and non-motorised transport issues in Western Cape municipalities. To an extent, this approach builds on existing expertise and capacity within local government and begins a process of enhanced capacity development to manage increasingly complex transport networks. At the same time, Stage 1 does not impose a dramatic change to the business model of existing public transport operators and, overall, it allows for shorter term, lower impact, affordable responses which are suited to the specific local areas being addressed.

More specifically, Stage 1 includes a strong focus on non-motorised transport, basic infrastructure improvements and the regulation and enforcement of existing public transport operators, in conjunction with strengthened industry engagement. The aim here is to 'get the basics rights' before moving toward the implementation of expensive and complex integrated public transport networks.

Stage 2: In Stage 2, government begins to introduce small subsidised service contracts with existing

operators for the provision of higher quality public transport services. Through the use of contracting, government begins to incentivise self-organisation and consolidation within the industry. In Stage 2, the work streams established in Stage 1 are continued. Additional areas of focus include introducing and managing subsidised contracts for public transport operators, small-scale ITS and AFC systems and managing data from these systems. Monitoring public transport operators becomes a priority.

Stage 3: In Stage 3, the public transport priorities established in the previous two stages are consolidated and extended. Where appropriate and financially viable, the municipality moves towards progressively implementing a context-appropriate IPTN network with gross contracts between government and private operators. The nature of this network will differ markedly by context and area typology.

5.4.6 Proposed institutional arrangements for public transport improvement

Outside of the City of Cape Town and the Municipality of George, there is very little capacity to pursue public and non-motorised transport improvement at the municipal level within the Western Cape. Therefore, in order to make progress, it is proposed that the Western Cape Government execute its NLTA s12(1) mandate to work with municipalities to jointly perform or execute municipal land transport functions, while progressively building municipal capacity. In order to limit the burden of this arrangement on the Western Cape Government, only a limited number of targeted municipalities will be actively supported at any given time.

In the longer term, capacity will be developed at the local level so that municipalities can perform their land transport functions either independently or jointly with adjacent municipalities, potentially through the establishment of municipal entities.

Support from the Western Cape Government (the Department of Transport and Public Works) will be split into two overarching functions with different purposes:

The Western Cape Government will act as an incubator: A newly established provincial incubation unit will work to establish and develop local transport units in priority areas of implementation. Together, these provincial units will plan, implement and manage local public and non-motorised transport improvement, working jointly with municipalities. Once sufficiently developed, the units will be transferred to municipal ownership. The incubator role in support of a particular municipality will initially be intensive as capacity is being developed, and will taper off and cease over time once the municipality has sufficient capacity internally.

The Western Cape Government will perform platform functions: Those functions that can sensibly be performed indefinitely on a province-wide basis. This includes developing centralised technology platforms and systems which will support province-wide public and non-motorised transport improvement, such as intelligent transport systems, integrated fare management and a call centre. The Western Cape Government will perform these functions indefinitely on behalf of LMs to leverage economies of scale and the concentration of specific expertise. Platform functions also allow for the strategic management of data that has significance for province-wide analysis of progress and trends, and for the specific management of operational contracts that the Western Cape Government has a direct financial responsibility for.

These arrangements are illustrated in the diagram below.

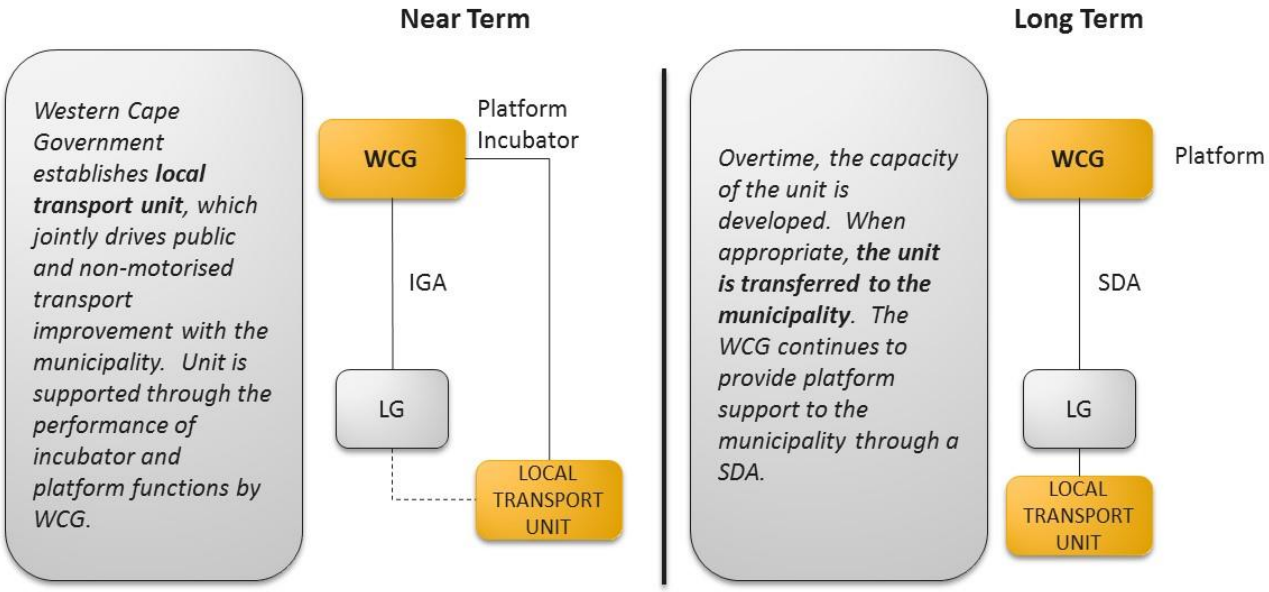


Figure 5-1: Proposed Institutional Arrangements

The Intergovernmental relationship between the Western Cape Government and targeted municipalities will be supported by the establishment of Joint Planning and Implementation Committees/Forums, to guide improvement initiatives.

It is also important to note that although it is proposed that the Western Cape Government play a central role in the performance/support of functions and flow of funds, a local municipality can take on these roles at any point according to current legislation.

5.4.7 Funding

The Western Cape Government will drive an effort to source the necessary funding for the proposed improvements, both from internal sources and from other sources such as National Government and international donors.

5.4.8 Implementation Plan

The implementation plan covers 5 years and includes the necessary steps in the implementation process, including the technical, institutional, organisational and funding components.

The basis of the implementation plan is the piloting of the PPTIF in 3 priority municipalities over a 5 year period. After the 5 year period, the pilot projects will be reviewed and successful elements will be rolled out to other municipalities in the Western Cape.

The high level implementation plan is summarised in the figure below. The proposed detailed planning and local establishment processes are for targeted or priority municipalities only.

Through the PPTIF, a prioritisation mechanism was developed to support the Department's decision-making process. This mechanism incorporated four criteria including population, size of economy, growth potential and public transport mode share. The use of this mechanism in conjunction with strategic considerations has resulted in the emergence of the following priority areas. These areas will be the focus of investment and activity over the next five years:

- Saldanha Bay Municipality
- Overstrand Municipality
- The municipalities of the Cape Metropolitan Functional Region including Stellenbosch, Drakenstein, Swartland and Theewaterskloof.

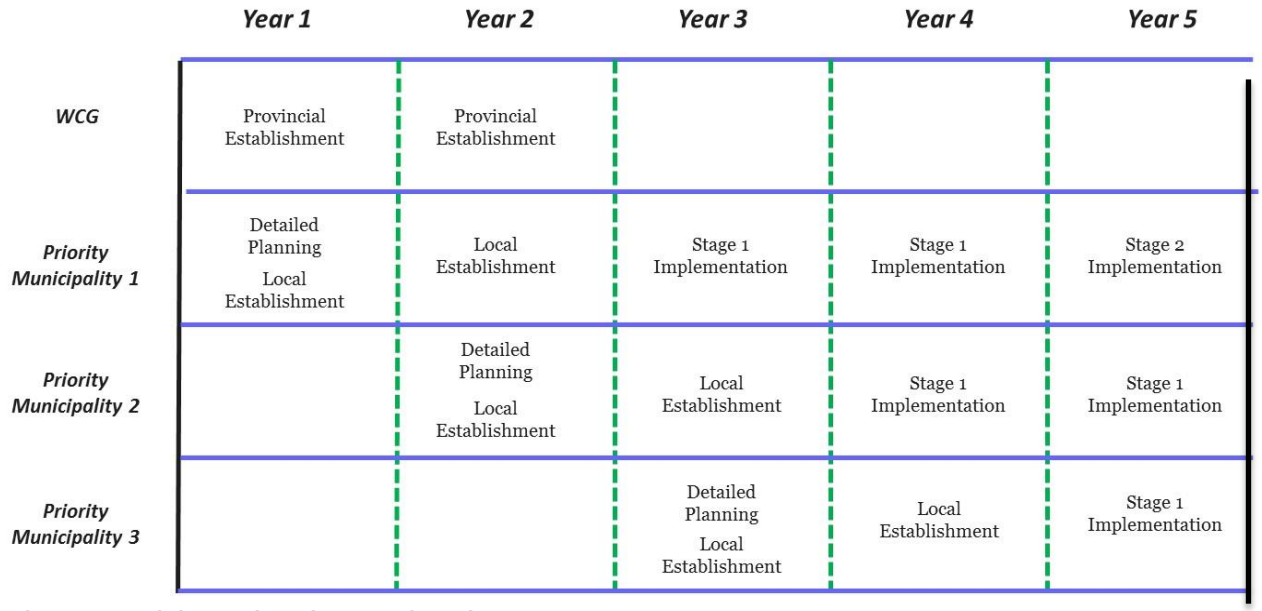


Figure 5-2: High Level Implementation Plan

6 TRANSPORT NEEDS ASSESSMENT

6.1 Introduction

This chapter considers the information collected and discussed in Chapter 3: Transport Register. This chapter identifies transport needs based on this information, including data that has not yet been confirmed by the local municipalities. There are a number of needs which are not unique to only one local municipality. The main needs within the district can be summarised as follows:

- A lack of internal integration with parallel processes such as the Integrated Development Plan, Local Economic Development plan, Spatial Development Framework etc.
- Inadequate budget for public transport infrastructure and facilities, road maintenance
- Limited capacity at a district and local municipal level to fulfil municipal transport planning function.
- Time constraint for implementation of proposed/ planned projects.
- Growth in road freight transport rather than rail, resulting in trucks affecting maintenance requirements and impacting on the quality of life in towns on freight routes.
- Poor connectivity of NMT routes, with varying standards and lack of universal accessibility, which not only reduces mobility but impacts on public transport accessibility.
- Funding infrastructure is a challenge, particularly since the need is widely distributed – people travelling far, to destinations that generate few trips, and from areas of low density.
- Lack of public transport service during the off-peak periods
- Lack of public transport services connecting main town centres with outlying rural areas.

Based on an understanding of the transport needs within each local municipality the following SWOT analysis was prepared. This analysis was done for the follow categories:

- Public Transport
- Public Transport Infrastructure
- Learner Transport
- Freight
- Non-motorised Transport
- Transport for Tourism
- Road Network

6.2 Transport Needs Assessment

Breede Valley

Public Transport	
Strength	**Weakness**
Existing minibus taxi transport within the towns and between neighbouring towns	limited services during off-peak periods, not universally accessible
Existing rail service at Worcester	No service linking other towns within Breede Valley. Currently only a morning and afternoon/evening service being operated
Opportunity	**Threat**
create universally accessible facilities	commuters limited purchase power, affordability of public transport
Public Transport Infrastructure	
Strength	**Weakness**
Existing road based public transport Infrastructure is in a reasonably good condition	There is a lack of shelter at existing facilities
Rail infrastructure not currently being utilised for passenger movement	underutilisation of facilities during the off-peak
Opportunity	**Threat/ Constraint**
Provision of shelter at existing facilities	Obsolescence
utilising the existing rail infrastructure for passenger movement	Capital infrastructure funding
Learner Transport	
Strength	**Weakness**
an existing service is being provided	little information available about the learner transport services
Opportunity	**Threat**
A formalised transport system for learners	Unaffordable or unavailable services for certain categories of learner
Freight	
Strength	**Weakness**
current freight route Worcester	road infrastructure is inadequate to accommodate the transport of heavy haul vehicles
Opportunity	**Threat**
create formal overnight facilities for truck traffic passing through Worcester	high maintenance cost associated with truck traffic
create an alternative route for freight movement	

Non-motorised Transport	
Strength	**Weakness**
some existing NMT infrastructure in CBD	NMT infrastructure is not continuous
existing NMT link from CBD to Zwelethemba	Spatial divide discourages the use of NMT
Opportunity	**Threat**
provision of NMT infrastructure and end of trip facilities	
provision of bicycles	Crime
Transport for Tourism	
Strength	**Weakness**
variety of tourist attractions	no scheduled services for transporting tourists between attractions
Opportunity	**Threat**
provision of a service to transport tourists between tourist attractions	seasonality of tourist attractions
Road Network	
Strength	**Weakness**
existing paved road network is in good condition	Majority of traffic is through traffic travelling on the R60 between the N1 and N2 and on the N1.
	poses safety concerns where schools are located close to high order roads
Opportunity	**Threat**
new roads are not required	Pedestrian and Vehicle Accidents

Drakenstein

Public Transport	
Strength	**Weakness**
Existing minibus taxi transport within the towns and between neighbouring towns	limited services during off-peak periods, not universally accessible
Existing rail service at all towns in the municipal area	only two rail services being rendered on this line, one outbound in the morning and inbound in the afternoon/ evening
long distance bus service operating through Paarl	inadequate long distance facilities
Opportunity	**Threat**
create universally accessible facilities	Over supply of minibus taxi services, commuters have limited purchase power, affordability of public transport.
Public Transport Infrastructure	
Strength	**Weakness**
Existing road based public transport Infrastructure is in a reasonably good condition	There is a lack of shelter at existing facilities
	underutilisation of facilities during the off-peak
Opportunity	**Threat/ Constraint**
Provision of shelter at existing highly utilised public transport facilities	high maintenance cost
Rail infrastructure not currently being utilised for passenger movement	Capital infrastructure funding
Learner Transport	
Strength	**Weakness**
an existing service is being provided	little information available about the learner transport services
Opportunity	**Threat**
A formalised transport system for learners	potential resistance from existing operators, conditions attached to qualify learner transport subsidy
Freight	
Strength	**Weakness**
current freight route through Ceres and Tulbagh	road infrastructure is inadequate to accommodate the transport of heavy haul vehicles
Opportunity	**Threat**
create formal overnight facilities for truck traffic passing through the town of Ceres	high maintenance cost associated with truck traffic

Non-motorised Transport	
Strength	**Weakness**
some existing NMT infrastructure in urban areas	NMT infrastructure is not continuous and not universally accessible
	Limited NMT infrastructure in rural areas, and poor support of public transport
	Safety and Security
Opportunity	**Threat**
provision of NMT infrastructure and end of trip facilities	
provision of bicycles	
Transport for Tourism	
Strength	**Weakness**
variety of tourist attractions	no scheduled services for transporting tourists between attractions
Opportunity	**Threat**
provision of a service to transport tourists between tourist attractions	seasonality of tourist attractions
Road Network	
Strength	**Weakness**
existing paved road network is in good condition	majority of traffic is through traffic
Opportunity	**Threat**
new roads are not required	

Langeberg

Public Transport	
Strength	**Weakness**
Existing minibus taxi transport within the towns and between neighbouring towns	limited services during off-peak periods, not universally accessible
	Commuter affordability
Opportunity	**Threat**
create universally accessible facilities	commuters limited purchase power, affordability of public transport
Public Transport Infrastructure	
Strength	**Weakness**
Existing road based public transport Infrastructure is in a reasonably good condition	There is a lack of shelter at existing facilities
Rail infrastructure not currently being utilised for passenger movement	existing formal facility in Zolani not currently being utilised, and underutilisation of facilities during the off-peak
Opportunity	**Threat/ Constraint**
revitalisation of existing formal facility in Zolani	Obsolescence
provision of rail passenger service	Capital infrastructure funding
Learner Transport	
Strength	**Weakness**
an existing service is being provided	little information available about the learner transport services
Opportunity	**Threat**
A formalised transport system for learners	potential resistance from existing operators, conditions attached to qualify learner transport subsidy
Freight	
Strength	**Weakness**
current freight route through Langeberg (R60/2)	road infrastructure is inadequate to accommodate the transport of heavy haul vehicles
Opportunity	**Threat**
If warranted create formal overnight facilities for truck traffic passing through the town Robertson	high maintenance cost and increased congestion associated with truck traffic

Non-motorised Transport	
Strength	**Weakness**
some existing NMT infrastructure	NMT infrastructure is not continuous, and distance between neighbouring towns too great
	safety and security
Opportunity	**Threat**
delineation of NMT space on existing road network	Crime
provision of NMT infrastructure and end of trip facilities	
provision of bicycles	
NMT Education such as safety	
Transport for Tourism	
Strength	**Weakness**
variety of tourist attractions	no scheduled services for transporting tourists between attractions
Opportunity	**Threat**
provision of a service to transport tourists between tourist attractions	seasonality of tourist attractions
Road Network	
Strength	**Weakness**
existing paved road network is in good condition	majority of traffic is through traffic
	poses safety concerns for pedestrian and scholars where schools are located close to high order roads
Opportunity	**Threat**
new roads are not required	deterioration of road network

Witzenberg

Public Transport	
Strength	**Weakness**
Existing minibus taxi transport within the towns and between neighbouring towns	limited services during off-peak periods, not universally accessible
Existing rail service at Tulbagh and Wolseley	no passenger rail service linking Ceres, Prince Alfred Hamlet and Wolseley
	Lack of connectivity between Tulbagh and Op-die-berg to Ceres
Opportunity	**Threat**
create universally accessible facilities	commuters limited purchase power, affordability of public transport
Public Transport Infrastructure	
Strength	**Weakness**
Existing road based public transport Infrastructure is in a reasonably good condition	There is a lack of shelter at existing facilities
Rail infrastructure between Ceres, Prince Alfred Hamlet and Wolseley not currently being utilised for passenger movement	existing formal facility in Prince Alfred Hamlet not being utilised & underutilisation of facilities during the off-peak
Opportunity	**Threat/ Constraint**
Provision of shelter at existing facilities	Obsolescence
utilising the existing rail infrastructure for passenger movement	Capital infrastructure funding
revitalisation of formal facility in Prince Alfred Hamlet	
Learner Transport	
Strength	**Weakness**
an existing service is being provided	little information available about the learner transport services
	Lack of pedestrian facilities (such as pedestrian crossings or pick-up/drop-off points) for scholars at schools
Opportunity	**Threat**
A formalised transport system for learners	
Freight	
Strength	**Weakness**
current freight route through Ceres and Tulbagh	road infrastructure is inadequate to accommodate the transport of heavy haul vehicles
Opportunity	**Threat**
create formal overnight facilities for truck traffic passing through the town	high maintenance cost associated with truck traffic

Non-motorised Transport	
Strength	**Weakness**
some existing NMT infrastructure	NMT infrastructure is not continuous or consistent
Opportunity	**Threat**
provision of NMT infrastructure and end of trip facilities	
provision of bicycles	Crime
Transport for Tourism	
Strength	**Weakness**
variety of tourist attractions	no scheduled services for transporting tourists between attractions
Opportunity	**Threat**
provision of a service to transport tourists between tourist attractions	seasonality of tourist attractions makes it difficult to have a scheduled service
Road Network	
Strength	**Weakness**
existing paved road network is in good condition	majority of traffic is through traffic
	poses safety concerns where schools are located close to high order roads
	heavy vehicle traffic travelling through Ceres
Opportunity	**Threat**
new roads are not required	deterioration of road network

7 SUMMARY OF LITPs

7.1 Introduction

As mentioned in Chapter 1, part of the DITP review includes updating the local municipality ITPs. This chapter serves to summarise the main elements from each of the local municipalities including Stellenbosch.

7.2 Breede Valley local municipality

The Breede Valley local municipality lies south of the Witzenberg local municipality and north of the Langeberg municipality.

The Breede Valley local municipality includes a number of towns:

- Worcester
- Rawsonville
- De Doorns
- Touws River

Within the Breede Valley area, there are rural and informal areas such as De Wet, Stofland and Zwelethemba.

The primary source of public transport for commuters is minibus taxis with two associations operating in the municipal area. A rail service is currently operating each day of the week which serves travellers between Worcester and Cape Town. The taxi operations are influenced by the agricultural sector seasonality, which suggests that there are annual peak periods for public transport in the municipality.

The National Route N1 is located within this local municipality and accommodates large volumes of traffic through the area. Due to the location of the N1 it is noted that there is significant freight traffic moving through the town of Worcester to get access to the N1.

A number of issues as identified during the stakeholder engagement meetings include, high public transport fares, NMT is not safe due to the limited existing facilities, high freight volumes and unsafe scholar transport.

The transport needs of the municipality can be summarised as follows: improve pedestrian facilities and improve learner transport facilities at and around schools.

7.3 Drakenstein local municipality

The Drakenstein local municipality lies north of the Stellenbosch local municipality and west of the Witzenberg municipality.

The Drakenstein local municipality includes a number of towns:

- Paarl
- Wellington
- Hermon
- Gouda
- Saron

The Drakenstein municipality has a number of rural villages (such as Hermon and Simondium) but has a significant proportion of its population in the larger towns of Paarl and Wellington. Due to the bulk of the population residing in Paarl and Wellington and the spatial gap between these two towns and the others, it is noted that there is a stronger functional relationship between Hermon, Gouda and Saron with towns outside the municipal area such as Wolseley and Tulbagh.

Similarly to the other municipalities, the main source of public transport is minibus taxis and the rail service. The minibus taxis primarily operate within the municipal area, with few services extending beyond Stellenbosch local municipality. Metrorail provides a number of daily services between Wellington, Paarl and Cape Town. A number of long distance bus operators pick up passengers within Paarl.

The public has indicated a number of problems and issues within the district, such as the lack of safety, long waiting times, better integration needed between modes, illegal operators and lack of law enforcement.

In recent years Drakenstein has also experienced an increase in heavy freight vehicles as Paarl expanded its industrial areas.

In terms of transport needs, it was identified that an improvement of existing public transport infrastructure is required as well as the provision of NMT facilities.

7.4 Langeberg local municipality

The Langeberg local municipality lies east of the Stellenbosch local municipality and south of the Breede Valley municipality.

The Langeberg local municipality includes a number of towns:

- Robertson
- Ashton
- Montagu
- McGregor
- Bonnievale

Langeberg is also comprised of a number of rural settlements:

- Zolani
- Ashbury
- Happyvallei

Within Langeberg, the only public transport services currently operating are minibus taxi services. Although there is an existing railway line, this is only used for freight movement and not for the transport of passengers. Most of the public transport operations take place within the local municipality, with commuters moving between the main towns mentioned above. In Langeberg only one formal public transport facility exists which is in Zolani. However, this taxi rank is not being used.

The R60 and R62 roads carry significant volumes of freight traffic moving between the N2 and N1.

The general public has expressed their main issues as the affordability of public transport fares, a lack of NMT facilities, safety concerns around scholar movement and a lack of public transport infrastructure and facilities.

The main priorities for Langeberg are improving existing NMT infrastructure and improving the safe transport of learners.

7.5 Witzenberg local municipality

The Witzenberg local municipality lies east of the Drakenstein local municipality and north of the Breede Valley municipality.

The Witzenberg local municipality includes a number of towns:

- Ceres
- Wolseley
- Prince Alfred
- Tulbagh
- Op-die-Berg

Witzenberg is also comprised of a number of rural settlements, namely:

- Warm Bokkeveld
- Koue Bokkeveld
- Agter-Witzenberg

Within the Witzenberg municipal area the primary modes of public transport are minibus taxi and rail. Non-motorised transport also plays a significant role within the municipality.

The public transport operations are also impacted by seasonal demand related to the agricultural sector, with an increase in demand taking place during the harvest season. This results in more frequent minibus taxi trips between the main service centres and the farming areas.

The passenger rail service operating within the municipal area is limited to one morning and one afternoon service between Wolseley and Cape Town. Currently a freight rail service is operated between Ceres and Prince Alfred Hamlet. It is envisaged that this will become a passenger service in future.

Witzenberg also has issues related to heavy vehicle movement through the town. The freight traffic experienced within the district is primarily vehicles travelling towards Cape Town or the N7.

The needs assessment identified projects related to NMT and additional public transport services during the fruit harvesting season.

7.6 Stellenbosch Local Municipality

The following has been extracted from the Executive Summary of the Stellenbosch CITP (2016-2021).

1. INTRODUCTION

The Stellenbosch Comprehensive Integrated Transport Plan (CITP) is prepared in compliance with the National Land Transport Act (2009) and relevant Provincial legislation.

The CITP was prepared in accordance with the guidelines and requirements of the Department of

Transport and is a Sector Plan of the Stellenbosch Municipalty's Integrated Development Plan (IDP).

The CITP covers the period 2016 – 2021 and has been approved by Town Council for submission to the MEC responsible for Transport and Public Works.

The CITP has been prepared in consultation with public meetings of interested and affected parties.

2. TRANSPORT VISION AND OBJECTIVES

The transport **VISION** stated in the CITP is:

"A demand-managed, sustainable, balanced and equitable transport system that allows for the basic mobility needs of individuals to be met, is affordable, operates efficiently, offers choice of transport modes, supports a vibrant economy and operates seamlessly within and across the municipal boundaries"

The **VISION** takes into consideration relevant national and provincial policies and legislation, the Western Cape Government's strategic goals and the five strategic focus areas of the Integrated Development Plan of the Stellenbosch Local Municipality.

The **OBJECTIVES** of the CITP are represented by the principles of:

- Investment
- Sustainability
- Safety
- Integrated Planning

3. TRANSPORT REGISTER

The Transport Register of the CITP provides an overview of the status of the transport system and identifies trends and changes in the demographics of the area to which the transport system must adapt.

The Transport Register assists in identifying shortcomings in the transport system and areas where improvement is needed.

Information on the following aspects of the transport system is provided:

- Utilisation of public transport services and facilities
- The status and condition of public transport facilities and infrastructure
- The percentage utilisation of the various modes of transport
- The status and condition of the road network
- Freight transport information
- Financial information

4. SPATIAL DEVELOPMENT FRAMEWORK

The SDF provides a clear direction of the land development strategies of the Stellenbosch Municipality and identifies focus areas of the CITP including:

- transport corridors and nodes
- areas identified for mixed use and densification in support of public transport
- measures to discourage urban sprawl

The vision of the Provincial Land Transport Framework provides a framework for a transport system built on the pillars of sustainability, equity, access to opportunity in an economically efficient manner and safety that are taken into account to ensure cohesive planning with surrounding areas

The following focus areas are identified:

- The need to increase road corridor capacities and public transport linkages to support the development of increased land development densities
- The adoption of the principles of Transit Oriented Development (TOD) and Transport Demand Management (TDM) to reduce congestion of the road network as this negatively impacts economic growth and the "greenness" of the Municipality.
- The continued development of Non Motorised Transport (NMT) infrastructure and networks to reduce the demand for private car travel and improve the liveability of neighbourhoods and communities within the area.
- The rail system should remain the backbone of the transport system in the functional region, therefore rail capacity and infrastructure maintenance should receive attention in the Integrated Transport Plan.

5. TRANSPORT NEEDS ASSESSMENT

The Transport Needs Assessment provides a summary of the needs for new or improved transport services or infrastructure identified through an analysis of information collected, strategies for the development of Stellenbosch and through the consultation process.

The following key needs were identified for inclusion in the CITP strategies:

- The need for a high quality, sustainable public transport system
- The need to improve accessibility to transport for learners and persons with disabilities
- The need to improve facilities for pedestrians and non-motorised transport in Stellenbosch as well as the surrounding, smaller settlements and rural areas
- The need to improve mobility on the major road network by reducing congestion and the provision of alternative routes and corridors
- The need to identify and source additional funding to implement plans included in the CITP

The needs of the community were identified through a public consultation process. This information was used to identify projects that can be prioritized for inclusion in the CITP budget.

6. PUBLIC TRANSPORT OPERATIONAL STRATEGY

The Stellenbosch Municipality*, as a Planning Authority*, is responsible for transport functions in terms of the National Land Transport Act (5 of 2009) including the planning and implementation of an efficient and affordable public transport service network and travel corridors

There are several implications stemming from this responsibility that the Stellenbosch Municipality must consider. These are:

- Financial implications: The cost of planning, infrastructure provision, purchase of vehicles, operation and maintenance
- The necessity for consultation with role-players on issues such as empowerment, training, compensation for loss of jobs or profits, negotiation of operating contracts
- Municipal capacity to plan and monitor the public transport system
- The need for a clear procurement strategy

The elements of an upgraded public transport service network are:

- An integrated route network of short and long distance routes
- New universally accessible vehicles (initially using existing vehicles)
- Integration of rail, bus and minibus services with fixed timetables
- A new ticketing system
- Contracted operators (negotiated contract with existing operators)
- New transport infrastructure : terminals, shelters

Guiding principles for the proposed Stellenbosch public transport service network are:

- Compliance with the Department of Transport guidelines for a Public Transport Network Grant
- Transformation and upliftment of the public transport industry
- To improve public transport services and quality of life of residents
- Phased development of the public transport system
- Financial sustainability

7. OPERATING LICENCE STRATEGY

The purpose and objective of the Operating License Strategy (OLS) is to enable the Stellenbosch Municipality to make recommendations to the Provincial Regulatory Entity (PRE) based on the policies and strategies contained in the Comprehensive Integrated Transport Plan .

The evaluation of Operating License (OL) applications follows the following procedure:

- An application for an OL is submitted to the PRE and is referred to the Municipality.

- The OL application is circulated to the appropriate Departments internally within the Municipality.
- Evaluation of Supply and Demand: The OL application is checked against the available survey data of passenger demand on the applicable routes.
- The OL application is checked against the available survey data of rank, terminal or stops capacity serving the applicable routes
- The OL application is assessed as to its impact on the conceptual Public Transport Network Routes that are identified in the ITP, or will operate in parallel to or in conflict with any commuter rail services or bus services.
- The OL is checked against the record of outstanding warrants or convictions, previous convictions relating to the operation of public transport services and the ability of the applicant to operate the service in a manner satisfactory to the public.
- In terms of section 78 of the NLTA, if a licence has not been in use for more than 180 days, the licence can be cancelled. The licence holder must be asked to furnish, in writing, satisfactory reasons why the service has not been operated, after which the licence can be extended for a further 180 days or cancelled.
- If all the responses to the evaluation support the approval of the application, a letter of approval is then issued to the NPTR or the PRE with any conditions attached. If the responses do not support the application, a letter of rejection is then issued.

8. TRANSPORT INFRASTRUCTURE STRATEGY

The Transport Infrastructure Strategy deals with the maintenance and provision of all types of transport infrastructure including infrastructure for non-motorised modes, road based modes and rail infrastructure. The following types of infrastructure projects are included:

- Infrastructure Maintenance: Maintenance and rehabilitation of roads, public transport facilities and traffic control equipment.
- Road Infrastructure: The construction of all classes of roads, bridges and associated stormwater, non-motorised infrastructure such as sidewalks and cycle tracks and traffic control equipment.
- Public Transport: Passenger facilities, dedicated rights of way and off-street facilities such as terminals and depots.

A strategy is proposed to improve transport mobility on major roads linking Klapmuts and Somerset West and passing through Stellenbosch. Several alternatives have been identified for further investigation and consultation:

- Construction of a by-pass road to the west of Stellenbosch. This is a long term solution that has advantages and disadvantages.
- Travel Demand Management to reduce the reliance on cars and encourage the use of public transport
- Increase the capacity of existing roads for all users

9. TRAVEL DEMAND MANAGEMENT

The objectives of Travel Demand Management (TDM) are far reaching and may include reducing traffic congestion by reducing the demand for car use, lifestyles, using infrastructure efficiently, reducing the environmental impacts of private transport, and supporting investments in public transport and non-motorised transport.

Several interventions, requiring further study, are proposed to achieve the above objectives:

- Studies:
    - Investigate and prioritise congestion bottlenecks to make more efficient use of road infrastructure
    - Improve road safety
    - Promoting NMT
    - Promoting public transport
- Programmes and Policy:
    - Enforce traffic laws that impact NMT activity, and by-laws governing use of public space

- Review building design regulations and street design standards that impact on walkability
- Develop campaigns to raise awareness of travel options, and to encourage a shift in behavior
- Pursue possibility of establishing a car-share service

- Infrastructure:
  - Plan in more detail improved public transport services and develop an implementation plan
  - Develop shared parking structures to reduce impact of traffic on the historic town core
  - Undertake localised improvements for pedestrians, such as pedestrian-only signals, bulb-outs and street lighting along key routes

10. FREIGHT TRANSPORT STRATEGY

The freight system forms an integral part of the transport network. Freight is moved by means of the road network which is managed by South African National Roads Agency Ltd as well as provincial and local government and the rail network, pipelines and ports which are managed and operated for the most part by Transnet

The Western Cape Government is mandated with the control of overloading of freight vehicles. There are currently 9 weighbridges within the Province, of which one is within the Stellenbosch municipal boundary.

Overloading is not adequately controlled and there is inadequate legal support for enforcement.

In Stellenbosch, the inbound heavy vehicle traffic volume accounts for 1% of the morning peak period inbound traffic volume which does not significantly affect the road system capacity.

In Franschhoek, approximately 29% of heavy vehicles are through traffic on the main road. Although an alternative heavy vehicle route may alleviate some pressure on the Franschhoek main road, the majority of heavy vehicle traffic is generated in the town and the surrounding farms and will continue to make use of the main road.

Proposed Interventions:

- Development of an infrastructure improvement programme
- Improve law enforcement and overload control
- Development of a strategic freight network
- Promoting and endorsing a self-regulatory entity such as the Road Transport Management System (RTMS)
- Investigation of the feasibility of installing an additional weighbridge within Stellenbosch
- Detailed freight surveys are required
- Investigate the use of alternative / preventative measures to deter heavy haul vehicles from using the Franschhoek pass as an alternative to the current Huguenot Tunnel and potentially the N1 Winelands.

11.1 NON-MOTORISED TRANSPORT

Non-Motorised Transport (NMT) can be described as all means of transport that are human powered such as the modes of walking, cycling, animal-powered vehicles including variants such as small wheeled transport (skateboards, roller blades, push scooters and hand carts) and wheelchair travel.

Non-motorised transport is available to everyone as a mode of travel and is the cheapest and healthiest mode of travel for the individual and the environment. The promotion of NMT is therefore critical to encourage economic development and dignified living in both rural and urban environments.

The Stellenbosch Municipality prepared a NMT Policy in 2015 which defines the vision and objectives for NMT implementation in the area that strives to “facilitate a mobility environment where all transport modes are of equal importance.”

A market survey on cycling was conducted during the development of the Draft Stellenbosch Cycle Plan (2015). The results of this survey indicated that the main deterrents to cycling are traffic safety, the lack of cycling infrastructure and personal safety concerns.

A NMT network plan for Stellenbosch was prepared in 2015 as well as a bicycle masterplan. These plans provide for the development of a network of sidewalks and cycle tracks.

In terms of the above plans, a number of NMT interventions and projects have been identified for inclusion in the CITP.

11.2 TRANSPORT SAFETY AND SECURITY

Safety and security concerns are one of the main deterrents for potential public transport users. A strategy has been developed to address these concerns in an effective manner.

The following strategy is proposed:

- The maintenance and improvement of lighting at all the public transport facilities to improve the safety of commenters at night.
- The establishment of a data base of crime incidences at public transport facilities and on-board vehicles.
- A study be done to establish the levels and type of protection services available in rural and urban public transport systems to effectively tailor a strategy to the various communities.
- The auditing of public transport infrastructure design projects against security criteria developed by the CSIR.
- The cleaning of public transport facilities of litter and graffiti so as to create a sense of safety amongst commuters who use the facility.

12 FUNDING STRATEGY AND SUMMARY OF PROPOSALS AND PROGRAMMES

The key focus of projects, proposals and budgets of the CITP is to enable and contribute to economic growth, improved accessibility, equitable transport for all and a safe environment while ensuring environmental sustainability and good governance.

The projects and proposals contained in this CITP comprise the following project types:

- **Roads and Stormwater**: Maintenance, road construction and upgrading, street lighting and construction projects such as parking areas.
- **Traffic Engineering**: Traffic calming, signage, traffic signals, intersection improvements, road marking, road safety improvements.
- **Non-motorised Transport**: Sidewalks, lock-up facilities for bicycles, pedestrianisation projects
- **Public Transport**: Public transport facilities (ranks, shelters)
- **Support Infrastructure and Vehicles**: Upgrading of municipal facilities and the purchasing of vehicles.
- **Planning**: Preparation of integrated transport plans and strategies, feasibility studies, masterplans.

The proposed Stellenbosch Municipality CITP Five Year Budget comprises an average spend over the first three years (2016/17 – 2020/21) of R 277 000 000, including major new projects that could be implemented in stages.

The primary sources of funds are the Stellenbosch Municipality and the Western Cape Government. It is proposed that the Public Transport Service Network be funded from the Public Transport Network Grant (PTNG).

It is recommended that to ensure that additional funding is provided to implement high priority transport projects in the Stellenbosch Municipal Area:

- A Committee be appointed by the Stellenbosch Municipality with representation from the relevant Municipal Departments, the Western Cape Government and other relevant agencies to formulate firm proposals for the funding of the projects listed in the CITP Five Year budget.
- The Stellenbosch Municipality establish a Municipal Land Transport Fund into which the funds must be paid for use in implementing the CITP.

13 STAKEHOLDER CONSULTATION

Stakeholder consultation was conducted by means of:

- A survey questionnaire
- A public meeting held in Stellenbosch

The priority issues from the survey questionnaire and the public meeting were:

- The lack of a regular and reliable public bus service in Stellenbosch and to surrounding

areas is the highest priority and the main focus in the next five years.

- The second priority is the need to build new roads to provide alternative routes and relieve congestion in and around Stellenbosch.
- The creation of more parking in the Stellenbosch CBD.
- The improvement of cycling and pedestrian routes and safety in Stellenbosch.

8 FUNDING STRATEGY AND SUMMARY OF PROJECT BUDGETS

8.1 Introduction

This chapter serves to illustrate the proposed funding strategy which looks at the current funding sources for transport related improvements. This chapter will also summarise the 5 year annual municipal transport budget and programme for each local municipality. These summaries will include prioritisation of projects based on the municipal transport needs and the available budgets.

Some of the key focus areas that require funding are in terms of basic needs, such as maintenance of roads and provision of roads and related infrastructure, implementation of a safe, affordable and convenient public transport system and the provision of a safe environment for motorised transport and NMT.

Municipalities have various potential sources of funding available to them. These funding sources can be either public funding through internally generated funding (such as property rates and taxes) or national/ provincial government allocations or private funding through value capturing, public private partnerships or loans.

8.2 Summary of Project Proposals

The tables that follow are transport-related budgets provided by the local municipalities. Priorities are implied in the year(s) for which budget has been allocated. The sources of funding beyond municipal budgets are essentially the same as recorded in the previous DITP (2011-2016).

It should be noted that the Langeberg municipality has allocated no funding to transport related services for the 2015/16 financial year with a strong likelihood that no budget will be allocate to transport for the subsequent 3 year period. The Langeberg municipality has allocated funding to services which are a much higher priority.

The transport budgets of the local municipalities indicate that large portions of funding have been planned for road infrastructure improvements.

Breede Valley has budgeted, amongst others, for road network improvements and a bus route. Breede Valley budget also suggests that many of the transport projects which appear on the budget do not have funding for the 2015/16 financial year or subsequent years.

Witzenberg has budgeted primarily for road network improvements.

Drakenstein has budgeted, amongst others, for road network improvements and upgrading of existing sidewalks.

8.2.1 Breede Valley

Item	Description	Funding Source	Total Funded budget 2015/16 (Rands)	Budget Expectation 2016/2017 (Rands)	Budget Expectation 2017/2018 (Rands)
1	De Doorns: Rehabilitation of Municipal Roads (MIG 210857)	National Government: MIG (DORA)	181 950		
2	De Doorns: Rehabilitation of Municipal Roads (Counter Funding)	Projects (MIG Counter Funding)	1 888 832		
3	Rawsonville: Rehabilitation of Municipal Roads (MIG 212168)	National Government: MIG (DORA)	100 350		
4	Rawsonville: Rehabilitation of Municipal Roads (Counter Funding)	Projects (MIG Counter Funding)	702 554		
5	Worcester: Rehabilitation of Municipal Roads (MIG 212170)	National Government: MIG (DORA)	1 811 708		
6	Worcester: Rehabilitation of Municipal Roads (Counter Funding)	Projects (MIG Counter Funding)	2 000 000		
7	Avian Park Roads	Projects New	2 000 000		
8	Zwelethemba IDT Roads	Projects New	2 000 000		
9	Hex Industria Roads	Projects New	1 250 000		
10	HOP Land Roads - Touws River	Projects New	1 250 000		
11	De Doorns East Roads	Projects New	1 250 000		
12	Truck with tipper load body (4 Ton, Diesel)	Furniture and Equipment	616 025		
13	Roads & Stormwater	Projects New	144 000		
14	Roads	Projects New	156 000		
15	Touws River: Rehabilitation of Municipal Roads (MIG 212170)	National Government: MIG (DORA)	1 971 992		
16	Bus route	Projects New	3 072 849		
17	Embayment busses: Noble Street	Projects New	300 000		
18	Computers (Replacement of 2 computers)	UNFUNDED NEW REQUESTS		0	0
19	Traffic Circle (High and Louis Lange Streets)	UNFUNDED NEW REQUESTS			

Item	Description	Funding Source	Total Funded budget 2015/16 (Rands)	Budget Expectation 2016/2017 (Rands)	Budget Expectation 2017/2018 (Rands)
20	Equipment	UNFUNDED NEW REQUESTS		0	0
21	Resealing of Municipal Roads (MIG) - Rawsonville	National Government: MIG (DORA)		0	0
22	Resealing of Municipal Roads (Counter Funding to MIG) - Rawsonville	Projects (MIG Counter Funding)		0	0
23	Resealing of Municipal Roads (MIG) - Worcester	National Government: MIG (DORA)			
24	Resealing of Municipal Roads (Counter Funding to MIG) - Worcester	Projects (MIG Counter Funding)		0	0
25	Resealing of Municipal Roads (MIG) - De Doorns	National Government: MIG (DORA)		0	0
26	Resealing of Municipal Roads (Counter Funding to MIG) - De Doorns	Projects (MIG Counter Funding)		0	0
27	Resealing of Municipal Roads (MIG) - Touws River	National Government: MIG (DORA)		0	0
28	Resealing of Municipal Roads (Counter Funding to MIG) - Touws River	Projects (MIG Counter Funding)		0	0
29	Avian Park Roads	UNFUNDED NEW REQUESTS		0	0
30	Zwelethemba IDT Roads	UNFUNDED NEW REQUESTS		0	0
31	Hex Industria Roads	UNFUNDED NEW REQUESTS			
32	Parking Bays at VGK Church (Fisher & Van Huysteenlaan)	UNFUNDED NEW REQUESTS		0	0
33	HOP Land Roads - Touws River	UNFUNDED NEW REQUESTS		0	0
34	De Doorns East Roads	UNFUNDED NEW REQUESTS			
35	Upgrading of Gravel Roads	UNFUNDED NEW REQUESTS			

Item	Description	Funding Source	Total Funded budget 2015/16 (Rands)	Budget Expectation 2016/2017 (Rands)	Budget Expectation 2017/2018 (Rands)
36	Upgrading of Gravel Roads	UNFUNDED NEW REQUESTS		0	0
37	Upgrading of Gravel Roads	UNFUNDED NEW REQUESTS			
38	Upgrading of Gravel Roads	UNFUNDED NEW REQUESTS		0	0
39	Bus Route (MIG 201624 - Counter funding)	Projects (MIG Counter Funding)			
40	Fairway Heights Access Road (Trim Park)	UNFUNDED NEW REQUESTS		250 000	0
41	Rehabilitation of Leipoldt Avenue from Robertson Road to Fisher Street	UNFUNDED NEW REQUESTS		0	0
42	Rehabilitation of Leipoldt Avenue from Fairbairn to Grey Street	UNFUNDED NEW REQUESTS		0	1 000 000
43	Rehabilitation of Leipoldt Avenue from Fisher to Fairbairn Street	UNFUNDED NEW REQUESTS		300 000	0
44	Rehabilitation of Leipoldt Avenue from Grey to Le Seuer Street	UNFUNDED NEW REQUESTS			
45	Roads	UNFUNDED NEW REQUESTS		0	65027138
46	Embayment - 4 busses at Breerivier Senior Secondary School, Noble Street	UNFUNDED NEW REQUESTS			
47	Roads	UNFUNDED NEW REQUESTS			
48	Worcester Eastern Bypass (Roberson Road to N1)	UNFUNDED NEW REQUESTS		250 000	250 000
49	Providing pedestrian and cycle path shelters in Worcester	UNFUNDED NEW REQUESTS		5 000	5 000
50	Re-align pedestrian crossing over railway line in De Doorns	UNFUNDED NEW REQUESTS			

Item	Description	Funding Source	Total Funded budget 2015/16 (Rands)	Budget Expectation 2016/2017 (Rands)	Budget Expectation 2017/2018 (Rands)
51	Implement pedestrian sidewalk in De Doorns	UNFUNDED NEW REQUESTS			
52	Provision of Pedestrian Walkway between Le Sueur and Ranier Streets	UNFUNDED NEW REQUESTS			
53	Building of three raised pedestrian crossings across High Street, Worcester CBD	UNFUNDED NEW REQUESTS		5 200 000	5 400 000
54	Building of a raised pedestrian crossing across Stockenstroom Street, Worcester CBD	UNFUNDED NEW REQUESTS		50 000	50 000
55	Grader, Replacement of BVM 449	UNFUNDED NEW REQUESTS			
56	Digger Loader	UNFUNDED NEW REQUESTS			
57	Equipment: Roads and Storm Water	UNFUNDED NEW REQUESTS			
58	EQUIPMENT: DE DOORNS	UNFUNDED NEW REQUESTS		5 928 720	5 928 720
59	EQUIPMENT: TOUWS RIVER	UNFUNDED NEW REQUESTS			
60	Truck with tipper load body (4 Ton, Diesel)	UNFUNDED NEW REQUESTS			
61	Light Delivery Vehicle (1 Ton, LDV, 2000 Petrol) with canopy and accessories	UNFUNDED NEW REQUESTS		8 250 000	8 250 000
62	Truck with tipper load body (4 Ton, Diesel)	UNFUNDED NEW REQUESTS		0	0
63	Light Delivery Vehicle (1 Ton LDV) 2000 Petrol	UNFUNDED NEW REQUESTS		1 250 000	0

Item	Description	Funding Source	Total Funded budget 2015/16 (Rands)	Budget Expectation 2016/2017 (Rands)	Budget Expectation 2017/2018 (Rands)
64	Light Delivery Vehicle (1 Ton LDV) 2000 Petrol, Replacement of Nissan 1800 LWB_BVM 193	UNFUNDED NEW REQUESTS		0	0
65	Truck with tipper load body (4 Ton, Diesel), Replacement of Toyota Dyna Wipbak 4ton(kappie97/8)_BVM 207	UNFUNDED NEW REQUESTS		15 943 466	0
66	Truck with tipper load body (4 Ton, Diesel), Replacement of Toyota Dyna Tipbak_BVM 488	UNFUNDED NEW REQUESTS			
67	Tractor, Replacement of International Trekker_BVM 820	UNFUNDED NEW REQUESTS		0	0
68	Truck with tipper load body and hydraulic lift (Dounle Cab, 4 Ton, Diesel), Replacement of Isuzu vragmotor_BVM 901	UNFUNDED NEW REQUESTS			
Total			20 696 260	37 427 186	85 910 858

8.2.2 Drakenstein

New / Replacement of Assets	Capital Item Description	2015/2016 Revised Capital Budget	2016/2017 Revised Capital Budget	2017/2018 Revised Capital Budget	2018/2019 Revised Capital Budget	2019/2020 Revised Capital Budget
New	STREET LIGHTING: HERMON	-	185 349	-	-	-
New	STREET LIGHTING: GOUDA	-	447 957	-	-	-
New	BUILDINGS: OFFICE ALTERATIONS: MARKET STREET	100 000	150 000	200 000	-	-
New	BUILDINGS: OFFICE ACCOMMODATION (BLAKE STREET)	-	-	-	-	360 000
New	DETAILED DESIGN- BRB & OOSBOSCH	1 491 228	-	-	-	-
New	DETAILED DESIGN- BRB & OOSBOSCH	3 508 772	-	-	-	-
Replacement	UPGRADE EXISTING SIDEWALKS (DRAKENSTEIN)	7 500 000	600 000	600 000	850 000	1 000 000
Replacement	UPGRADE SIDE WALKS (WARD PROJECT)	2 500 000	2 500 000	2 700 000	2 800 000	3 000 000
New	FENCING: HUGENOTE PARKING AREA	130 000	-	-	-	-
Replacement	PROCLAIMED AND MAIN ROADS UPGRADES	9 376 409	10 488 068	7 605 944	7 636 932	8 345 984
New	VERSAILLES STREET WELLINGTON CHANNEL	-	1 000 000	-	-	-
Replacement	REPAIR SLIP JAN PHILIPS	1 500 000	3 000 000	3 000 000	3 000 000	3 000 000
Replacement	UPGRADING OF GRAVEL TO PAVED ROADS (SARON / GOUDA)	4 000 000	5 000 000	5 000 000	5 000 000	6 000 000
Replacement	UPGRADING GENL HERTZOG-WELLINGTON	1 000 000	-	-	-	-
Replacement	RECONSTRUCTION OF DROMMEDARIS STR	4 000 000	4 000 000	5 000 000	-	-

New / Replacement of Assets	Capital Item Description	2015/2016 Revised Capital Budget	2016/2017 Revised Capital Budget	2017/2018 Revised Capital Budget	2018/2019 Revised Capital Budget	2019/2020 Revised Capital Budget
Replacement	RECONSTRUCTION OF CECILIA STREET	-	-	5 000 000	8 000 000	-
Replacement	REFURBISHMENT OF STREETS & STORMWATER DEPOT	2 000 000	5 000 000	4 000 000	4 000 000	4 000 000
Replacement	RECONSTRUCTION OF STREETS	2 000 000	4 000 000	6 000 000	6 000 000	4 500 000
New	TRAFFIC CALMING MAIN STREET PAARL & WELLINGTON	350 000	240 000	-	-	-
New	TRAFFIC CALMING (DRAKENSTEIN)	1 400 000	400 000	400 000	500 000	800 000
New	UPGRADE JAN PHILLIPS MOUNTAIN DRIVE (GEOTECHNICAL REPORT INCLUDED)	1 500 000	-	-	-	-
Replacement	REFURBISH STORM WATER SYSTEMS (DRAKENSTEIN)	6 000 000	7 500 000	7 500 000	7 500 000	8 000 000
New	CONSTRUCT VAN DER STEL STREET (BETWEEN ABBATOIR AND KLEIN DRAKENSTEIN)	-	-	-	4 000 000	12 000 000
New	PAVING OF PARKING AREAS (DRAKENSTEIN)	-	1 000 000	500 000	500 000	500 000
New	PAARL GATEWAY PROJECT (MAIN ENTRANCES)	2 500 000	2 500 000	-	-	-
New	RAMPS FOR DISABLED (SIDEWALKS)	98 656	15 000	15 000	15 000	15 000
New	STREET NAME SIGNS (DRAKENSTEIN)	140 000	45 000	50 000	50 000	50 000
Replacement	CONSTRUCTION OF STOKERY ROAD, WELLINGTON (Transport)	8 070 175	-	-	-	-
New	TRAFFIC LIGHTS (DRAKENSTEIN)	1 600 000	1 600 000	2 880 607	2 000 000	2 000 000
Total		60 765 240	49 671 374	50 451 551	51 851 932	53 570 984

8.2.3 Langeberg

No municipal budget allocated to transport infrastructure or services.

8.2.4 Witzenberg

Directorate	Department	Project Description	Funding Source	Budget 20115/16	Budget 2016/2017	Budget 2017/2018
Community	Traffic	Fire Arms	CRR	R 100 000.00	R -	R -
Community	Traffic	Vehicle replacement programme	External Loans	R 420 000.00	R -	R -
Technical	Stormwater	Vredebes Housing Stormwater	HOUSE	R -	R 12 000 000.00	R 9 500 000.00
Technical	Stormwater	Network - Stormwater upgrading	CRR	R 150 000.00	R 200 000.00	R 220 000.00
Technical	Stormwater	Professional Fees for Rural Development Projects	CRR	R 200 000.00	R -	R -
Technical	Roads	Traffic Calming	CRR	R 200 000.00	R 220 000.00	R 250 000.00
Technical	Roads	Vredebes Housing Roads	HOUSE	R -	R 12 000 000.00	R 9 500 000.00
Technical	Roads	Skoonvlei Upgrading of Roads	CRR	R 3 800 000.00	R -	R -
Technical	Roads	Vehicle replacement programme	External Loans	R 230 000.00	R -	R -
Technical	Roads	Jackhammers	CRR	R 80 000.00	R -	R -
Technical	Roads	Vehicle replacement programme	CRR	R -	R 800 000.00	R -
Technical	Roads	Upgrading Roads - Vredebes	MIG	R -	R -	R 5 000 000.00
Technical	Roads	Bella Vista Housing Bulk Roads	MIG	R -	R -	R -

Directorate	Department	Project Description	Funding Source	Budget 20115/16	Budget 2016/2017	Budget 2017/2018
Technical	Roads	Network - Street	CRR	R 3 000 000.00	R 3 000 000.00	R 3 000 000.00
Technical	Roads	Equipment	CRR	R -	R 600 000.00	R -
Technical	Roads	Professional Fees for Rural Development Projects	CRR	R 500 000.00	R 600 000.00	R -

Annexure A: Enlarged Maps

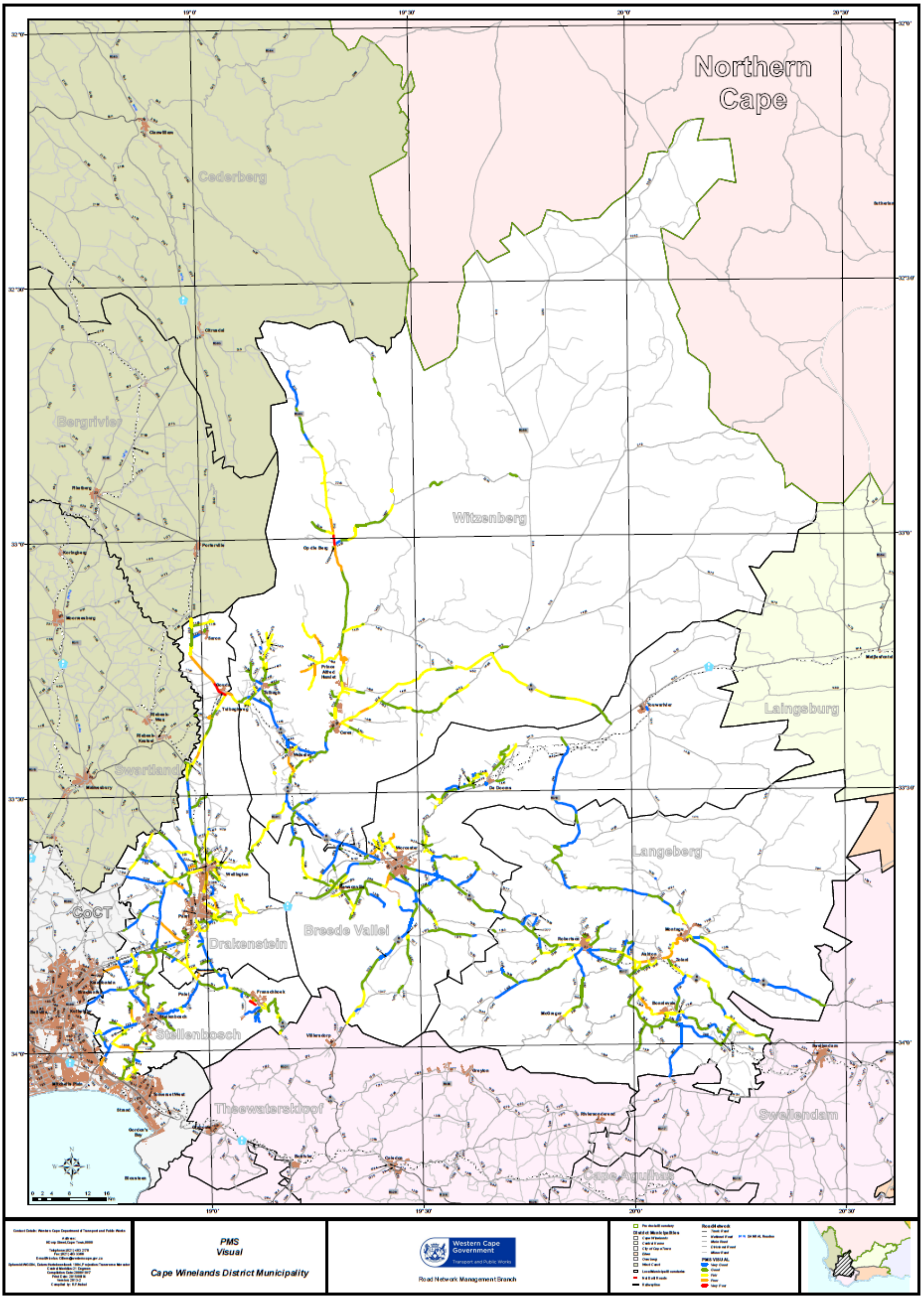


Figure Annexure A-1 Paved Road Condition of Provincial Roads (Enlarged)

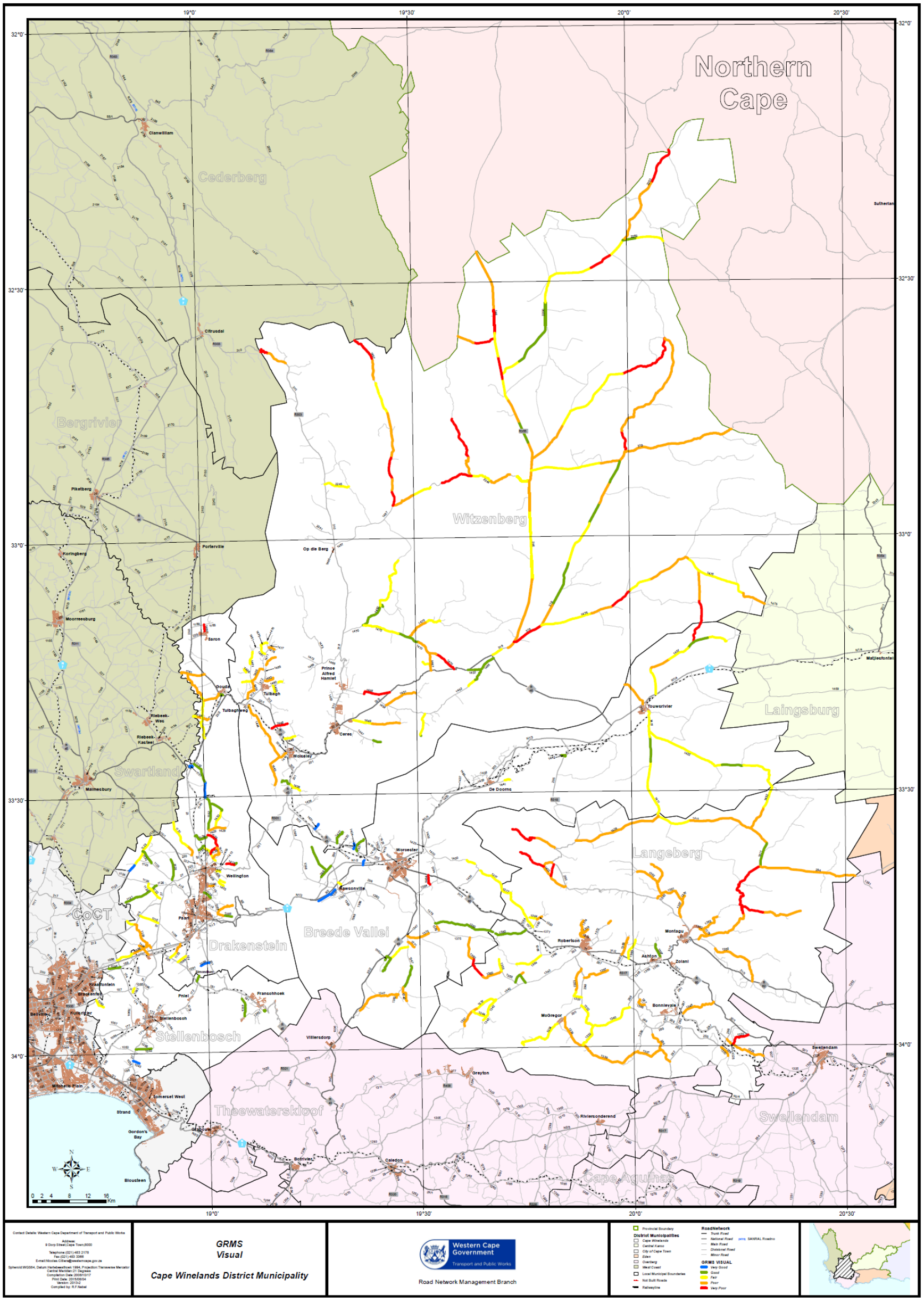


Figure Annexure A -2 Gravel Road Condition of Provincial Roads (Enlarged)

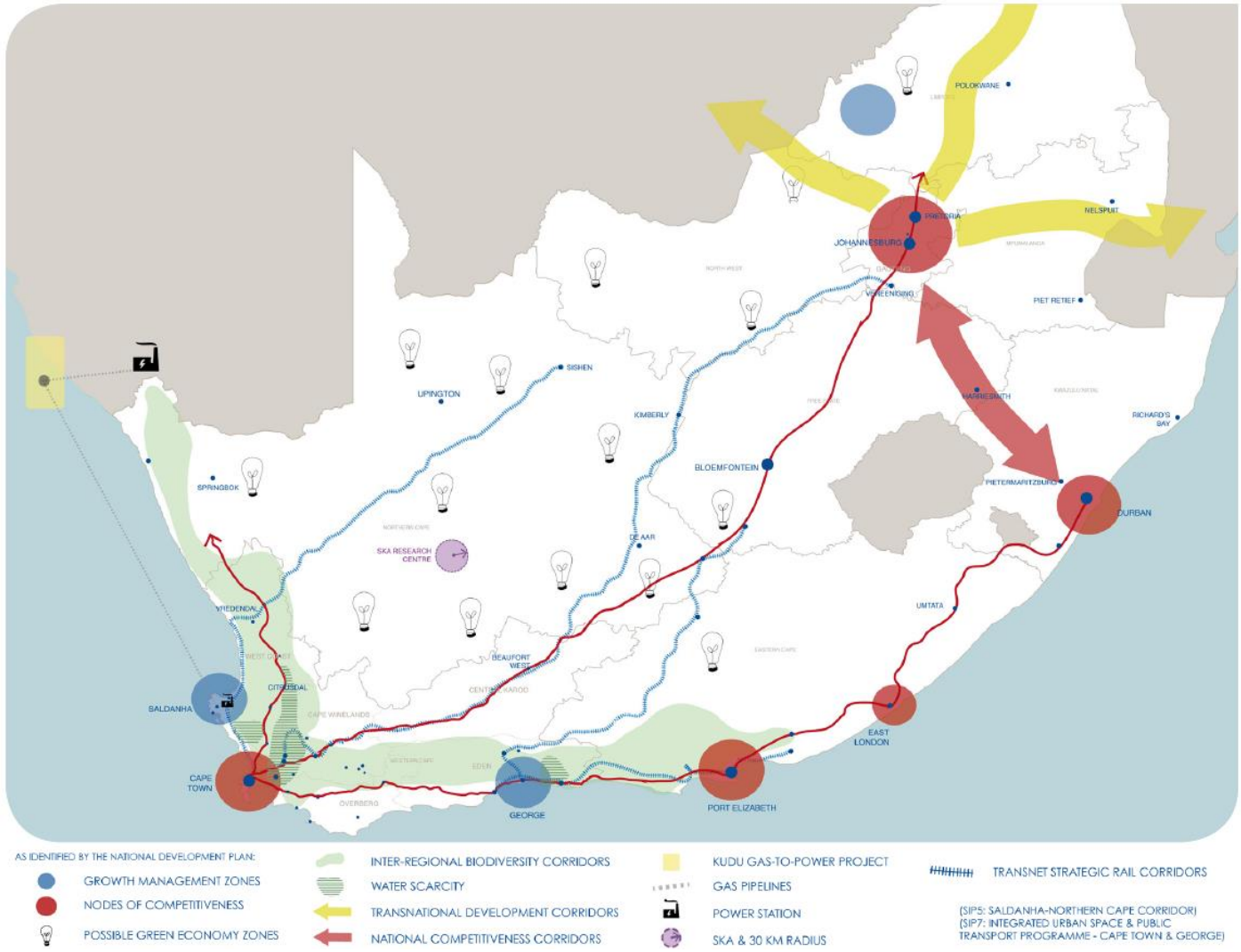


Figure Annexure A -3 Inter- and Intra- Provincial Spatial Initiatives based on NDP and other National Strategies (Enlarged)

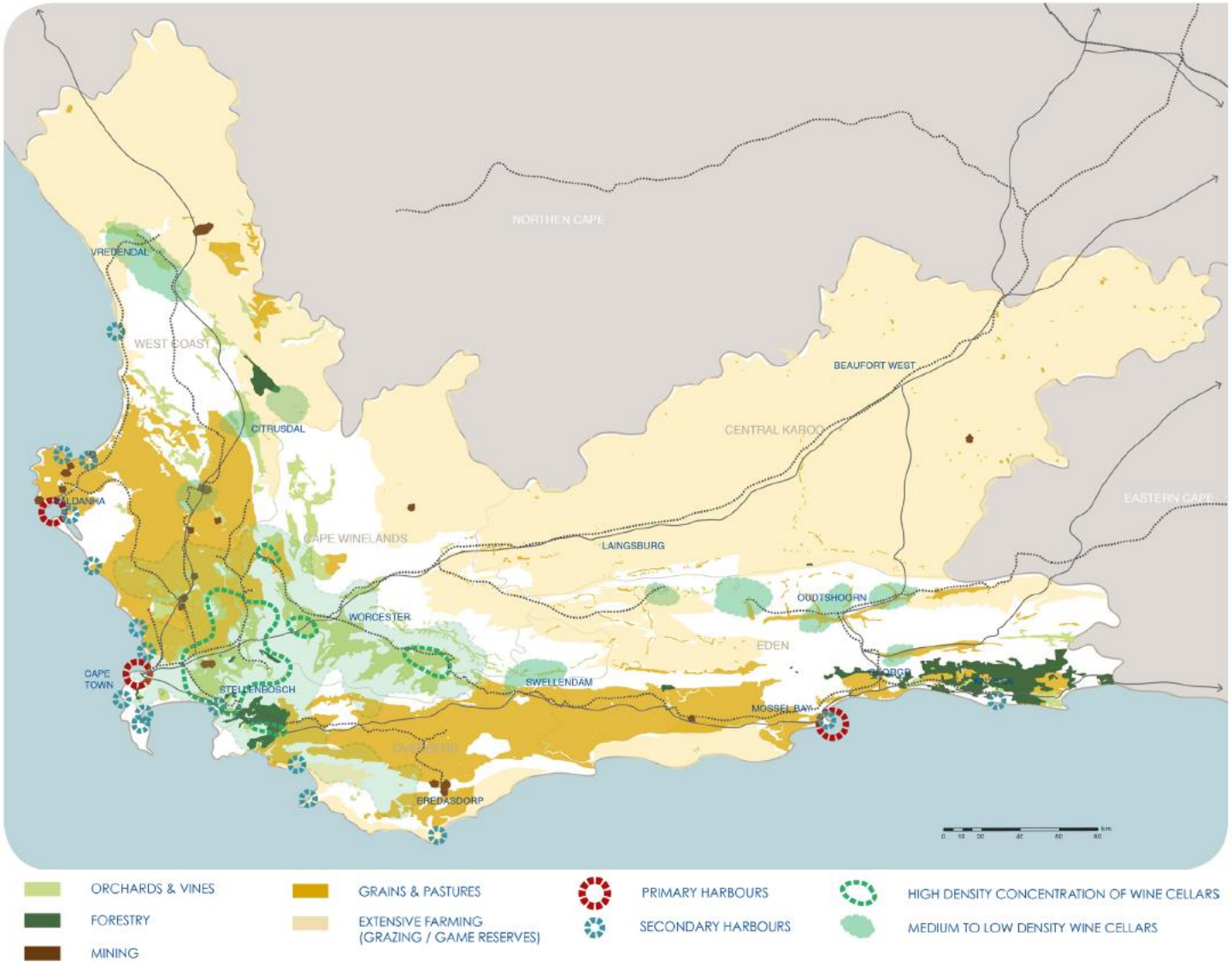


Figure Annexure A -4 Western Cape Province - Primary Sectors (Agriculture, Fishing, Forestry and Mining) (Enlarged)

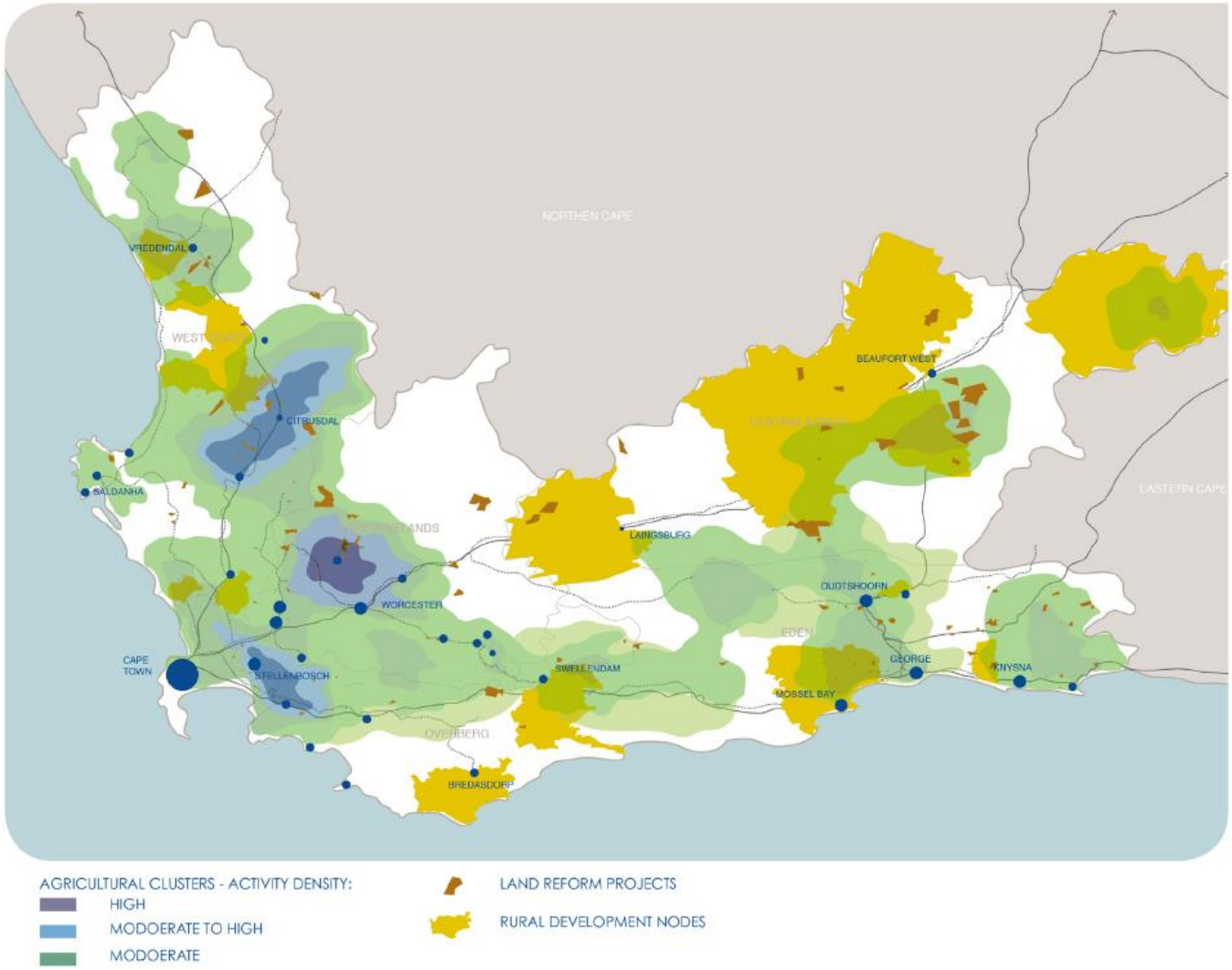


Figure Annexure A -5 Western Cape Province - Primary Sectors (Agriculture, Fishing, Forestry and Mining) (Enlarged)

Annexure B: School Bus Routes

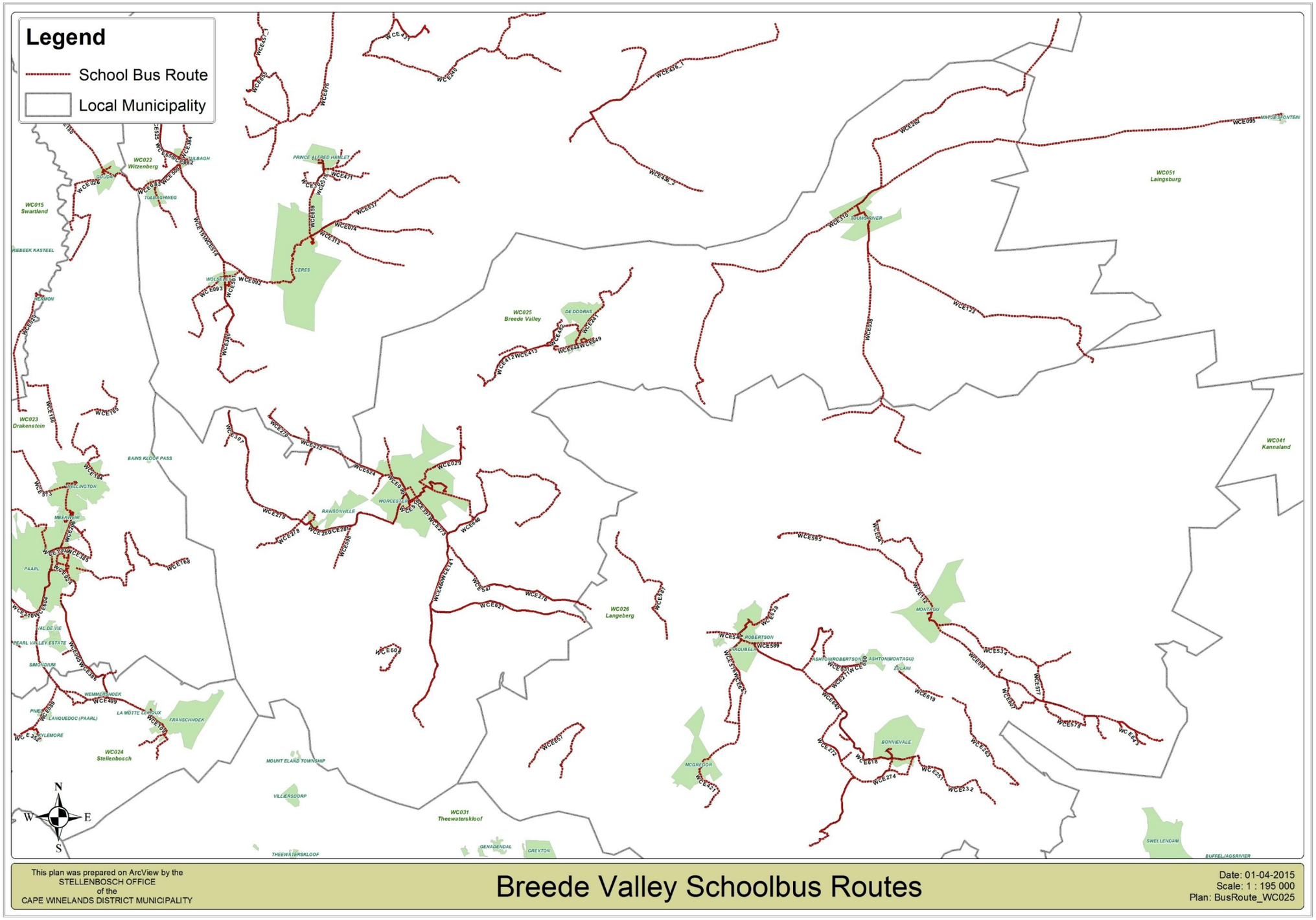


Figure Annexure B-1 Breede Valley School Bus Routes

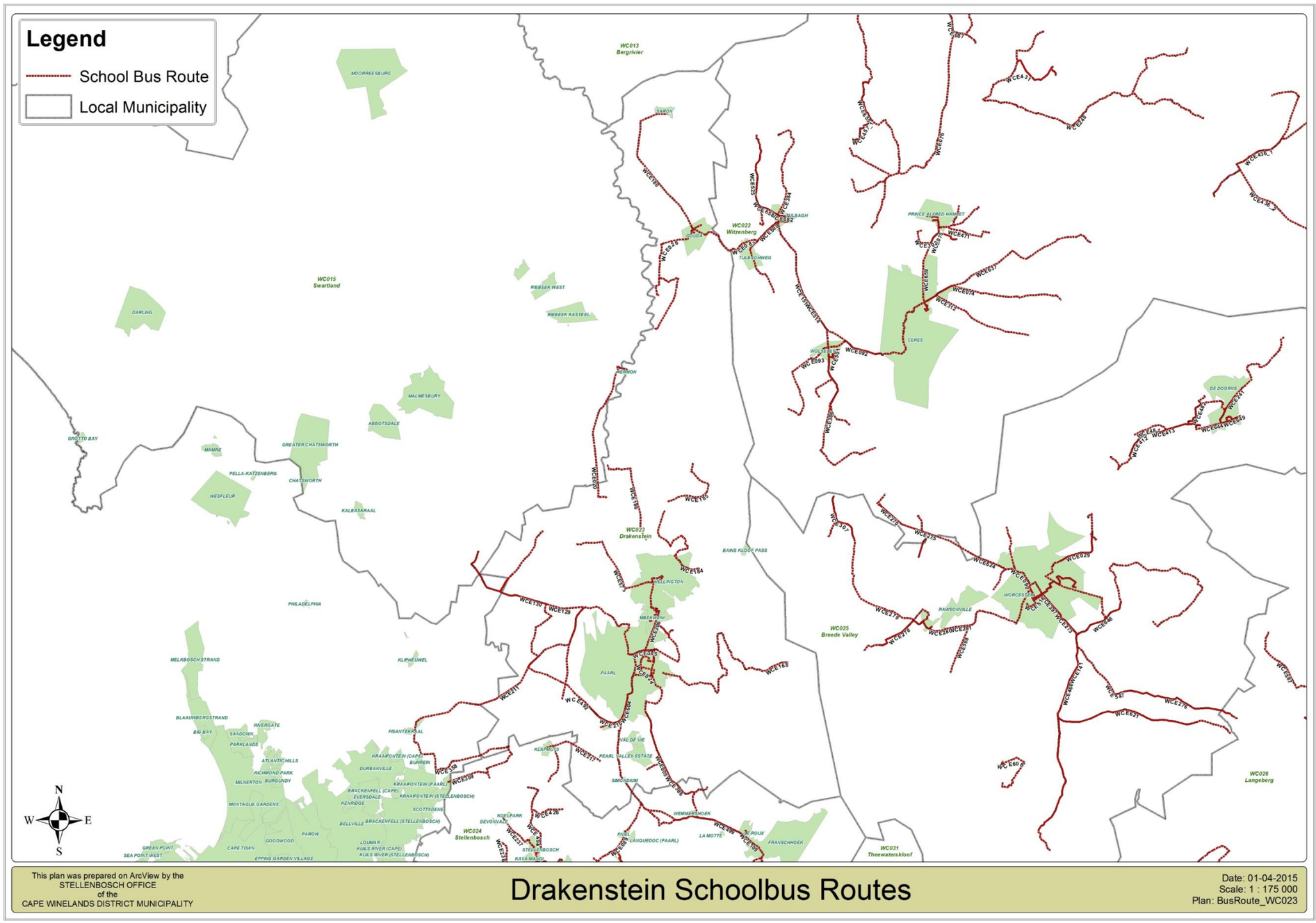


Figure Annexure B -2 Drakenstein School Bus Routes

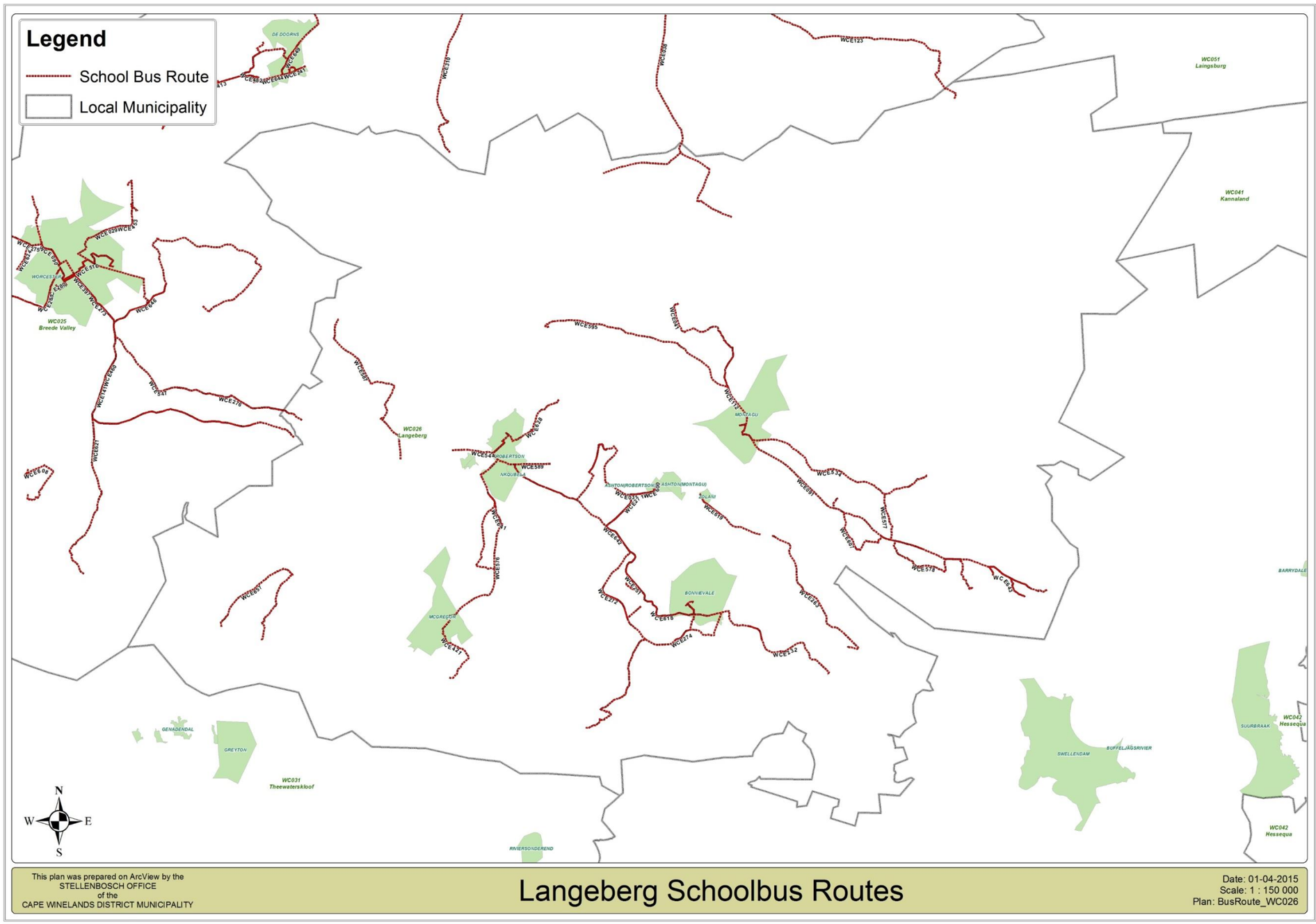


Figure Annexure B -3 Langeberg School Bus Routes

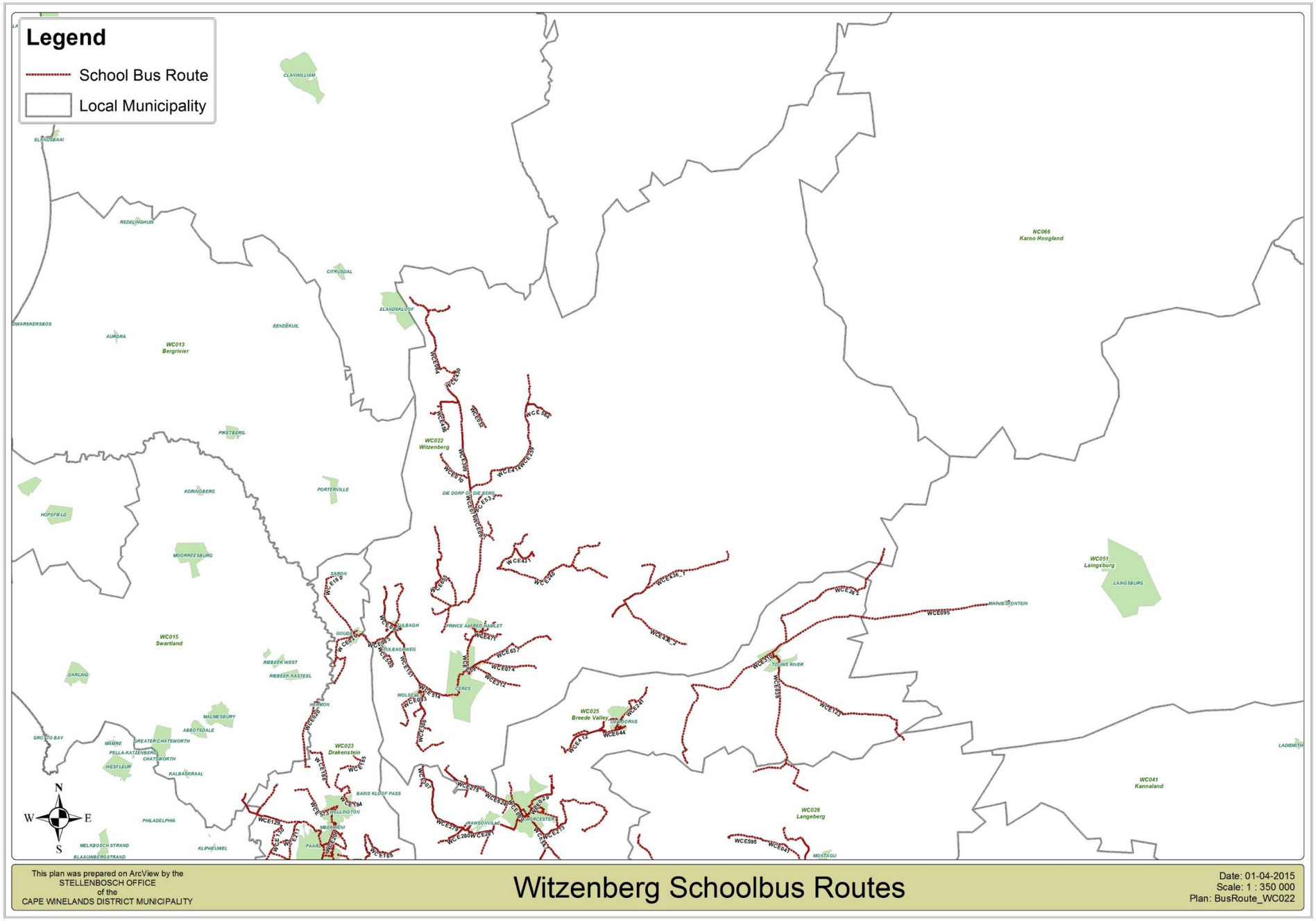


Figure Annexure B -4 Witzenberg School Bus Routes

Annexure C: Key Outcomes of Public Participation

Annexure D: Stakeholder Engagement Notes

Annexure E: Project Management Team Meeting Notes

Annexure F: Provincial Road Infrastructure MTEF Budget

Table Annexure F-1 WCG MTEF Budget for Rehabilitation/ Reconstruction: Cape Winelands District Municipality

PGWC - MTEF Budget with PROVINCIAL fund allocation according to Roads Infrastructure Branch **Rehabilitation / Reconstruction programme**

Road	Dir	From km	To km	From	To	AADT	SNC	Rough IRI	Condition %	RCI %	Cracks % All/Wide	Commit	NPV Benefit	Rehabilitation/Reconstruction Cost (R'000) 2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
DR01050	P	0.00	6.00	Jct MR168 Lynedoch	Groene Rivier	6236	3.0	5.0	60	28	4 / 4		20 206 985		25 885								
DR01050	P	6.00	7.34	Jct MR168 Lynedoch	Groene Rivier	1168	2.7	5.6	65	38	0 / 0		3 210 449					4 330					
DR01053	P	7.60	7.68	Jct MR27 Welgegund	Jct MR27 Audacia	123	2.4	6.2	75	55	1 / 1		432 979	258									
DR01064	P	1.72	5.86	Jct V Riebeeck St Stellenbosch	Jonkershoek Forestry Reserve	1401	2.5	5.1	62	25	5 / 4		3 232 301			12 718							
DR01067	P	0.00	3.25	Jct. MR177 near Longlands	Stellenboschkloof	662	2.7	5.1	73	55	0 / 0		1 651 420				8 066						
DR01069	P	0.84	4.00	Jct Mun MR177 Stellenbosch	Bertram's Winery	2003	3.3	4.8	61	30	4 / 4		5 719 425				13 820						
DR01078	P	0.76	2.20	Jct Mun MR172 Stellenbosch	Rustenburg Bdy Cranford	2008	2.9	4.7	73	35	1 / 1		3 205 145					6 466					
DR01079	P	0.00	0.24	Jct MR172 Silvermyn	Jct DR1079 Kylemore	3387	3.9	4.1	91	87	0 / 0		4 646 458						1 453				
DR01085	P	0.00	3.47	Jct MR174 Koelenhof	Jct MR27 Kromme Rhee	3273	2.9	3.9	60	29	4 / 4		6 375 536					13 456					
DR01102	P	14.00	15.15	Jct MR217 near Oortmanspost	Jct Vissershok and Main Road	818	2.9	4.2	51	26	7 / 7		5 553 021			4 815							
DR01102	P	6.00	14.00	Jct MR217 near Oortmanspost	Jct Vissershok and Main Road	818	2.4	4.6	45	25	7 / 7		5 003 433					34 890					
DR01103	P	1.65	1.86	Jct. MR205 near Simonsvlei	Jct. MR189 Van Wyks River	604	3.3	3.8	38	25	7 / 7		1 232 916					727					
DR01108	P	2.00	6.82	Jct MR189 Van Wyks River	Jct MR27 Ruite Valley	1108	2.6	4.7	35	23	7 / 7		3 588 746				18 692						
DR01130	P	0.00	0.03	Jct DR1125 Schoone Oord	Jct DR1123 Vondeling	117	3.3	7.1	91	87	0 / 0		694 281				174						
DR01151	P	0.12	0.35	Jct TR23/2 Hermon	Hermon Railway Station	264	3.3	7.2	33	22	11 / 11		1 837 335									999	
DR01152	P	22.00	23.87	Jct TR23/2 Hermon	Wellington Municipal Boundary	1709	2.8	4.1	50	25	2 / 2		2 849 520					8 460					
DR01343	P	0.44	3.10	Jct Mun MR191 Franschhoek	Jct OP05621 Farm La Dauphine	1738	2.0	3.9	70	30	1 / 1		2 770 289								18 206		
DR01351	P	0.00	1.13	Jct MR191 Lamotte	Jct DR1343 Franschhoek	1558	2.9	4.7	49	25	7 / 7		2 585 842							6 828			
DR01437	P	0.00	0.10	Jct DR1435 Hex River	Access Hex River Station	529	3.3	5.9	88	89	0 / 0		2 482 087		387								
DR01486	P	0.00	0.45	Jct MR310 Wagen Drift	Jct De Keur St Op-Die-Berg	1571	2.1	3.9	68	30	2 / 2		2 006 519										4 344
MR00025	P	3.67	3.98	Jct Lady Grey St Paarl	Jct MR218 Noorder Paar	14066	2.9	3.3	89	71	0 / 0		23 748 464				1 991						
MR00166	P	0.11	2.00	Jct MR165 Firgrove Stn	Jct MR27 near Zandberg	2295	2.7	5.5	42	23	7 / 7		8 052 963		7 329								
MR00166	P	2.00	4.71	Jct MR165 Firgrove Stn	Jct MR27 near Zandberg	2331	3.3	4.0	72	36	1 / 1		4 148 282				17 402						
MR00172	P	0.05	1.25	Jct Mun MR27 Stellenbosch	Jct MR191 Groot Drakenstein	12797	4.5	1.8	51	25	11 / 11		3 096 445		13 332								
MR00189	P	22.00	24.00	Jct Mun MR184 Bellville	Jct Mun MR201 Paarl	1963	3.2	4.3	91	90	0 / 0		6 001 230			8 192							
MR00189	P	12.34	16.00	Jct Mun MR184 Bellville	Jct Mun MR201 Paarl	1174	2.4	5.5	30	20	11 / 11		6 697 650			19 144							

MR00189	P	24.00	26.00	Jct Mun MR184 Bellville	Jct Mun MR201 Paarl	2914	3.0	3.0	91	90	0 / 0		4 658 037				10 341						
MR00189	N	31.48	32.84	(31.48)...	...(32.84)	4383	2.6	9.9	92	90	0 / 0		31 513 359				11 647						
MR00189	P	26.00	32.84	Jct Mun MR184 Bellville	Jct Mun MR201 Paarl	3340	3.1	3.4	91	90	0 / 0		5 669 758					34 617					
MR00191	P	0.00	2.00	Jct MR189 Paarl	Jct MR279 Rust River	5535	3.5	3.6	52	23	7 / 7		9 635 656		12 247								
MR00191	P	2.00	10.00	Jct MR189 Paarl	Jct MR279 Rust River	6361	3.0	3.7	48	23	7 / 7		53 773 800		52 515								
MR00201	P	12.00	14.00	Jct TR22/1 Ceres	Jct MR191 Wemmershoek	3720	2.7	7.2	46	22	4 / 4		33 686 649		9 048								
MR00201	P	6.00	12.00	Jct TR22/1 Ceres	Jct MR191 Wemmershoek	3568	3.7	6.1	53	23	7 / 7		20 978 119		37 487								
MR00201	P	36.00	40.00	Jct TR22/1 Ceres	Jct MR191 Wemmershoek	1328	2.7	3.0	53	26	4 / 4		1 188 422			17 306							
MR00201	P	14.00	20.00	Jct TR22/1 Ceres	Jct MR191 Wemmershoek	875	2.7	8.4	67	61	0 / 0		4 381 744				19 390						
MR00201	P	46.10	50.23	Jct TR22/1 Ceres	Jct MR191 Wemmershoek	8381	3.2	3.6	43	21	11 / 11		27 252 668						35 863				
MR00201	P	56.92	74.59	Jct TR22/1 Ceres	Jct MR191 Wemmershoek	3666	3.3	3.2	86	87	0 / 0		4 935 199						115 321				
MR00210	P	0.00	0.87	Jct Langenhoven Rd & TR9/2	Entrance to Hugenot Stn	5175	3.2	3.1	92	90	0 / 0		5 574 187						8 303				
MR00218	P	0.00	4.00	Jct MR25 Noorder Paarl	Jct MR27 Bordjie Outspan	3670	3.3	4.1	34	23	12 / 11	Yes	49 406 483		32 000								
MR00218	P	4.00	5.56	Jct MR25 Noorder Paarl	Jct MR27 Bordjie Outspan	2647	3.0	4.7	42	24	7 / 7	Yes	18 712 944			10 000							
MR00220	P	2.00	4.00	Jct TR25/1 Paarlse Pont	Jct TR25/1 Good Hope	1164	2.6	4.0	48	23	4 / 4		2 710 102			7 168							
MR00220	P	0.00	2.00	Jct TR25/1 Paarlse Pont	Jct TR25/1 Good Hope	1003	2.4	4.5	46	23	4 / 4		2 640 153					7 168					
MR00222	P	1.41	1.58	Jct Mun MR23 Wellington	Jct MR220 Zanddrift	2340	3.3	6.8	77	55	0 / 0		10 413 057			659							
MR00282	P	18.00	19.03	Jct NR2/4 Stormsvlei	Jct MR287 Bonnievale	1743	3.2	2.9	62	24	4 / 4	Yes	3 431 429		1 600								
MR00287	P	30.71	32.00	Jct MR31 Robertson	Jct MR288 Drew	1778	4.4	5.0	49	26	4 / 4		4 866 951		4 623								
MR00287	P	26.00	30.03	Jct MR31 Robertson	Jct MR288 Drew	2360	4.2	5.2	48	25	4 / 4		6 979 025			20 897							
MR00287	P	16.00	18.00	Jct MR31 Robertson	Jct MR288 Drew	2064	2.2	4.9	62	24	5 / 4		7 818 069					8 192					
MR00287	P	14.00	16.00	Jct MR31 Robertson	Jct MR288 Drew	2683	2.7	4.2	57	25	4 / 4		7 860 350					9 216					
MR00287	P	18.00	22.00	Jct MR31 Robertson	Jct MR288 Drew	1237	2.5	4.9	58	25	4 / 4		3 970 867					14 336					
MR00287	P	22.00	26.00	Jct MR31 Robertson	Jct MR288 Drew	1366	2.9	4.9	50	23	11 / 11		4 269 554					18 097					
MR00291	P	6.00	8.99	Jct TR32/1 Stockwell Stn	Jct Mun MR287 Bonnievale	1293	3.0	4.5	48	24	7 / 7		3 440 589				13 527						
MR00298	P	0.00	2.00	Jct TR30/2 Worcester	Jct MR299 Wyzersdrift	5148	3.0	4.2	52	23	4 / 4		12 178 924		9 149								
MR00298	P	2.00	4.00	Jct TR30/2 Worcester	Jct MR299 Wyzersdrift	5208	3.2	4.8	55	25	4 / 4		14 800 031		11 978								

MR00302	P	0.00	24.59	Jct NR1/2 Hartebeest River	Jct MR201 Kleine Berg	3908	3.7	3.1	52	23	4 / 4	Yes	61 622 473	52 000									
MR00303	P	0.00	0.34	Jct NR1/3 De Doorns	Jct NR1/3 Buffelskraal	4408	4.5	3.7	91	87	0 / 0		7 998 442					2 637					
MR00305	P	3.53	6.96	Jct TR22/1 Goedgevonden	Jct MR201 La Plaisante	2472	4.6	3.6	51	22	7 / 7		5 368 156				27 648						
MR00306	P	0.36	0.72	Jct Mun MR305 Wolseley	Jct Mun MR307 Wolseley	1954	3.6	4.2	80	65	0 / 0		3 695 707					1 475					
MR00310	P	12.00	20.00	Jct Mun MR22 Ceres	Jct NR 7/4 Citrusdal	3145	2.7	3.2	51	33	4 / 4		5 910 303				66 328						
MR00310	P	38.00	44.00	Jct Mun MR22 Ceres	Jct NR 7/4 Citrusdal	1234	2.0	4.0	28	21	11 / 11		4 621 573					26 011					
MR00310	P	44.00	50.00	Jct Mun MR22 Ceres	Jct NR 7/4 Citrusdal	939	2.0	5.3	19	20	11 / 11		4 131 543						27 109				
MR00310	P	10.00	12.00	Jct Mun MR22 Ceres	Jct NR 7/4 Citrusdal	5151	2.6	2.5	92	93	0 / 0		6 676 419							12 178			
OP04232	P	0.00	0.55	Jct MR166 near Normandie	Jct OP4233 at Property 123/259	629	3.3	4.8	66	31	0 / 0		1 070 749					1 216					
OP04236	P	0.00	2.67	Jct MR27 Klein Heldeberg	Jct DR1021 Eendrag	2066	3.6	4.8	73	47	0 / 0		3 822 586						8 202				
OP05247	P	0.00	0.94	Jct MR205 near Babylonstoren	Boundary at Backsberg	840	3.3	7.2	64	28	1 / 1		6 458 150					2 427					
Total														**52258**	**217580**	**194874**	**144704**	**199380**	**160940**	**190006**	**182066**	**999**	**4344**

Table Annexue F -1 WCG MTEF Budget for Reseal: Cape Winelands District Municipality

PGWC - MTEF Budget with PROVINCIAL fund allocation according to Roads Infrastructure Branch
Reseal programme

Road	Dir	From km	To km	From	To	AADT	SNC	Rough IRI	Condition %	RCI %	Cracks % All/Wide	Commit	NPV Benefit	Reseal Cost (R'000) 2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
DR01123	P	8.00	10.00	Jct TR25/1 Botter River Vallei	Jct MR174 Klipheuwel	564	3.0	2.8	68	46	1 / 1		244 794						3 438				
DR01154	P	3.85	3.91	Jct TR23/2 Sonquasdrift	Jct MR226 Riebeek Kasteel	284	3.3	3.4	73	68	0 / 0		515 839		57								
MR00023	P	1.64	4.00	Jct Mun MR27 Wellington	Jct TR24/1 Hermon	6096	5.1	1.8	76	36	0 / 0		2 370 006		5 409							5 409	
MR00023	P	4.00	6.00	Jct Mun MR27 Wellington	Jct TR24/1 Hermon	5701	5.0	1.8	84	38	1 / 0		2 235 742			4 202							4 202
MR00023	P	6.00	18.00	Jct Mun MR27 Wellington	Jct TR24/1 Hermon	5024	4.7	1.8	84	53	0 / 0		1 626 943					26 358					
MR00023	P	18.00	20.00	Jct Mun MR27 Wellington	Jct TR24/1 Hermon	3973	4.0	1.8	86	47	1 / 0		1 850 430			4 202							4 202
MR00023	P	20.00	22.00	Jct Mun MR27 Wellington	Jct TR24/1 Hermon	3973	4.1	2.1	73	25	1 / 0		2 261 383		4 202							4 202	
MR00023	P	22.00	23.09	Jct Mun MR27 Wellington	Jct TR24/1 Hermon	3973	4.6	2.1	83	63	0 / 0		1 482 339					2 498					
MR00165	P	8.47	8.99	Jct MR116 Faure I/C	Jct MR166 Firgrove	12819	3.9	2.7	71	39	0 / 0		12 879 494	993									
MR00172	P	2.49	8.00	Jct Mun MR27 Stellenbosch	Jct MR191 Groot Drakenstein	8590	4.2	1.9	86	73	0 / 0		1 356 719						17 509				
MR00172	P	8.00	15.76	Jct Mun MR27 Stellenbosch	Jct MR191 Groot Drakenstein	8137	4.2	2.3	89	80	0 / 0		7 917 162						16 350				
MR00187	P	4.72	8.00	Jct Mun MR179 Bellville	Jct MR174 Koelenhof	13105	4.8	1.0	91	82	0 / 0		972 831							7 518			
MR00187	P	8.00	12.00	Jct Mun MR179 Bellville	Jct MR174 Koelenhof	9756	4.8	1.1	92	86	0 / 0		758 473							9 168			
MR00187	P	12.00	14.71	Jct Mun MR179 Bellville	Jct MR174 Koelenhof	9703	4.8	1.3	91	78	0 / 0		1 035 343						6 211				
MR00189	P	16.00	18.00	Jct Mun MR184 Bellville	Jct Mun MR201 Paarl	1794	2.8	3.6	58	36	4 / 4		1 174 128		3 438							3 438	
MR00191	P	10.00	21.88	Jct MR189 Paarl	Jct MR279 Rust River	8847	3.9	1.3	82	49	0 / 0		2 339 188			25 724							25 724
MR00191	P	22.69	23.71	Jct MR189 Paarl	Jct MR279 Rust River	13476	3.2	1.3	61	31	4 / 4		3 762 372	2 143							2 143		
MR00191	P	26.02	28.00	Jct MR189 Paarl	Jct MR279 Rust River	2547	3.3	2.1	61	28	4 / 4		943 151		3 025							3 025	
MR00191	P	28.00	38.00	Jct MR189 Paarl	Jct MR279 Rust River	2252	2.9	1.7	78	54	0 / 0		565 896				13 370						
MR00191	P	38.00	41.95	Jct MR189 Paarl	Jct MR279 Rust River	1562	2.3	1.7	83	84	0 / 0		282 700							5 281			
MR00201	N	46.10	50.23	(46.10)... [56.92]...	...(50.23) ...[59.02]	8381	3.5	2.7	54	24	7 / 7		7 900 741	7 888									
MR00201	N	56.92	59.02	(46.10)... [56.92]...	...(50.23) ...[59.02]	8027	5.0	2.7	66	27	2 / 1		6 437 108		4 412								

MR00201	P	0.00	2.00	Jct TR22/1 Ceres	Jct MR191 Wemmershoek	2208	4.8	2.9	71	24	2 / 1		1 003 057			3 820						3 820
MR00201	P	2.00	6.00	Jct TR22/1 Ceres	Jct MR191 Wemmershoek	2208	4.4	2.8	72	25	2 / 2		895 708				7 640					
MR00201	P	40.00	42.70	Jct TR22/1 Ceres	Jct MR191 Wemmershoek	1702	3.5	1.3	54	29	4 / 4		362 818	3 610							3 610	
MR00205	P	0.00	6.00	Jct MR27 Klapmuts	Jct MR191 Simondium	3675	2.9	3.0	83	59	0 / 0		5 559 129				8 022					
MR00205	P	6.00	8.62	Jct MR27 Klapmuts	Jct MR191 Simondium	3946	2.9	3.5	68	25	1 / 1		8 158 339		3 503							
MR00207	P	1.40	2.70	Jct Mun MR208 Paarl	Jct MR201 Vendome Firs	9654	3.7	3.3	65	25	2 / 2		12 087 774		2 235							
MR00213	P	10.79	20.88	Jct MR188 Lichtenburg	Jct MR27 Bellview	2659	3.4	2.3	89	88	0 / 0		582 102						19 272			
MR00287	P	2.69	4.00	Jct MR31 Robertson	Jct MR288 Drew	3047	3.6	2.8	86	84	0 / 0		746 596						2 252			
MR00287	P	4.00	6.00	Jct MR31 Robertson	Jct MR288 Drew	3047	3.2	2.3	86	63	0 / 0		958 157					3 820				
MR00287	P	6.00	14.00	Jct MR31 Robertson	Jct MR288 Drew	2826	3.7	2.6	85	69	0 / 0		975 310					15 280				
MR00288	P	14.00	16.34	Jct TR32/1 Jan Harmansgat	Jct MR282 Bonnievale	550	2.9	2.4	71	30	1 / 1		127 187						3 129			
MR00289	P	16.00	18.54	Jct MR287 Goudmyn	Jct MR282 Bonnievale	800	3.2	3.0	80	42	1 / 1		269 811					2 911				
MR00290	P	0.25	4.00	Jct Mun MR31 Robertson	Jct Smit St & DR1334 McGregor	1828	3.5	3.5	69	26	0 / 0		999 243			4 632						4 632
MR00290	P	4.00	6.00	Jct Mun MR31 Robertson	Jct Smit St & DR1334 McGregor	1126	3.4	3.4	60	25	4 / 4		592 508		2 292						2 292	
MR00290	P	16.00	18.50	Jct Mun MR31 Robertson	Jct Smit St & DR1334 McGregor	1014	3.1	3.7	78	34	1 / 1		491 416		2 865						2 865	
MR00298	P	4.00	14.50	Jct TR30/2 Worcester	Jct MR299 Wyzersdrift	4824	3.6	2.5	79	47	0 / 0		1 692 947			23 684						23 684
MR00298	P	20.45	20.70	Jct TR30/2 Worcester	Jct MR299 Wyzersdrift	713	2.9	2.7	65	25	1 / 1		251 606		334							
MR00299	P	0.00	4.00	Jct MR302 De Breede River	Jct DR1398 Goudini Spa	749	3.7	2.5	83	45	1 / 0		164 292						6 112			
MR00299	P	4.00	5.13	Jct MR302 De Breede River	Jct DR1398 Goudini Spa	652	3.2	3.5	77	30	1 / 1		397 981			1 511						1 511
MR00299	P	8.45	9.85	Jct MR302 De Breede River	Jct DR1398 Goudini Spa	423	3.3	2.8	64	24	3 / 3		119 962				1 872					
MR00307	P	0.00	1.23	Jct TR22/1 Waverley	Jct Mun MR305 Wolseley	1874	3.4	3.5	56	24	1 / 1		1 037 419		1 645						1 645	
MR00310	P	1.91	6.00	Jct Mun MR22 Ceres	Jct NR 7/4 Citrusdal	8274	2.2	2.6	58	23	4 / 4		19 356 894	9 374								
MR00310	P	6.00	8.00	Jct Mun MR22 Ceres	Jct NR 7/4 Citrusdal	5969	2.4	3.0	69	24	0 / 0		10 799 693		4 584							
MR00310	P	8.00	10.00	Jct Mun MR22 Ceres	Jct NR 7/4 Citrusdal	5466	2.4	3.2	54	21	5 / 4		11 247 869	4 202								
DR01168	P	0.00	4.86	Jct TR23/3 Halfmanshof	De Hoek Estates	357	3.9	3.3	56	27	5 / 4		173 658				6 498					
MR00310	P	52.00	58.00	Jct Mun MR22 Ceres	Jct NR 7/4 Citrusdal	800	2.0	2.6	56	29	1 / 1		456 202		8 022							
MR00310	P	66.00	68.00	Jct Mun MR22 Ceres	Jct NR 7/4 Citrusdal	266	3.1	2.2	70	35	1 / 1		54 002						3 438			
MR00312	P	0.00	4.70	Jct TR22/1 Leeuw River	Jct DR1471 Oude Drostdy	1432	3.9	3.2	59	29	1 / 1		881 803		6 284						6 284	

MR00313	P	0.40	4.89	Jct Mun MR312 Tulbagh	Tulbagh Weg Rly Stn	1574	4.4	2.7	84	56	1 / 0		348 163							10 291			
OP04234	P	0.00	1.16	Jct DR1039 & OP4233 Raithby	Bdy of Pty 502 near Tertia	673	3.3	2.0	80	69	0 / 0		71 093					1 108					
OP05226	P	0.00	0.22	Jct MR172 near Walcarmas	On Property 116/1 Glen Arum	65	3.3	2.3	69	30	1 / 1		12 677							252			
OP05255	P	0.00	1.41	Jct MR201 Loewenstein	De Hoop 838 Bdy Iolille	1303	3.7	2.1	85	81	0 / 0		194 103							2 424			
OP05620	P	0.00	1.94	Jct DR1343 near Bourgogne	Farm Boundary near Hillside	499	2.2	3.8	55	24	4 / 4		260 685		2 594							2 594	
OP05729	P	0.00	0.23	Jct OP5728 Carpe Diem	Protea	97	3.3	2.3	56	25	5 / 4		27 175				264						
OP05883	P	5.25	5.56	Jct DR1452 on Klipfontein	Pty 393 & 426 Welvaart Bdy	147	3.3	2.9	69	37	1 / 1		64 869						296				
DR01021	P	1.55	3.55	Jct Old Stellenbosch Rd S/West	Jct MR166 Firgrove Stn	4254	3.3	3.0	76	50	0 / 0		3 304 365		2 292								
DR01052	P	0.00	4.44	Jct MR168 Welmoed Estate	Jct OP05208 Veelverjaagt	1853	2.8	3.4	56	27	1 / 1		955 718		6 784							6 784	
DR01053	P	0.81	4.20	Jct MR27 Welgegund	Jct MR27 Audacia	2718	3.0	2.0	85	84	0 / 0		387 837							5 827			
DR01056	P	0.00	1.32	Jct MR27 Jamestown	Boundary of Jamestown	3251	3.7	3.8	76	41	4 / 4		1 761 237		3 278							3 278	
DR01069	P	4.00	5.76	Jct Mun MR177 Stellenbosch	Bertram's Winery	1022	3.7	3.7	73	39	1 / 1		646 430		2 017							2 017	
DR01334	P	0.00	0.19	Jct Smit St & MR290 McGregor	Rietvallei Boundary	365	3.3	3.3	79	73	1 / 1		212 143				254						
DR01358	P	0.00	4.05	Jct TR31/2 Kraalbosch Vlakte	Jct MR287 Spes Bona	676	3.4	3.4	75	37	1 / 1		320 207				4 641						
DR01359	P	0.00	3.00	Jct DR1358 Rouxvale	Jct DR1365 Sandvliet	284	2.7	2.6	72	31	1 / 1		47 799							4 011			
DR01363	P	0.00	2.84	Jct TR31/2 Riet Valley	Jct MR287 Goedemoed	464	4.2	2.8	84	74	0 / 0		89 781							3 255			
DR01379	P	8.26	8.59	Jct TR30/2 Reiersrus	Jct DR1375 Scherpenheuwel	374	2.6	3.8	69	35	4 / 4		298 061		378							378	
DR01380	P	7.11	7.79	Jct TR31/1 De Norree	Jct DR1379 Moordkuil	177	3.3	2.6	77	53	1 / 1		33 723								909		
DR01385	P	0.88	2.44	Jct DR1118 & MR210 Drakenstein	Jct OP05631 Lot C Keerweder	870	3.0	2.8	78	68	0 / 0		166 695							1 788			
DR01388	P	0.00	3.12	Jct DR1118 Rem Lanquedoc	Jct DR1119 Eikerus	1411	2.9	3.5	48	26	8 / 7		958 841	4 171							4 171		
DR01389	P	0.00	2.00	Jct MR298 Boontjies River	Jct DR1386 Daschbosch River	522	2.8	2.6	75	32	1 / 1		119 418						2 674				
DR01090	P	4.00	6.73	Jct MR27 Klapmuts	Jct DR1098 Hoopenberg	943	2.5	3.2	61	23	1 / 1		313 283			4 171							
DR01389	P	2.00	4.03	Jct MR298 Boontjies River	Jct DR1386 Daschbosch River	403	2.6	2.5	78	33	1 / 0		66 680							2 714			
DR01390	P	4.00	6.93	Jct MR298 Pokkraal	Brandvlei Prison	703	5.0	2.1	81	46	1 / 1		107 230						5 037				
DR01394	P	10.00	11.37	Jct TR30/2 Aan de Doorns	Jct DR1400 Efatta	470	2.7	2.7	79	31	0 / 0		178 063						1 570				
DR01398	P	0.00	4.00	Jct MR298 Rawsonville	Jct MR302 Witelsboom	2516	3.7	2.6	66	33	4 / 4		1 125 186		7 640							7 640	
DR01398	P	4.00	8.00	Jct MR298 Rawsonville	Jct MR302 Witelsboom	1046	3.0	2.7	64	29	0 / 0		289 506			5 348							

DR01398	P	8.00	12.00	Jct MR298 Rawsonville	Jct MR302 Witelsboom	845	3.1	3.5	52	21	5 / 5		387 973		4 966							
DR01398	P	12.00	14.00	Jct MR298 Rawsonville	Jct MR302 Witelsboom	845	3.8	2.3	71	30	1 / 1		169 899					3 438				
DR01399	P	0.97	1.67	Jct MR298 Klipdrift	Jct V.Riebeeck St Rawsonville	475	3.0	2.9	76	36	1 / 0		104 708						802			
DR01400	P	18.00	20.00	Jct TR31/1 Nuy Station	Jct NR1/3 De Wet Station	504	2.8	3.1	68	28	1 / 1		202 659			2 292						
DR01409	P	0.00	0.49	Jct MR201 Mount Breeze	Jct DR1413 Groenfontein	575	3.6	3.0	76	27	2 / 2		170 861					655				
DR01416	P	1.80	5.63	Jct NR1/2 Worcester	Jct OP05706 Hartebeest River	467	3.1	3.3	65	42	1 / 1		131 172				4 701					
DR01426	P	2.00	4.33	Jct NR1/3 Glen Heatlie	Jct DR1400 De Wet	330	3.8	2.8	75	76	1 / 1		63 401						4 005			
DR01440	P	0.00	0.26	Jct Mun MR306 Wolseley	Jct OP5774 & OP5775 Elandsklf	1898	3.3	3.7	71	38	0 / 0		2 989 815		397							
DR01447	P	0.00	7.85	Jct TR22/2 Ceres	Jct OP05848 Ezelsfontein	906	2.6	2.6	74	36	0 / 0		294 246					11 259				
DR01452	P	4.00	10.00	Jct TR22/2 Schapen River	Jct TR22/2 Hottentotkloof	432	3.5	2.8	77	64	0 / 0		109 382						8 022			
DR01458	P	6.00	8.00	Jct TR22/2 Rhodona	Jct MR310 Prince Alfred Hamlet	508	3.3	2.5	81	52	1 / 1		109 995						2 674			
DR01458	P	8.00	10.92	Jct TR22/2 Rhodona	Jct MR310 Prince Alfred Hamlet	652	2.7	2.5	63	25	3 / 2		172 008			3 904						
DR01468	P	0.00	4.00	Jct MR310 Koelefontein	Jct OP05873 Doornkraal Rd	581	2.7	2.6	65	31	0 / 0		177 615				4 584					
DR01468	P	4.00	6.00	Jct MR310 Koelefontein	Jct OP05873 Doornkraal Rd	546	2.8	2.8	61	38	1 / 1		246 899				2 292					
DR01471	P	0.00	5.43	Jct DR1459 Die Heuwel	Jct DR1477 Bloubank	529	3.1	2.9	71	40	0 / 0		146 315						6 605			
DR01108	P	0.00	2.00	Jct MR189 Van Wyks River	Jct MR27 Ruite Valley	1541	3.5	3.1	49	25	4 / 4		863 107		2 674						2 674	
DR01110	P	0.78	4.80	Jct Mun MR209 Paarl	MR201 Wateruintjies Vlei	1258	3.7	2.9	79	40	1 / 1		480 326					7 678				
DR01114	P	0.00	1.70	Jct. MR201 near Paris Oaks	Jct. DR1110 Paarl	2801	3.9	2.8	68	37	0 / 0		1 147 763		2 273						2 273	
DR01118	P	1.05	4.00	Jct Mun MR201 Daljosafat	Jct MR210 Palmietvlei	1876	3.6	3.4	71	34	1 / 0		893 288			3 944						3 944
DR01118	P	4.00	6.31	Jct Mun MR201 Daljosafat	Jct MR210 Palmietvlei	2990	3.6	3.5	60	26	4 / 4		2 427 196	3 088						3 088		
		Total												**35471**	**87600**	**87434**	**54137**	**75006**	**66294**	**95630**	**13922**	**56798**	**71719**

Table Annexue F -2 WCG MTEF Budget for Upgrade to Paved Standard: Cape Winelands District Municipality

PGWC - MTEF Budget with PROVINCIAL fund allocation according to Roads Infrastructure Branch

Upgrade to paved standards

Road	Dir	From km	To km	From	To	District	AADT	Gravel mm	Commit	NPV Benefit	Upgrade to pave standards: Cost (R'000) 2014	2015	2016	2017	2018
DR01374	P	0.47	1.32	Keerom St Robertson	Willemnels Riv CW Lange Valley	DM : Cape Winelands	569	15		######	5 865				
DR01440	P	0.26	2.09	Jct Mun MR306 Wolseley	Jct OP5774 & OP5775 Elandsklf	DM : Cape Winelands	1024	15		######	12 627				
DR01090	P	6.73	6.78	Jct MR27 Klapmuts	Jct DR1098 Hoopenberg	DM : Cape Winelands	424	20		7 943 182		345			
DR01053	P	4.20	7.60	Jct MR27 Welgegund	Jct MR27 Audacia	DM : Cape Winelands	1004	90		######		23 460			
DR01385	P	2.44	3.80	Jct DR1118 & MR210 Drakenstein	Jct OP05631 Lot C Keerweder	DM : Cape Winelands	529	0		8 185 567			9 384		
DR01129	P	2.82	4.76	Jct MR23 Olyvenhout	Jct DR1152 Groenberg	DM : Cape Winelands	513	0		7 728 898			13 386		
DR01351	P	1.13	5.26	Jct MR191 Lamotte	Jct DR1343 Franschhoek	DM : Cape Winelands	723	75		7 426 054			28 497		
DR01413	P	6.59	8.39	Jct DR1152 Olifantskop	Jct OP05643 West Bdy Welvanpas	DM : Cape Winelands	508	7		5 380 917				12 420	
DR01094	P	0.00	1.92	Jct MR174 Cross Roads	Jct DR1097 Kraaifontein	DM : Cape Winelands	484	33		######				13 248	
DR01449	P	0.78	11.12	Jct TR22/2 eNduli	Jct OP5854 & OP5855 Swaarmoed	DM : Cape Winelands	537	12		######				71 346	
DR01104	P	0.00	1.72	Jct MR189 Klapmuts	Jct OP5241 Klapmuts Outspan	DM : Cape Winelands	432	50		7 133 779					11 868
DR01124	P	0.17	1.95	Jct MR201 Vlakplaas	Jct DR1119 Eikerus	DM : Cape Winelands	457	35		5 208 442					12 282
DR01123	P	12.28	22.00	Jct TR25/1 Botter River Vallei	Jct MR174 Klipheuwel	DM : Cape Winelands	517	24		######					67 068
										TOTALS	**18 492**	**25 820**	**53 283**	**99 031**	**93 236**

Table Annexue F -3 WCG MTEF Budget for Regravel: Cape Winelands District Municipality

PGWC - MTEF Budget with PROVINCIAL fund allocation according to Roads Infrastructure Branch
Regravel
programme

Road	Dir	From km	To km	From	To	AADT	GravelThckness mm	Surface Type	Commit	NPV Benefit	Regravel Cost (R'000)									
											2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
DR01121	P	0.00	5.00	Jct DR1126 Bordje Outspan	Jct OP05244 Middelburg	154	12	Gravel		3 894 251		1 650							1 650	
DR01122	P	0.47	4.84	Jct MR27 Hoogstede	Jct DR1126 Langerug	184	17	Gravel		9 312 488		1 442					1 442			
DR01128	P	0.00	2.00	Jct. DR1125 Paarl	Klip Valley	122	0	Gravel		2 539 523			660							660
DR01128	P	2.00	3.00	Jct. DR1125 Paarl	Klip Valley	72	16	Gravel		1 171 639									330	
DR01130	P	0.03	3.23	Jct DR1125 Schoone Oord	Jct DR1123 Vondeling	117	14	Gravel		3 357 401				1 056						
DR01133	P	0.11	1.70	Jct MR23 Soetendal	Jct DR1152 Olifantskop	178	0	Gravel		3 811 809				525				525		
DR01135	P	0.00	3.20	Jct MR23 Malan Stn	Jct DR1152 Driefontein	256	0	Gravel		6 187 945	1 056						1 056			
DR01151	P	0.00	0.12	Jct TR23/2 Hermon	Hermon Railway Station	264	0	Gravel		12 649 077	40						40			
DR01151	P	0.35	0.54	Jct TR23/2 Hermon	Hermon Railway Station	264	0	Gravel		12 649 077	63						63			
DR01152	P	0.02	5.00	Jct TR23/2 Hermon	Wellington Municipal Boundary	147	0	Gravel		3 956 943		1 643							1 643	
DR01152	P	5.00	8.58	Jct TR23/2 Hermon	Wellington Municipal Boundary	80	0	Gravel		1 463 176									1 181	
DR02244	P	25.68	35.37	Jct MR316 Beukes Fontein	Jct DR1487 Houd Den Bek	72	0	Gravel		1 458 432						3 198				
DR02245	P	0.00	4.00	Jct MR310 Dissel Fontein	Jct OP08001 Tweefontein	140	19	Gravel		3 571 241			1 320							1 320
DR02245	P	4.00	5.54	Jct MR310 Dissel Fontein	Jct OP08001 Tweefontein	82	29	Gravel		1 878 248							508			
DR01154	P	0.79	3.85	Jct TR23/2 Sonquasdrift	Jct MR226 Riebeek Kasteel	284	0	Gravel		7 000 997	1 010						1 010			
DR01154	P	3.91	4.32	Jct TR23/2 Sonquasdrift	Jct MR226 Riebeek Kasteel	284	0	Gravel		7 000 997	135						135			
DR01161	P	33.26	38.40	Jct NR 7/3 Moorreesburg	Jct TR23/3 Skoenmakersfontein	179	0	Gravel		5 857 740				1 696				1 696		
MR00294	P	1.59	25.00	Jct TR31/3 Montagu	Jct MR315 Witvlakte	89	0	Gravel		1 342 813								7 725		
MR00299	P	5.13	8.45	Jct MR302 De Breede River	Jct DR1398 Goudini Spa	243	64	Gravel		5 789 028			1 096						1 096	
MR00310	P	84.45	94.57	Jct Mun MR22 Ceres	Jct NR 7/4 Citrusdal	102	17	Gravel		2 634 941					3 340					
MR00316	P	0.26	2.50	Jct TR22/2 Riet Valley	Northern Cape Boundary	199	0	Gravel		6 149 192		739				739				
MR00316	P	3.95	5.86	Jct TR22/2 Riet Valley	Northern Cape Boundary	150	0	Gravel		4 729 210				630						630
MR00316	P	5.86	45.00	Jct TR22/2 Riet Valley	Northern Cape Boundary	64	9	Gravel		1 527 474						12 916				

MR00316	P	45.00	93.51	Jct TR22/2 Riet Valley	Northern Cape Boundary	41	35	Gravel		-						16 008				
MR00319	P	100.00	107.00	Northern Cape Boundary	Jct MR316 Karoo Poort	66	50	Gravel		3 162 008							2 310			
OP05618	P	0.98	1.11	Jct DR1343 Hugenote Monument	Boundary of Farm near Kismet	34	0	Gravel		-					43					
OP05643	P	0.00	0.68	Jct DR1413 at Western Boundary	Ptn Boundary on Welvanpas	90	0	Earth		1 729 693					224					
OP05653	P	0.00	3.82	Jct OP5648 near Frisgewaagd	Road over Railway Line	75	0	Earth		1 740 949								1 261		
OP05691	P	0.00	6.25	Jct MR299 at Wyzersdrift Bdy	Boundary of Farm 390/3 & 390/4	79	37	Gravel		1 224 492										2 063
OP05696	P	1.07	2.24	Jct TR9/2 on Die Mond van Hart	Jct MR302 near Chavonnes	185	61	Gravel		4 894 689				386						386
OP05839	P	0.00	1.10	Jct DR1462 near Kruisvallei	Meulstroom & Dennelaan Boundar	75	0	Gravel		1 683 778				363						
OP05883	P	0.00	4.96	Jct DR1452 on Klipfontein	Pty 393 & 426 Welvaart Bdy	66	0	Gravel		1 081 224								1 637		
OP05883	P	5.03	5.25	Jct DR1452 on Klipfontein	Pty 393 & 426 Welvaart Bdy	66	0	Gravel		1 213 955					73					
DR01043	P	0.00	1.35	Jct. MR27 nr Mietjiesvlei	Eikendal	347	78	Gravel		8 141 839				446						446
DR01325	P	20.38	22.31	Jct TR32/1 Swellendam	Jct MR288 & MR287 Drew	74	0	Gravel		1 608 296							637			
DR01330	P	0.00	2.52	Jct MR288 Drew	Jct OP06009 Wagenboomsheuwel	255	0	Gravel		5 672 869		832					832			
DR01333	P	0.00	4.54	Jct TR32/1 Joubertsdal	Jct DR1325 Bruintjies River	73	0	Gravel		1 254 174						1 498				
DR01334	P	0.19	11.20	Jct Smit St & MR290 McGregor	Rietvallei Boundary	365	0	Gravel		6 458 185	3 633				3 633					
DR01337	P	0.00	7.00	Jct DR1342 Wandsbeck	Poesjenels River Farm	145	0	Gravel		2 498 291				2 310						2 310
DR01337	P	7.00	9.88	Jct DR1342 Wandsbeck	Poesjenels River Farm	71	0	Gravel		979 035									950	
DR01339	P	6.63	25.00	Jct MR289 Langverwacht	Jct MR290 McGregor	112	0	Gravel		1 940 193					6 062					
DR01339	P	25.00	28.99	Jct MR289 Langverwacht	Jct MR290 McGregor	160	0	Gravel		2 195 286				1 317						1 317
DR01340	P	0.00	5.00	Jct MR289 Wakkerstroom	Jct DR1332 Steenboks Vlakte	76	0	Gravel		1 634 792								1 650		
DR01342	P	20.15	25.62	Jct MR290 Victoria Bridge	Rietvlei Boundary	100	0	Gravel		1 795 128				1 805						
DR01346	P	0.00	5.00	Jct TR32/1 Boesmanspad	Jct MR287 Bonnievale	108	0	Gravel		2 652 966			1 650							
DR01346	P	5.00	8.02	Jct TR32/1 Boesmanspad	Jct MR287 Bonnievale	197	0	Gravel		4 345 695		997					997			
DR01347	P	1.23	5.00	Jct TR30/2 Ratelfontein	Jct TR30/2 Moordkuil	129	0	Gravel		2 769 938				1 244						1 244
DR01347	P	13.18	13.21	Jct TR30/2 Ratelfontein	Jct TR30/2 Moordkuil	60	48	Gravel		1 331 586			10							10
DR01347	P	13.21	18.51	Jct TR30/2 Ratelfontein	Jct TR30/2 Moordkuil	162	45	Gravel		3 568 770				1 749						1 749
DR01080	P	0.00	1.76	Jct MR187 Bottelary	Eikenhof	278	34	Gravel		5 294 908		581						581		
DR01348	P	0.00	2.22	Jct MR287 Wolvendrift	Jct MR287 Concordia	81	0	Gravel		1 815 875							733			

DR01353	P	0.00	5.00	Jct MR290 Rem Uitnood	Jct MR290 Almond Grove	101	0	Gravel		2 315 114					1 650					
DR01080	P	1.76	2.64	Jct MR187 Bottelary	Eikenhof	166	33	Gravel		3 351 085			290						290	
DR01355	P	5.11	6.20	Jct DR1342 Le Chasseur	Le Chasseur Boundary	70	0	Gravel		1 268 621								360		
DR01356	P	0.00	5.00	Jct TR31/3 Locarno	Jct MR294 Montagu	83	2	Gravel		1 333 067								1 650		
DR01356	P	5.00	13.06	Jct TR31/3 Locarno	Jct MR294 Montagu	142	0	Gravel		2 848 354				2 660						2 660
DR01080	P	2.64	3.33	Jct MR187 Bottelary	Eikenhof	90	56	Gravel		1 769 930					228					
DR01360	P	0.00	14.75	Jct DR1355 La Chasseur	Jct DR1375 Roode Kleygat	82	0	Gravel		2 046 937									4 868	
DR01364	P	4.33	6.03	Jct TR31/1 Goree's Hoogte	Jct OP5919 & OP5917 Riverside	231	0	Gravel		5 695 255	561					561				
DR01364	P	6.24	10.44	Jct TR31/1 Goree's Hoogte	Jct OP5919 & OP5917 Riverside	139	0	Gravel		3 452 184				1 386						1 386
DR01366	P	0.00	3.35	Jct TR31/2 Riet Valley	Jct OP6034 Klein Klaasvoogdsri	305	0	Gravel		6 915 109	1 106				1 106					
DR01366	P	3.35	4.66	Jct TR31/2 Riet Valley	Jct OP6034 Klein Klaasvoogdsri	115	0	Gravel		4 594 944			432							432
DR01369	P	0.00	0.98	Jct TR31/2 Riet Valley	Jct OP05945 Klaasvoogdsriver	308	0	Gravel		5 490 272	323				323					
DR01369	P	1.03	3.07	Jct TR31/2 Riet Valley	Jct OP05945 Klaasvoogdsriver	308	0	Gravel		5 490 272	673				673					
DR01369	P	3.07	4.26	Jct TR31/2 Riet Valley	Jct OP05945 Klaasvoogdsriver	90	0	Gravel		1 303 698				393						
DR01083	P	0.59	1.40	Jct MR174 Koelenhof Prison	Jct DR1085 Koelenhof Farm	300	61	Gravel		6 305 934			267							267
DR01372	P	7.33	8.10	Jct Unknown St Robertson	Orange Grove	98	0	Gravel		1 513 641					254					
DR01374	P	1.32	4.00	Keerom St Robertson	Willemnels Riv CW Lange Valley	95	0	Gravel		1 621 661					884					
DR01375	P	0.00	4.96	Jct DR1347 Moordkuil	Jct OP05676 Roode Kleygat	246	15	Gravel		5 962 099		1 637					1 637			
DR01376	P	0.00	1.94	Jct MR294 Helpmekaar	Jct DR1382 Knipe's Hope	64	6	Gravel		1 846 238							640			
DR01377	P	1.68	4.02	Jct TR31/1 De Noree	Jct DR1400 Klopperbosch	63	2	Gravel		1 268 560								772		
DR01377	P	4.02	20.18	Jct TR31/1 De Noree	Jct DR1400 Klopperbosch	133	0	Gravel		3 321 162				5 333						5 333
DR01378	P	0.00	2.39	Jct DR1374 Lange Valley	Jct OP05940 Farm Keur Kloof	102	0	Gravel		2 915 828					789					
DR01379	P	7.41	8.26	Jct TR30/2 Reiersrus	Jct DR1375 Scherpenheuwel	374	0	Gravel		6 997 702	281				281					
DR01380	P	0.00	7.11	Jct TR31/1 De Norree	Jct DR1379 Moordkuil	177	36	Gravel		4 696 545			2 346					2 346		
DR01380	P	7.79	21.03	Jct TR31/1 De Norree	Jct DR1379 Moordkuil	177	41	Gravel		4 696 545			4 369					4 369		
DR01382	P	2.55	8.71	Jct Mun MR295 Montagu	Jct OP6106 & OP6107 Rietvlei 2	134	0	Gravel		3 640 047				2 033						2 033
DR01383	P	2.07	3.32	Jct DR1377 De Norree	Jct OP5929 SW Bdy Farm Norree	128	0	Gravel		2 224 517				413						413
DR01384	P	2.83	3.80	Jct TR31/1 Langvlei Stn	Jct DR1383 Kruispad	101	0	Gravel		7 309 546					320					
DR01384	P	3.80	4.58	Jct TR31/1 Langvlei Stn	Jct DR1383 Kruispad	55	6	Gravel		3 119 839									257	

DR01387	P	0.00	4.08	Jct MR295 Het Kruis	Old Baden Private Hotel	147	0	Gravel		2 216 565				1 346						1 346
DR01387	P	4.08	5.10	Jct MR295 Het Kruis	Old Baden Private Hotel	87	0	Gravel		1 125 986							337			
DR01392	P	0.00	4.60	Jct MR295 Keisiedorings	Jct OP06041 Pietersfontein	146	0	Gravel		2 967 764				1 518						1 518
DR01392	P	4.80	9.57	Jct MR295 Keisiedorings	Jct OP06041 Pietersfontein	66	1	Gravel		1 157 248							1 574			
DR01396	P	0.00	0.90	Jct DR1119 Uitkyk	Jct OP05639 Eastern Bdy Uitkyk	169	0	Gravel		4 013 827		297					297			
DR01397	P	0.00	4.75	Jct DR1398 Rawsonville	Jct OP5681 Westrn Bdy Gevonden	128	72	Gravel		3 456 550					1 568					
DR01399	P	0.23	0.97	Jct MR298 Klipdrift	Jct V.Riebeeck St Rawsonville	257	0	Gravel		4 466 201	244					244				
DR01400	P	8.23	10.21	Jct TR31/1 Nuy Station	Jct NR1/3 De Wet Station	216	0	Gravel		3 811 539		653					653			
DR01402	P	6.98	8.00	Jct MR295 Moerasvlei River	Jct MR295 De Koo	98	0	Gravel		1 508 558					337					
DR01402	P	8.00	9.31	Jct MR295 Moerasvlei River	Jct MR295 De Koo	169	0	Gravel		3 182 735		432					432			
DR01403	P	0.09	1.50	Jct DR1408 Welbedacht	Adjoining Olive Annex	234	0	Gravel		3 452 120	465							465		
DR01404	P	0.00	2.24	Jct TR31/1 Alma	Jct DR1394 Solitaire	151	0	Gravel		3 733 495				739						739
DR01094	P	1.92	2.57	Jct MR174 Cross Roads	Jct DR1097 Kraaifontein	167	23	Gravel		4 989 333			215						215	
DR01407	P	1.49	2.44	Jct Mun MR201 Wellington	Access Leeuwe Valley	379	0	Gravel		5 005 632	314						314			
DR01095	P	0.00	1.95	Schuurmansfontein	Western Bdy of Watervliet	323	76	Gravel		8 646 163				644						644
DR01413	P	1.68	3.79	Jct DR1152 Olifantskop	Jct OP05643 West Bdy Welvanpas	98	14	Gravel		2 033 484					696					
DR01417	P	0.85	4.29	Jct DR1412 Hexberg	Jct DR1129 Cordies Rus	235	0	Gravel		5 065 946	1 135							1 135		
DR01421	P	0.00	1.45	Jct MR302 De Breede Rivier	Jct OP05752 Olifantsberg	107	71	Gravel		1 763 914					479					
DR01424	P	0.00	1.30	Jct MR302 Jan du Toits River	Jct OP05753 Oliphantsberg	112	70	Gravel		2 318 714					429					
DR01427	P	0.00	1.32	Jct MR302 Waaihoek	Waaihoek on Eendracht Farm	145	69	Gravel		3 086 122				436						
DR01427	P	1.32	3.12	Jct MR302 Waaihoek	Waaihoek on Eendracht Farm	68	78	Gravel		1 315 634										594
DR01429	P	0.25	1.75	Jct DR1152 Burgersfontein	Jct OP05645 Kruishof	375	13	Gravel		8 212 033	495					495				
DR01429	P	1.75	3.88	Jct DR1152 Burgersfontein	Jct OP05645 Kruishof	140	39	Gravel		3 401 852			703							703
DR01431	P	0.00	1.31	Jct MR302 Botha Station	Jct OP05759 Boesmansvlei	187	57	Gravel		3 821 006				432						432
DR01436	P	1.44	3.00	Jct MR201 Romansrivier Cellars	Jct OP05772 De Liefde	191	0	Gravel		3 534 183		515					515			
DR01436	P	3.00	4.22	Jct MR201 Romansrivier Cellars	Jct OP05772 De Liefde	96	0	Gravel		1 283 977								403		
DR01440	P	2.09	6.98	Jct Mun MR306 Wolseley	Jct OP5774 & OP5775 Elandsklf	167	0	Gravel		4 367 654		1 614					1 614			
DR01099	P	0.00	2.28	Jct. MR205 Babylons Toren	Jct. MR191 near Cillie	325	19	Gravel		6 592 361		752					752			

DR01440	P	7.10	9.48	Jct Mun MR306 Wolseley	Jct OP5774 & OP5775 Elandsklf	80	0	Gravel		1 462 127								785		
DR01441	P	1.93	2.00	Jct NR1/3 De Doorns	Jct OP05737 Keurbosch Kloof	229	0	Gravel		7 832 830	23						23			
DR01441	P	2.00	3.20	Jct NR1/3 De Doorns	Jct OP05737 Keurbosch Kloof	108	0	Gravel		3 716 479					396					
DR01444	P	0.09	13.76	Jct MR323 Tulbagh Rd Stn	Jct DR1440 Kluitjieskraal	228	0	Gravel		4 934 708	4 511					4 511				
DR01446	P	0.00	1.00	Jct TR22/1 Goedgevonden	Jct OP5800&OP5798 Boontjiesriv	155	0	Gravel		2 561 704			330					330		
DR01446	P	1.00	2.37	Jct TR22/1 Goedgevonden	Jct OP5800&OP5798 Boontjiesriv	86	0	Gravel		1 205 010					452					
DR01447	P	7.85	9.48	Jct TR22/2 Ceres	Jct OP05848 Ezelsfontein	190	0	Gravel		5 096 381		538					538			
DR01451	P	0.00	7.12	Jct DR1452 Schapenrivier	Jct OP5882 & OP5881 Leeuwenftn	99	0	Gravel		1 561 908								2 350		
DR01452	P	22.90	27.72	Jct TR22/2 Schapen River	Jct TR22/2 Hottentotkloof	225	0	Gravel		6 205 616		1 591					1 591			
DR01452	P	27.72	30.00	Jct TR22/2 Schapen River	Jct TR22/2 Hottentotkloof	115	0	Gravel		4 578 827			752							752
DR01452	P	30.00	30.49	Jct TR22/2 Schapen River	Jct TR22/2 Hottentotkloof	46	0	Gravel		-							162			
DR01455	P	0.00	0.78	Jct TR23/3 Gouda	Gouda Railway Station	70	0	Gravel		1 829 369								257		
DR01458	P	0.00	6.00	Jct TR22/2 Rhodona	Jct MR310 Prince Alfred Hamlet	276	0	Gravel		4 919 984	1 980				1 980					
DR01459	P	1.18	2.92	Jct MR313 Bellevue	Jct DR1465 De Oude Drosdy	253	0	Gravel		5 121 700	574					574				
DR01459	P	2.92	6.72	Jct MR313 Bellevue	Jct DR1465 De Oude Drosdy	87	0	Gravel		1 922 689								1 254		
DR01460	P	3.95	4.88	Jct Mun MR312 Tulbagh	Jct OP05837&OP05838 Witzenberg	78	0	Gravel		1 153 115				307						
DR01461	P	6.42	8.98	Jct Mun MR312 Tulbagh	Jct DR1471 Vrolikheid	115	0	Gravel		3 663 657			845							845
DR01461	P	11.66	12.83	Jct Mun MR312 Tulbagh	Jct DR1471 Vrolikheid	75	0	Gravel		1 315 835								386		
DR01462	P	0.31	1.38	Jct MR312 Kruis Valley	Jct OP5839 Dennelaan	122	0	Gravel		1 847 765			353							353
DR01464	P	0.95	1.92	Jct DR1461 La Rhone	Jct OP05819 & OP05820 Eureka	182	0	Gravel		4 992 606		320					320			
DR01467	P	0.00	3.82	Jct TR22/2 Vogelgesang	Jct DR1470 Olckersia	77	0	Gravel		2 097 943						1 261				
DR01104	P	1.72	2.95	Jct MR189 Klapmuts	Jct OP5241 Klapmuts Outspan	241	35	Gravel		8 967 684		406						406		
DR01474	P	0.00	1.37	Jct DR1471 Bloubank	Jct OP05828 Weltevrede	72	0	Earth		2 199 576								452		
DR01478	P	0.00	1.00	Jct DR1476 Opstal	Jct OP05826 Winterhoek	174	0	Gravel		3 903 797		330					330			
DR01478	P	1.00	2.00	Jct DR1476 Opstal	Jct OP05826 Winterhoek	99	0	Gravel		1 805 374					330					
DR01480	P	0.85	2.30	Jct MR229 Saron	Jct DR1168 Lushof	234	0	Gravel		4 756 835		479				479				
DR01109	P	0.00	6.30	Jct MR213 Eenzaamheid	Jct DR1098 Groenefontein	131	0	Gravel		3 304 301				2 079						2 079

DR01487	P	66.02	72.02	Jct MR539 Kriedouwkranz	Jct MR310 Op-Die-Berg	78	0	Gravel		1 906 151							1 980			
DR01487	P	72.39	76.69	Jct MR539 Kriedouwkranz	Jct MR310 Op-Die-Berg	78	12	Gravel		2 134 671							1 419			
DR01487	P	77.63	80.21	Jct MR539 Kriedouwkranz	Jct MR310 Op-Die-Berg	78	0	Gravel		1 988 083						851				
DR01487	P	80.64	90.00	Jct MR539 Kriedouwkranz	Jct MR310 Op-Die-Berg	77	0	Gravel		2 018 668						3 089				
DR01487	P	90.00	100.00	Jct MR539 Kriedouwkranz	Jct MR310 Op-Die-Berg	82	16	Gravel		2 009 678							3 300			
DR01487	P	100.00	102.53	Jct MR539 Kriedouwkranz	Jct MR310 Op-Die-Berg	115	0	Gravel		3 398 052			835							
DR01487	P	102.83	105.93	Jct MR539 Kriedouwkranz	Jct MR310 Op-Die-Berg	115	7	Gravel		3 471 693			1 023							
DR01115	P	0.26	4.50	Jct MR27 Ruite Valley	Jct MR213 Kuilenburg	152	13	Gravel		4 761 680				1 399						1 399
Total											**18622**	**17447**	**17497**	**34643**	**26549**	**46424**	**28189**	**29783**	**15494**	**36062**

Table Annexue F-4 WCG MTEF Budget: Cape Winelands District Municipality

PGWC - MTEF Budget with PROVINCIAL fund allocation according to Roads Infrastructure Branch

Totals for analysis based on 2013 visual assessments, compiled April 2014 - May 2014

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Reseal	35471	87600	87434	54137	75006	66294	95630	13922	56798	71719
Rehabilitation	52258	217580	194874	144704	199380	160940	19006	18206	999	4344
Upgrade to Pave	18492	25820	53283	99031	93236	0	0	0	0	0
Regravel	18622	17447	17497	34643	26549	46424	28189	29783	15494	36062
Total (R'000)	**124843**	**348448**	**353088**	**332515**	**394171**	**273659**	**142824**	**61911**	**73290**	**112125**

CAPE WINELANDS DISTRICT
MUNICIPALITY • MUNISIPALITEIT • UMASIPALA

CORPORATE DISASTER MANAGEMENT

PLAN



Version 4: March 2019

DOCUMENT VERSION CONTROL

This Document:	Current Revision	Current Date:
Disaster Management	Rev 1	April 2008
Disaster Management	Rev 2	December 2016
Disaster Management	Rev 3	February 2018
Disaster Management	Rev 4	March 2019

DOCUMENT REVIEW AND ACCEPTANCE

Approved By:
Head: Disaster Management Centre
DATE

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LIST OF ACRONYMS

CBO	Community Based Organisation
DMC	Disaster Management Centre
DCT	Disaster Co-ordination Team
FBO	Faith Based Organisation
IDDMC	Interdepartmental Disaster Management Committee
IDP	Integrated Development Plan
No.	Number

1. INTRODUCTION

This plan serves to confirm the organisational and institutional arrangements within the area of the Cape Winelands District Municipality to effectively promote disaster prevention, mitigation, risk reduction and to lessen the impact of those hazards that cannot be avoided.

Disaster Management is a continuous and integrated multi-sectoral and multi-disciplinary process of planning and implementation of measures aimed at disaster prevention, -mitigation, -preparedness, -response, -recovery and –rehabilitation (Section 1, Disaster Management Act, No. 57 of 2002).

The preventative elements of this plan must be implemented and maintained on a continuous basis. The emergency or reactive elements of this plan will be implemented in the district whenever a significant event or disaster occurs or is threatening to occur in its area of jurisdiction.

The responsibility for the implementation of the plan is that of the Municipal Manager in co-operation with all internal functionaries.

The Disaster Management Act, No. 57 of 2002 (Section 53) requires, amongst others, of the Municipality to take the following actions:

(a) prepare a disaster management plan for its area, which includes departmental plans, according to the circumstances prevailing in its area;
(b) the regular review and update of the plan taking into consideration new developments or circumstances that may arise.

The plan and the supportive plans that form part thereof should comply with the following principles and will address the following issues:

1. form an integral part of the Integrated Development Plan as prescribed by the Municipal Systems Act, No. 32 of 2000 (Section 26 (g));
2. anticipate the likely types of disasters that might occur in the district and their possible effects;
3. provide for appropriate prevention and mitigation strategies;
4. identify and address weaknesses in capacity to deal with possible disasters;
5. facilitate maximum emergency preparedness;
6. establishment of an emergency management organization that will be utilized to mitigate any significant emergency or disaster affecting the district; and
7. contain contingency plans and emergency procedures in the event of a disaster, providing for the allocation of responsibilities to the various role players and co-ordination in the carrying out of those responsibilities.

The District Municipality must submit a copy of its disaster management plan, including the above-mentioned requirements, and of any amendment to the plan, to the National Disaster Management Centre and the Western Cape Provincial Disaster Management Centre.

2. DEFINITIONS AND PURPOSE

2.1 DISASTER MANAGEMENT DEFINITIONS

For the sake of clarity, the following disaster management definitions are listed:

"**the Act**" means the Disaster Management Act, No. 57 of 2002,

"**disaster**" means a progressive or sudden, widespread or localized, natural or human-caused occurrence which –

(a) causes or threatens to cause-
  (i) death, injury or disease,
  (ii) damage to property, infrastructure or the environment; or
  (iii) disruption of the life of a community; and

(b) is of such a magnitude that it exceeds the ability of those affected by the disaster using only their own resources (Sec. 1 Disaster Management Act, No. 57 of 2002).

The Council of the District Municipality must declare a disaster in terms of Section 55 of the Disaster Management Act, No. 57 of 2002.

"**disaster management**" means a continuous and integrated multi-sectoral, multidisciplinary process of planning and implementing of measures aimed at-

(a) preventing or reducing the risk of disasters;
(b) mitigating the severity of or consequences of disasters;
(c) emergency preparedness;
(d) rapid and effective response to disasters; and
(e) post-disaster recovery and rehabilitation (Sec. 1 Disaster Management Act, No. 57 of 2002)

2.2 PURPOSE OF THE CORPORATE DISASTER MANGEMENT PLAN

The purpose of this plan is to determine general principles to direct the provision of essential services during an emergency or anticipated emergency. Furthermore, the procedures and the coordination of responses are outlined. The obligations, duties and responsibilities of all departments and agencies will be defined. This plan addresses the planned response to extraordinary emergencies associated with natural disasters, technological incidents and national security emergencies in or affecting the district.

3. CAPE WINELANDS DISTRICT MUNICIPALITY DISASTER MANAGEMENT POLICY FRAMEWORK (SECTION 42)

The District Municipality envisages the establishment of an internal Interdepartmental Disaster Management Committee in order to align disaster management activities with the National-, Provincial- and District Disaster Management Policy Frameworks.

The Disaster Management Centre as envisaged in the Disaster Management Act, No. 57 of 2002, will be the custodian of the corporate or district-wide Disaster Management Plan. Individual district departments/sections will be responsible for the compilation and maintenance of their own departmental disaster management plans and for submitting such plans to the District Disaster Management Centre. The processes involved in Disaster Management can best be explained through the following Disaster Management Continuum:

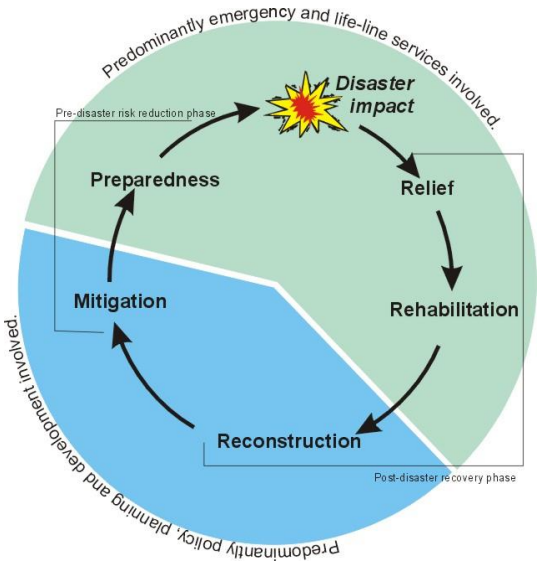

Figure 1: Disaster Management Continuum

Figure 1 illustrates the continuum – it should be noted that Disaster Management is not only reactive, but also involves actions aimed at preventing disasters, or mitigating the impact of disasters. Departmental plans should be compiled with due consideration of the needs of other departments during disasters. The needs identified by the various departments in the corporate disaster management planning framework will indicate where line functions of other departments must contribute. **These contributions will then be included in line function- and departmental disaster management plans**.

Departmental disaster management plans should cover the whole disaster management continuum, and must address actions before, during and after disasters. Disaster management plans are compiled on the basis of a generic plan including standard operating procedures. It should be complemented with risk-specific plans that address disaster management for special circumstances.

4. RISK PROFILE

Risk and vulnerabilities will determine the priorities for Disaster Management programs and projects. The amount of possible benefit to be derived from a project in terms of lives protected, livelihoods secured and property or natural resources defended, will be the criteria that determine priorities.

Two risk assessments have been completed in the District, namely, 2005 Hazard Identification, Vulnerability Assessment and Risk Prioritisation conducted by Africon and a 2008 Community Based Risk Assessment conducted by Cape Peninsula University of Technology. The table below indicates the risks identified during these two risk assessments:

2005: Hazard Identification, Vulnerability Assessment and Risk Prioritisation	**2008: Community Based Risk Assessment**
• Floods • Rail derailment • Fires • Severe storms • Dam failures • Aircraft accidents • Bus accidents	• Spread of disease, • Blocked drains • Non-removal of solid waste • Uncontrolled fires • Environmental pollution • Grey/waste water • Problems with toilet facilities • Lack of facility maintenance

Table 1: Hazards identified in the Cape Winelands District Municipality

Communities in informal settlements are the most vulnerable to many of these physical risks, but proximity to certain installations or hazards also exposes other communities to risks. In terms of capacity to address and therefore reduce risks, there currently is a strong emphasis on preparedness and response planning. This means that capacity in terms of mitigation and prevention should be strengthened.

The following have been identified as critical Disaster Management issues and should receive priority attention in the IDP;

a) Integrating risk management programs within the **IDP**;
b) To develop and maintain risk specific safety infrastructure and plans for high risk installations, infrastructure, industries etc.;
c) To establish disaster prevention programmes that focus on the most vulnerable areas and communities, with special emphasis on women and children, disabled persons and the elderly, and aim to support sustainable livelihoods;
d) To refine disaster loss tracking and assessment and establish a culture of ongoing scientific risk analysis; and
e) To establish pro-active measures, including media liaison and rapid response to media inquiries.

Risk reduction should be a priority during all activities performed by the various departments in the municipality. This will include line function risk assessment, assessing internal capacity to deal with identified risks and the formulation of risk reduction plans.

5. MANAGEMENT STRUCTURE

The principle to function within the established structure of the Cape Winelands hierarchy must be maintained as far as possible.

The management will plan and implement measures to deal with the changed circumstances during significant events or disasters in order to maintain and ensure continuation of existing services. The planning, prevention and response management structure for the Cape Winelands District Municipality is as follows:

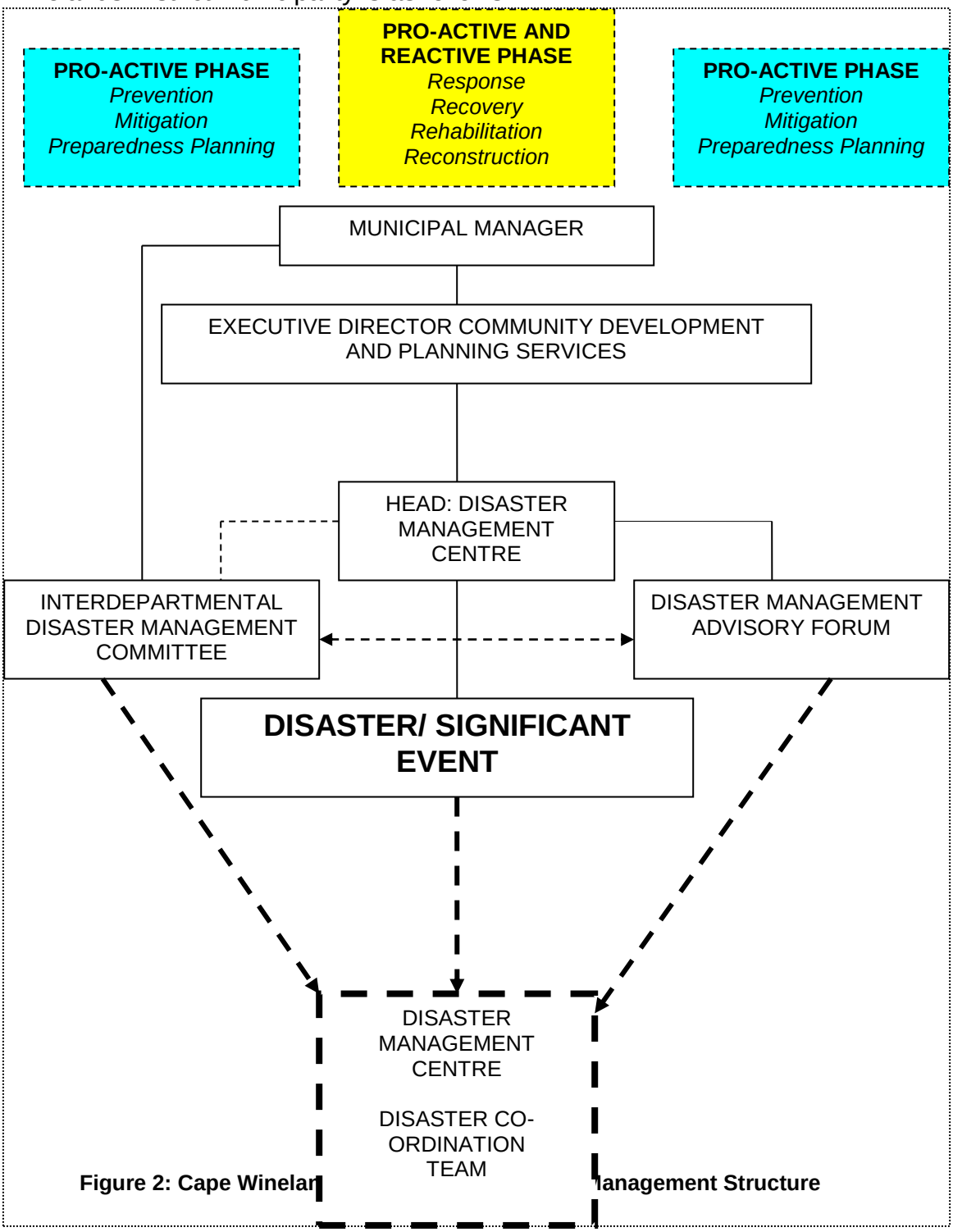

Figure 2: Cape Winelan anagement Structure

5.1 INTERDEPARTMENTAL DISASTER MANAGEMENT COMMITTEE (IDDMC)

The IDDMC is made up of the Executive Management Team along with the Head: Disaster Management Centre and relevant Directors and Deputy Directors.

The Interdepartmental Disaster Management Committee has, amongst others, the following functions:

a) **Pro-active activities** which include, but is not limited to the following:
   - Convene quarterly meetings;
   - Update corporate plan regularly;
   - Consider conditions, trends, current and future developments in the area internally and externally;
   - Identify and consider new hazards in the area; and
   - Assign teams to investigate possible risk and related issues.

b) **Reactive activities**: refer to duties of the Disaster Co-ordination Team (see 5.5 below)

5.2 DISTRICT DISASTER MANAGEMENT ADVISORY FORUM

A disaster management advisory forum, in terms of Section 51 of the Act, is a consultative body in which a municipality and relevant disaster management role-players within the municipal area consult with one another and co-ordinate their actions on matters relating to disaster management in the municipality

In the event of a disaster, the nature of the event will determine which representatives of the Advisory Forum or other experts will be co-opted to participate in the management thereof. Under normal circumstances the Forum meets once per semester.

The District Municipality's Disaster Management Advisory Forum will in terms of Section 51 of the Act, consist of the following:

a) INTERNAL TO THE DISTRICT MUNICIPALITY:

Municipal Manager
Executive Director: Financial and Strategic Support Services
Executive Director: Technical Services
Executive Director: Community Development and Planning Services
Head: Disaster Management Centre
Director: IDP, Performance and Risk Management
Chief Fire Officer
Any other departmental representatives as nominated by the Municipal Manager

b) EXTERNAL BODIES:

Municipal Managers and/or Disaster Management Functionaries of the five local municipalities in the district;
Representatives from all national and provincial departments functioning in the district such as, but not limited to, the following:

Provincial Government: Western Cape Disaster Management Centre
SA Police Services, Western Cape Province
SA National Defence Force, Western Cape
Western Cape Emergency Medical Services
Department of Social Development
Department of Education
Department of Environmental Affairs and Development Planning
Department of Correctional Services
Department of Water and Sanitation
Department of Transport and Public Works
Department of Community Safety (Provincial Traffic Department)
Department of Health
Department of Agriculture
Department of Home Affairs
Cape Nature
External Organisations (NGO's, CBO's and FBO's)

Other representatives or disaster management experts may be co-opted to participate in the normal proceedings of the Advisory Forum as the need arises.

The Disaster Management Division will be responsible for rendering secretarial services during functional activities of the respective established disaster management structures.

5.3 LINES OF COMMUNICATION AND INTERGOVERNMENTAL RELATIONS

In terms of Section 43 (2) of the Disaster Management Act, No. 57 of 2002, the CWDM must establish a Disaster Management Centre for its municipal area. The relationship between the different spheres of government and the lines of communication between these spheres are illustrated below.

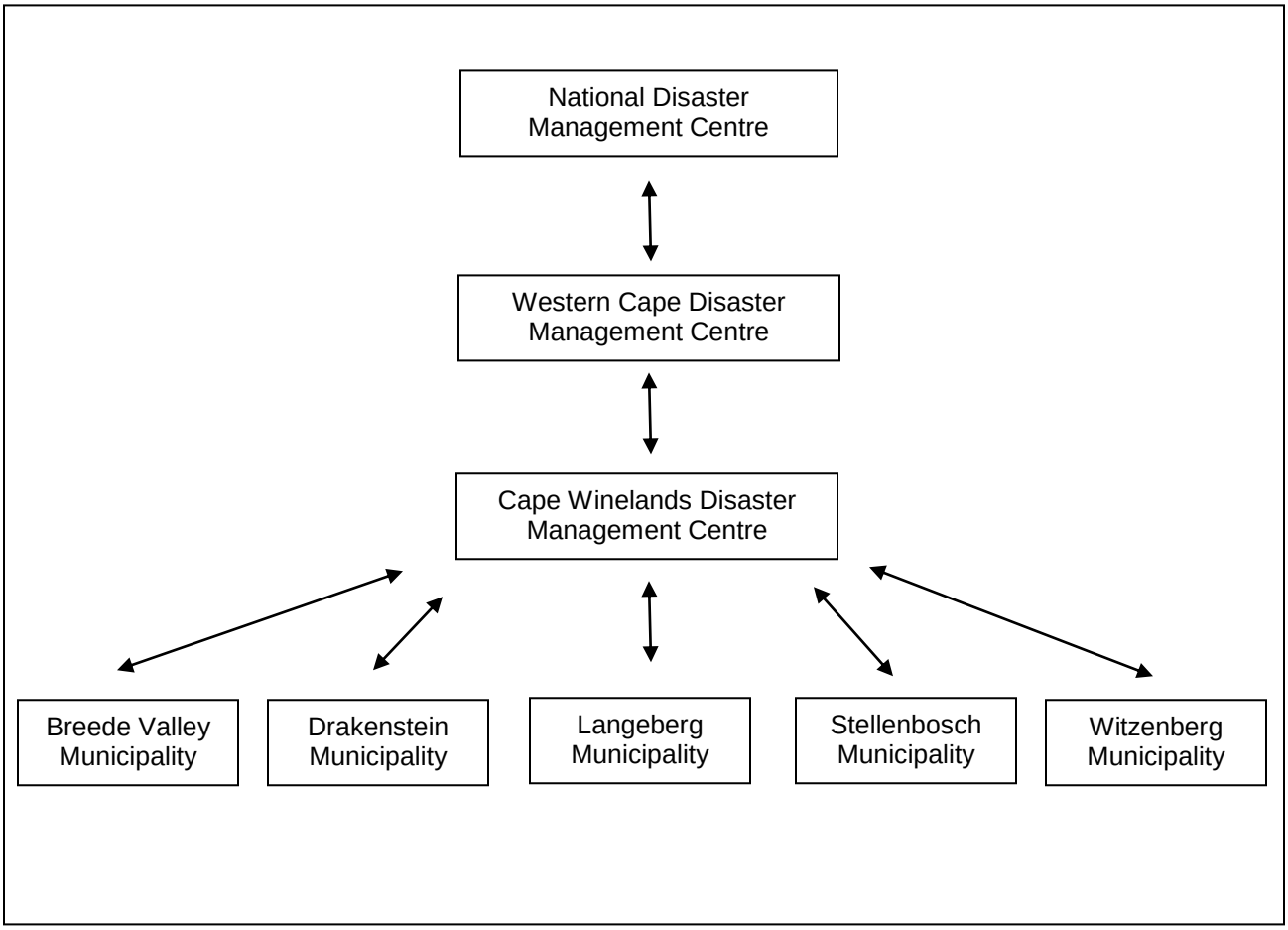

Figure 3: Lines of Communication

5.4 DISASTER MANAGEMENT CENTRE (DMC*)*

In terms of Section 44 of the Act, amongst others, the Disaster Management Centre (DMC) must also specialize in issues concerning disasters and disaster management within the District Municipality. In this regard it must promote an integrated and co-ordinated approach to the function with special emphasis on prevention and mitigation.

The Disaster Management Centre was established at the Worcester Emergency Medical Services Centre, Murray Street, Worcester on 6 June 2014.

5.4.1 FUNCTIONS AND POWERS

The Cape Winelands District Municipality's Disaster Management Centre will, amongst others, act as a repository and conduit for information concerning disasters, impending disasters and disaster management in the municipal area.

It will also promote the recruitment, training and utilisation of volunteers to participate in disaster management in the municipal area.

The Disaster Management Centre will perform its functions –
(a) within the national, provincial and district disaster management frameworks;
(b) subject to the District IDP and other directions of the Council; and
(c) in accordance with the administrative instructions of the Municipal Manager.

The Disaster Management Centre will liaise with and co-ordinate its activities with those of the National Disaster Management Centre and the Western Cape Disaster Management Centre.

Irrespective of whether a local state of disaster has been declared or not, the Municipal Council is primarily responsible for the co-ordination and management of local disasters that occur in its area.

5.5 DISASTER CO-ORDINATION TEAM (DCT)

The Disaster Co-ordination Team consists of the following:

Municipal Manager
Executive Director: Community Development and Planning Services
Head: Disaster Management Centre
Executive Director: Financial and Strategic Support Services
Executive Director: Technical Services
Deputy Director: Communication Services
Relevant Directors, Deputy Directors and Managers per department
Relevant Disaster Management Advisory Forum Members

The team will be responsible to assess, evaluate and co-ordinate all actions in all the phases of a significant occurrence or incident. Each line function will be responsible for the implementation of its own departmental disaster plan but, they will ensure co-ordination and support between departments and external bodies. The Disaster Co-ordination Team may appoint a risk mitigation project team to address specific pre- or post-disaster risk elimination or reduction projects.

The Disaster Co-ordination Team, under the direction of the Municipal Manager/ Executive Director must, when activated, and during any response and relief operations perform the following functions in terms of and in addition to Section 49 of the Act, which will include:

a) Maintaining records of communications, decisions, actions and expenditures;
b) Determining of emergency area(s) and sites;
c) Decide on emergency measures and priorities;
d) Co-ordinate incident or disaster assessments (combine);

e) Requesting emergency assistance of any kind;
f) Closing public buildings when necessary;
g) Depending on circumstances, issue public warning orders and instructions;
h) Protecting the health and safety of emergency responders;
i) Ensuring that an acceptable level of service is rendered for the district outside emergency area(s);
j) Preparing lists of fatalities, casualties and missing persons;
k) Preparing lists of destroyed and/or damaged properties;
l) Co-ordinate response with provincial ministries through the Provincial Government: Western Cape Disaster Management Centre;
m) Co-ordinate response with non-governmental disaster relief organisations, neighbourhood- and community based organizations;
n) Provide and co-ordinate critical emergency information to the media for dissemination to the affected population(s) and the general public at the prerogative of the Executive Mayor or Municipal Manager who have delegated authority;
o) Co-ordinate information for public release with emergency partners' communications staff;
p) Respond to enquiries from the media or public in accordance with official policy;
q) Identify target audiences for post-emergency communications; and
r) Identify persons/organizations to contribute to post-emergency reports/debriefings.

5.6 ROLES AND RESPONSIBILITIES

5.6.1 EXECUTIVE MAYOR

In the event of a local disaster the Executive Mayor, in consultation with his/her Executive Mayoral Committee, may by notice in the Provincial Gazette declare a local state of disaster if existing legislation and contingency arrangements do not adequately provide for the municipality to deal effectively with the event or special circumstances warrant the declaration of a local state of disaster (Section 55 of the Act).

Responsibilities of the Executive Mayor in a disaster situation:

1. Authorize unforeseen and unavoidable expenditure in terms of section 29 and 32 of the Municipal Finance Management Act, No. 56 of 2003 in consultation with the Municipal Manager;
2. In terms of section 55 (2) the Executive Mayor and his/her Council may make by-laws to the extent that it is necessary to assist and protect the public as well as to combat and/or deal with the effects of the disaster;
3. The Executive Mayor and his/her Council may terminate or extend a declared disaster by notice in the Provincial Gazette before the term of the declared disaster lapses (after three months);
4. Notify next of kin in the event when a community member is injured, missing or killed;
5. Initiate the establishment of a disaster relief fund in terms of Section 12 read with Section 7 of the Municipal Finance Management Act, No. 56 of 2003;
6. Release media statements; and

7. Report on the emergency impact and response to the Council or its committees responsible for the emergency area(s), as well as to the mayors of local- and district municipalities and councillors of the area.

5.6.2 MUNICIPAL MANAGER

During disasters, the Municipal Manager or his designate will be responsible to report, liaise and consult with the Executive Mayor and Mayoral Committee and external Provincial and National Government Departments. He/she will, furthermore be responsible to:

Proactive Phase:

1. Constitute the IDDMC;
2. Convene quarterly IDDMC meetings; and
3. Co-opt specialized role-players to the IDDMC and DCT.

Reactive Phase:

1. When notified of a disaster or significant event by the Executive Director or delegate, the Municipal Manager will activate and chair the Disaster Co-ordination Team;
2. Report on the emergency impact and response to the Executive Mayor;
3. Notify next of kin in the event when a municipal employee is injured, missing or killed;
4. Identify staff/persons/organizations to receive recognition for contributions to emergency response;
5. Forward media statements to the Executive Mayor for release;
6. When notified of a disaster or significant event by the Executive Director or delegate, the Municipal Manager will, activate the disaster response plan;
7. The Municipal Manager must ensure that all departmental disaster management plans are included in the Integrated Development Plan of the Council; and
8. He/she must also ensure that the employment and performance contracts of all newly appointed Section 57 employees should include disaster management responsibilities.

5.6.3 HEAD: DISASTER MANAGEMENT CENTRE

The Head: Disaster Management Centre is responsible for the strategy and management of the Disaster Management Centre, focussing especially on the planning and functioning throughout all the phases of the Disaster Management continuum. The Head: Disaster Management Centre is also responsible for the compilation and maintenance of the District's Corporate Disaster Management Planning Framework. The Head: Disaster Management Centre is responsible for consultation with the Executive Director: Community Development and Planning Services who is primarily responsible for disaster management.

The Head: Disaster Management Centre is also responsible for the performance by the Centre of its disaster management functions (Section 44 of the Act) and to co-ordinate the implementation of the District's Corporate Disaster Management Planning Framework and:

Proactive Phase:

1. Establish and maintaining of the District's Disaster Management Centre
2. Establish a District Disaster Management Advisory Forum
3. Initiate and facilitate efforts to make funds available for disaster management in the municipal area;
4. Assist municipal departments and municipal organs of state other than municipalities with the compilation of their disaster management plans;
5. Obtain and record departmental disaster management plans;
6. Co-ordinate the updating, maintenance and evaluation of departmental plans;
7. To make provision in own departmental budget for significant events which requires immediate response and relief actions;
8. The Head: Disaster Management Centre must ensure that the contents of this corporate planning framework are communicated to staff members at all levels within the department;
9. Report on issues regarding the Corporate Disaster Management Plan within the Annual Disaster Management Report which is to be submitted to the Provincial- and National disaster management centres as well as all municipal councils within the district;
10. Recommend to the Municipal Manager or relevant Executive Director to enter into service delivery agreements with individuals, CBO'S and NGO'S with relation to relief actions during disasters and significant events.

Reactive Phase:

1. In case of a disaster or significant event, the Head: Disaster Management Centre shall notify the Municipal Manager and Executive Director: Community Development and Planning Services and will request the Municipal Manager to activate the disaster response plan;
2. When deemed necessary, make recommendations to the Municipal Manager for the declaration of a disaster by the Council of the District Municipality as defined in the Act;
3. To initiate steps to deal with a significant event, which requires multi-disciplinary and multi-sectoral actions;
4. Liaise with municipal, provincial and national officials within the district;
5. Recommend to the Municipal Manager to request for provincial and/or national assistance;
6. Provide situational reports to all internal and external role-players on a regular basis;
7. Co-ordinate disaster response and relief by individuals, CBO'S and NGO'S;
8. Recommend to the Municipal Manager to request voluntary donations during a disaster or significant event;
9. Make arrangements for the request for, receipt and administration of donations;
10. Identification of available resources to be utilised for disaster risk management purposes;
11. Authorize areas to be evacuated or re-entered;
12. Identify and recommend persons/organizations to receive recognition for contributions to the emergency response;

13. Establish and maintain the required telecommunications links; and
14. Recommend to the Municipal Manager that Executive Directors should release departmental resources including personnel, equipment or vehicles for utilisation during disasters and significant events.

The Head of the Disaster Management Centre shall be responsible for the distribution of the updated disaster management plan in terms of Section 43 of the Act.

The Head of the Disaster Management Centre will make recommendations to the Municipal Manager who will officially activate and announce the duration and termination of the disaster or significant event to all relevant parties. Special or extraordinary delegations will apply during such periods.

In the recovery and rehabilitation phase, a project team under a line function can be convened to take responsibility for further activities that address the causal factors of the disaster/incident. This team will receive a brief from and report to the Disaster Management Advisory Forum as well as senior management.

5.6.4 EXECUTIVE DIRECTOR: COMMUNITY DEVELOPMENT AND PLANNING SERVICES

In terms of Section 52 of the Act compile a departmental disaster management plan in relation to the identified hazards and risk assessments applicable to the functional activities of the department. Such plans are to be submitted to the Disaster Management Centre.

The Executive Director should ensure that his/her department/divisions pay particular attention to preventative, mitigating, response and recovery activities by the compilation of relevant contingency plans. The implementation of the plan will include the following:

1. To make provision in own departmental budget for significant events which requires immediate response and relief actions, including impact assessments;
2. Plan and ensure that risk reduction and disaster prevention/mitigation principles are adhered to in the recovery and redevelopment phases;
3. Ensure that risk reduction and mitigation principles are applied in all developmental projects;
4. The contents of this corporate planning framework must be communicated to staff members at all levels within the department; and
5. Execute all other, tasks, duties or functions assigned by the Municipal Manager
6. The department should assign dedicated officials with extended delegated authority for the duration of the disaster or significant event to approve the acquisition of goods and services needed;
7. Upon request of the Municipal Manager, release resources including personnel, equipment or vehicles for utilisation during disasters and significant events. Personnel shall be deemed to be on official duty; and
8. Execute all other, tasks, duties or functions assigned by the Municipal Manager.

5.6.5 EXECUTIVE DIRECTOR: FINANCIAL AND STRATEGIC SUPPORT SERVICES

In terms of Section 52 of the Act compile a departmental disaster management plan in relation to the identified hazards and risk assessments applicable to the functional activities of the department. Such plans to be submitted to the Disaster Management Centre.

The Executive Director should ensure that his/her department/divisions pay particular attention to preventative, mitigating, response and recovery activities by the compilation of relevant contingency plans. The implementation of the plan will include the following:

1. Compilation of re-active departmental procedures to ensure service continuation
2. Plan for the continuation of operational activities during a disaster e.g. reserve personnel and resources;
3. Draft and get the approval for an emergency procurement policy
4. Facilitation emergency procurement
5. Initiating and facilitating efforts to make funds available for proactive and re-active disaster management within the municipal area
6. Management and administration of a disaster relief fund, if established;
7. The department should assign dedicated officials with extended delegated authority for the duration of the disaster or significant event to approve the acquisition of goods and services to be used to redress the impact of the event;
8. Upon request of the Municipal Manager, release resources including personnel, equipment or vehicles for utilisation during disasters and significant events. Personnel shall be deemed to be on official duty during such redeployment; and
9. Responsible for the legal process to promulgate a declared disaster in the Provincial Gazette;
10. Monitoring compliance with relevant legislation and regulations during abnormal circumstances;
11. Ensuring that Council's administrative support services, including human resources management, are maintained under abnormal circumstances;
12. Providing disaster related information to municipal employees and their families;
13. Documenting and safeguarding of information for potential municipal insurance claims and legal actions;
14. Documenting information for remuneration of municipal employees during disasters or significant events;
15. Documenting potential occupational health and safety issues;
16. Protect the health and safety of emergency responders;
17. Documenting information for potential municipal labour relations issues;
18. The contents of this corporate planning framework must be communicated to staff members at all levels within the department; and
19. Execute all other, tasks, duties or functions assigned by the Municipal Manager.

5.6.6 EXECUTIVE DIRECTOR: TECHNICAL SERVICES

In terms of Section 52 of the Act compile a departmental disaster management plan in relation to the identified hazards and risk assessment applicable to the functional activities of the department. Such plans to be submitted to the Disaster Management Centre.

The Executive Director should ensure that his/her department/divisions pay particular attention to preventative, mitigating, response and recovery activities by the compilation of relevant contingency plans. The implementation of the plan will include the following:

1. Compilation of pro-active departmental disaster management programmes to support risk reduction or elimination;
2. Providing technical advice in preventing or reducing the effects of flooding;
3. Confining and containing flood water where possible;
4. Removal of debris from transportation routes and other sites as required;
5. Rendering of emergency repairs to damaged road infrastructure;
6. Identifying and prioritising of essential services that may require restoration as a result of an emergency or a disaster;
7. To make provision in own departmental budget for significant events which requires immediate response and relief actions;
8. Plan for the continuation of operational activities during a disaster e.g. reserve personnel and resources;
9. Upon request of the Municipal Manager, release resources including personnel, equipment or vehicles for utilisation during disasters and significant events;
10. The contents of this corporate plan must be communicated to staff members at all levels within the department;
11. Execute all other tasks, duties or functions assigned by the Municipal Manager.

5.6.7 CHIEF FIRE OFFICER

The Chief Fire Officer must ensure that a Disaster Management Plan is compiled and maintained for the Fire Service with specific reference to:

1. Compilation of pro-active departmental Disaster Management programmes to support disaster risk reduction and preparedness
2. Compilation of disaster management plan to ensure service continuation during disaster situations
3. Supplying resources for Disaster Management purposes as requested by the Disaster Co-ordination Team

5.6.8 DEPUTY DIRECTORS: MUNICIPAL HEALTH SERVICES

The Deputy Directors: Municipal Health Services must ensure that a Disaster Management Plan is compiled and maintained for the Municipal Health Services with specific reference to:

1. Compilation of pro-active departmental Disaster Management programmes to support disaster risk reduction and preparedness
2. Initiate steps to eliminate risks presented by communicable diseases;
3. Isolate person(s) in order to decrease or eliminate risks presented by a communicable disease;
4. Identify persons/organizations to contribute to post-emergency reports/debriefings;
5. Monitor large groups of people for contamination and/or health effects;
6. Monitor the environment for contamination;
7. Co-ordinate the immunization of large groups of people;
8. Seize and dispose of food that poses a health hazard;
9. Monitor the environment (air, water, and ecosystem) for contamination;
10. Identify persons/organizations to contribute to post-emergency reports/debriefings,

5.6.9 DEPUTY DIRECTOR: COMMUNICATIONS SERVICES

The Deputy Director: Communication must ensure that a Disaster Management Plan is compiled and maintained for the Communications Directorate with specific reference to:

1. Compilation and distribution of press releases
2. Updating of social media
3. Communication of public safety messages
4. Designing of risk-reducing public education and awareness materials
5. Liaising with media representatives
6. Arranging of media briefings
7. On instruction of the Municipal Manager, release media statements or general information on significant events and/or disasters in terms of Section 44 (1)(c);

6. DEPARTMENTAL DISASTER MANAGEMENT PLANS (ANNEXURE A)

Typical aspects addressed in a disaster management plans are the following:

1. Planning Framework/Introduction
2. Risk and Vulnerability Assessment leading to a needs analysis
3. Evaluation and description of Infrastructure / Organisation available
4. Prevention through risk elimination.
5. Mitigation through risk reduction
6. Preparedness planning for risks that cannot be eliminated
7. Lines of communication (Protocols) and liaison
8. Awareness and Education
9. Evaluation and Maintenance

7. SIGNIFICANT EVENTS AND DISASTER DECLARATIONS

Based on the information available, the Head of the Disaster Management Centre will inform the Municipal Manager, who shall inform and recommend to Council whether or not the circumstances warrant a disaster declaration in terms of Section 55 of the Act.

Significant event declaration

Guided by assessment reports from disaster management role-players within the District, the Head: Disaster Management Centre may initiate steps to counter the effects and impact of a significant event in accordance with existing contingency plans and notify the Municipal Manager and/or the Mayoral Committee of the Council accordingly. (Sections 44 and 54 of the Act)

Disaster Declaration

In the event of a local disaster the Council may by notice in the Provincial Gazette declare a local state of disaster if existing legislation and contingency arrangements do not adequately provide for the municipality to deal effectively with the event or special circumstances warrant the declaration of a local state of disaster (Section 55 of the Act). The stipulations of Sections 23(2) and 49 regarding the recording and classification of disasters should be adhered to.

The Municipal Manager may request assistance and resources from another level of government and that request shall not be deemed to be a request for implementation of the emergency plans of that jurisdiction.

8. POST DISASTER RECOVERY AND REHABILITATION OPERATIONS

Post-disaster recovery and rehabilitation operations will be dealt with in terms of the activities of the IDDMC and Disaster Management Advisory Forum members.

9. REVIEW AND UPDATE OF THE CORPORATE DISASTER MANAGEMENT

The Cape Winelands Disaster Management Centre will regularly review and update the Corporate Disaster Management Plan as required by Section 53 of the Disaster Management Act, 57 of 2002

10. REFERENCES

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ANNEXURE A: DEPARTMENTAL DISASTER MANAGEMENT PLAN

CAPE WINELANDS DISTRICT MUNICIPALITY
DISASTER MANAGEMENT PLANNING TEMPLATE FOR MUNICIPAL DEPARTMENTS

(INSERT NAME OF DEPARTMENT)

DIRECTORATES/ DIVISIONS	PRIMARY MUNICIPAL FUNCTIONS	INSTITUTIONAL CAPACITY	HAZARD ANALYSIS	DISASTER RISK ASSESSMENT	DISASTER RISK REDUCTION MEASURES (PREVENTION & MITIGATION)	DISASTER RESPONSE AND RECOVERY
Name	Describe each directorate, division and section's core municipal functions in detail with reference to clients, area of jurisdiction etc.	Describe personnel structure, legal framework for function. Identify capabilities and shortfalls.	1. Identify possible hazards, i.e natural, technological etc. 2. Profile hazards by means of risk assessment 3. Determine risk to communities, structures etc. 4. Determine vulnerability in relation to communities, infrastructure, environment 5. Determine consequences, loss of life, injury, economic etc.	Determine the following: • Frequency of occurrence • Magnitude & potential intensity • Likely locations • Duration • Seasonal pattern • Speed of onset • Early warning	Identify operational aspects for example programmes and projects in terms of IDP and other needs to address risk factors. Examples: job creation to reduce vulnerability, strengthening of physical structures, compliance to building regulations, awareness programmes etc.	Describe the measures planned by all disciplines to respond to disastrous events. Elaborate on recovery and redevelopment measures in the post disaster scenario within the constraints of budget etc.

CAPE WINELANDS DISTRICT SPATIAL DEVELOPMENT FRAMEWORK

2019/2024

CAPE WINELANDS DISTRICT
MUNICIPALITY • MUNISIPALITEIT • UMASIPALA

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1: Municipal Financial Impact Analysis

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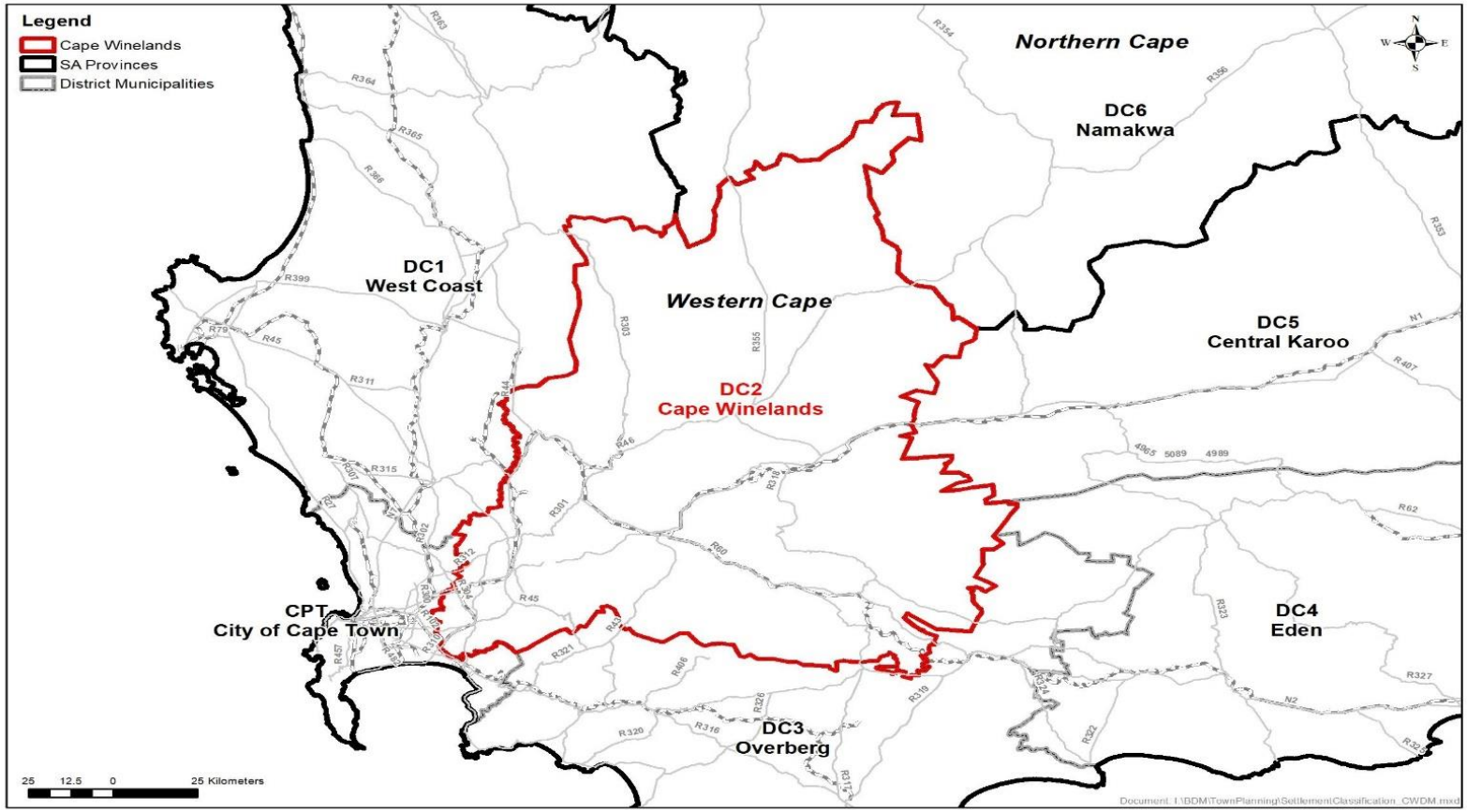
3: Cape Winelands District Municipal Climate Change Adaptation Summery Report

1. INTRODUCTION

1.1 STUDY AREA

The Cape Winelands district is situated next to the Cape Metropolitan area and encloses 22 309.47km². It is a landlocked area between two coastal regions, the West Coast and Overberg districts and inland regions, Namakwa (Northern Cape Province) and Central Karoo districts.



1.2 STRATEGIC CONTEXT

The Cape Winelands Spatial Development Framework identifies eighteen (18) key focus areas for intervention that are spread across four chapters (refer to table 1 below);

Chapters:	Key Focus areas:
A. DEMOGRAPHICS AND BUILT ENVIRONMENT:	1. Population growth & migration 2. Hierarchy of towns 3. Growth potential of towns 4. Municipal services financial model 5. Integrated district public transport network 6. Cultural landscapes: Sense of place 7. Water infrastructure 8. Energy & telecommunications infrastructure 9. Solid waste disposal 10. Disaster management
B. DISRTICT SPACE ECONOMY:	11. Economic growth sectors 12. Municipal space economy linkages 13. Agri parks
C. BIODIVERSITY & ECOSYSTEMS: SERVICES	14. Biodiversity 15. Ecosystem services 16. Invasive alien species 17. Cape Winelands Biosphere Reserve
D. CLIMATE CHANGE:	18. Rain and temperature

The key focus areas were chose based on the functions of the Cape Winelands District Municipality in terms of Section 84 (1) of the Municipal Structures Act (117 of 1998), assigned functions i.e. Disaster Management and relevant issues and concerns that have an impact on the Cape Winelands District and broader Cape Metropolitan Functional Region landscape.

Cognisance is also given to the structural deficiencies that was highlighted by the Greater Cape Metro Regional Spatial Implementation Framework (GCM RSIF) which are;

- Pervasiveness of socio-spatial segregation,
- Sprawling and low-density multi-nodal network of settlements,
- Mismatches between where people live and work,

- Isolated concentrations of poverty severed from economic opportunities, and
- Underinvestment in public transport and freight infrastructure, making the region inaccessible to most residents and inefficient for business to operate in.

These challenges must be addressed, although site specific and at a lower scale than the CWDM SDF's strategic focus, strategies will none the less be proposed to deal with these structural deficiencies that are evident throughout the CWDM.

Strategically, in the context of **human settlements**, the emphasis is on considering the functionality of settlements, their economic growth potential, migration and urbanisation challenges (bulk services, transport modes, solid waste disposal etc.) and the creation of a framework in which rational decisions can be made in terms of capital investment and social support programs.

The **district space economy** chapter highlights the strength of economic growth sectors that are located within the urban space economy, it also acknowledges the importance of the primary sector (agriculture). The industries that performs strongly in the urban space economy has backward linkages to agriculture. Strategically, this chapter emphasise the importance of integrated planning and the coordination of public sector investment within the urban space economy. The agri parks programme from the National Department of Rural Development and Land Reform will be implemented in each district municipality. In the case of the CWDM, the agri hub will be located in Ceres (Witzenberg Municipality). Various other towns were selected as farmer productions support unit points. The farmer production support unit points are aligned to poverty pockets. According to the Draft Rural Development Plan (19/12/2016) various projects were proposed for the farmer production support unit points. The CWDM SDF supports the proposed investment into the farmer production support unit points and agri hub (Ceres, Witzenberg Municipality) from a strategic perspective.

Biodiversity conservation remains a challenge in the CWDM area. Rapid urbanisation, agricultural expansion and the impact of climate change poses a major threat to the Cape Floristic Region as well as ecosystem sources (water, air, biodiversity and soil). The CWDM area consist of Fynbos, Succulent Karoo, Albany Thicket an Afro-temperate Forest biomes. The CWDM SDF spatially reflects the important areas for protection and refers users to the Western Cape Biodiversity Spatial Plan and its accompanying handbook.

The impact of **climate change** has already been felt with the recent and potential ongoing drought as well as rain surges that causes flooding. From a land use planning perspective various site-specific measures needs to be put in place as well as disaster risk related systems that relates more to adaptation to anticipated and un anticipated occurrences. Strategically, adaptation and mitigation measures are prioritised.

In conclusion, the purpose of the Cape Winelands Spatial Development Framework 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;
- Develop a spatial logic that guides public and private-sector investment;
- Ensure the social, economic, built and environmental sustainability of the area, and

- Formulate proposals to redress the spatial legacy of apartheid;

1.3 PRINCEPLES OF THE CWDM SDF

The CWD SDF adopts the principles of the Spatial and Land Use Planning Act (16 of 2013, which are;

Spatial Justice: A socially just society is one that embraces the qualities of equity, solidarity and inclusion. Whilst equal opportunity targets everyone in the community, social justice targets marginalised and disadvantaged groups. Inclusionary settlements focus on the public realm rather than on private enclaves; support civic interaction and equitable access throughout the public environment; and make urban opportunities accessible to all, especially the poor. Inclusionary economies have low barriers to entry, do not discriminate between the formal and informal sectors, and take active measures to empower those previously restricted in their access to the means of production. Past spatial imbalances are redressed by improving access to, and use of, land.

Spatial Sustainability: Land development should be spatially compact, resource- frugal, compatible with cultural land scenic landscapes, avoid alienating productive landscapes, and not compromise the functionality of ecosystems.

Spatial Resilience: Resilience is about the capacity of regions to withstand shocks and disturbances such as climate change or economic crises, and to use such events to catalyse renewal, novelty and innovation. The focus is on creating complex, diverse and resilient spatial systems that are sustainable in all contexts.

Spatial Efficiency: Efficiency relates to the form of regional settlements and use of resources compaction as opposed to sprawl; mixed- use as opposed to mono-functional land uses; residential areas close to work opportunities as opposed to dormitory settlement; and prioritisation of public transport over private car use. When a settlement is compact higher densities provide thresholds to support viable public transport, reduce overall energy use, and lower user costs as travel distances are shorter and cheaper. Spatially efficient economies are more productive as they minimize business transaction costs and maxsimise outputs. Spatially compact city-regions provide for the fluid exchange of ideas, goods and services, which establishes an enabling environment for businesses and households to operate in.

Spatial Governance: Effective governance of city-regions is based on collaboration and coordination, integration and alignment, and transparency. Planning is evidenced based, informs the budgeting process, and spatial targets are incorporated into public investment programmes.

1.4 VISION, MISSION AND OBJECTIVES

The Cape Winelands District Spatial Development Framework as a sector plan of the Cape Winelands District Integrated Development Plan (CWD IDP) adopts the CWD IDP's vision which is "A unified Cape Winelands of Excellence for sustainable development", mission, "All structures of the Cape Winelands co-operate together towards effective, efficient and economically sustainable development".

The objectives of the CWD SDF are;

- To improve the quality of life for the people of the region by ensuring principle led responses
- To plan in advance by considering future population growth, economic and climatic changes
- To manage the impact and exposure of external and internal threats to growth and development
- To restructure urban settlements through compaction and densification
- To promote sustainable resource use and responsible rural development
- To improve and conserve the district's natural environment

1.5 LEGISLATIVE REQUIREMENT FOR THE FRAMEWORK

The Cape Winelands District Municipality compiled a Spatial Development Framework for its area of jurisdiction in terms of Section 26 of the Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000). The CWDM is mandated to do a Spatial Development Framework as a sector plan of the CWDM Integrated Development Plan in terms of the Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000).

As per the Spatial and Land Use Planning Act, local government must compile a municipal spatial development framework in terms of Chapter 4, Section 12 (1) of the mentioned Act.

2. DEMOGRAPHICS AND BUILT ENVIRONMENT

2.1 POPULATION GROWTH AND MIGRATION

According to the South African Institute for Race Relations, the Western Cape has shown significant growth in its population. This increase is due to internal migration as people seek job opportunities, facilities and housing. The PSDF (2014) states that the Western Cape's population is growing faster than national averages, largely on account of in-migration (i.e. Stats SA estimate that the province received a net gain of 225 657 people between 2006 and 2011, 35% of whom were from outside the country, 31% from the Eastern Cape, and some 14% from Gauteng). The fertility rate in the Western Cape has declined considerably over the years and is lower than the rest of the country. Of significance is that in-migration accounts for approximately one-third of the population growth rate, which places additional burdens on government's service delivery efforts particularly in the main economic centres. In the Cape Winelands district, the current growth statistics are as follow;

Table 2: Municipal Annual Growth rates between Census 2001 and Census 2011(Source: Stats SA)

Municipality	**Total Population in 2001**	**Total population in 2011**	**Annual Growth rate between 2001 and 2011**
Witzenberg	83 567	115 946	3.27%
Drakenstein	194 417	251 626	2.6%
Stellenbosch	118 709	155 733	2.71%
Breede Valley	146 028	166 825	1.33%
Langeberg	81 271	97 724	1.84%

Table 3: Municipal Annual Growth rate between Census 2011 and Community Survey 2016

Municipality	**Total Population in 2011**	**Total population in 2016**	**Annual Growth rate between 2011 and 2016**
Witzenberg	115 946	130 548	2.37%
Drakenstein	251 626	280 915	2.2%
Stellenbosch	155 733	173 418	2.25%
Breede Valley	166 825	176 578	1.14%
Langeberg	97 724	105 483	1.53%

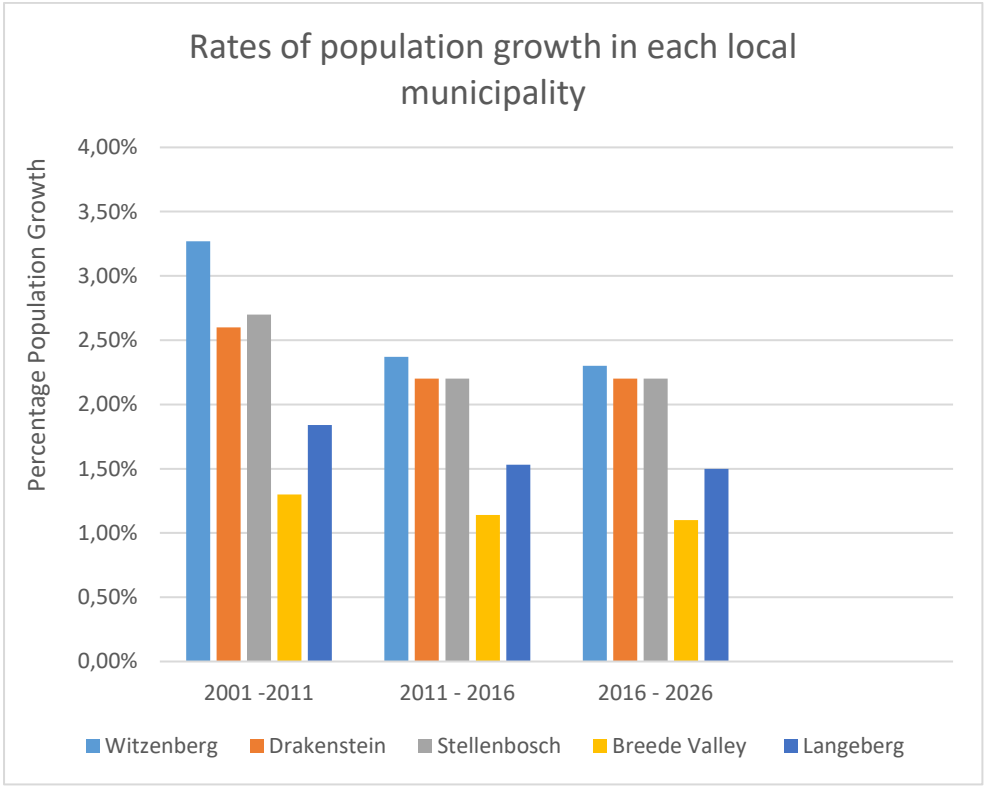
Table 4: Comparing annual population growth rates between two time frames, namely 2001 – 2011 and 2011 - 2016 to check if the growth rates themselves have increased or declined.

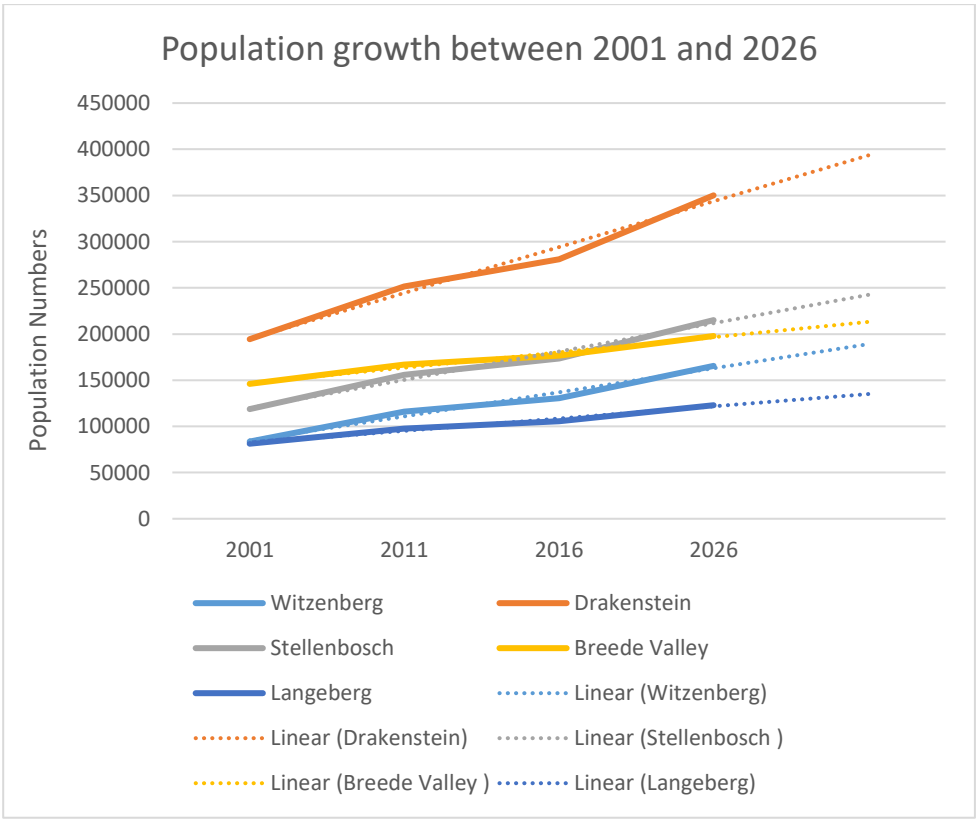
Municipality	Annual Growth rate between 2001 and 2011	Annual Growth rate between 2011 and 2016	Increase (↑) Or Decline (↓) in annual population growth rates comparing two time frames
Witzenberg	3.27%	2.37%	↓
Drakenstein	2.6%	2.2%	↓
Stellenbosch	2.7%	2.25%	↓
Breede Valley	1.3%	1.14%	↓
Langeberg	1.84%	1.53%	↓

Table 5: Population Growth Projections for 2026, based on the annual population growth rates between 2011 and 2016

Municipality	Population figures in 2016 according to the Community Survey	Annual projected population growth rates	Anticipated population growth rates for 2026
Witzenberg	130 548	2.4%	165 500
Drakenstein	280 915	2.2%	350 117
Stellenbosch	173 418	2.2%	215 040
Breede Valley	176 578	1.1%	197 827
Langeberg	105 483	1.5%	122 898

Graph 1: Rates of population growth per period 2001-2011, 2011-2016, 2016-2026

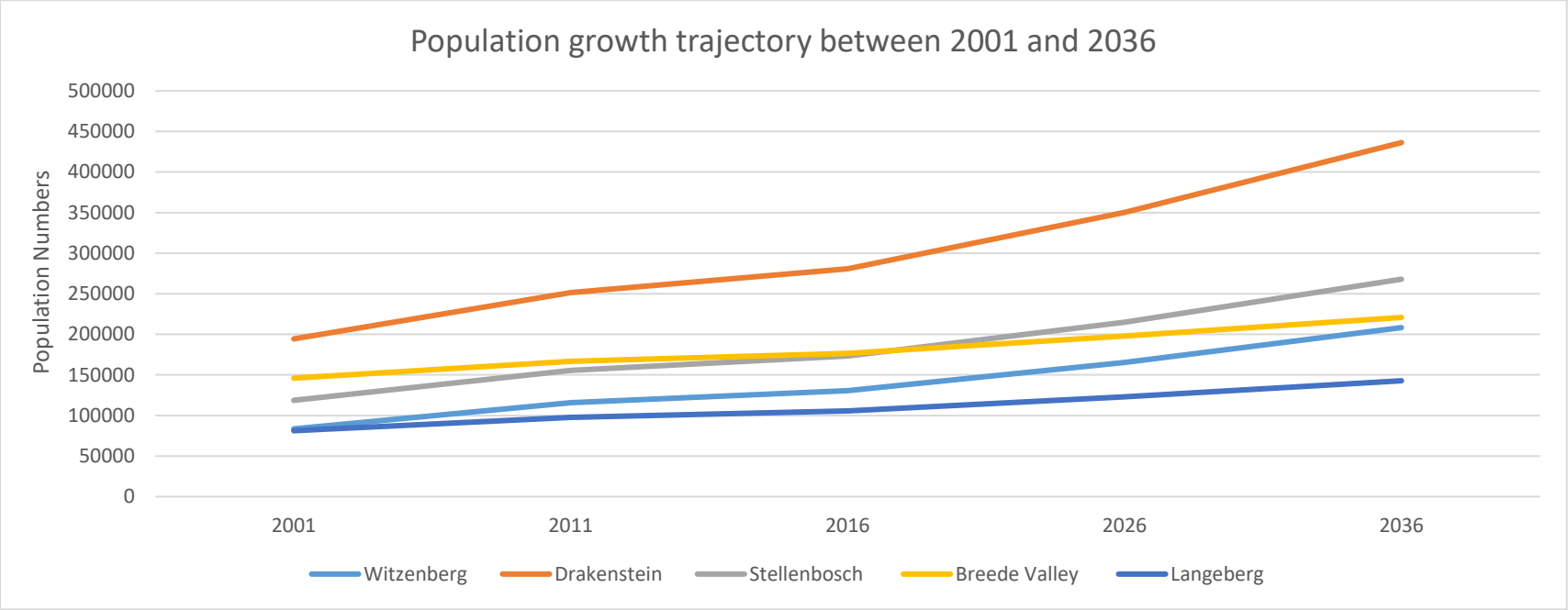




Graph 2: Population growth between 2001 and 2026

From the above it is interesting to note that by 2026 it is anticipated that the total population of Stellenbosch Municipality would have overtaken that of Breede Valley Municipality.

Graph 3: Population growth trajectory between 2001 and 2036



The above graph would seem to indicate that if population growth rates continue at the same levels that they did between 2011 and 2016, then Witzenberg's population will overtake that of Breede Valley soon after 2036. Witzenberg shows a similar growth trajectory to Drakenstein and Stellenbosch, with Breede Valley and Langeberg showing a slightly different growth trajectory.

We have entered a new planning paradigm in South Africa with the advent of SPLUMA. The mentioned Act requires that municipal spatial development frameworks must include a longer-term spatial development vision statement for the municipal area which indicates a desired spatial growth and development pattern for the next 10 to 20 years. Depending on the date of developing/reviewing spatial development frameworks, municipalities must include population growth estimates for the next five-year period. These estimates will be reviewed every five years to ensure that it is relevant. Stats SA does surveys on a five-year cycle (Formal Stats SA publications occur every 10 years with a Community survey in between). Municipal spatial development frameworks must also include estimates on the demand for housing units across different socio-economic categories and the planned location and density of future housing development. Proactive planning is essential to achieving good governance and efficient service delivery.

2.1.1 Potential risks associated with population growth and migration:

It is essential to guard against risks that manifests with population growth with specific emphasis on migration and the difficulties of migrants assimilating into regions that is culturally different. The impact of a growing labour-intensive agricultural sector that is making use of brokers whom source labourers from outside the province and the influx of foreign nationals is a common phenomenon in the CWDM area. Apart from impacts mentioned, the ability of municipalities and government to provide housing and related services remains nearly an impossible challenge.

Social conflict is highlighted in the CWDM Risk Assessment Report (2014) as being an 'extremely high-risk priority'. Early warning signals are identified as follow;

- Sudden demographic changes and population displacement
- Increasing population resulting in rising unemployment rates
- An increase in numbers of demonstrations or rallies especially around local elections
- An increase in new faces in the area, i.e. strange people attempting to organise unrest
- Organised land invasions
- Dissent with regard to new housing developments and allocations in areas
- Increase in foreign immigration
- Increase in spaza (informal) shops owned by foreign nationals in townships

2.1.2 Key findings: Population Growth and Migration

2.1.2.1 Over a 15-year period from 2001 to 2016, population growth statistics reflects substantial growth within the CWDM. Stellenbosch municipality (46%), Drakenstein municipality (45%), Witzenberg municipality (56%) municipality had the highest growth percentages. Breede Valley municipality (21%) and Langeberg municipality (30%) relatively lower than the others. The PSDF (2014) indicates that between 2006 and 2011, the province received a net gain of 225 657 people from which 80% were because of migration. It is essential that long term population growth projections must be done, at least 20-year projections. The CWDM area has 42 756 indigent households according to the CWDM Socio Economic Profile (2017), this figure will most likely increase. The proposed population projections will enable government to determine growth hotspots and plan accordingly for essential services to mitigate potential risks relating to social conflict.

2.1.2.2 Due to the labour-intensive nature of commercial farming, Commercial farmers source labour from Lesotho, Swaziland, Rural Eastern Cape etc. due to local inhabitants listed on databases from the Department of Labour not being interested in the opportunities presented in the agricultural sector. The potential impact of this is workers settling permanently in the relevant areas i.e. Ceres Koue Bokkeveld and Langeberg municipal area. This creates further issues in terms of housing provision and related indigent services.

2.1.2.3 Growth projections between 2016 and 2026 shows a slight decline if annual percentages between 2011-2016 is continued. External factors that have not been taken into calculations are drought and the impact of climate change as well as the national and municipal government elections. The external factors could either lead to further decline in population growth or a slight increase in certain municipalities.

2.1.3 Implementation proposals:

FOCUS AREA:	POPULATION GROWTH AND MIGRATION
STRATEGIES:	1. Population growth projections must be done at least every five years to determine future population growth and hotspots.
	2. The municipality must play a facilitative role and assist Commercial farmers in Witzenberg and Langeberg municipalities with the recruitment of local unemployed people registered on the database of the Department of Labor.
	3. Social conflict risks and early warning signals associated with migration must be included in municipal Integrated development plans and spatial development frameworks. Refer to the CWDM Risk Assessment Report (2014).
	4. Develop a migration policy to accommodate and manage new or relocated entrants. This must be dealt with as a developmental rather than a security concern.
	5. Indigent policies must be updated on a regular basis to keep up with new entrants into a municipal area.
	6. 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.
	7. Municipalities to register indigent cases.
PRIORITY:	HIGH

2.1.4 CWDM Implementation Plan : Population Growth and Migration

PROJECT/ACTIVITY:	BUDGET:	RESPONSIBLE:	DURATION:
Revision of Risk Assessment	R243 500, 00	Disaster Management Section	2018/2019

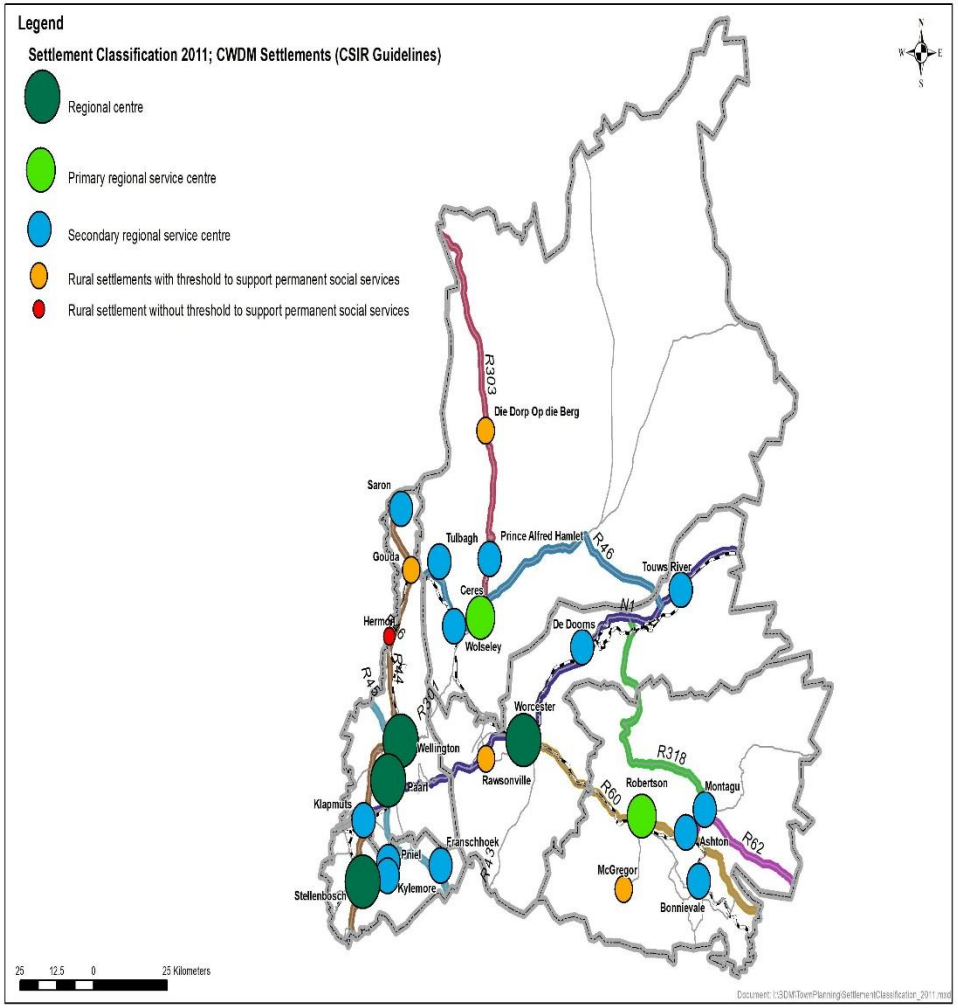
2.2 HIERARCHY OF TOWNS

Settlement classification based on the CSIR guidelines remains an important indicator of the distribution of existing primary social facilities in relation to settlement thresholds.

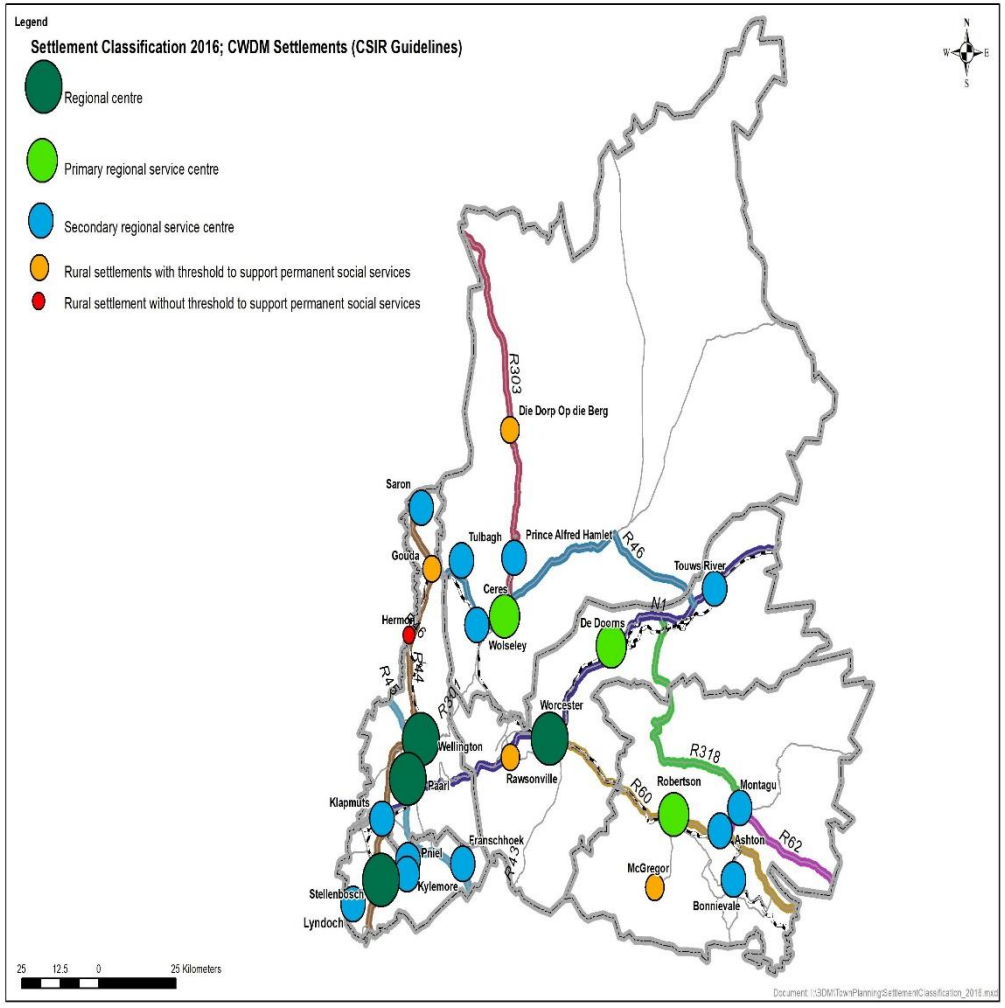
Table 6: PSDF 2014, Settlement Classifications; CWDM Settlements (CSIR Guidelines), Projections based on "Draft Data Estimate percentages, Data source: Statistics South Africa & Western Cape DEA&DP".

Settlements Classifications based on 2011 populations statistics (Stats SA)	Population Thresholds	Population, Community Survey (2016)	Population projection (2026)	Population projection (2036)
REGIONAL CENTRE Paarl, Stellenbosch, Wellington, Worcester,	**>70 000**	**REGIONAL CENTRE** **Paarl:** 126 975 **Stellenbosch:** 89 903 **Wellington:** 63 557+35 089 **Worcester:** 104 527	**REGIONAL CENTRE** **Paarl:** 162 539 **Stellenbosch:** 112 858 **Wellington:** 83 771+45 357 **Worcester:** 121 308	**REGIONAL CENTRE** **Paarl:** 208 063 **Stellenbosch:** 141 673 **Wellington:** 110 414+58 630 **Worcester:** 140 783
PRIMARY REGIONAL SERVICE CENTRE Ceres, Robertson	**>20 000-70 000**	**PRIMARY REGIONAL SERVICE CENTRE** Ceres: 36 043 Robertson: 30 675 De Doorns: 20 586	**PRIMARY REGIONAL SERVICE CENTRE** Ceres: 42 243 Robertson: 37 761 De Doorns: 26 352 Franschhoek: 21 692 Montagu: 23 587	**PRIMARY REGIONAL SERVICE CENTRE** Ceres: 49 510 Robertson: 46 484 De Doorns: 33 373 Franschhoek: 26 966 Montagu: 31 699 Klapmuts: 22 038 Prince Alfred Hamlet: 20 004 Wolseley: 27 328
SECONDARY REGIONAL SERVICE CENTRE Ashton, Bonnievale, **De Doorns,** Montagu,	**>5000-20 000**	**SECONDARY REGIONAL SERVICE CENTRE** Ashton: 14 133 Bonnievale: 10 229 Montagu: 17 551 Klapmuts: 9 495 Kylemore, Pniel, Lyndoch:12 031	**SECONDARY REGIONAL SERVICE CENTRE** Ashton: 15 924 Bonnievale: 12 967 Klapmuts: 14 466 Kylemore, Pniel, Lyndoch: 15 552 Prince Alfred Hamlet: 13 005	**SECONDARY REGIONL SERVICE CENTRE** Ashton: 17 941 Bonnievale: 16 437 Kylemore, Pniel, Lyndoch: 20 102 Saron: 13 837 Touwsriver: 19 964 Tulbagh: 17 906

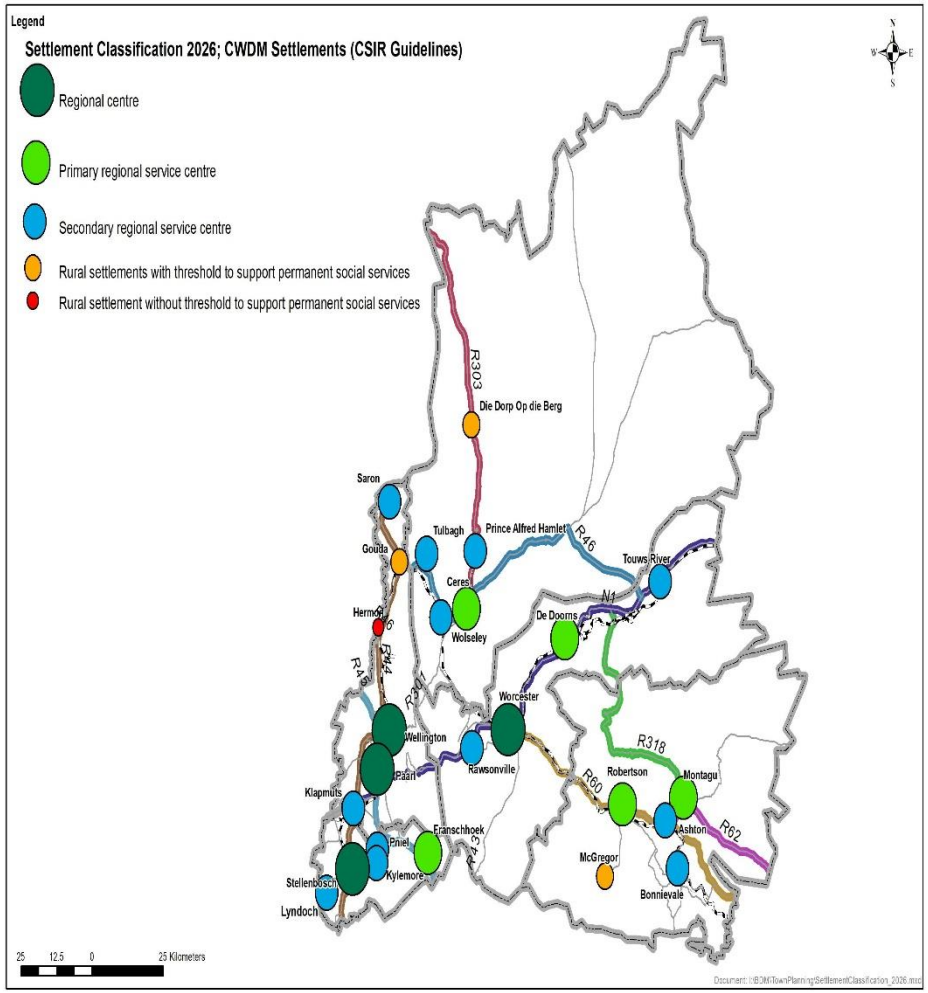
Klapmuts, Kylemore, Pniel Lyndoch Prince Alfred Hamlet, Saron, Touwsriver, Tulbagh, Wolseley, Franschhoek		Prince Alfred Hamlet: 8 455 Saron: 8 781 Touwsriver: 8 768 Tulbagh: 10 307 Wolseley: 14 276 Franschhoek: 17 450	Saron: 11 023 Touwsriver: 13 231 Tulbagh: 13 585 Wolseley: 19 752 Rawsonville: 5047	Gouda: 6232 McGregor: 5398 Rawsonville: 6983
RURAL SETTLEMENTS WITH THRESHOLD TO SUPPORT PERMANENT SOCIAL SERVICES Gouda, McGregor, Op Die Berg, Rawsonville,	**>1000-5000**	**RURAL SETTLEMENTS WITH THRESHOLD TO SUPPORT PERMANENT SOCIAL SERVICES** Gouda: 3878 McGregor: 3493 Op Die Berg: 1843 Rawsonville: 3648	**RURAL SETTLEMENTS WITH THRESHOLD TO SUPPORT PERMANENT SOCIAL SERVICES** Gouda: 4916 McGregor: 4342 Op Die Berg: 2676	**RURAL SETTLEMENTS WITH THRESHOLD TO SUPPORT PERMANENT SOCIAL SERVICES** Op Die Berg: 3886
RURAL SETTLEMENT WITHOUT THRESHOLD TO SUPPORT PERMANENT SOCIAL SERVICES Hermon	**< 1000**	Hermon	Hermon	Hermon



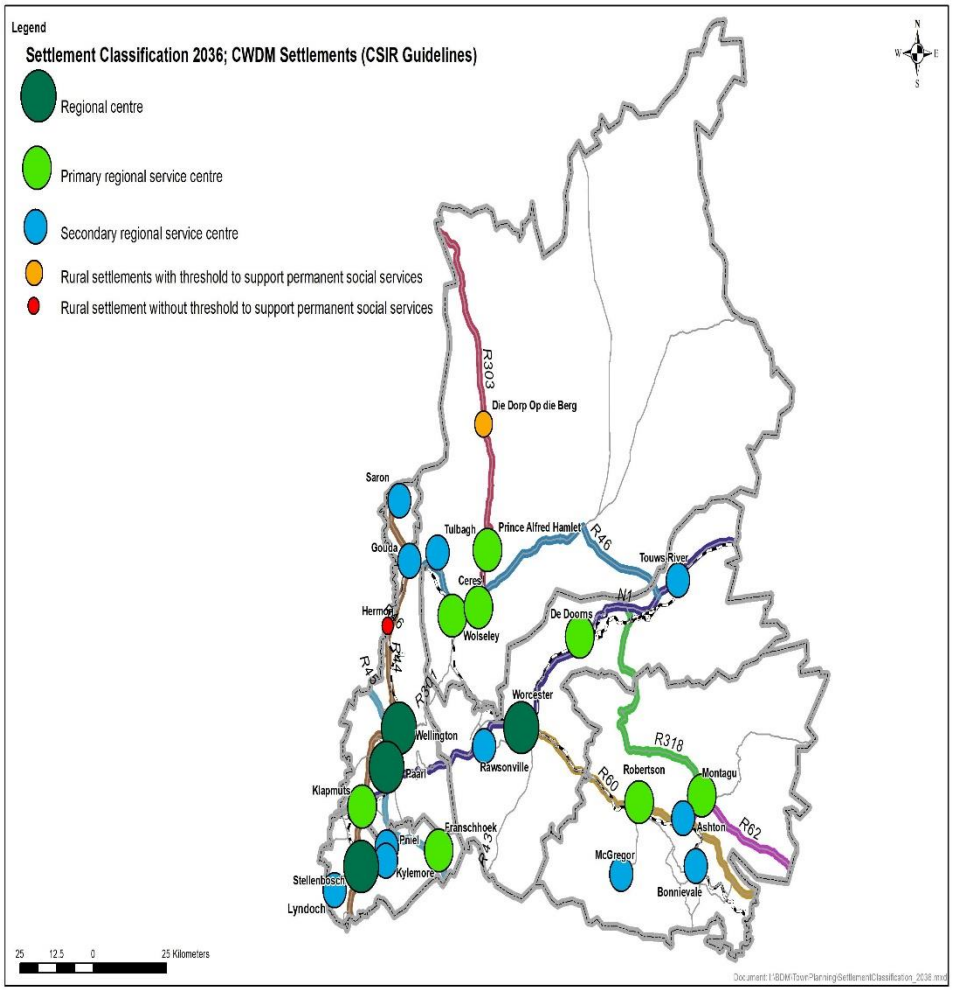
Map 1: CWDM Settlement Classifications 2011 (PSDF 2014)



Map 2: CWDM Settlement Classifications 2016 (based on Community Survey)



Map 3: CWDM Settlement Classification 2026 (based on projections)



Map 4: CWDM Settlement Classification 2036 (based on projections)

2.2.1 Regional Centres

The Draft Greater Cape Metro Regional Spatial Implementation Framework (GCMRSIF) highlights the importance and functionality of regional centres within the greater cape metro region. Stellenboch, Paarl/ Wellington and Worcester are in the CWDM. In the context of the CWDM, four regional centres exist;

Stellenbosch: Southern Winelands service & admin centre, tertiary education & research, agri processing, multi-national HQs, tourism destination, tech industry, very high growth potential;

Paarl-Wellington: Northern Winelands service & admin centre, tertiary education, agri processing & distribution, tourist destination, very high/high growth potential;

Worcester: Northern Boland service centre, admin centre, N/S & E/W regional logistics hub, specialist disability treatment, tertiary education, agri processing & distribution, high growth potential and;

Both Stellenbosch and Drakenstein Municipalities have identified Klapmuts as a prospective sub-regional urban node along the N1. Residential and industrial development opportunities have been identified north and south of the N1, and the area has also been identified as having potential to serve as a regional freight logistics hub. Stellenbosch and Paarl/Wellington falls within the functional region of the metro economy. These nodes function more as an extension of the metropolitan area rather than being significant centres for services and goods to the surrounding countryside. Worcester remains an important, and probably the only, 'major regional service centre' due to easy accessibility from surrounding towns and towns located in the Langeberg & Witzenberg municipal area.

2.2.2 Primary Regional Service Centre

Ceres: Agricultural regional service centre, regional gateway to Tankwa Karoo, Koue and Warmbokkeveld, administrative centre, linkages to N1.

Robertson: The Langeberg municipal area did not form part of the study area of the draft GCMRSIF. Robertson, Ashton, Bonnievale and Montagu fulfil important roles as service centres/agricultural service centres. Robertson has a medium growth potential forecast but can build upon being the largest town with the broadest economic base within the Langeberg municipal area.

2.2.3 Other Municipal Towns

The development of towns (district wide) 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. Apart from the economics that drive the growth and development of these towns, aspects regarding technological innovation, the environment, the particular spatial location, cultural patterns and management systems also play a role. Thus, each municipal area in the district has distinct growth forces and historically evolved relations between the towns, villages and neighbourhoods, which will shape the potential for future growth. It is critical for pro-growth (and pro-poor) municipal strategies that these towns and their development potential are taken into account.

Table 7: Social Facilities (CSIR Guidelines for the Provision of Social Facilities in South African Settlements, 2012)

Categories	Facilities
Health & Emergency Services:	Tertiary, Regional and District Hospital
	Community Health Centre
	Primary Health Clinic
	Fire Station
	Police Station
Social and Cultural (Public Service)	Performing Arts Centre
	Museum
	Library
	Civic Centre/City Hall Major Public Event Venue
	Home Affairs Office
	Thusong Centre
Civic Services	Labour Office
	Magistrate's Court
	Municipal Office
	Prison and Place of Safety
	Solid Waste Disposal Site and Recycling Depot
	Community Hall
	Children's Home
	Home for the Aged
	Hospice and Health Centre
	ICT Access Points
Social Services	Post Office/Agency and Post Boxes
	South African Social Security Agency (SASSA) Office and Social Grant Pay Point
	Cemetery and Crematorium
	Informal Urban Agriculture
	Local Market
	Worship Centre
Education Services	Further Education and Tertiary Institutions
	Special Education
	Secondary School
	Primary School
	Early Childhood Development (ECD): Grade R
	Early Childhood Development (ECD): Crèche
	Early Childhood Development (ECD): Resource Hub and Care Centre
Parks and Recreation Services	Parks
	Sports and Recreation: Overall Allocations for Sports Fields and Facilities

2.2.4 Key findings: Hierarchy of Towns

2.2.4.1. Settlement classification of CWDM towns per the PSDF (2014) based on the CSIR Guidelines is essential to indicate the distribution of existing primary social facilities in relation to settlement thresholds. This in tandem with population growth projections will assist government/municipalities in determining which towns are in a transition to a new classification (higher/lower order) which will in turn determine the types of social facilities that is needed.

2.2.5 Implementation proposals:

FOCUS AREA:	HIERARCHY OF TOWNS
STRATEGIES:	1. Population growth projections must be done at least every five years at settlement level to determine future population growth and hotspots.
	2. Settlements that are in transition to a higher/lower order classification as per the CSIR Settlement Classifications must be determined and included in municipal spatial development frameworks and integrated development plans well in advance to ensure that sufficient planning is done.
	3. Ensure higher levels of sustainable growth through, *inter alia*, 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
	4. Consider and incorporate the growth and development of Cape Town as critical informant for district planning and implementation
PRIORITY:	HIGH

2.3 GROWTH POTENTIAL OF TOWNS

The Growth Potential Study (2013) determined the following growth potential for municipalities and towns in the Cape Winelands district based on assessing five thematic indices, namely: human capital, infrastructure availability, economy, physical attributes, and institutional capacity (refer to table 4 below);

The CW SDF does not propose an investment typology. Municipalities must assess settlements individually and consider strengths and weaknesses in terms of the thematic indices.

The GPS provides a comprehensive profile for each settlement based on 85 individual indicators. The information generated from these assessments can inform strategies and projects aimed at addressing the weaknesses of individual settlements and optimising the strengths to unlock opportunities for growth and development. These assessments are crucial and must be prioritised. Detail planning and broad consultations that include all stakeholders (private sector, government etc.) must have parity on the way forward.

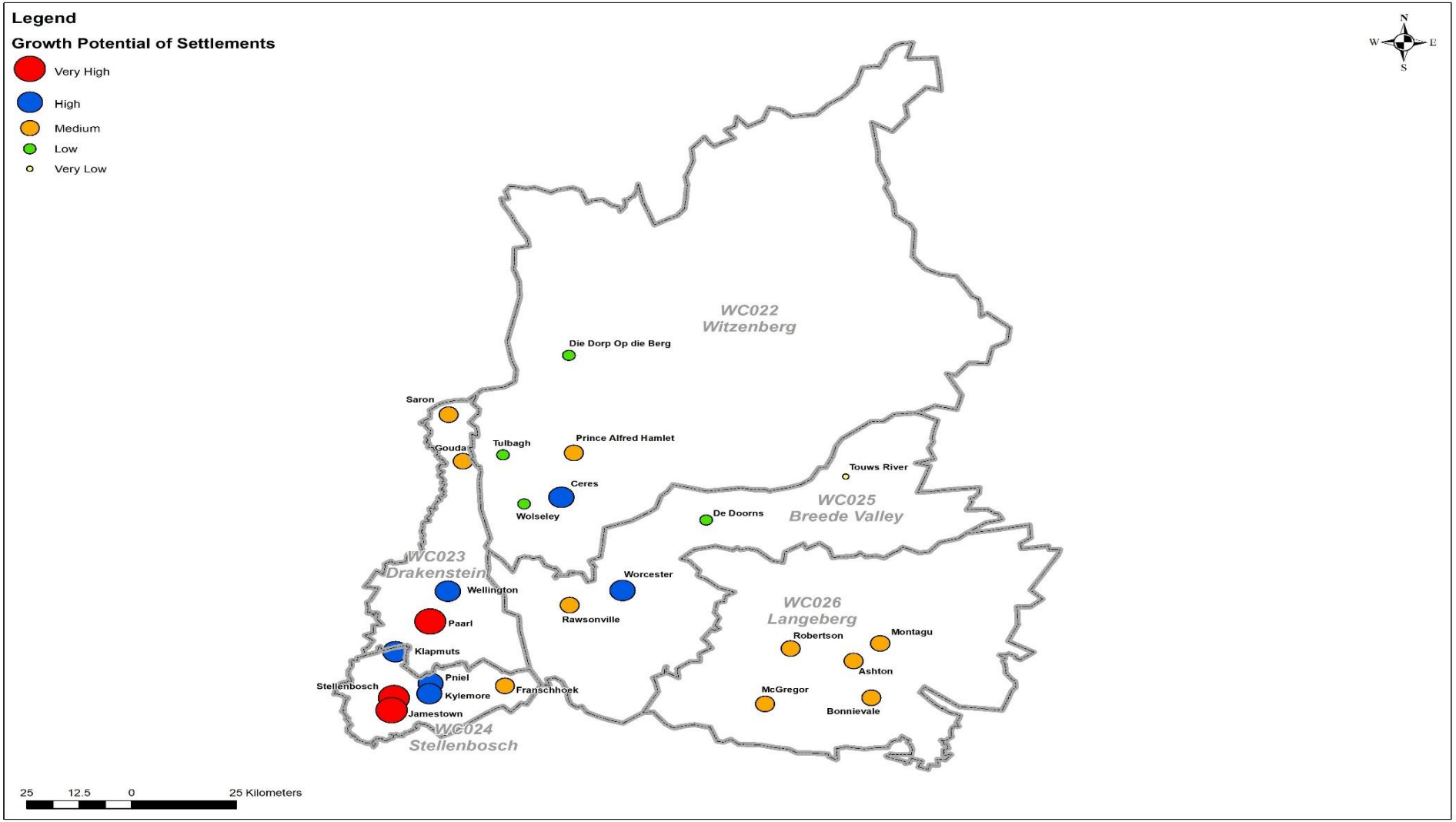
The PSDF (2014) identifies Stellenbosch, Klapmuts, Paarl, Ceres and Worcester as settlements that have very high growth potential and very high social needs. This is a deviation from the GPS (2013). The deviation is specifically aimed at Ceres and Klapmuts. Reasons given are based on the relationship between areas of urban growth pressure and important natural and agricultural resources.

Ceres as a primary regional service centre's growth outlook is strengthened by the proposed R45 000 000, 00 Agri-Park development that will be developed within the next five (5) years and as having a strong agricultural sector. Klapmuts, on the other hand, is near Stellenbosch, Paarl and the City of Cape Town. Klapmuts together with Paarl and Stellenbosch is located within the functional region of the Metro Economy.

Wellington is viewed by the draft GCMRSIF as a regional node in tandem with Paarl and has a very high/ high growth potential. This regional node fulfils a service, tertiary education, agri processing & distribution, tourist destination and administrative center function for the northern winelands region.

Table 8: Growth Potential and Socio-Economic Needs of CWDM Towns (GPS 2013)

B Municipalities:	Growth Potential: Settlement level	Growth Potential: Municipal level	Socio-economic needs
WITZENBERG		Low	
Ceres	*Medium (GPS 2013)* **Very High (PSDF2014)**		**High** **Very High (PSDF2014)**
Prince Alfred Hamlet	Medium		Medium
Op die Berg	Low		Medium
Tulbagh	Low		Medium
Wolseley	Low		Medium
LANGEBERG		Medium	
Montagu	Medium		Medium
Ashton	Medium		Medium
Robertson	Medium		**High**
MgGregor	Medium		Very low
Bonnievale	Medium		Medium
BREEDE VALLEY		Medium	
Worcester	**High**		**Very high**
Rawsonville	Medium		Low
De Doorns	Low		Low
Touwsrivier	Very low		Low
DRAKENSTEIN		Very high	
Paarl	**Very high**		**Very high**
Wellington	*Medium* **Medium -High (PSDF 2014)**		**Very high**
Gouda	Medium		Very low
Saron	Medium		Low
STELLENBOSCH		Very high	
Stellenbosch-Jamestown	**Very-high**		**Very high**
Pniel-Kylemore	**High**		Low
Franschhoek	Medium		Medium
Klapmuts	*Medium (GPS 2013)* **Very High (PSDF 2014)**		Low **Very High (PSDF 2014)**



Map 5: CWDM Growth Potential of Towns. The designations are informed by the GPS (2013), PSDF (2014) and draft GCMRSIF

2.3.1 Key findings: Growth Potential of Towns

- Ceres as a primary regional service centre's growth outlook is strengthened by the proposed R45 000 000, 00 Agri-Park development that will be developed within the next five (5) years and as having a strong agricultural sector. According to Witzenberg Municipality, the agricultural sector economy located within the Warm & Koue Bokkeveld are going to grow with 20-30% within the next five years. Farmers have planted new orchards etc. that will produce fruit within the mentioned period. The challenge for the municipality is the provision of adequate services and possible industrial land for cold storage facilities. The town of Ceres is further constrained by a lack of land for urban expansion. The expansion of the agricultural industry and in-migration must be monitored as can be seen from the high population growth percentages.
- The Growth Potential Study (2013) determined growth potential for municipalities and towns in the Cape Winelands district based on assessing five thematic indices, namely: human capital, infrastructure availability, economy, physical attributes, and institutional capacity. Municipalities must assess settlements individually and consider strengths and weaknesses in terms of the thematic indices. The latter will potentially highlight opportunities for investment.
- Stellenbosch, Paarl and Wellington are located within the functional metro economy of Cape Town. These towns function more as an extension of the metropolitan area, people live in the metro and work and make use of services in these towns and vice versa. The economic growth outlook will therefor always remain positive although the long-term impact of a "drying" Cape Winelands region is not known at this stage.

2.3.2 Implementation proposals:

FOCUS AREA:	GROWTH POTENTIAL OF TOWNS
STRATEGIES:	1. The thematic indices that was used to score municipalities and settlements in terms of potential for economic growth must be analysed. The high scoring thematic indices will present opportunities for investment and vice versa, the low scoring thematic indices will present strategic opportunities for investment that could improve the growth potential of a municipal area or settlement.
	2. Identify and consider the growth forces and historically evolved relations between the towns, villages and neighbourhoods as informants of future growth potential and options
	3. 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)
PRIORITY:	HIGH

2.4. INTEGRATED HUMAN SETTLEMENTS

Efficient settlements are underpinned by 'good' and effective governance/ municipal decision making, utilizing structural elements and existing resources efficiently to deal with legacy challenges (apartheid spatial layout of towns) and the availability of infrastructure. SPLUMA (16 of 2013) is founded on the development principle of efficiency whereby, "land development optimises the use of existing resources and infrastructure; decision-making procedures are designed to minimise negative financial, social economic or environmental impacts; and development application procedures are efficient and streamlined and timeframes are adhered to by all parties". The CW SDF embraces this as a key principle to enable efficient settlement.

The CWSDF will also build upon the three (3) frameworks that are mentioned below;

The Draft Greater Cape Metro Regional Spatial Implementation Framework (2016);

The GCMRSIF identified the following structural deficiencies which is applicable to most of the settlements in the CWDM, these structural deficiencies include;

- Pervasiveness of socio-spatial segregation,
- Sprawling and low-density multi-nodal network of settlements,
- Mismatches between where people live and work,
- Isolated concentrations of poverty severed from economic opportunities, and
- Underinvestment in public transport and freight infrastructure, making the region inaccessible to most residents and inefficient for business to operate in.

The Integrated Urban Development Framework (2016);

The Integrated Urban Development Framework (IUDF) provides Government's policy framework for transforming and restructuring South Africa's urban spaces. It is guided by the vision of creating 'liveable, safe resource-efficient cities and towns that are socially integrated, economically inclusive and globally competitive, where residents actively participate in urban life'.

In order to address the overall outcome of spatial transformation of the IUDF, the IUDF proposes an urban growth and management model premised on **compact, connected and coordinated cities and towns**. Yet it recognizes that the country has different types of cities and towns which have different roles and responsibilities. As such, the vision has to be interpreted and pursued in differentiated and locally relevant ways.

Strategic Goals:

1. **Spatial integration:** To forge new spatial forms in settlement, transport, social and economic areas
2. **Inclusion and access:** To ensure people have access to social and economic services, opportunities and choices

3. **Growth:** to harness urban dynamism for inclusive, sustainable economic growth and development

4. **Governance:** to enhance the capacity of the state and its citizens to work together to achieve spatial and social integration

The Strategic Goals inform the priority objectives of the nine policy levels, which are premised on the understanding that (1) integrated urban planning informs the basis of achieving integrated urban development, which follows a specific sequence of urban policy actions: (2) integrated transport that informs (3) targeted investments into integrated human settlements, underpinned by (4) integrated infrastructure network systems and (5) efficient land governance, which all together can trigger (6) economic diversification and inclusion, and (7) empowered communities; all of the above will demand effective (8) governance and (9) financial reform to enable and sustain these policy actions. The levers thus seek to address in combination the structural drivers that maintain the status quo.

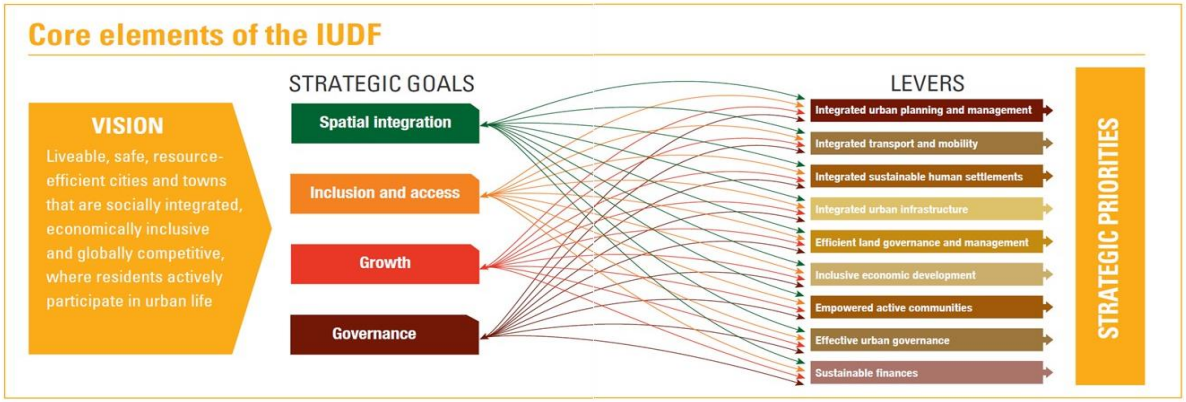
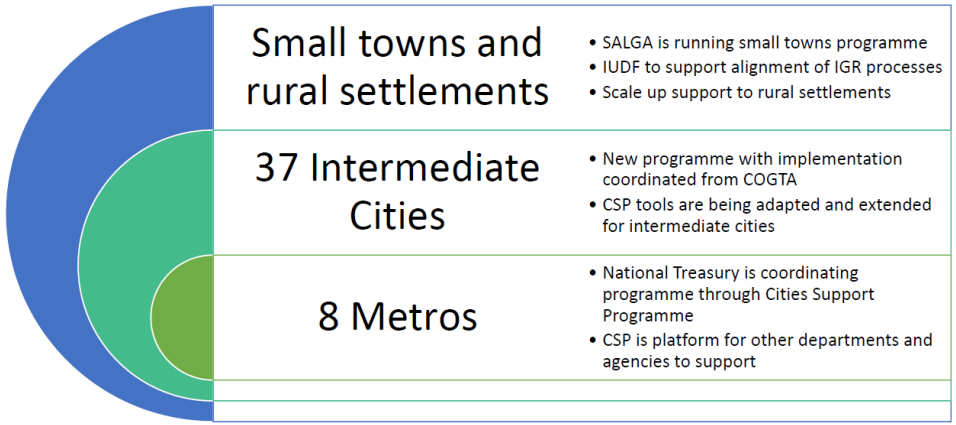


Figure 1: IUDF core elements.

In a letter addressed to the Director-General, Western Cape Provincial Government, 25 October 2016, from the National Department of Cooperative Governance (DCOG) notes that Cabinet resolved to implement the IUDF in a phased manner. During the Western Cape IUDF Forum meeting on 17 October 2017 it was noted that a differentiated implementation approach is required. The 8 Metros are already receiving support through National Treasury led City Support Programme (CSP) and SALGA is running with the Small Towns Regeneration Programme. The next phase will focus on providing support to 39, and not 37 as indicated in the figure 2 below, "Intermediate Cities" as they are expected to play a major role in the Country's approach to dealing with urbanisation.



Source: Extract from Presentation: Implementing the IUDF
Presented to: Western Cape IUDF Forum on 17 October 2017

Three Western Cape municipalities, namely Stellenbosch, George and Drakenstein, have been selected for the Intermediate Cities Municipalities programme. It needs to be noted that the selection of these intermediate cities will only be finalised once the selected municipalities have submitted their applications for the Integrated Urban Development Grant (IUDG) to DCOG and meet the minimum conditions of approval (i.e. top management stability, audit finding, capital expenditure of at least 70% of budget on average over the past two years, etc.). The benefits of the IUDG are:

- It offers municipalities flexibility to prioritise their local needs.
- Municipalities will no longer be required to submit business plans for projects on an annual basis but select projects from their 3-year Capital Programme derived from the 10-year Capital Expenditure Framework.
- It introduces a performance-based incentive component which the municipality can use at their discretion.

Irrespective of the outcome, the Cape Winelands District needs to be aware that the approval of the IUDG for the selected municipalities may have a considerable impact on the fiscal management and reporting structures of these municipalities.

The Provincial Spatial Development Framework (2014);

The PSDF (2014) proposes the following 'Settlement Policy Objectives' that must be implemented at municipal level. The 'Provincial Settlement Policy' objectives are to;

- Protect and enhance sense of place and settlement patterns
- Improve accessibility at all scales
- Promote an appropriate land use mix and density in settlements
- Ensure effective and equitable social services and facilities and
- Support inclusive sustainable housing.

2.4.1 THE MUNICIPAL FINANCIAL SERVICES MODEL (MSFM) [Read with Annexure 1]

The intention of the MSFM according to the PSDF (2014) is to investigate the impact of current spatial growth patterns of settlements on sustainability which include quantifiable financial impacts. Provincial spatial policy promotes the principles of urban compaction, integration and densification. Settlements however continue to sprawl peripherally as a result of decisions based on short term gains, be it political, economic or pragmatic.

The Municipal Financial Sustainability of Current Spatial Growth Patters was conducted as an informant into the 2014 PSDF. The objective of the Study was to investigate the impact of current spatial growth patterns on municipal sustainability in concrete and quantifiable terms. Provincial spatial policy has continuously promoted the principles of urban compaction, integration and densification yet our cities and towns continue to sprawl peripherally. Although the reasons for this continuous sprawl are complex, it is often a result of development decisions based on short-term gains. The study counteracts this short-term view with a longer-term perspective on what peripheral development does to the long-term financial sustainability of municipalities, as well as other non-financial impacts. It provides sound economic and financial evidence to support the spatial principles of compaction and densification and provides weight to spatial plans in the decision-making process.

The Study included applying the Municipal Services Financial Model[1] in seven case study municipalities. The model determined the municipal financial sustainability of two alternative spatial growth patterns namely: business-as-usual (BAU) and a compact scenario. The seven case study municipalities "were selected based on geographic spread and the degree to which they can be considered typical of their municipality category" and are included in the table below.

Table 9: Selected Western Cape Municipalities for the Municipal Financial Sustainability Model study.

[1] The Municipal Services Financial Model (MSFM) projects the infrastructure requirements and associated revenue and expenditure over a 10-year timeframe, using a calibrated baseline situation. The baseline position was developed from municipal documents and interviews with officials, while the future projections were based on municipal targets and a number of other growth assumptions. The critical assumptions regarded the form and density of residential development, and changes to capital and operating unit costs under the two spatial growth scenarios.

Selected WC Municipality	Category
City of Cape Town	A
Stellenbosch; George	B1
Saldanha Bay; Overstrand	B2
Theewaterskloof; Beaufort West	B3

A general finding of the Study was that the capital available to fund new infrastructure for growth as well as the rehabilitation of existing infrastructure fall far short of the calculated capital requirements. The current spatial growth patterns (BAU) increase this capital funding gap substantially.

Another key finding was that the case study municipalities are all vulnerable on their operating accounts, and that interventions will have to be undertaken to sustain the financial viability of municipalities, even without further spatial growth. The cumulative net position was shown as negative for all the case study municipalities however this can be improved with compaction and densification.

The implications of continuing urban sprawl in the province is that both capital and operating costs for municipalities will increase. Without an adequate increase in revenues to cover these costs, municipal financial viability will deteriorate at an ever-increasing rate over time. Through the provision of quantitative evidence, the Study concluded that the current spatial patterns are not sustainable for municipalities and are detrimental to the environment and the urban poor.

Table 10: Aggregate financial modelling results for the Western Cape.

Measure	**BAU**	**Compact**	**Difference**	**% Improvement**
Total capital investment required over 10 years (R million)				
City of Cape Town	106,877	88,095	18,782	18%
B1s	8,598	7,281	1,317	15%
B2s	14,824	12,688	2,136	14%
B3s	13,951	11,837	2,115	15%
Total for Western Cape	**144,250**	**119,900**	**24,350**	**17%**
Sum of net operating position over 10 years				

City of Cape Town	-15,556	-12,836	-2,720	17%
B1s	-2,628	-2,017	-611	23%
B2s	-2,372	-1,792	-580	24%
B3s	-3,394	-2,569	-825	24%
Total for Western Cape	**-23,950**	**-19,214**	**-4,737**	**20%**

The results of the Study are presented in Table 12 above. The Study notes that an analysis of the results should focus on the overall provincial picture and not necessarily on the category results.

"The total capital cost premium attributable to the current spatial growth patterns (BAU) over the next 10 years is projected to be R24 billion, or 17%, when compared with an alternative, compact spatial form. The dominance of the City of Cape Town, and hence the significance of spatial form in this municipality, is clear from the results, with 77% of the savings coming from this municipality alone. The percentage savings in capital costs decreases with decreasing municipal size.

On the operating account, the cumulative net position is shown to be negative for all municipal categories, but this can be improved with densification. The improvement in the province as a whole is estimated to be 20%, with the largest possible improvement being seen in the smaller B2 and B3 municipalities, whose operating accounts are highly sensitive to expenditure increases."

Taking the lead from the PSDF, the Cape Winelands District Municipality investigated the possibility of running the Municipal Financial Impact Analysis in the B-Municipalities that make up the Cape Winelands District; namely:

- Stellenbosch Municipality;
- Drakenstein Municipality;
- Breede Valley Municipality;
- Witzenberg Municipality; and
- Langeberg Municipality.

The main purpose of running the Municipal Financial Impact Analysis in the B-Municipalities is to generate baseline information against which decisions on development plans can be assessed. Find the Municipal Financial Impact Analysis attached as Annexure 1.

Stellenbosch Municipality formed part of the original Study thus this municipality has already been baselined. As 4 years have passed since this baseline information was generated, we will be able to determine if the MFSM tool will be able to indicate whether or not the municipality is starting to move towards a more financially sustainable position based on development decisions taken during the last four years.

2.4.1.1 Stellenbosch Case Study (Source: Extract from the Municipal Financial Sustainability of Current Spatial Growth Patterns, 2013):

The Stellenbosch case study shows that compaction has the greatest capital benefit for public services, followed by electricity, while the benefits for the other sectors are more marginal (Figure 12,). Again, the impact of opting for a greater proportion of medium density low cost housing solutions manifests as a negative cost difference. The total capital saving for Stellenbosch due to compaction is estimated at R480 Million, or 12% less than the BAU scenario.

The cumulative net operating account for the compact scenarios is 21% better than that of the BAU scenario for Stellenbosch. The breakdown of operating position by services (Figure 13) shows the familiar pattern of maximum difference in sanitation, then solid waste, then water supply. The electricity difference is only slightly negative for Stellenbosch.

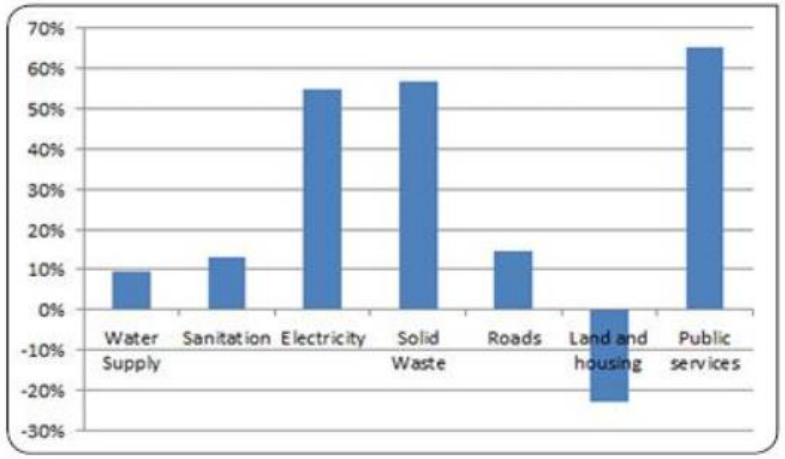


Figure 12: Savings on capital expenditure due to compaction by sector for Stellenbosch

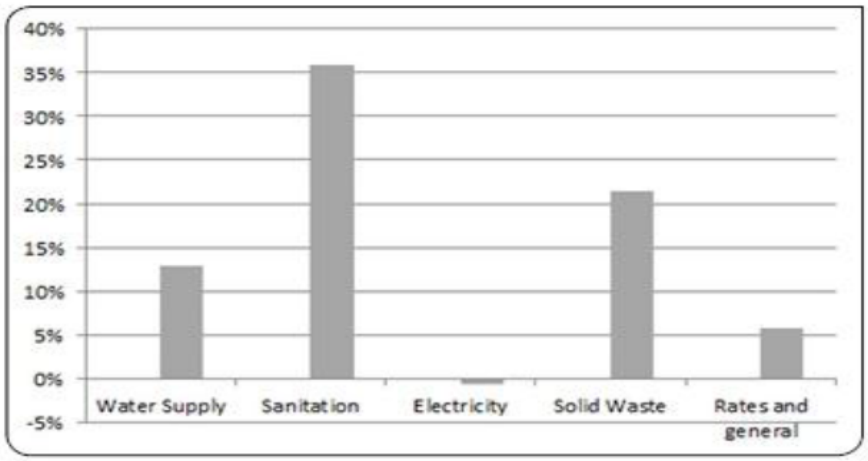


Figure 13: Cumulative improvement in operating account position by sector due to compaction for Stellenbosch

2.4.1.3 Implementation proposals for Annexure 1; Municipal Impact Analysis Cape Winelands, The Financial Impact of Spatial Growth Patterns.

FOCUS AREA:	MUNICIPAL FINANCIAL SERVICES MODEL
	1. 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. Klapmuts); ensure that all new developments include a 'range of elements' that contribute to a more sustainable urban environment.
	2. Focus on improving functioning of settlements and achieving design standards; create and apply urban design guidelines for historic precincts within urban areas.
	3. Create sustainable and liveable urban environments by ensuring access and choice to urban markets, services, amenities and provisions.
	4. Create integration of urban areas through physical (if possible) and socio-economic integration.
	5. Create a functional and sustainable urban open space network.
	6. Integrate the 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).
	7. 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).
	8. 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 scale
	9. 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 settlements.
	10. 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 dwellings
	11. 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.
	12. Promote the establishment of integrated development zones.
PRIORITY:	HIGH.

2.4.2 INTEGRATED DISTRICT PUBLIC TRANSPORT NETWORK:

The **bulk of the population** of the CWDM lives in and around the more urban local municipalities of Drakenstein and Stellenbosch. There are also a large number of people living on farms and in the rural hinterlands of the CWDM. The largest concentration of people is found in the main urban hubs of Stellenbosch, Paarl/Wellington, Worcester, Ceres, Robertson and Ashton. Most of the CWDM has very low-density levels of persons per km². Distances between towns are also quite far which further increases the reliance on motorised modes.

The **public transport services** in the CWDM allow people to access destinations in their local area or other settlements to which they regularly travel, but which cannot be reached on foot or by other means of Non-Motorised Transport (NMT) modes. These destinations include essential services or activities accessed on a frequent basis, such as places of employment, shops, government services and schools. Public transport holds approximately 14% of the transport modal share, NMT 48% while 26% of people use private vehicles to reach their destinations in the CWDM.

Table 11: Public Transport Services by Mode

Mode	Type of Service
Train	Commuter service.
Bus	Mainly for the transportation of learners in terms of scholar bus contracts administered by the Department of Education.
Minibus-taxis	Commuter, scholar services and off-peak weekday services to shopping and hospitals/clinics.
Other Transport provided by farmers	Transport of farm workers over weekend to shops.
Department of Health fleet of vehicles	Serves various hospitals and clinics but mainly for own staff and transporting of medicine and medical equipment.

Currently the **Minibus-Taxi (MBT)** is the dominant public transport mode providing both commuter and long-distance services. MBT services operate predominantly out of the urban centres located within each municipality. Generally, it is these urban centres which are responsible for the majority of MBT passenger movements throughout the week. The Breede Valley and Drakenstein municipalities account for over 75% of total passenger demand in the CWDM.

Rail services within the CWDM are available in 4 local municipalities, namely Drakenstein, Witzenberg, Breede Valley and Stellenbosch municipality, and stop at 24 stations serving the CWDM. The CWDM have a train freight rail system which accommodates passenger transport. Commercial long-distance bus services that operate through the CWDM are those of InterCape, Greyhound, SA Road Link, and TransLux.

Public transport infrastructure in the CWDM consists of 42 formal and 21 informal MBT and bus facilities and 3 formal air strips. Roughly half of the formal MBT rank facilities are off-street facilities, designed for MBT operations, with demarcated lanes and bays according to destinations. There are shelters and mostly some amenity facilities for passengers, but there is a need for both the construction of additional facilities as well as for the upgrade of the inadequate facilities in the CWDM.

The **N1 rail and road corridor** and the **Breede River Valley corridor** are two major strategic corridors in the CWDM and they are major distributors of people, goods and services from the CWDM to other municipalities within the Western Cape, to other provinces. These major corridors are supported by other major roads **(R44, R45, R46, R318, R303, R60, and R6**2) which distribute goods and services to the people within the DM (refer to Map 6 below, Major Transport routes).

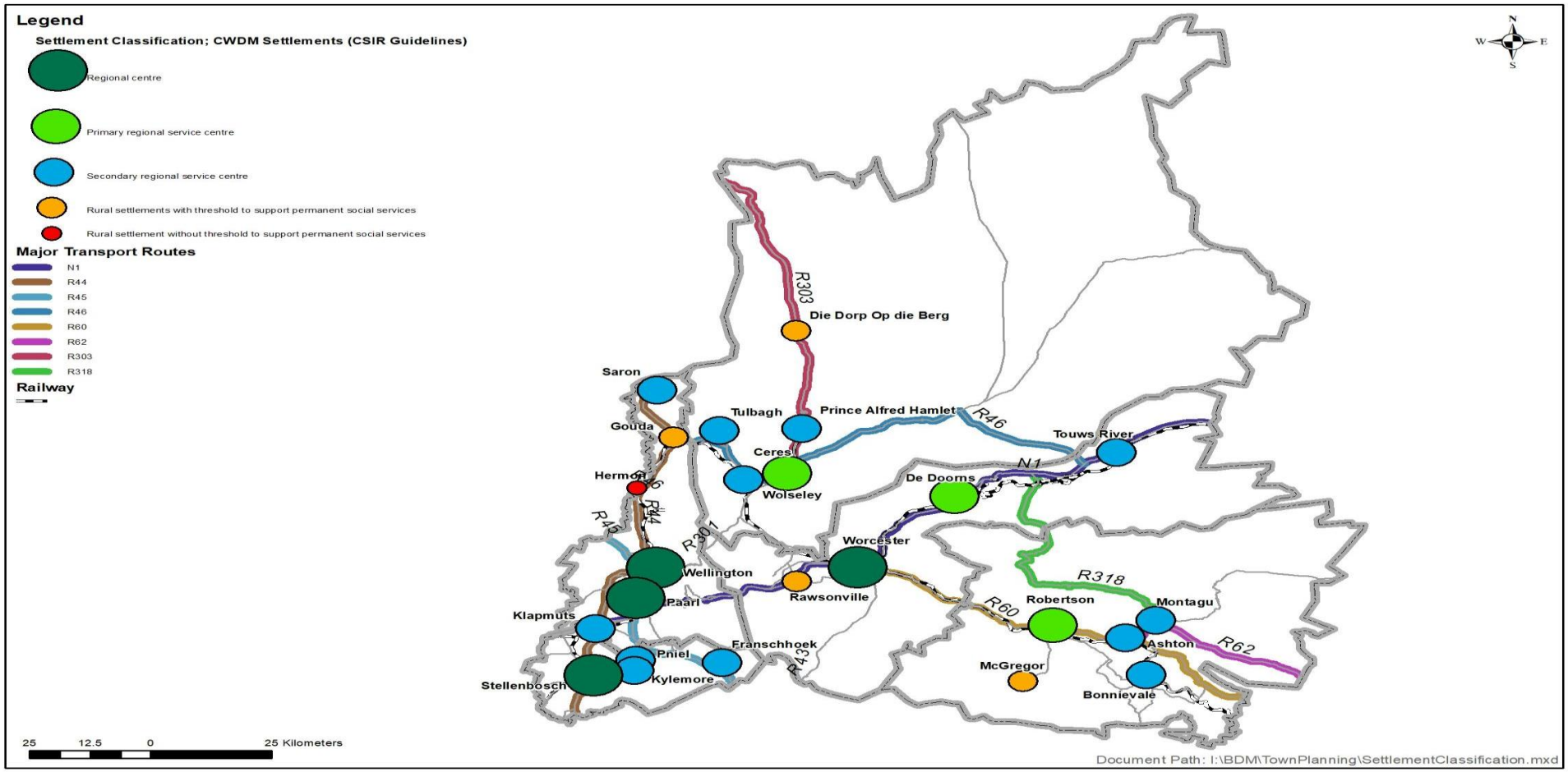


Table 12: Key Spatial Challenges per Local Municipality.

Local Municipality	Key Spatial Challenges
Drakenstein	• Lack of available land for transport and related infrastructure (Huguenot Station Precinct). • No park-and-ride facility at Huguenot Station. • Poorly defined transport and public spaces in Paarl Central Business District (CBD). • Key nodes (Wellington and Paarl) do not support NMT. • Poor transport-land use integration in Paarl CBD.
Stellenbosch	• Lack of integrated settlements within Municipality. • Dispersed rural settlements. • Derelict and unutilized rail infrastructure (Franschhoek rail connection). • Inter-city bus facilities are poorly located.
Breede Valley	• Poor transport-land use integration in Worcester CBD. • Worcester CBD does not support NMT. • Dispersed and non-integrated public transport facilities or ranks within • Worcester CBD (i.e. rail, long-distance bus, taxi). • Public transport services and facilities are non-existent or limited in rural areas.
Witzenberg	• Lack of integrated settlements, particularly at Ceres. • Dispersed public transport facilities within Ceres CBD. • Poorly located public transport facilities at Ceres and the underutilization thereof.
Langeberg	• Dispersed public transport facilities or ranks at Robertson CBD no integration. • Dispersed rural settlements with vast distances between them. • Poor NMT infrastructure. • Public transport facilities are limited within the rural settlements (McGregor, Montagu).

2.4.2.1Key findings: Integrated District Public Transport Network

2.4.2.1.1 Refer to table 12 (Key spatial challenges per local municipality)

2.4.2.1.2 The CWDM Integrated Public Transport Network Framework (2012) indicated that there is no integration between Spatial Planning/ Land Use Management and Integrated Transport Planning. The leads to the following challenges;

- General lack of transport and land use integration particularly in respect to nodes and corridors.
- Urban nodes are not dense enough to create the thresholds that can sustain affordable and convenient public transport services in the continued low-density urban sprawl pattern of development.
- Owing to the dispersed population distribution in the rural areas, public transport systems are not viable, and taxi-operations are relatively expensive over long distances.
- A large portion of the population still walks significant distances owing to low income levels and/or poor public transport service provision.
- The unavailability of land for transport and related infrastructure.
- The lack of integrated settlements.

2.4.2.2 Implementation proposals:

FOCUS AREA:	INTEGRATED DISTRICT PUBLIC TRANSPORT NETWORK
STRATEGIES:	1. Strengthen the transport and other communication networks that link the better located areas with those with less potential; Increase the ability to commute between higher order and lower order towns (refer to settlement classifications) by managing the operating environment, transport system and decision-making mechanisms relevant to transport planning; improve rural transport opportunities. 2. 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. 3. Apply the principles of densification and diversification along (selected) transport routes; Public transport services for special needs passengers; provide and ensure universal access to public transport facilities for persons with physical disabilities. 4. Transport for learners: facilitate provision of improved public transport services for learners in rural areas; identify candidate pilot projects for specialized services. 5. Non-motorized transport and road safety: improve the level of provision for pedestrians and cyclists. 6. 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 municipalities.
PRIORITY:	HIGH

2.4.2.3 CWDM Implementation Plan: Integrated District Public Transport Network

PROJECT/ACTIVITY:	BUDGET:	RESPONSIBLE:	DURATION:
Road Safety Education	R1 148 000, 00	Public Transport Regulation	Annually
Sidewalks and Embayments	R3 980 000, 00	Public Transport Regulation	Annually
Integrated Public transport	R2 024 000, 00	Public Transport Regulation	2018/2019
CBD Public Transport Plans	R250 000, 00	Public Transport Regulation	2018/2019
Regional Taxi Council	R10 000, 00	Public Transport Regulation	Annually

2.4.3 CULTURAL LAND SCAPE: SENSE OF PLACE

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" 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. The principles of "critical regionalism" specifically 'Sense of Place 'is described as the 'degree to which a place can be clearly perceived and mentally differentiated and structured in time and space by its residents, and the degree to which that mental structure connects with their values and concepts' (Lynch, 1998).

In evaluating a sense of place, one needs to recognise that there are various 'components of sense' that, together, provide a particular environmental quality for the observer. 'Sense of place' is based upon the sensed quality of the unique 'components of sense' of a particular place, including its identity, character, structure, local climate, topography, vegetation, building materials, building practices, and local authenticity.

In practice, in the preparation and consideration of development applications (including architecture and placement of new infrastructure), it is important to ensure that the above 'components of sense' are incorporated into the planning and design. For example, this implies that any development within the natural environment should inter alia reflect elements of the traditional vernacular of the area, make use of local natural building materials, and reflect a strong sense of local authenticity.

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 as provisionally protected areas, and
- The "listing" of the Cape Winelands Cultural Landscape as a World Heritage Site (WHS) at UNESCO.

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 in terms of Section 27 of the National Heritage Resources 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.

The PSDF (2014) proposes the following 'Policy Objectives' to protect, manage and enhance critical regionalism specifically 'sense of place'

- Prevent settlement encroachment into agricultural areas, scenic landscapes and biodiversity priority areas, especially between settlements, and river corridors.
- Promote smart growth ensuring the efficient use of land and infrastructure by containing urban sprawl and prioritising infill, intensification and redevelopment within settlements.
- Respond to and enhance an economically, socially and spatially meaningful settlement hierarchy that considers the role, character and location of settlements in relation to one another while preserving the structural hierarchy of towns, villages, hamlets and farmsteads in relation to historical settlement patterns.
- Use heritage resources, such as the adaptive use of historic buildings, to enhance the character of an area, stimulate urban regeneration, encourage investment and create tourism opportunities, while ensuring that interventions in these heritage contexts are consistent with local building and landscape typologies, scale, massing, form and architectural idiom.
- Conservation strategies, detailed place-specific guidelines and explicit development parameters must supplement urban edges to ensure the effective management of settlement and landscape quality and form.

2.4.3.1 Key findings: Cultural Land Scape, Sense of Place

2.4.3.1.1 Heritage surveys with determined sensitivities that includes rural cultural landscapes, conservation management plans and Heritage Impact Assessments is not prioritised by the relevant role players.

2.4.3.2 Implementation proposals:

FOCUS AREA:	CULTURAL LANDSCAPE, SENSE OF PLACE
STRATEGIES:	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 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. 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. 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. 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. 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. 8. Conduct the necessary steps to give effect to the registration of the WHS. 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. 10. Compile a visual resource management plan for the N1 route between the Hugenote Tunnel and Cape Town. 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 12. Ensure sufficient resources (personnel and funds) within SAHRA and HWC to perform legislative mandates
PRIORITY:	HIGH

2.4.4 WATER INFRASTRUCTURE

In the CWDM area, 86.9% of households have access to flushing toilets and 97.7% of households have access to piped water. 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 Langeberg and Witzenberg municipalities, small local supply schemes meet almost all the urban water requirements. 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. Invasive alien vegetation management remains as crucial as water infrastructure maintenance. Municipalities were tasked by National/Provincial government to development Invasive Alien Vegetation Management Plans. It is the intention of these plans to identify government/municipal land that needs to be cleared of invasive vegetation.

Table 13: Dams for domestic supply in the CWDM area.

Local Municipalities	Capacity (million m3)	Domestic use	Other use
WITZENBERG			
Koekedouw	22.5	Ceres, Prince Alfred Hamlet	
Lakenvlei	10.3	Roode Elsberg Dam for De Doorns.	Irrigation/Domestic As per Roode Elsberg
Tulbach Town Dam		Tulbagh	
LANGEBERG			
Poortjieskloof	9.2		irrigation
Klipberg	2.0		Irrigation
Pietersfontein	2.0		Irrigation
Moordkuil/Draaivlei	1.07		Irrigation
Grootvlei	1.6		Irrigation
BREEDE VALLEY			
Keerom,	10.4		Irrigation
Stettynskloof	15.5	Worcester, Rawsonville	Irrigation
Greater Brandvlei	319.3	Robertson, Ashton, Montagu, Bonnievale	
Elands Kloof	11.4	Touwsriver	Irrigation
Fairy Glen	0.5		Irrigation
Buffelsjag	5.2		
Roode Elsberg	7.7	De Doorns	Irrigation
DRAKENSTEIN			
Wemmershoek	58.8	CoCT, Paarl	
Voelvlei	164.1	CoCT, Cape West Coast	
Paarl Mountain		Paarl	
STELLENBOSCH			
Idas Valley 1	0.50	Stellenbosch	
Idas Valley 2	1.54	Stellenbosch	
Bergriver	130	CoCT, Franschhoek, Stellenbosch	

2.4.4.1 Potential risks associated with water infrastructure:

Dam failures and disruptions to basic services i.e. water supply is highlighted in the CWDM Risk Assessment (2014) as potential risks.

Dam failures; There were two dam failures reported since 2008, in Vlottenburg during 2012 (Stellenbosch Municipal area) and Tulbagh in 2016 (Witzenberg Municipal area). To date there was an extreme increase in rainfall with major floods causing damage of approximately R 1.6 billion.

Areas, communities or households most at risk;

- Communities, towns and property owners living downstream of a dam.
- Farming communities, under the category of agriculture, are the second biggest sector of water users after the City of Cape Town. Their dependency on water increases their vulnerability, should a dam break occur.
- Roads and other critical infrastructure situated close to the dam e.g. water purification systems and sewage treatment plants.

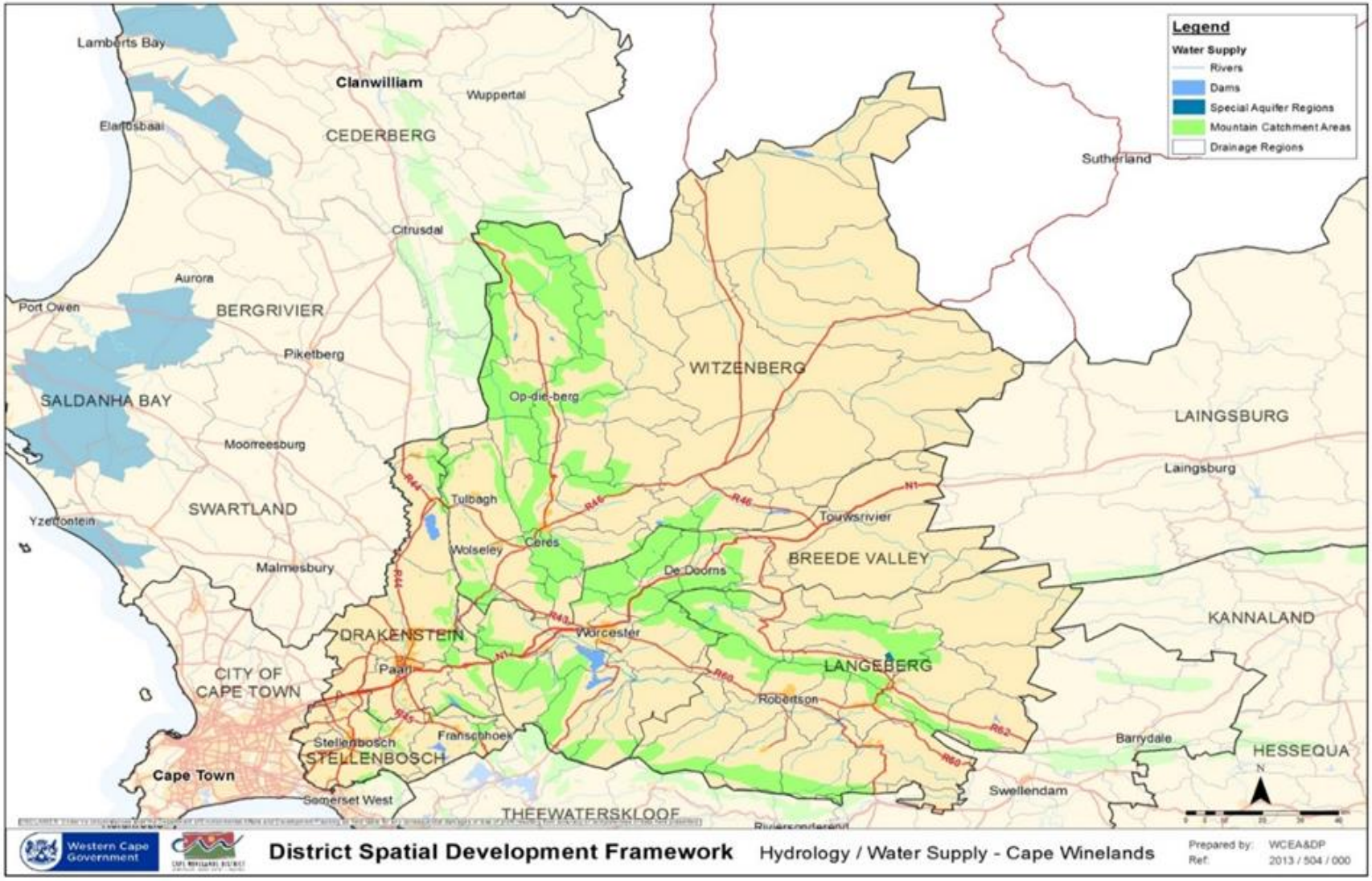
Disruption of Basic Services: Water Supply;

Water supply disruptions occur during maintenance or repair work. The CWDM area has many indigent households, the latter might have an impact on municipal maintenance budgets. It may be necessary for municipalities to develop significant indigent policies that does not add to the poverty trap. Likely impacts of disruptions could result in;

- Health and sanitation problems if prolonged interruptions occur
- Economic impact to businesses and industries due to a lack of production
- Discomfort to households

Conditions that increases the severity of water supply disruptions are;

- As a result of decreased rainfall (climate change), all resources, especially surface water resources, will be under pressure and will have lower safe yields
- Due to increased heat units, water demand from agriculture, as well as from towns will rise sharply even in the event that average rainfall would not
- reduce much, it is anticipated that much greater variability of rainfall will occur within a year and also between years due to more extreme climatic conditions.
- From a water service perspective, the most significant challenges are the augmentation of existing water sources, the replacement and upgrading of old infrastructure to accommodate development, the provision of sustainable basic services to informal settlements and to ensure the provision of basic services to rural communities located on private farms
- The elevated concentrations of dissolved salts from the naturally saline soils and groundwater are aggravated by intensive agricultural land use
- Effluents can be washed into rivers during high rainfall events increasing the organic loads to the receiving rivers influencing water quality.



Map 7: Hydrology and water supply.

2.4.4.2 Key findings: Water Infrastructure

2.4.4.2.1 Refer to disruption of basic services- water, specifically conditions that increases the severity of water supply disruption.

2.4.4.2.2 Municipalities must develop indigent policies, indigent household figures are as follow; Breede Valley 7315, Drakenstein 12429, Langeberg 7413, Stellenbosch 4217, Witzenberg 4572 (CWDM IWMP, 2015).

2.4.4.2.3 Catchments of the bulk of dams within the CWDM is infested with invasive alien plant species. The invasive plant species pose a major threat to water conservation.

2.4.4.2.4 Municipalities must complete their Invasive Alien Vegetation Management Plans. Implementing these plans through active alien clearing is as important as water infrastructure maintenance.

2.4.4.2.5 Increased risk of drought due to climate change will add extra pressure on water infrastructure. Municipalities should seek and employ alternative methods to augment water supply as well reduce the demand.

2.4.4.3 Implementation proposals:

FOCUS AREA:	WATER INFRASTRUCTURE
STRATEGIES:	1. Municipalities must complete their Alien Vegetation Management Plans for municipal properties; Increase alien clearing in catchments located throughout the entire District and B municipalities in partnership with Department of Water and Sanitation and LandCare Programme.
	2. 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.
	3. Determine the impact of long-term water supply trends and climate-change processes on growth and development.
	4. Invest in technologies and systems that decouple economic growth from rising raw water consumption 5. Where urban development proposals will exceed infrastructure capacity, applications should be refused until provision is made to deal with the additional loads
	6. 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.
	7. Water augmentation possibilities that can be investigated and implemented by municipalities include: Aquifer recharge, subsidising grey water systems and rain tanks, making greywater systems compulsory for new developments, treating and storing storm water, treating sewerage for water use, small catchment management levies, rehabilitation of wetlands and riparian areas, alien clearing, gamifying water targets to increase participation/adherence by communities.

	8. Manage decreased water quality in ecosystem; Invasive aquatic weeds removal and management in Berg and Breede Rivers by the Cape Winelands District Municipality, B municipalities, DOWA, property/landowners and water user associations. Continuous clearing should be done annually between September and April. The specific area to be targeted is between the R45 and Hermon.
	9. Manage the quantity of water available for irrigation and drinking; Cape Winelands District Municipality to facilitate research into the re-use of wastewater within the District Municipality, with B-municipalities indicating which towns should be included in the research. The economic viability and quantities are important selection criteria. The replenishment of aquifers by infusion of purified waste water should form part of the research. Implementation by relevant Engineering Departments of B-municipalities. Cape Winelands District Municipality to facilitate the assessment of existing infrastructure for water storage. Implementation by Engineering Departments of B-municipalities.
PRIORITY:	HIGH

2.4.4.4 CWDM Implementation Plan: Water Infrastructure

PROJECT/ACTIVITY:	BUDGET:	RESPONSIBLE:	DURATION:
EPWP Invasive Alien Vegetation Management	R 2 030 000, 00	Land Use and Spatial Planning Section	Annually
River Rehabilitation	R 360 000, 00	Land Use and Spatial Planning Section	Annually
Service Delivery Agreement with Cape Winelands Biosphere Reserve-Water Augmentation Programme; Aquatron Toilet System	R150 000, 00	Land Use and Spatial Planning Section	Annually
Subsidy: Water/Sanitation Rural areas/Farms	R1 000 000, 00	Municipal Health Services	Annually
Provision of Water to Schools	R500 000, 00	Projects and Housing	Annually

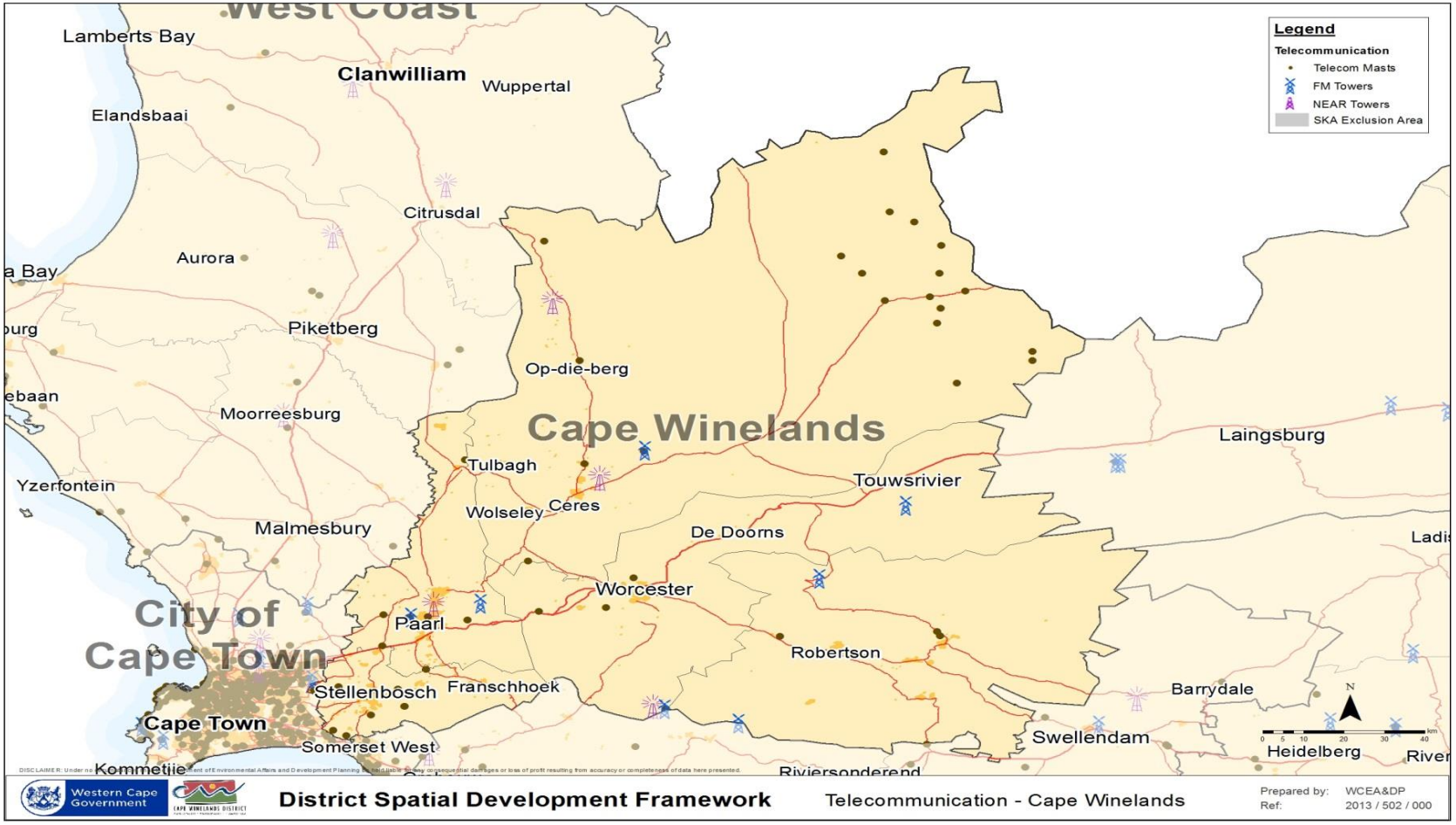
2.4.5 ENERGY & TELECOMMUNICATION INFRASTRUCTURE

According to the PSDF (2014) the built environment sector (i.e. households, commerce and services) only consumes 13% of total energy. Electrical distribution infrastructure is well established, has good coverage, and is in a reasonable condition. Current deficits and uncertainties lie in the generation and sourcing of electricity capacity. The provincial energy focus is on lowering carbon emissions and local generation (e.g. renewable and greater use of gas).



Map 8: below illustrates Eskom lines and substations and Wind Farm Applications.

Whilst access to mobile communication has increased rapidly, internet access has been stagnant. It is the strategy of Provincial Government that every citizen in the Western Cape has access to affordable high-speed broadband, has the necessary skills to use it, and uses it in their daily lives. Map 9 below illustrates telecommunication within the CWDM.



Map 9: Telecommunications Infrastructure

2.4.5.1 Implementation proposals:

FOCUS AREA:	ENERGY AND TELECOMMUNICATION INFRASTRUCTURE
STRATEGIES:	1. Provide low-cost high-speed network services in the main centres.
	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.
	3. 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.
PRIORITY:	HIGH

2.4.6 SOLID WASTE DISPOSAL

According to the White Paper: Policy on Pollution, Waste Minimisation, Impact Management and Remediation (2000), municipalities are responsible for providing waste management services, and managing waste disposal facilities. Specific functions to be carried out by municipalities include;

- Compiling and implementing general waste management plans, with assistance from provincial government
- Implementation of public awareness campaigns
- Collecting data for the waste information system
- Providing general waste collection services and managing waste disposal facilities within their areas of jurisdiction
- Implementing and enforcing appropriate waste minimisation and recycling initiatives, such as promoting the development of voluntary partnerships with industry, including the introduction of waste minimisation and recycling initiatives, such as promoting the development of voluntary partnerships with waste minimisation clubs.

The CWDM's function is limited to the development of a District Integrated Waste Management Plan and the regionalisation of landfill, both investigation and possible management of a regional facility which will pose operational and financial challenges. The CWDM initiated the investigation of two regional landfill sites, a site for the eastern and western portion of the district. The investigation into a regional landfill site for the eastern portion of the CWDM was successful. The proposed site will service Langeberg, Witzenberg and Drakenstein municipalities. However, the outcome of the investigation for the western portion of the district which consist of Stellenbosch and Drakenstein municipalities indicated that there is no suitable space for a regional landfill site.

Currently a licence was issued for the regional landfill site in the eastern portion of the district. An appeal was lodged against the issuing of the mentioned licence due to the minister rejecting objections on the application for the licencing of the mentioned regional landfill site. Whilst the regional landfill site has not been constructed the local municipalities are managing waste disposal sites in their relevant municipal areas. These local waste disposal sites are going to be closed upon the construction and opening of the regional land fill site in the eastern portion of the CWDM. Waste disposal issues relating to a lack of a regional landfill

site for the western portion of the district (Stellenbosch & Drakenstein municipalities) could be solved by Drakenstein municipality's Waste to Energy programme. The CWDM will encourage possible negotiations between the two local municipalities.

2.4.6.1 Status Quo: Local Municipal Waste Management (CWDM IWMP, 2015)

Waste management in local municipalities resides under three municipal functions, i.e. waste collection, waste disposal and waste reduction.

Waste Collection; Where collection of domestic municipal waste is concerned, the majority of urban residents within the CWDM area are receiving a municipal collection service.

- Breede Valley Municipality; there is currently no collection service to farmers and rural households' due to the problem of transport distances and accessibility. Farmers offload their waste at the disposal sites free of charge. The unserviced areas in the municipality are the rural areas and farms. Received figures indicates that 7190 out of the 7315 indigent households receive free basic refuse removal, which is 98%.
- Drakenstein Municipality; in the rural areas and farms there are three scenarios: If the farm is on a collection route, the farm waste is placed by the owner outside his property boundary from where it is collected by the Municipality. Farmers also transport and offload their waste themselves to the Paarl Transfer Station or the Wellington Landfill and they make use of the coupon system. Farmers can also apply for the use and service of a waste skip that is placed on his property. He pays a monthly fee and the Municipality collects the filled skip when they are notified. Received figures indicate that 12 429 out of the 12 429 indigent households receive free basic refuse removal, which is 100%.
- Langeberg Municipality; the farming community delivers their own waste to landfill, as it is not economically feasible for the Municipality to collect waste at these remote locations. Received figures indicate that 6 932 out of the 7 413 indigent households receive free basic refuse removal, which is 94%.
- In Stellenbosch Municipality figures indicate that 4 217 out of the 4 217 indigent households receive free basic refuse removal, which is 100%.
- Witzenberg Municipality; the municipality does not collect waste at the remote farming communities, as this would be economically unsustainable. Farming communities deliver their own waste. Received figures indicate that 4 572 out of the 4 572 indigent households receive free basic refuse removal, which is 100%.

Waste Reduction; recovery for recycling is done by Material Recovery Facilities (MRFs) in the following towns/settlements;

- Breede Valley Municipality- Touws River Transfer Station and MRF.
- Drakenstein Municipality-Paarl MRF and Wellington Landfill Site.
- Langeberg Municipality-Robertson Composting Facility and Ashton, Montagu and Bonnievle MRFs.
- Stellenbosch Municipality- Source separated waste is collected in Stellenbosch with recycling taking place at the Kraaifontein Waste Facility in the City of Cape Town Metro.

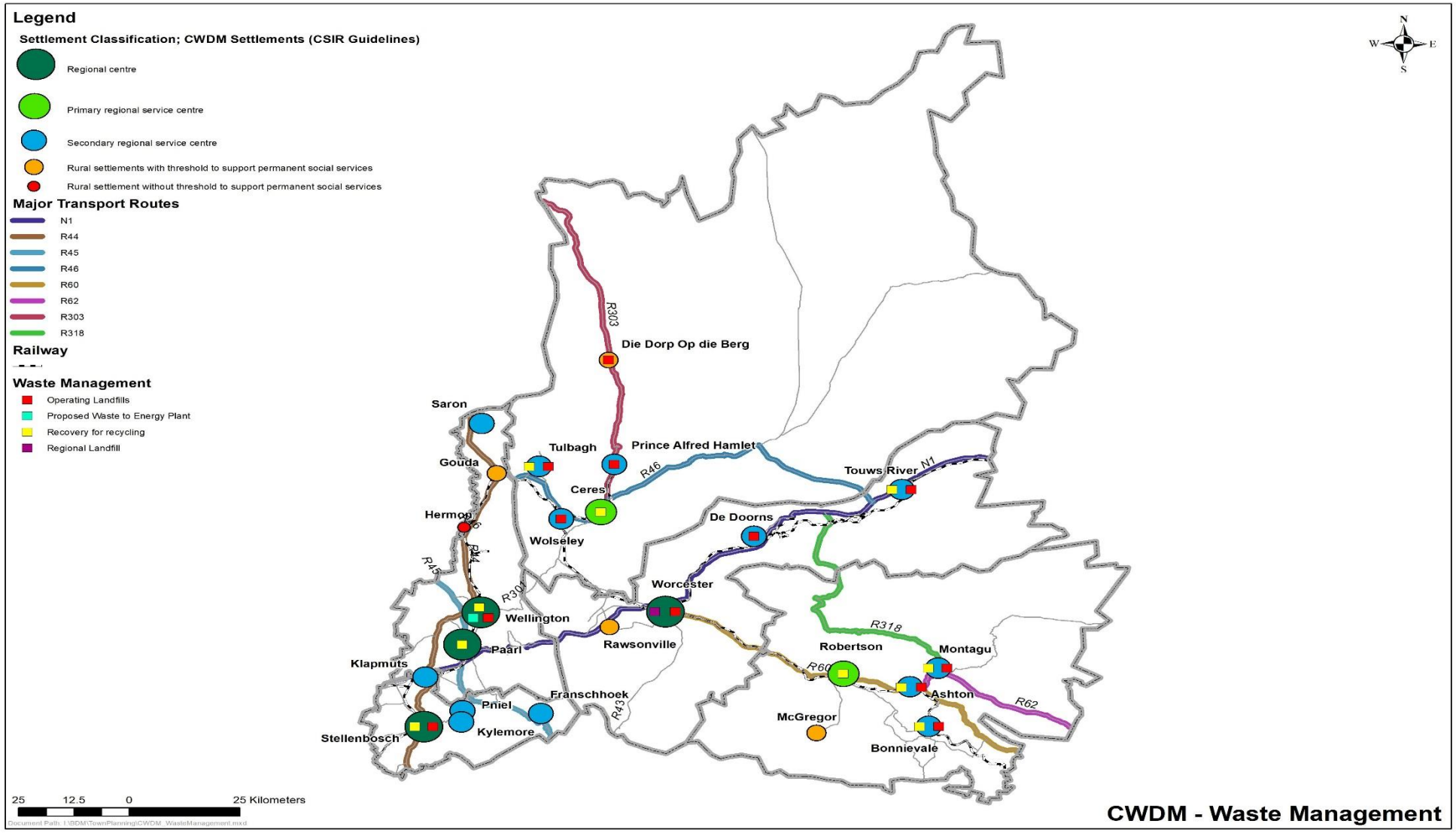
- Witzenberg Municipality-Tulbagh Landfill and Ceres, waste is separated outside Ceres and transported to Cape Town.

Waste Disposal; Operating landfills are located at the following locations (refer to map#;

- Breede Valley Municipality; Worcester, De Doorns and Touws River.
- Drakentein Municipality; Wellington.
- Langeberg Municipality; Ashton, Bonnievale and Montagu.
- Stellenbosch Municipality; Stellenbosch.
- Witzenberg Municipality; Wolseley, Tulbagh, Prince Alfred Hamlet, Op -Die-Berg.

Table 14: Cost of additional infrastructure to remain compliant up to 2030 (CWDM IWMP, Final report 2016)

Municipality	Facility	Establishment Costs
Drakenstein Municipality	Back up Transfer Station / MRF	R 17 928 000
	Closure and Rehabilitation of Wellington Landfill	R 46 707 700
Stellenbosch Municipality	Closure and Rehabilitation of Stellenbosch Landfill Cell 3	R 16 757 200
Witzenberg Municipality	Transfer Station / MRF in Wolseley	R 15 901 000
	Public Drop-off in Op-die Berg	R 2 680 300
	Closure and Rehabilitation of Op-die-Berg Landfill	R 4 635 200
Breede Valley Municipality	Public Drop-off in De Doorns	R 11 758 000
	Closure and Rehabilitation of Worcester Landfill	R 60 067 900
Langeberg Municipality	Public Drop-off in Bonnievale	R 2 680 300
	Closure and Rehabilitation of Ashton Landfill	R 17 993 300
	Closure and Rehabilitation of Bonnievale Landfill	R 12 459 400
Cape Winelands District Municipality	Establish new Regional Landfill	R 49 941 000
	Extension of landfill Phase 2	R 51 016 000
Total		**R310 525 300**



Map 10: Waste Management; Operating Landfills, Recovery and Recycling facilities and proposed Regional Landfill Site.

2.4.6.2 Key findings: Solid Waste Disposal

2.4.6.2.1 The strategic objectives of the CWDM relating to Waste Management places an emphasis on waste avoidance, waste reduction and waste disposal. Waste avoidance refers to avoiding materials of entering the waste stream e.g. by re-use, composting etc. Waste reduction refer to reducing the quantity of waste e.g. by doing recycling and waste disposal is defined as the storage, treatment or disposal of waste at licensed facilities. The CWDM IWMP highlights the fact that over the year's municipalities placed a greater emphasis on waste collection and disposal. The more sustainable approach of waste minimisation and reduction has been adopted recently. Municipalities will however have to shift to avoidance and reduction of waste rather than the disposal thereof.

2.4.6.2.2 Public awareness and education remain an issue, in order to move towards waste avoidance and greater reduction, public awareness and education must be prioritised.

2.4.6.2.3 According to the May 2016 Assessment of Municipal Integrated Waste Management Infrastructure, Phase 2 Draft Report of May 2016, the regional landfill site for the eastern side of the Cape Winelands district will cost R56 447 000 excluding VAT. Financing of the regional landfill site in terms of construction and management could be problematic since the CWDM does not receive MIG funding. Depending on how funding is sourced, the regionalisation of landfill could impose an extra financial burden on the relevant local municipalities.

2.4.6.2.4 The absence of a regional land fill site for the western portion of the CWDM will have implications for waste disposal in the Stellenbosch municipal area since local waste disposal sites are close to reaching their life span. Drakenstein municipality's Waste to Energy programme might present opportunities for Stellenbosch municipality to dispose their waste.

2.4.6.2.5 Municipalities must develop indigent policies. As indicated, indigent household figures are as follow; Breede Valley 7315, Drakenstein 12429, Stellenbosch 5757, Langeberg 7413, Witzenberg 4572.

2.4.6.3 Implementation proposals:

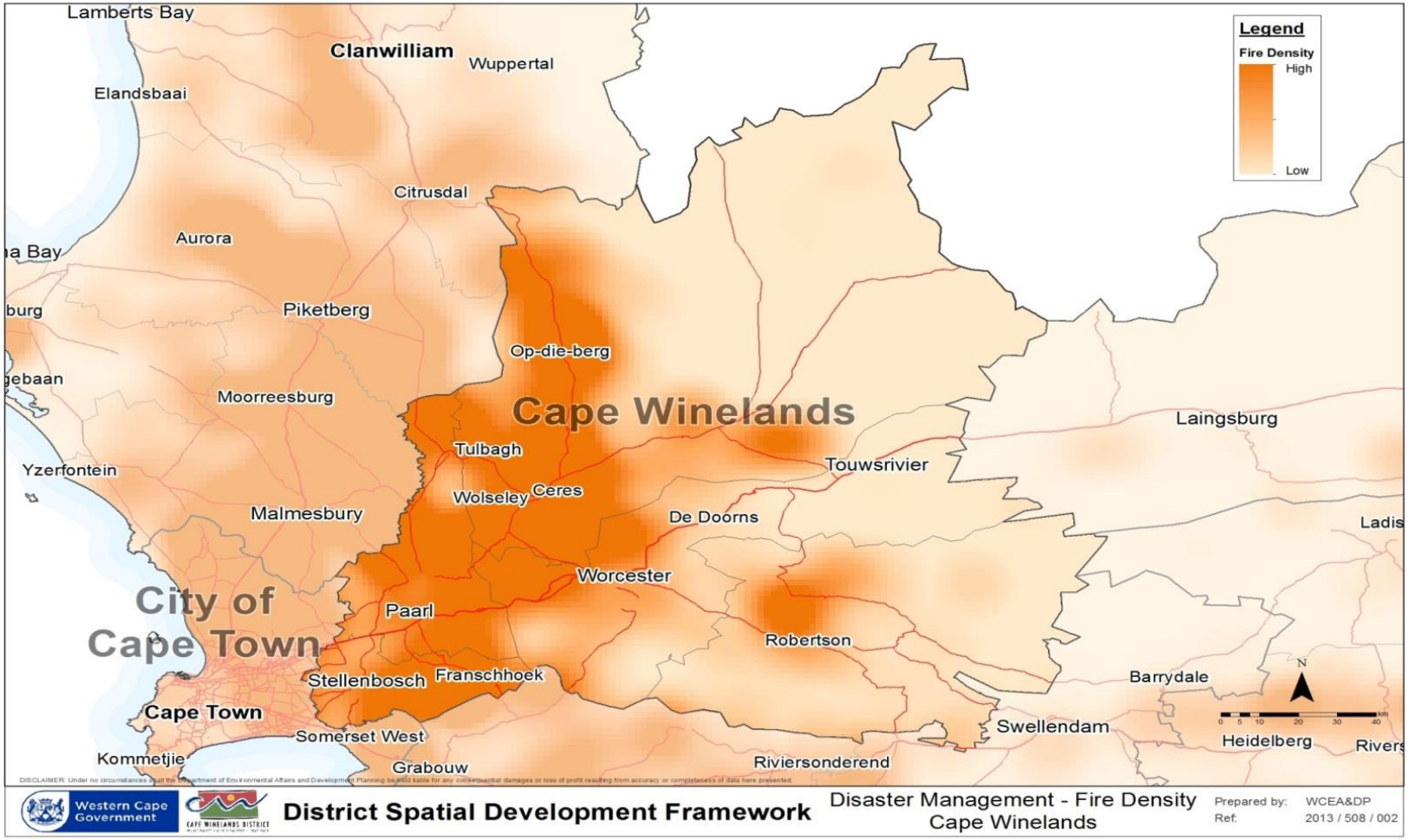
FOCUS AREA:	SOLID WASTE DISPOSAL
STRATEGIES:	1. Develop waste reduction strategies. 2. Prioritize public awareness in terms of waste reduction and avoidance. 3. Develop a Regional Landfill site for the Western and Eastern portion of the CWDM area. If a Regional Landfill site for the Western Portion of the CWDM is not practical, then the stalled Drakenstein Municipal Waste to Energy Program must be continued. The mentioned program must absorb the waste generated on the Western portion of the CWDM. 4. Investigate alternative technologies that can assist with the disposal of waste.
PRIORITY:	HIGH

2.4.6.4 CWDM Implementation Plan: Solid Waste Disposal

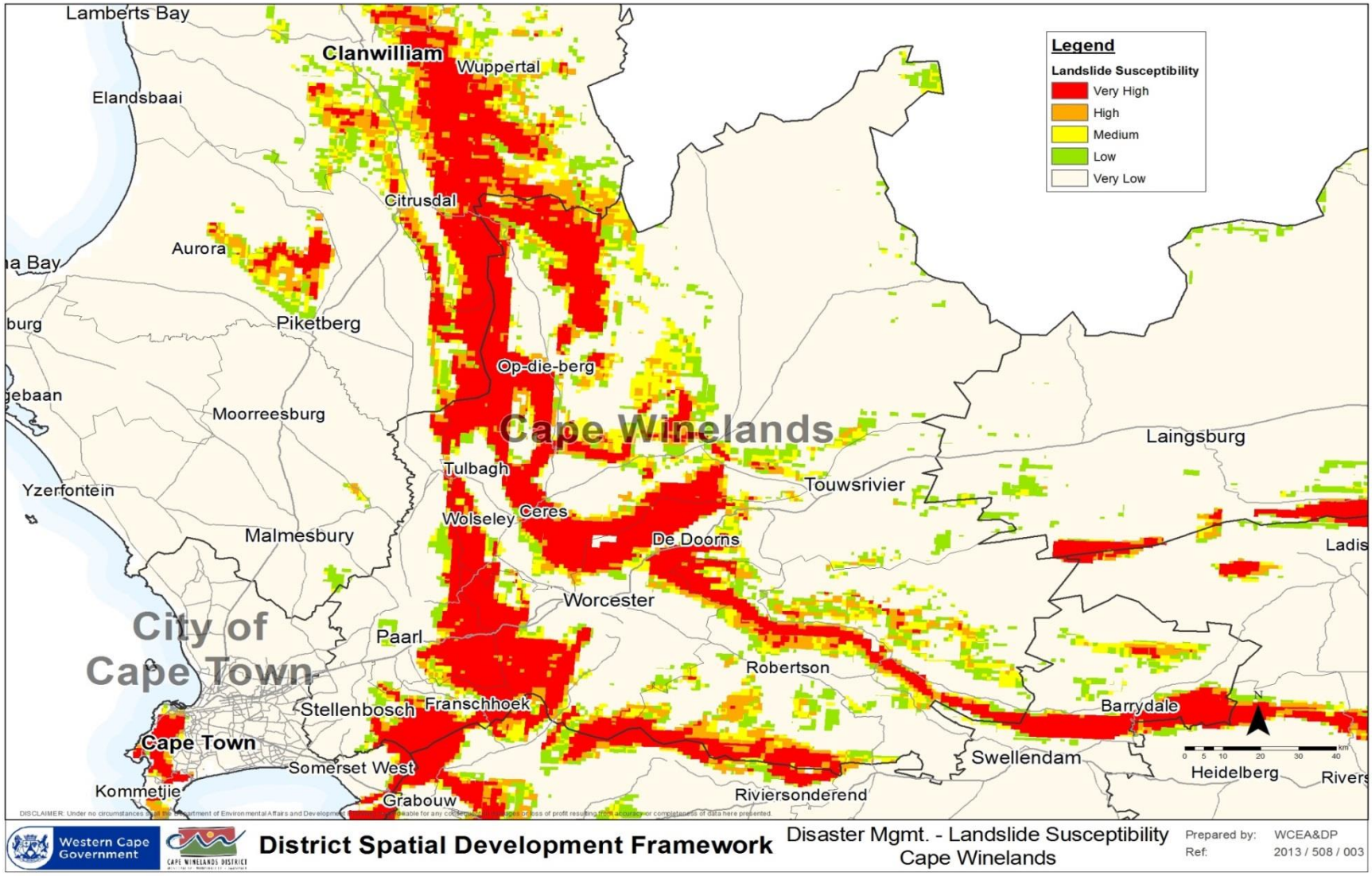
PROJECT/ACTIVITY:	BUDGET:	RESPONSIBLE:	DURATION:
Regional Landfill Site Planning	R403 000, 00	Technical Services	2018/2019

2.4.7 DISASTER MANAGEMENT: GEOGRAPHIC RISK AREAS

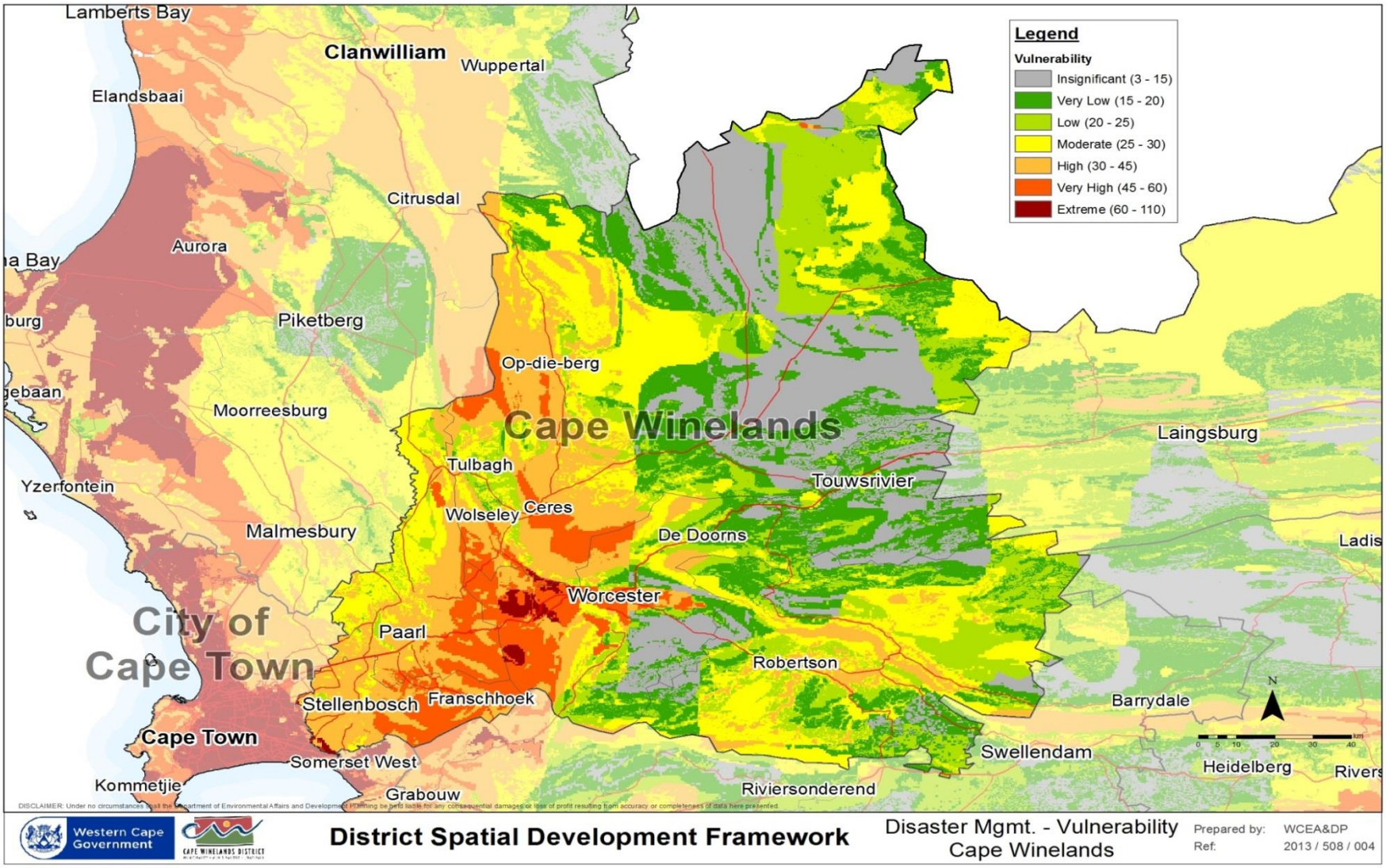
The PSDF (2014) identified the following high-risk areas pertaining to fire, landslides and overall vulnerability: refer to Map 13, 14 and 15.



Map 11: CWDM high risk fire areas.



Map 12: CWDM Landslide Susceptibility.



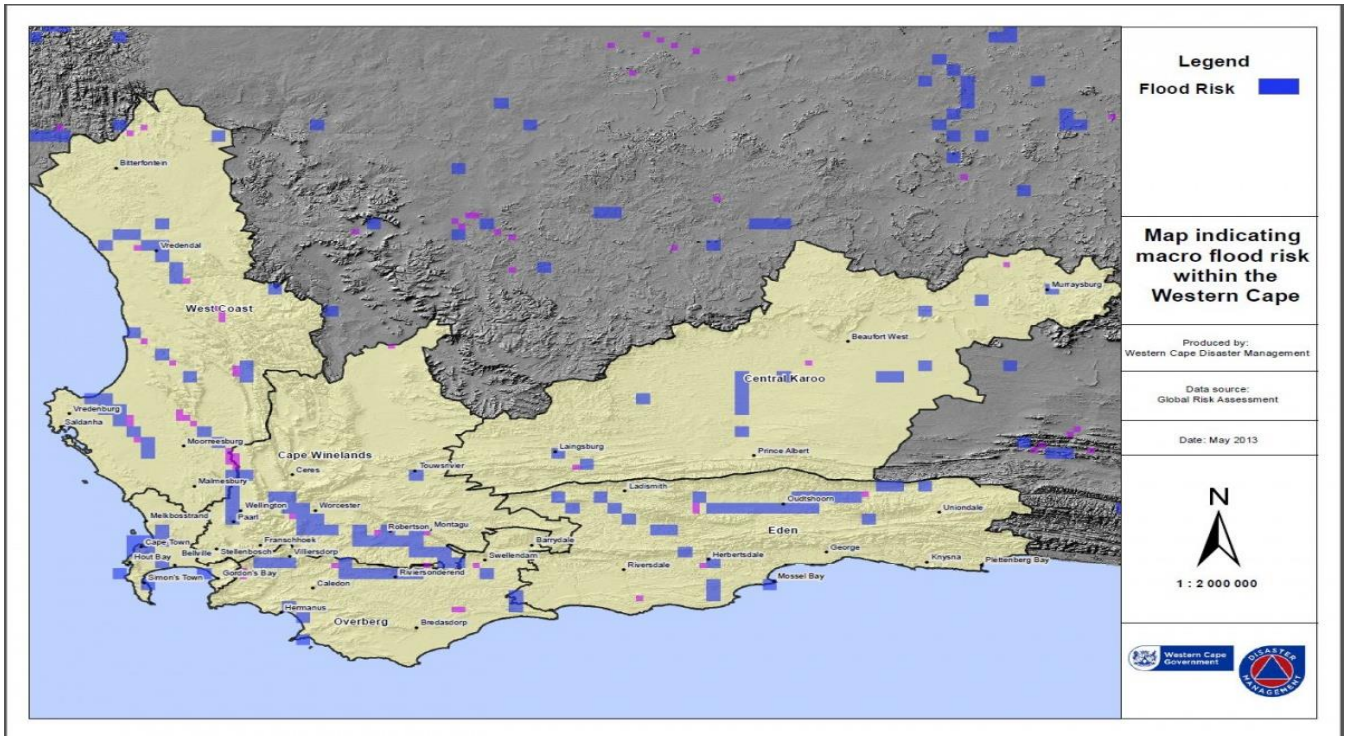
Map 13: Disaster vulnerability in the CWDM.

2.4.7.1 Potential risks associated with vulnerability spatial depiction (refer to map 13)

Flooding:

Flooding occurs at least once a year within the CWDM area. The largest and most important rivers in the area are the;

- Breede River
- Olifants River (of which only the headwaters lie within the study area)
- Doring River (the only large river that is still in a natural condition)
- Touws River (which is significantly modified)



Map 14: Flood risk areas

Table 15: Likely impacts of flooding

Economic:	Environmental:	Social:
• Extensive damage to both property and infrastructure • Large damage costs • Disruption in influx of tourists • Overflowing of dams and potential dam failure • Road closures • Disruption of services i.e. electricity, water, public transport and emergency services such as ambulances, hospitals etc. • Significant economic losses for businesses and farms	• Rivers spilling their banks resulting in flash floods • High run-off, severe erosion that leads to instability of steep catchments • Displacement of large amounts of sediment downstream • Slope failure, rock falls and mudslides on steep slopes or mountainous areas	• Low cost housing most affected • Injury and loss of lives to people and animals • Displacement of households and communities • Increase in the number of people with water borne diseases

Conditions that increase the severity of flooding;

- Irregular maintenance of storm water systems. For instance, litter, rubble and other dumped objects blocking storm water drains and streams, worsening the impact of the floods
- Debris-loading from soil erosion due to exposure of large tracts of land, along with vegetative debris loading associated with vegetation clearance can be washed into watercourses and swept downstream, where they obstruct culverts, channels and bridges.
- Increase and encroachment of low-cost housing or informal settlements in areas prone to flooding placing large numbers of people at risk.
- Rapid urban growth in floodplains that has hardened river catchments, increasing surface run-off.
- Under-investment in municipal maintenance and roads and protective stormwater systems.
- The risk of damage also increases when natural flood-paths of rivers are altered, and wetlands degraded in severe weather-exposed areas.
- Lack of household insurance.

Veld Fires:

The Western Cape 's fire season is generally from November to April, when temperatures are highest. During these months, there is greater use of natural recreational areas and the indigenous fynbos is also more likely to burn. Fires should generally not occur more than once every seven years, to avoid a loss of species that have not matured and produced seeds. The Western Cape 's fire season officially ends at the end of April.

Areas, communities or households most at risk;

- The whole district is fire prone with less frequent fires occurring towards the north of Ceres.
- Mostly in urban rural edge - informal settlements located at the urban edge where these fires usually start, which spreads to the veld and forests.
- Houses located at the urban edge with limited access.
- Mountainous areas are at high risk in the CWDM area.
- Areas with a high presence of alien plants.
- Commercial or small farms in isolation. Recreational areas i.e. picnic and hiking trails where many fires tend to start.
- Three major fires occurred in the Franschhoek area since 1999, i.e. February 1999, December 2005 (6-year gap) and January 2013 (7-year gap).

Table 16: Likely impact of veld fires

Economic:	Environmental:	Social:
• Damage and loss of property and infrastructure • Loss of farming lands, forestry and plantations • Claims against municipalities	Positive impacts: • Control of invasive alien plants • Promotion of desirable plants Negative impacts: • Loss of biodiversity (if fynbos burns too frequently or direct animal mortality • Loss of vegetation cover and increased erosion • Increased alien infestation (in disturbed areas where alien plants are often pioneer species) • Habitat fragmentation • Loss of ecosystem services, i.e. water production.	• Evacuation of people from homes • Reduction in potable water • Injury and loss of lives • Loss of employment / reduction in hours worked which affect livelihoods • Loss of personal items and special memorabilia.

2.4.7.2 Key findings: Disaster Management, Geographic Risk Areas

2.4.7.2.1 Refer to conditions that increase the severity of flooding.

2.4.7.2.2 Veld fires are exacerbated by warm, dry and windy conditions. The recent El Nino worsened the severity of veld fires in the Western Cape province.

2.4.7.3 Implementation proposals

FOCUS AREA:	DISASTER MANAGEMENT, GEOGRAPHIC RISK AREAS
STRATEGIES:	1. 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 2. Plan fire services in line with new development needs 3. Apply an acceptable housing density (relevant to the specific housing development) that would limit the spread of fire 4. Ensure that development of residential dwellings only takes place after adequate bulk services are provided 5. Provide additional fire hydrants in all areas 6. Install watch towers, fire breaks, fire extinguishers in forestry areas 7. Ensure that fire hydrant water supply is sufficient in higher lying areas 8. Ensure the enforcement of an Environmental Impact Assessment (EIA) with all development projects (according to the NEMA guidelines) 9. Plan for the upgrading of existing infrastructure to cope with new developments 10. Identification and plotting of vacant high-risk flood areas for future reference and avoid human settlements in such areas 11. Avoid development and settling of communities along rivers and within the flood line 12. Apply and update zoning regulations regularly in response to changed disaster management requirements; develop zoning codes for high risk areas 13. Identify alternate suitable venues/facilities for emergency services 14. Apply low intensity land use in 1:100 flood line areas 15. Study and understand the impact of climate change on development 16. Ensure proper and appropriate signage regarding flood risk especially in low-lying areas 17. Plan and build retention dams to reduce risk of flooding 18. Restore and maintain water catchment areas 19. Build retaining walls to protect buildings from stormwater 20. Improve and upgrade stormwater reticulation systems regularly 21. Develop and maintain sustained cleaning programmes for rivers and dams 22. Plan and construct dams with larger capacity to regulate flow of water 23. Identify earthquake prone areas / geological faults 24. Development of suitable building codes (enforcement thereof) 25. Limit development in high risk areas 26. Approval of only single-storey buildings in disaster prone areas and at appropriate densities 27. Enforce area-specific building material/methods/codes

	28. Design strong earthquake resistant infrastructure services 29. Create a zoning for major hazardous installations (MHI) 30. Proper planning be done regarding the placement of factories and plants 31. Limit population figures around MHIs 32. Enforcement and evaluation of risk assessment for major hazardous installations 33. Monitoring, restricting and managing of routes for hazardous materials (hazmat) in transit (railways/roads) 34. Provide specific parking areas along the roadside for vehicles transporting hazardous material 35. Increase hazmat capabilities on main routes where hazmat freight vehicle parking areas are to be found Identification of containment sites and measures
PRIORITY:	HIGH

2.4.7.4 CWDM Implementation Plan: Disaster Management, Geographic Risk Areas

PROJECT/ACTIVITY:	BUDGET:	RESPONSIBLE:	DURATION:
Annual Environmental Health Education Programme	R445 537, 00	Municipal Health Services	Annually
Food-Water Samples and Testing	Operational Budget	Municipal Health Services	Annually
Disaster Management	Operational Budget	Disaster Management Section	Annually
Revision of Risk Assessment	R243 500, 00	Disaster Management Section	2018/2019
Fire Services	Operational Budget	Fire Services Section	Annually

3. DISTRICT SPACE ECONOMY

3.1 ECONOMIC GROWTH SECTORS

The spatial logic as per the Provincial Space Economy is to;

1. **Capitalise** on the Knowledge Economy

2. **Consolidate** investment in economically vibrant areas

3. **Connect** regional economic infrastructure

4. **Cluster** investment of economic infrastructure.

The above spatial logic can be applied within the growth potential forecast of the CWDM towns with the five (5) regional centres (Stellenbosch, Paarl-Wellington, Worcester, Ceres and Robertson) being the main growth centres. According to the MERO (2017), the CWDM GDP experienced an average growth rate of 2.9% per annum since 2010. However, growth rates are declining, with an estimated growth rate of 0.5 per cent for 2016.

In the case of the CWDM area the Cape Winelands GDP contribution per sector in 2015 was:

- **Agriculture, forestry & fishing**; 9,3%, **Mining & quarrying**; 0,2%, **Manufacturing**; 15,7%, **Electricity, gas & water**; 2,2%, **Construction**; 6,9%, **Wholesale & retail trade, catering & accommodation**; 18,4%, **Transport, storage & communication**; 9,8% **Finance, insurance, real estate & business services**; 19,8%, **Community, social & personal services**; 7,5%, **General government**; 10,2%

Table 17: Cape Winelands District GDPR contribution per sector (%), MERO, 2017.

Sector	Cape Winelands	Witzenberg	Drakenstein	Stellenbosch	Breede Valley	Langeberg
Primary Sector	**9.3**	**17.4**	**6.6**	**5.7**	**10.6**	**12.9**
Agriculture, forestry and fishing	9.1	17.3	6.4	5.5	10.4	12.8
Mining and quarrying	0.2	0.0	0.2	0.2	0.2	0.1
Secondary Sector	**24.9**	**26.1**	**26.6**	**24.1**	**21.4**	**25.9**
Manufacturing	15.7	14.2	16.0	17.0	13.4	18.2
Electricity, gas and water	2.2	3.3	2.6	1.4	2.0	1.8
Construction	6.9	8.5	8.0	5.6	5.9	5.9
Tertiary Sector	**65.9**	**56.5**	**66.8**	**70.3**	**68.0**	**61.2**
Wholesale and retail trade, catering and accommodation	18.4	16.9	17.7	20.2	18.3	19.2
Transport, storage and communication	9.8	7.0	8.9	11.0	11.0	11.1
Finance, insurance, real estate and business services	19.8	15.4	21.2	21.6	20.4	16.2
General government	10.2	10.4	10.6	10.6	10.2	8.0
Community, social and personal services	7.5	6.9	8.4	6.8	8.0	6.6

A similar trend follows with the urban-based economic growth sectors (i.e. manufacturing 15.7 %, wholesale & retail trade, catering & accommodation 18.4% and finance, insurance, real estate and business services 19.8%) being the leading drivers of growth within the Cape Winelands district this however does not detract from the importance of the agricultural sector and its linkage with urban economies within the district.

Declining Economy

A cause for concern is that after 2014, the economy of the Cape Winelands District grew at a slower rate each year, with 2016 experiencing the lowest growth rates since the recession in 2009. Reasons as put forward by the MERO (2017) are due to national and international developments affecting the economy. This can be broken down to;

- General increases in food prices due to the drought
- Rising national unemployment and increasing interest rates having a negative impact on investment while volatility in the Rand against currencies such as the US Dollar, Pound Sterling and Euro are contributing to rising inflation as South Africa is generally a net importer of goods.
- Other factors are, declining business confidence, political instability and the sub investment credit rating by agencies are all contributing to the deteriorating economic conditions.

Table 18: Municipal GDPR Growth trends (MERO, 2017).

Municipality	Contribution to GDPR (%) 2015	Trend 2005-2015	2010-2015	Real GDPR Growth (%) 2011	2012	2013	2014	2015	2016
Witzenberg	13.9	5.0	4.4	4.9	4.6	4.8	5.7	2.1	0.9
Drakenstein	32.8	2.8	2.5	3.2	2.8	2.6	2.6	1.3	0.4
Stellenbosch	24.0	2.8	2.6	3.2	3.0	2.5	2.5	1.6	0.5
Breede Valley	19.1	3.4	3.0	3.7	3.3	3.2	3.4	1.5	0.4
Langeberg	10.2	3.6	3.2	3.5	3.5	3.2	3.9	1.9	0.1
Total CWDM:	**100**	**3.3**	**2.9**	**3.5**	**3.2**	**3.1**	**3.3**	**1.6**	**0.5**
WC Province:		**3.0**	**2.6**	**3.8**	**2.9**	**2.6**	**2.2**	**1.5**	**0.7**

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

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.

As noted, agriculture remains the backbone of the provincial economy despite the importance of secondary and tertiary economic activities. This is especially the case in the Cape Winelands District which is home to a third of the province's agricultural

sector employing 21% of the District's workforce (CWD Socio-economic Profile 2014:10). In the Cape Winelands, around 90 per cent of goods exports are from the agri-processing value chain (PERO 2016: 47). This sector, together with tourism, and oil and gas, were selected as strategic priority areas for provincial focus due to their conduciveness to inclusive growth.

Wholesale and retail trade, catering and accommodation: 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.

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' headquarters the Cape Winelands is definitely the 'place to be'.

Manufacturing: established sector with strong backward linkages to agriculture; potential for SMME development; and an important job generator.

3.1.1 Other sectoral opportunities:

The Green Economy

It is essential that in applying the spatial logic (Capitalise, Consolidate, Connect and Cluster), the transitioning to a green economy is prioritised. A green economy is defined as an economy that aims at reducing environmental risks and ecological scarcities that aims for sustainable development without degrading the environment.

The Western Cape Government has realised the potential of benefits of a green economy and started an initiative called "Green is Smart" (Western Cape Government, 2013a). This is a green economy strategy framework and aims to optimise green economic opportunities and enhancing environmental performance in the Western Cape. The framework aims for the Western Cape to become the lowest carbon intensive province and a leading green economic hub of the African continent, through the following five drivers: "smart living and working", "smart mobility", "smart eco-systems", "smart agri-production", and "smart enterprise" (Western Cape Government, 2013a) (Van Niekerk, Brent and Musango 2013).

The green economy prospects will carve a pathway in the Cape Winelands District since the agricultural industry continues to play a big part in the economy of the district and province. The region's agricultural contribution (11 per cent) is smaller than that of the West Coast (14.6 per cent); however, it is the largest in the Western Cape Province accounting for more than a third of the Province's agricultural real value add. The agriculture and agro-processing industries are also responsible for the bulk of the region's exports (Cape Winelands Regional Development Profile 2013:50).

Further, the PERO 2014 identifies agriculture and tourism as sectors in which the Western Cape has comparative advantage. Both sectors have been highlighted in the Green is Smart strategy as priorities for support and intervention. The vibrant agricultural and tourism sectors of the province make it particularly sensitive to environmental risks. Over and above biophysical risk, agriculture is also exposed to indirect regulatory and market-related risk through carbon taxes, increasing energy prices and related changing preferences in the main export markets.

The Knowledge Economy

Given the many challenges currently facing developed and developing countries, 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 these challenges. This is relevant for Stellenbosch and the Stellenbosch-Paarl axis, but also for some of the other places in the district.

The knowledge economy must be viewed 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.

Fourth Industrial Revolution

The Fourth Industrial Revolution (4IR) builds on the Third Industrial Revolution, or digital revolution. It is characterised by the increased complexity, development and use of artificial intelligence, robotics, blockchain, nanotechnology, quantum computing, biotechnology, The Internet of Things, 3D printing and autonomous vehicles. The resulting effects cause and increased integration or 'blurring of lines' between the technology, biology and physical spheres. This revolution is having and will have serious effects on many areas of the economy, leading potentially to increased efficiency, sustainability and the creation or requirement of new types of skills, jobs or careers. However, this will likely lead to the loss of jobs in some areas, especially the unskilled labour areas.

The Fourth Industrial Revolution has already been identified as a serious impactor on the future agricultural sector of the Western Cape. Water saving technology, drones, robotics, farm-management software, precision agriculture, predictive analytics and genetic developments can have positive effects on the sustainability of the sector and food security into the future.

3.1.2 Key findings: Economic Growth Sectors

3.1.2.1 Due to various reasons (national and international), there is a decline in the economy of the Cape Winelands District. The sectors that performed the strongest is sectors located within the urban space economy therefor Public-Sector investment remains crucial. Spatial targeting as coordinated by the Western Cape Provincial Government and pursued by various other government departments could assist in guiding public-sector investment. The latter however does not detract from the importance of the agricultural sector and its economic linkages to the urban economies within the district.

3.1.2.2 Opportunities exist in the green and knowledge economy (refer to 3.1.1), municipalities/government must investigate these sectors and capitalise on it.

3.1.3 Implementation proposals:

FOCUS AREA:	ECONOMIC GROWTH SECTORS
STRATEGIES:	1. B-municipal Spatial Development Frameworks must facilitate spatial targeting processes, coordinating and identifying government infrastructure/capital investment locations within the urban settlements. 2. Seek partnerships with industries, local businesses, academic institutions, NGO's and other civil society stakeholders to promote interventions in skills trainings as well as research and the utilization of research. 3. Prioritise the implementation of the following drivers: "smart living and working", "smart mobility", "smart eco-systems", "smart agri-production", and "smart enterprise" (Western Cape Government, 2013a) (Van Niekerk, Brent and Musango 2013). 4. Strengthen rural support programmes for commercial and small-scale farming and develop the potential of the agricultural value chain. 5. Attract outside investors or entrepreneurs and encourage further diversification of local business.
PRIORITY:	HIGH

3.1.4 CWDM Implementation Plan: Economic Growth Sectors

PROJECT/ACTIVITY:	BUDGET:	RESPONSIBLE:	DURATION:
Investment Programme	R550 000, 00	Local Economic Development & Tourism Section	Annually
Mentorship Programme	R611 000, 00	Local Economic Development & Tourism Section	Annually
Business retention expansion	R700 000, 00	Local Economic Development & Tourism Section	Annually
Skills Development	R200 000, 00	Rural and Social Development Section	Annually

3.2 MUNICIPAL SPACE ECONOMY

Within the district, Stellenbosch is the largest and fastest growing regional economy (R17 Billion of the District's GDPR of R50 billion in 2013), this is followed by Drakenstein (R15.5 billion), Breede Valley (R7.5 billion), Langeberg (R5.5 billion) and Witzenberg (R4.5 billion) (Stellenbosch Draft IDP Bureau for Economic Research Report 2014: 42).

3.2.1 Drakenstein and Stellenbosch Municipal area:

Over the past decade(s), Stellenbosch and Paarl/Wellington has seen growth in each of the following sectors:

- Higher education and research (Paarl/Wellington to a lesser extent)
- Agriculture and agri-processing
- Tourism
- Corporate headquarters and business services
- Retirement settlements, and
- Other sectors that include a resilient retail sector and diverse (small and medium-sized) industrial enterprises. These could be related to agriculture, forestry, furniture making, publishing or the craft sector.

Drakenstein and Stellenbosch municipality falling within the functional region of the metro economy has seen significant growth in manufacturing, wholesale

& retail trade, catering & accommodation and finance, insurance, real estate & business services (refer to table). Paarl/Wellington has higher education facilities which gives this area a strong base in education, though in no ways comparable to Stellenbosch with its university-dominance. The research and innovation at Stellenbosch Technopark and its close relationship with the Stellenbosch University has made Stellenbosch the most important contributor to the science and technology sector in the District. Similar to Stellenbosch, Paarl also has corporate headquarters and, due to its slightly stronger manufacturing base, seems well placed to attract others.

Being the largest town in the Drakenstein municipal area, Paarl/ Wellington have attracted all the major retail chains, making retailing a further growth sector. 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.

In 2015 Drakenstein Municipality (29.33 per cent) and Stellenbosch Municipality (20.32 per cent) collectively employed 50% per cent of individuals in Cape Winelands District. The population of both municipalities is likely to increase further, the sector base of both is broad and the different growth sectors complement each other well. Both Stellenbosch and Drakenstein Municipalities have identified Klapmuts as a prospective sub-regional urban node along the N1. Residential and industrial development opportunities have been identified north and south of the N1, and the area has also been identified as having potential to serve as a regional freight logistics hub.

The following key infrastructure projects have been identified for Paarl;

- *Paarl CBD Upgrade*: Paarl is the economic centre of the Drakenstein municipality and is home to at least four major international companies namely Pioneer Foods, Nampak, Imperial Logistics and Distell. As a result, the relocation of businesses to the CBD and upgrade of the central town have been identified as an important project and economic opportunity. The Municipality entered into a Public Private Partnership Agreement with a consortium of property owners in the Paarl CBD in 2010. The first phase of the Agreement included upgrades to parking facilities and pavements in the area. The second phase of the Paarl CBD regeneration includes upgrades to Wamakers Square which currently house Pick 'n Pay and Woolworths as anchor tenants. Structural changes are planned with landscaping and beautification in the surrounding areas. The CAPEX R-Value is estimated at R100 million.

- *Paarl Waterfront Development*: Identified as a key catalytic project which will boost the tourism sector. The project consists of mixed use developments (including a hotel, restaurants, office blocks, sport science institute, etc.) located on the Berg River. This project is in the form of a PPP and the proposed use of the land has been as a luxury mixed use waterfront lifestyle development. This project has been put on hold. The Land Use Rights are in place and the ROD was transferred back to the Municipality. The Municipality envisages issuing a tender for development proposals with all of the rights in place. Total capex for the project will be approximately between 40 and 60 million rand for the sale of the land. This excludes any other infrastructural services. The anticipated total capex investment could be between R500 million and R1 billion rand.

3.2.2 Breede Valley Municipal area:

The area covered by Breede 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.

Worcester is the commercial, industrial, services and administrative hub of Breede Valley municipality, for development purposes the town has spare capacity i.e. sanitation, water and vacant developable land-industrial and residential. Through the N1 corridor and railway connections the town has optimal access to

the markets of the Cape Town metropolitan area. On a macro (district) scale it is believed that Worcester should be subject to an investment focus as a 'major service centre' due to being the largest town in the Northern Boland region with the broadest economic base. Worcester is also easy accessible from surrounding towns/towns located in the Langeberg & Witzenberg municipal areas. Breede Valley Municipality through Worcester as its economic hub contributed 18.9% towards the Cape Winelands district GDP, the highest after Drakenstein 33.3% and Stellenbosch 23.9%.

3.2.3 Witzenberg Municipal area:

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. The proposed Agri Parks development and potential expansion of the agricultural sector will further stimulate economic growth in this municipal area.

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.

3.2.4 Langeberg Municipal area:

Although the Langeberg municipal area has certain parallels with the Witzenberg area, there are also distinct differences, such as a relatively lower 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.

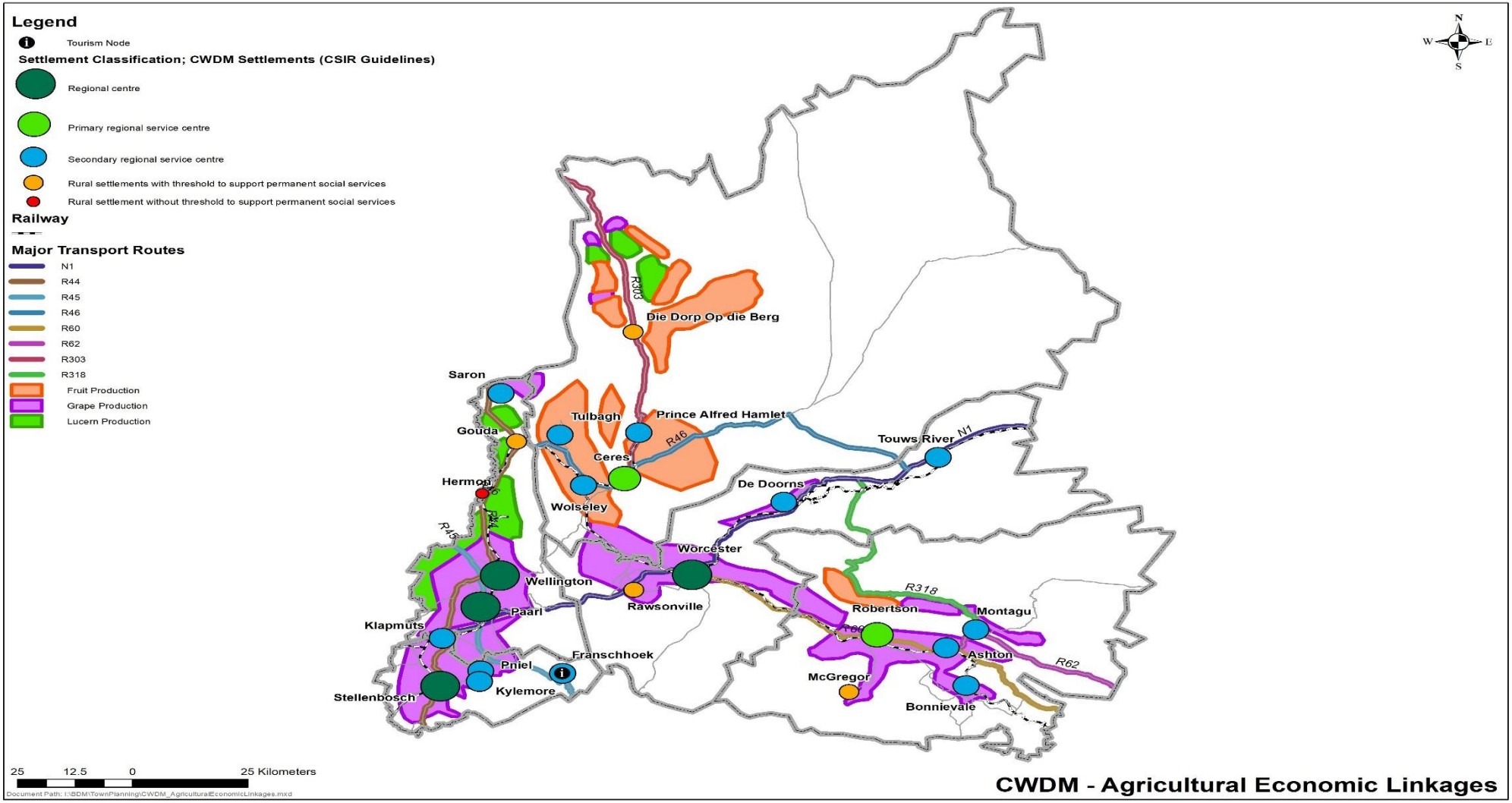
While Ashton is the industrial centre of the cluster, Robertson is the largest town and has the broadest economic base. This is further enhanced by its closeness to Worcester and its central location vis-à-vis the other places in the cluster.

Local economic development in this area is based on:

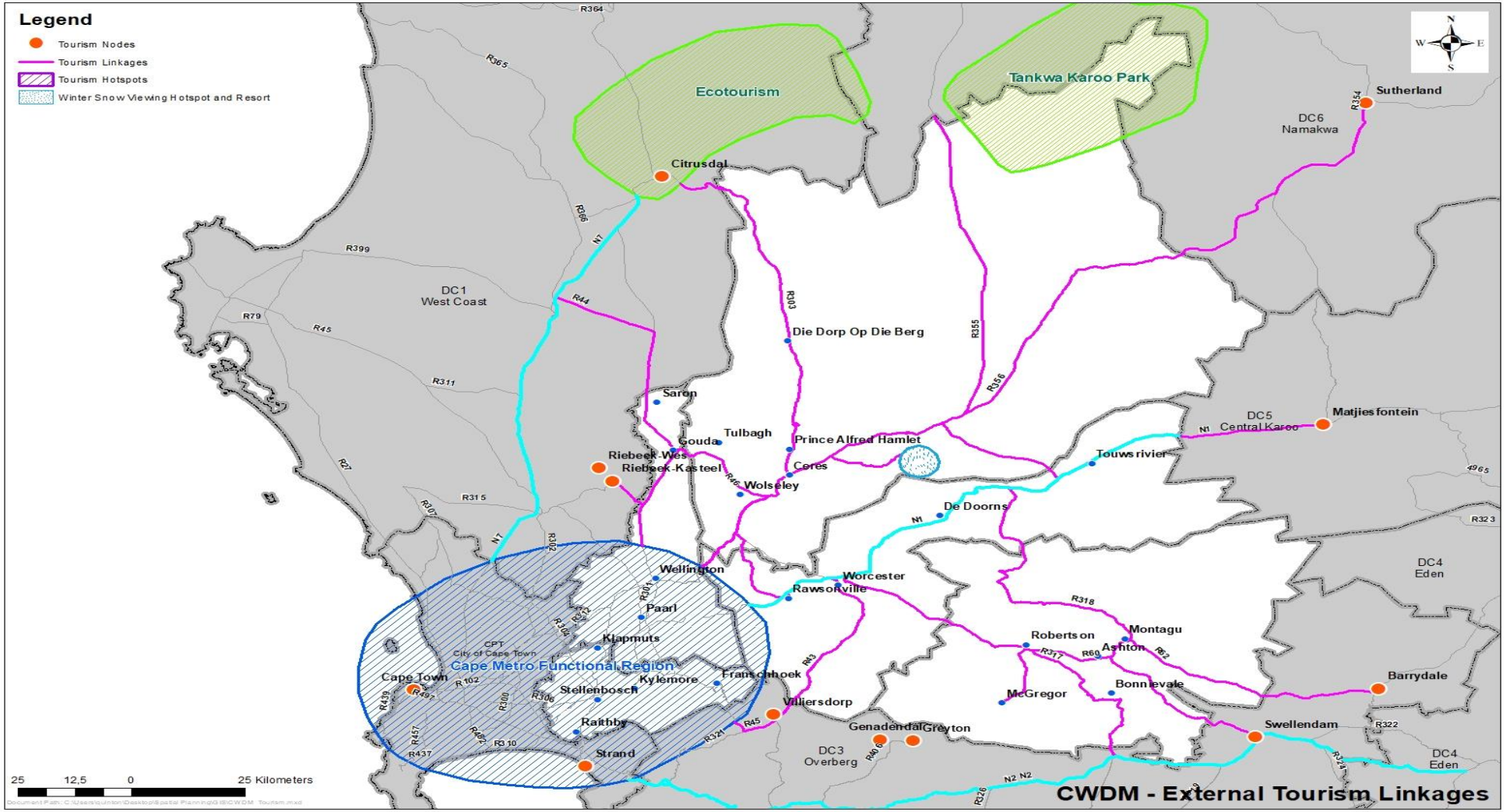
- diversified agriculture (including wine/grapes)
- tourism (catering for day, weekend, event, 'route', adventure/sport, health and cultural tourists)

- 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.



Map 15: CWDM Economic linkages, connecting routes, Settlements Classifications and tourism corridors (MERO, 2017).



Map 16: External tourism linkages

3.2.5 Implementation proposals

FOCUS AREA:	MUNICIPAL SPACE ECONOMY
STRATEGIES:	1. Stellenbosch Municipality: 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. Drakenstein Municipality: 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. Breede Valley Municipality: improvement of service delivery to existing enterprises and households to prevent them from moving elsewhere 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 ad hoc social support and improvements in the most basic infrastructure services. 4. Witzenberg Municipality: be aware of the need to increase revenue base to ensure service delivery and maintenance of municipal services. 5. Langeberg Municipality: encourage the rationalization 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. 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. 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. 9. Strengthen the linkages between nodes/settlements to improve access for households from the areas with less economic potential to areas with greater potential to access employment and social opportunities. 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 – encouraged, facilitated and monitored by municipalities and other public support agents – to address the needs. 11. Consider tourism nodes outside municipal boundaries that attracts traversing traffic; these tourism routes must be considered as potential development corridors (promoting land uses that comply with relevant Integrated Zoning Schemes and Municipal Bylaws).

	12. Optimize tourism potential of prominent tourist attractions/destinations.
PRIORITY:	HIGH

3.2.6 CWDM Implementation Plan: Municipal Space Economy

PROJECT/ACTIVITY:	BUDGET:	RESPONSIBLE:	DURATION:
Tourism training	R850 000, 00	Local Economic Development & Tourism Section	Annually
Tourism month	R27 350, 00	Local Economic Development & Tourism Section	Annually
Mayoral Tourism Awards	R122 000, 00	Local Economic Development & Tourism Section	Annually
Mayoral Tourism Awards Media Launch	R28 570, 00	Local Economic Development & Tourism Section	2018/2019
Educationals	R150 000, 00	Local Economic Development & Tourism Section	Annually
LTA Projects	R300 000, 00	Local Economic Development & Tourism Section	2018/2019
Tourism Campaign	R109 000, 00	Local Economic Development & Tourism Section	Annually
Tourism Events	R700 000, 00	Local Economic Development & Tourism Section	Annually
Township Tourism	R400 000, 00	Local Economic Development & Tourism Section	Annually

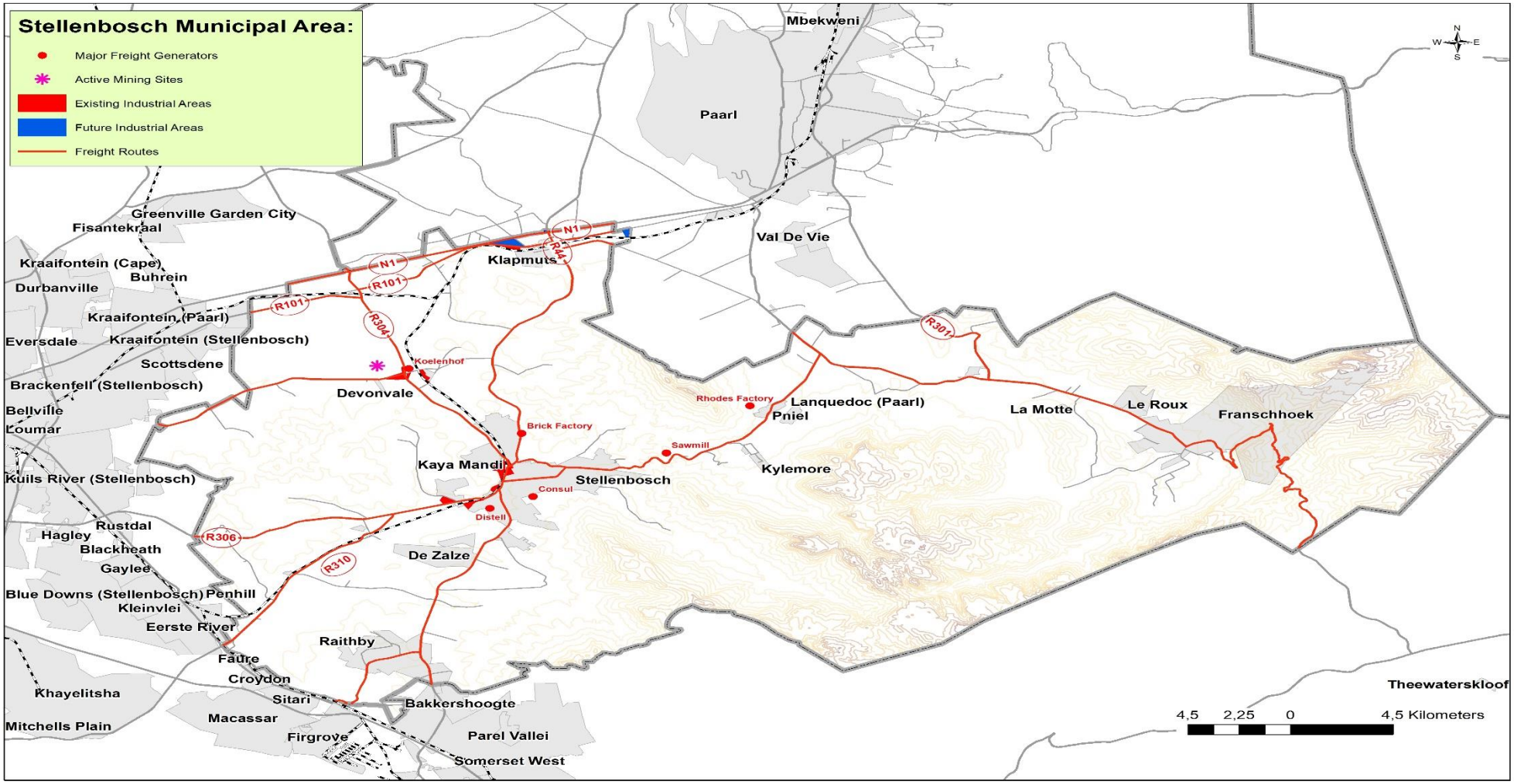
3.3 FREIGHT TRANSPORT AND ROUTES

According to the Cape Winelands Freight Transport Strategy (2013) the total freight volumes by surface transport (road and rail), as well as the volumes by rail analysis show that road freight is the most dominant freight mode currently in the CWDM and is likely to continue in the near future. Currently more than 95% of all freight will continue to be moved via road. Consultations with the Transnet Freight Rail (TRF) whom developed a Transnet Transport and Demand Model (2007) confirmed that the TRF does not foresee any rail network improvements in the next 20 years to accommodate freight movement. The existing rail network is deemed adequate to accommodate the expected increase in rail freight in the next 20 years.

Land use that have an impact on freight within the CWDM area is;

- Mining
- Industry-this refers mostly to industrial areas in towns
- Agriculture and agri-processing. Agri-processing refers specifically to processing that takes place outside of the established industrial areas in the towns of the Cape Winelands Impacted Freight Routes per B-municipal area;

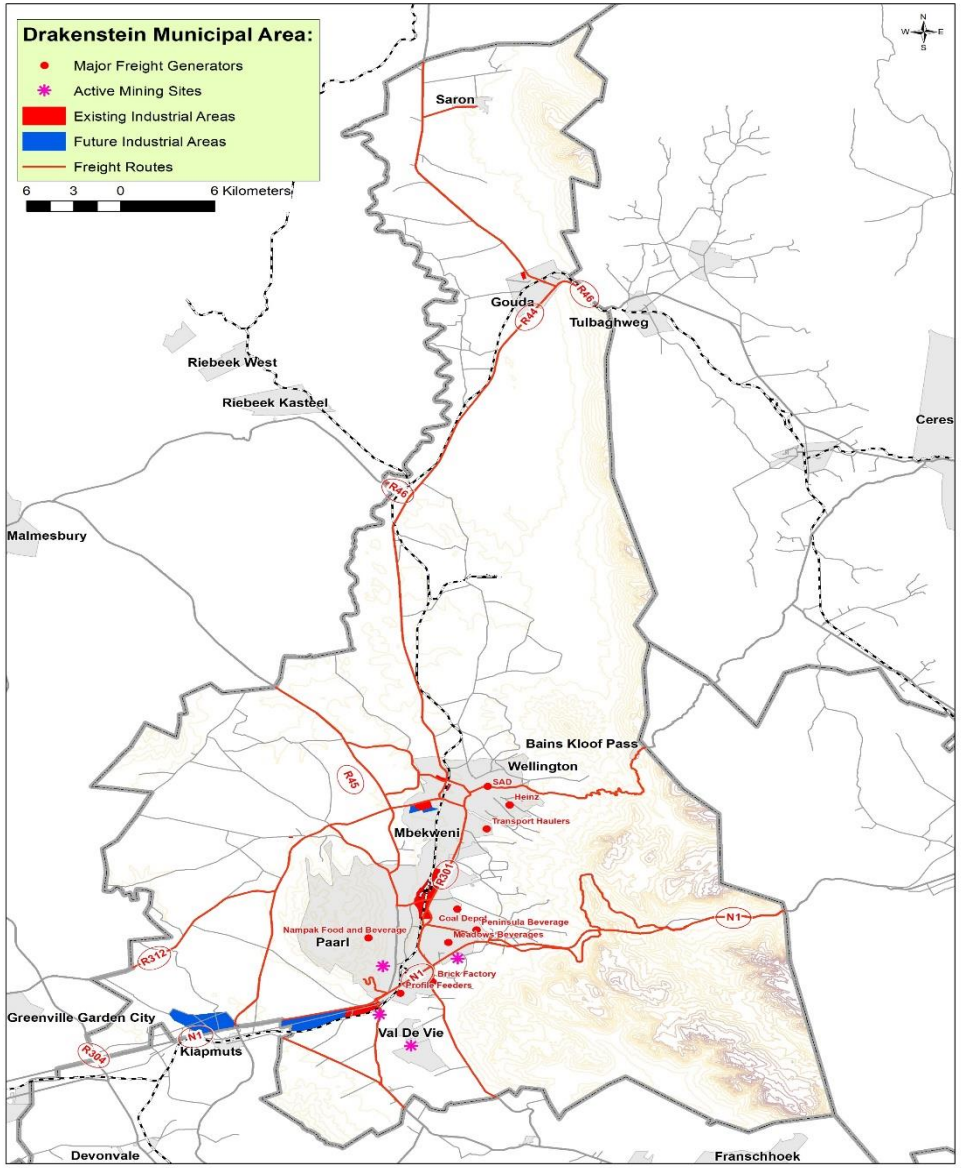
3.3.1. Stellenbosch Municipality/follows:



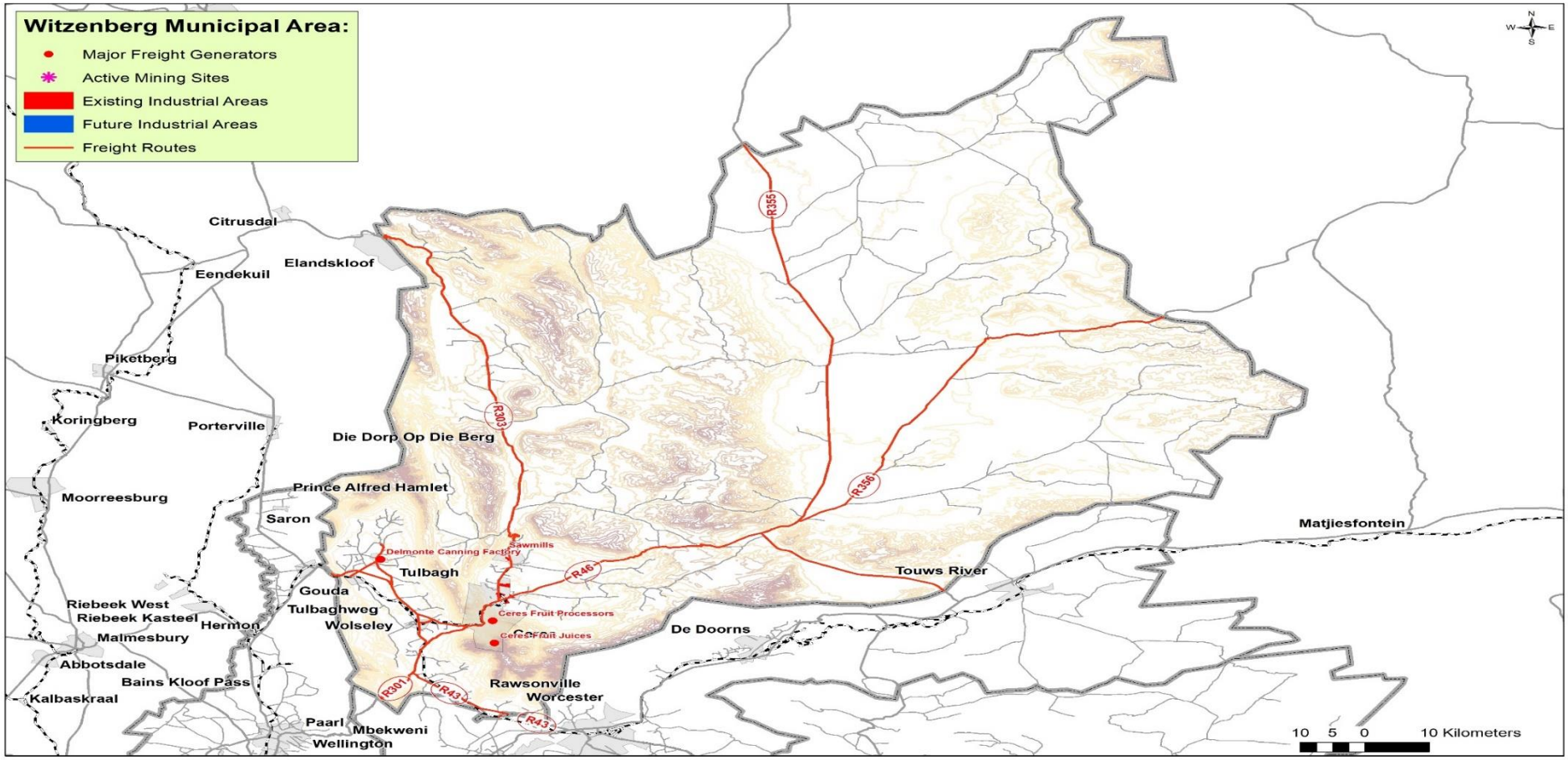
Map 17; the distribution of wine cellars and the agri-processing plants (major freight generators), as well as the location of industry in the Stellenbosch area illustrates that the main routes that connect Stellenbosch to Somerset West (the R44), Kuils River (R310), Klapmuts (R44), Brackenfell (R304) and Franschhoek (R310), as well as the R45 between Franschhoek and Paarl, carry significant amount of freight. In addition, secondary routes that provide access to farming areas off these routes also carry freight in the form of inputs into agri-processing (e.g. delivery of bottles) and distribution of the finished product (e.g. delivery of wine to the Cape Town Harbour for export).

3.3.2 Drakenstein Municipality

Map 18 (opposite); the R44 between Wellington and the N1, the R45 which connects Wellington to Gouda, Tulbagh and beyond and the R101 (Old Paarl Road) running parallel to the N1, Jan van Riebeeck Drive between Wellington and Paarl which connects to the N1 further south, and the R301 and R45 serving the Simondium Groot Drakenstein area, are important freight routes in the municipal area. The large number of freight companies situated in the area adds to the burden of heavy vehicles on these roads. Take out towns and blow up-check routes)



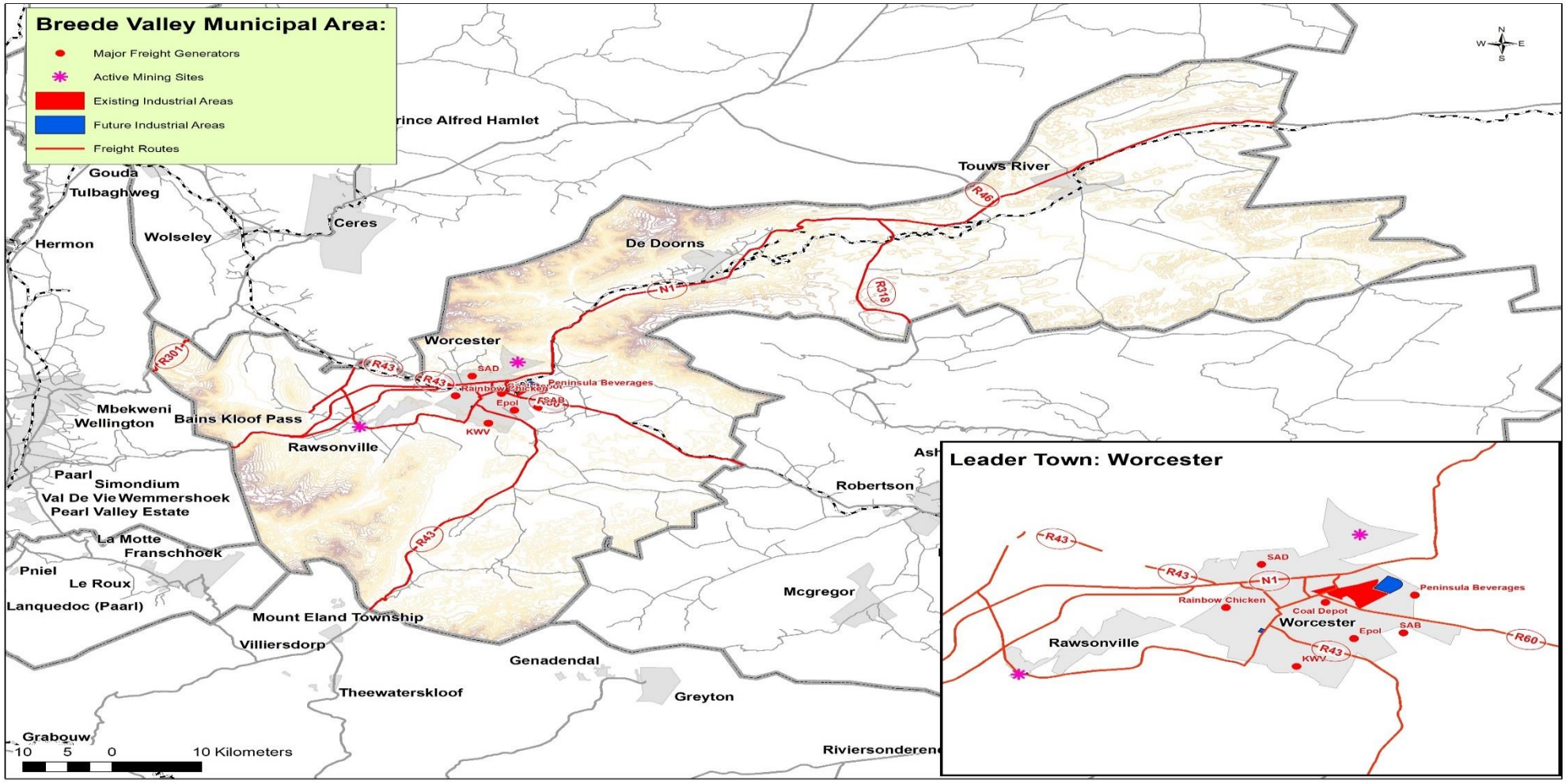
3.3.3 Witzenberg Municipality



Map 19; The transportation of high-quality fresh fruit and vegetables for export purposes is critical to the economy of the Witzenberg local municipality. Roads that are in a poor condition causes damage to the fruit which impacts negatively on grading and the selling price of the fruit. Important freight routes in this area includes the R301 to Op -die Berg and beyond, the R46 between Ceres and Gouda and the R44 from Gouda which then connects to the N1, and the R46 between Ceres and Touws River. The R43 between Ceres and Worcester are also important, it is used to transport packaging material for agri-processing in Witzenberg.

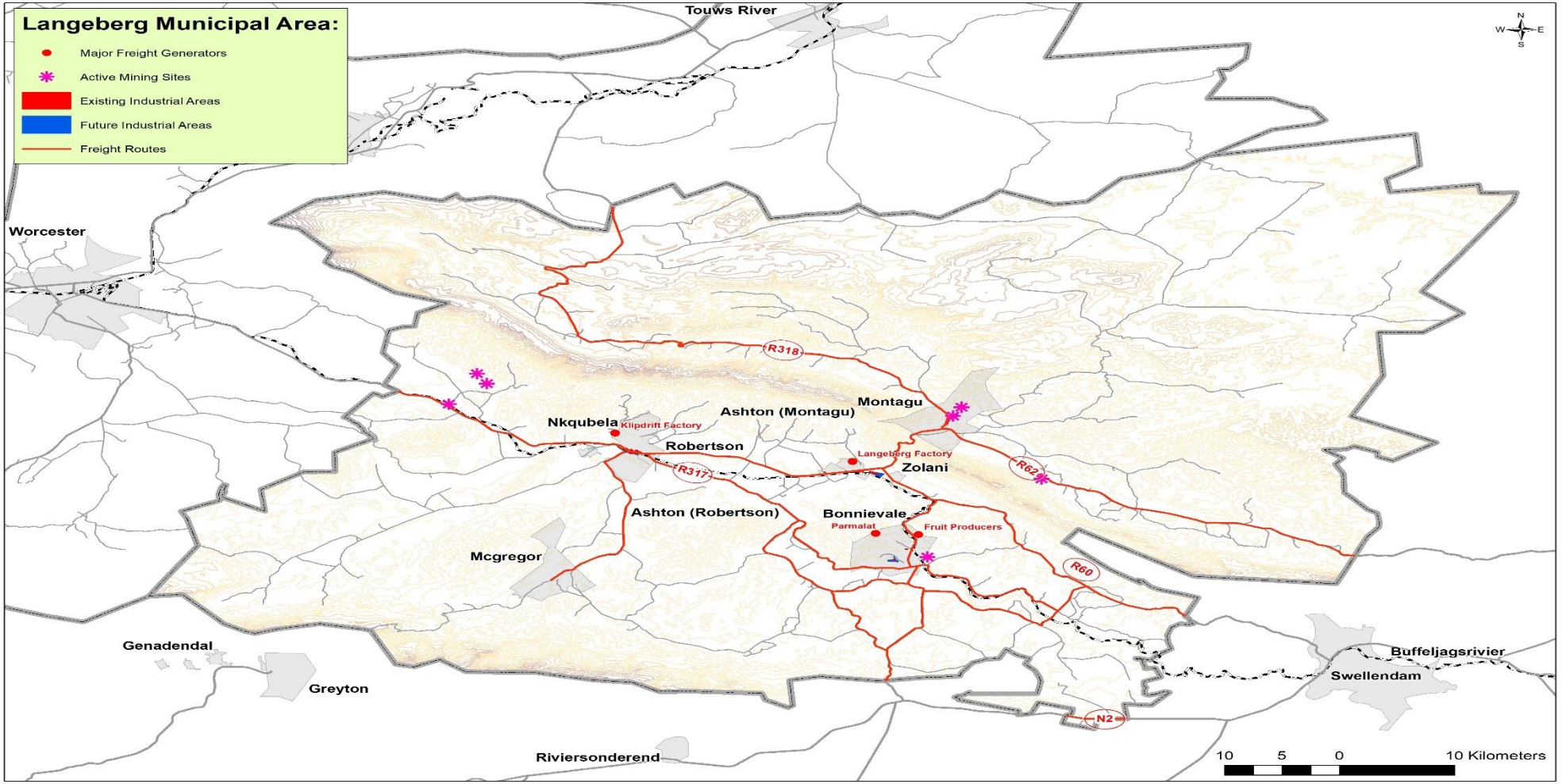
In addition to the quality of roads used to transport fresh produce, the fact that heavy vehicles en route between the N1 and the West Coast and other parts of the Western Cape pass through the town of Ceres (on Main Road) has been noted as a concern. The introduction of a weighbridge in the area has been put forward as a solution to at least discourage heavy vehicles who try to avoid weighbridges on the N1 to use this route.

3.3.4 Breede Valley Municipality/ follows



Map 20; freight generators in the Breede Valley are generally located close to major routes such as the N1 and the R60(to Robertson) and the R43(to Ceres), such as the high valuable table grapes crops of the Hex River Valley. Local officials noted the problem with heavy vehicles passing through the centre of Worcester en route to and from the R60 as an issue. The planned eastern bypass to the town, that will also provide additional access to its industrial area will solve this problem once implemented.

3.3.5 Langeberg Municipality



Map 21; the R62 and the R60 (from Ashton to Swellendam) are the most important freight routes in the Langeberg Municipal area, as they are used to distribute the produce of the region to the market. In addition, all roads that carry fruit to Ashton for processing is of vital importance to the local economy, including the route between Montagu and Ashton which is in the process of being upgraded. The historical and scenic value of the route will however possibly not result in increased carrying capacity. The R317 between Bonnievale and Robertson is also important as it provides access for local wine cellars and the Parmalat plat in Bonnievale.

3.3.6 Key findings: Freight Transport and Routes

3.3.6.1 Many of the Issues (Table 20) indicated by the CWDM Public Transport Regulation Section relate to locational inefficiencies of logistical distribution facilities. Products from the CWD is transported to Epping, Bellville etc. and then redistributed back to the CWD towns. i.e. fruit being transported to the Drydock in Bellville, Wine, dairy products being distributed to facilities in Epping and then transported back. Further logistical distribution inefficiencies are due Company procurement policies and internal economy stimulation e.g. Ceres Fruit Juice/Pioneer purchasing their packaging material at a "sister" company in Durban as opposed to purchasing the material at a company in Worcester.

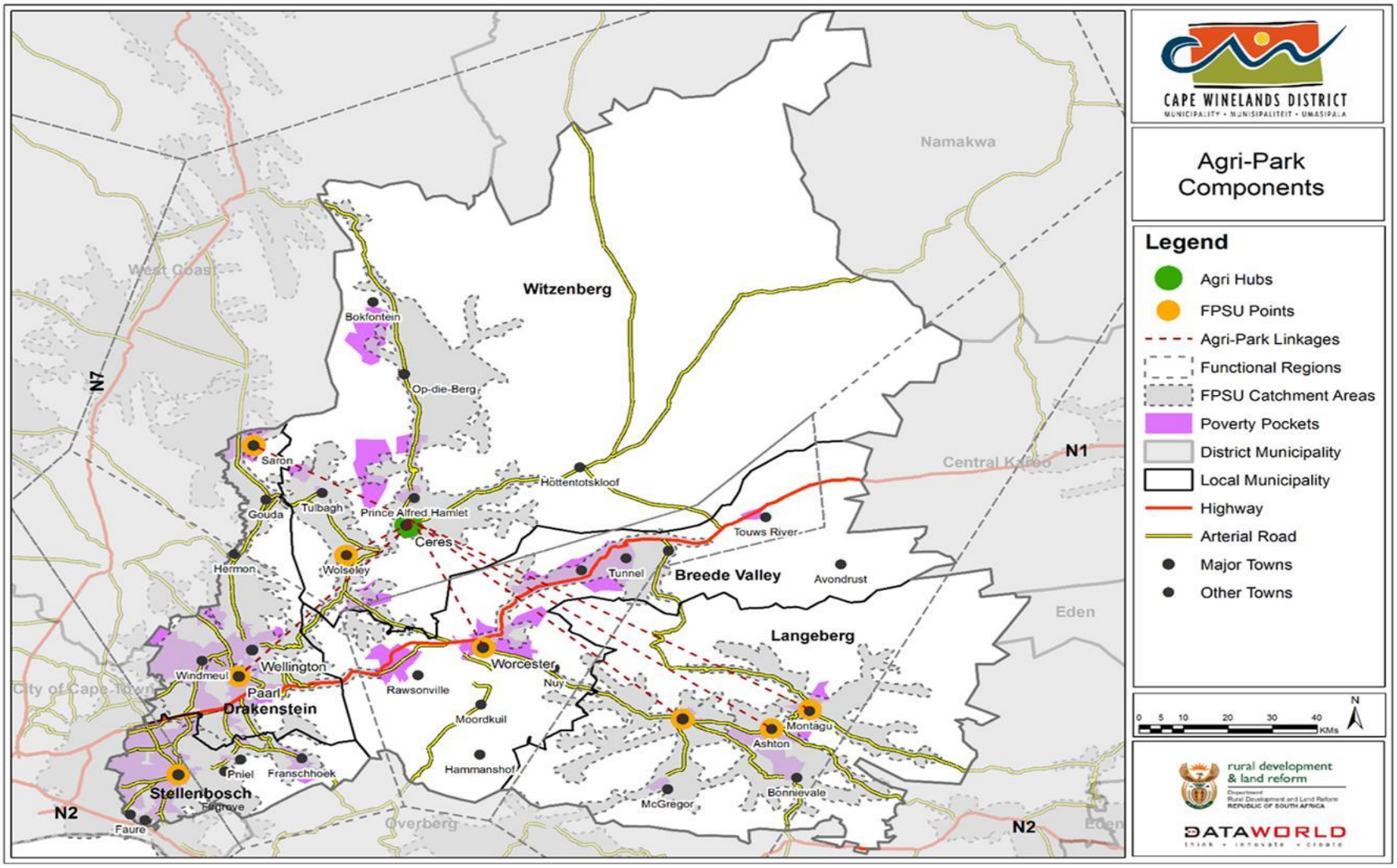
Table 19: Key issues and suggestions for freight and related routes.

Organisation	Issues	Suggestions
Imperial Cargo	• Vehicle movement through Paarl CBD area towards N1	• Upgrading of the Bo-dal Road to be able to accommodate heavy vehicles
Parmalat	• The R60 between Bonnievale and the N2 is closed to traffic after a large section collapsed • Operational efficiency at overloading control points	• Upgrade and maintenance of the R317 through Bonnievale to the N2 • Improve operational efficiency
APL Cartons	• Location of the weighbridge • Unreliability of rail service is main reason for not using it	• Truck stop facility (100 - 150 trucks) needed in Worcester • Improve rail service as it is ideally suited for inbound freight
Ceres Beverage Company	• Operational efficiency at overloading control points • Will make use of rail if there could be a siding at CBC	• Improve operational efficiency • Improve rail service and it could be used by many in Ceres • CWDM could assist in driver training and education
KWV	• Operational efficiency at Port in Cape Town • Lack of rail service to transport bulk wine	• Improve rail service and it could be used by many in Wellington
Unitrans	• Conditions of the rural roads • Impact of roadwork on cost (summer) • Access to the area north of the N1 in Worcester as trucks may not use N1/R60 IC	• Knowledge and communication around road works and condition of the roads • The Worcester bypass, with the inclusion of a link between the R60 and the R40 • Improve truck stops

	• Heavy vehicle traffic in the main road of Worcester • Truck stops; drivers avoid stopping at the truck stops	
Windmeul Eggs	• Traffic congestion on the roads towards Cape Town • The condition of the roads has a negative impact on costs. • Operational efficiency at overloading control points	• Improve operational efficiency at overloading control points
Distell	• Lack of rail service to transport bulk wine • Operational efficiency at Port in Cape Town • Operational efficiency at overloading control points	• Improve rail service • Improve operational efficiency • Improve operational efficiency
Hortgro	• Minutes	• Congestion at the entrance of the port in Cape Town. • Bypass opportunities on the R45 between Gouda and Wellington • Heavy vehicles with fruit greatly affect Ceres and Paarl.

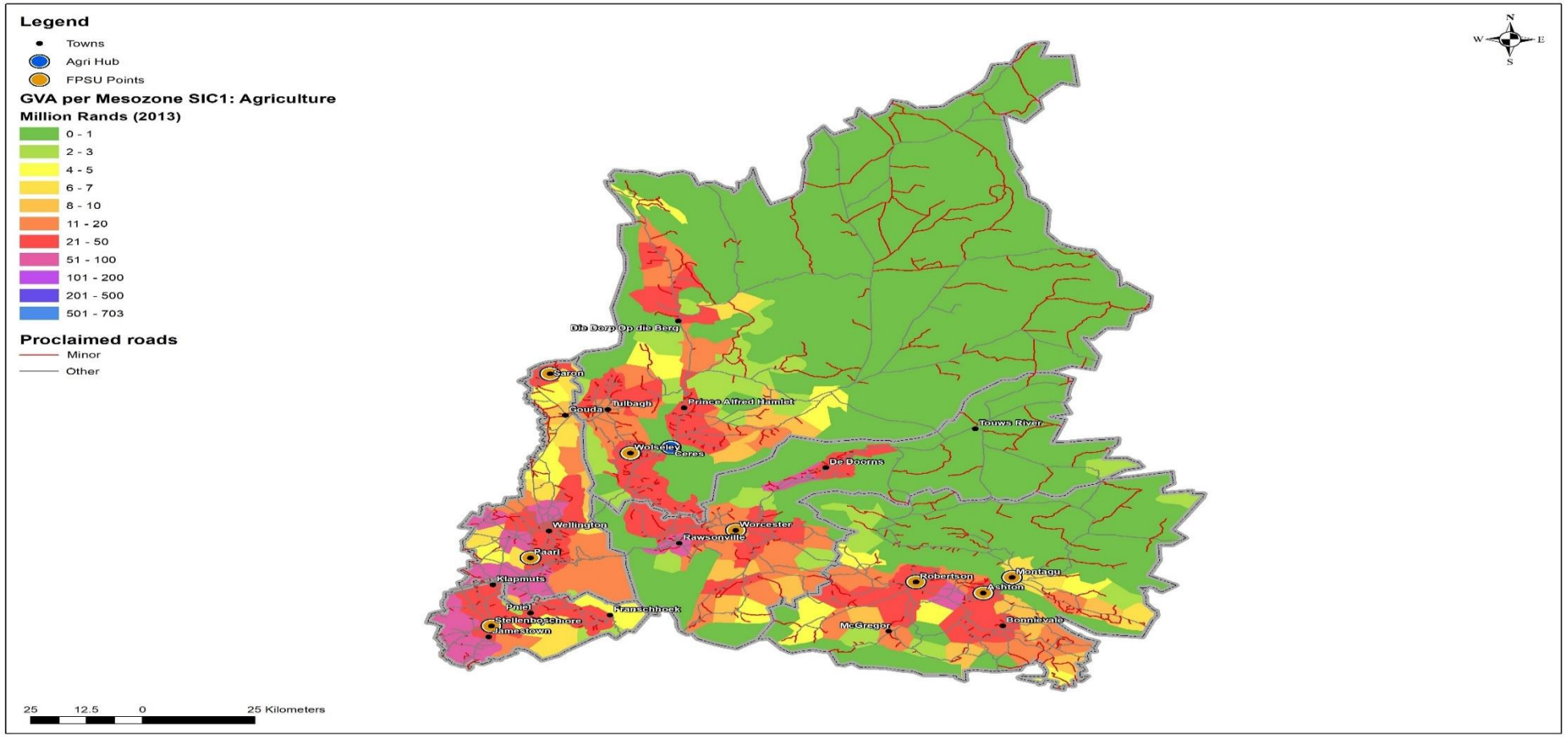
3.4 AGRI PARKS DISTRICT LEVEL IMPLEMENTATION: SPACE ECONOMY LINKAGES

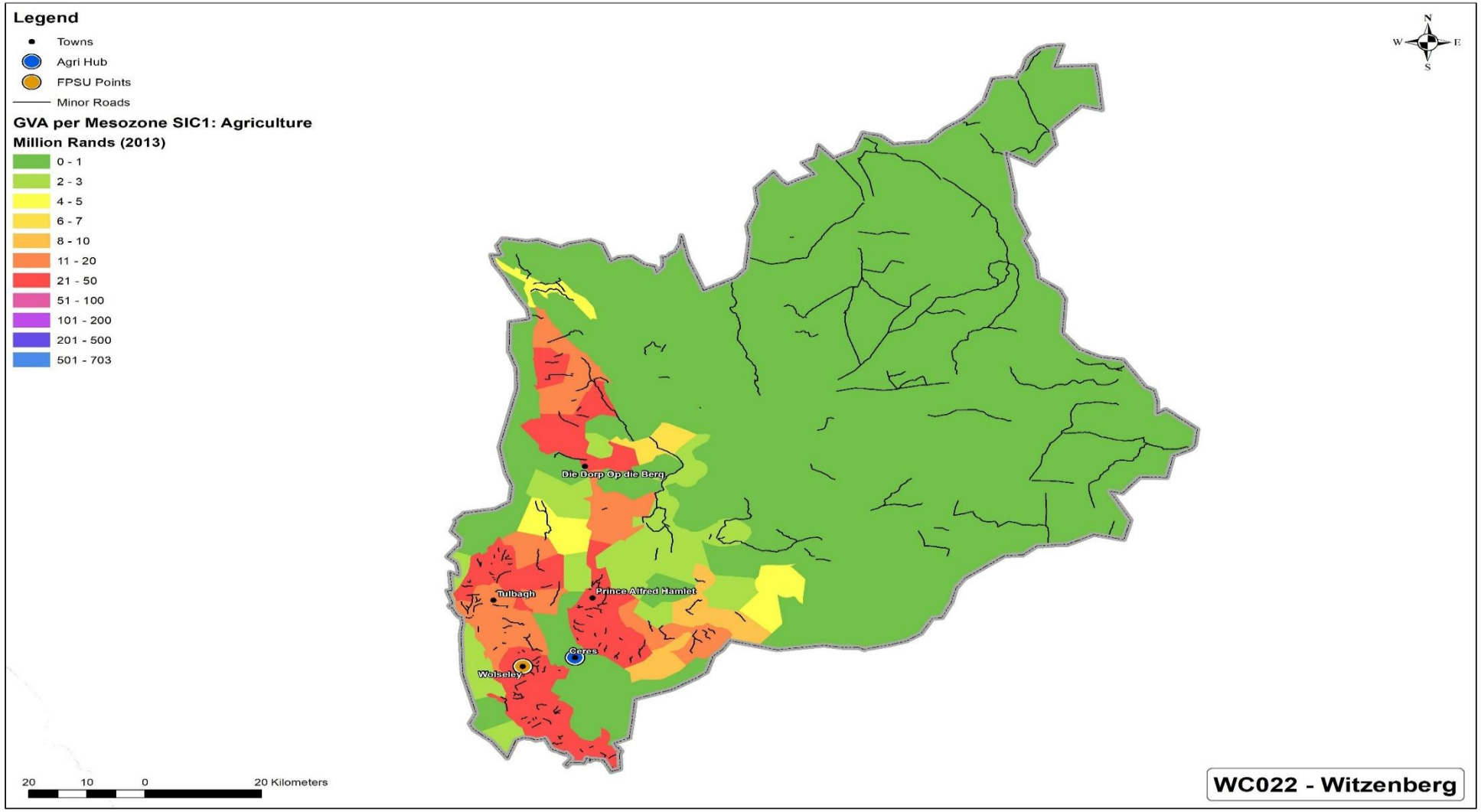
The Department of Rural Development and Land Reform (DRDLR) will be focussing resources and budgets on the various catchments surrounding the identified Farmer Production Support Units (FPSU's). These catchments have been identified based on a 30km distance along the existing road network and will enable various role players to target suitable strategic land for production support as well as land reform purposes. The DRDLR has prioritised Agri-park implementation in Saron, Stellenbosch, Ceres for the 2017/18 financial year and Paarl, Robertson, Montagu, Ashton and Worcester for the years thereafter. Here the focus will be on the establishment of the necessary Farmer Production Support (FPSU) Infrastructure as well as support to emerging farmers and the local community within the FPSU catchments (refer to Map 23 below).



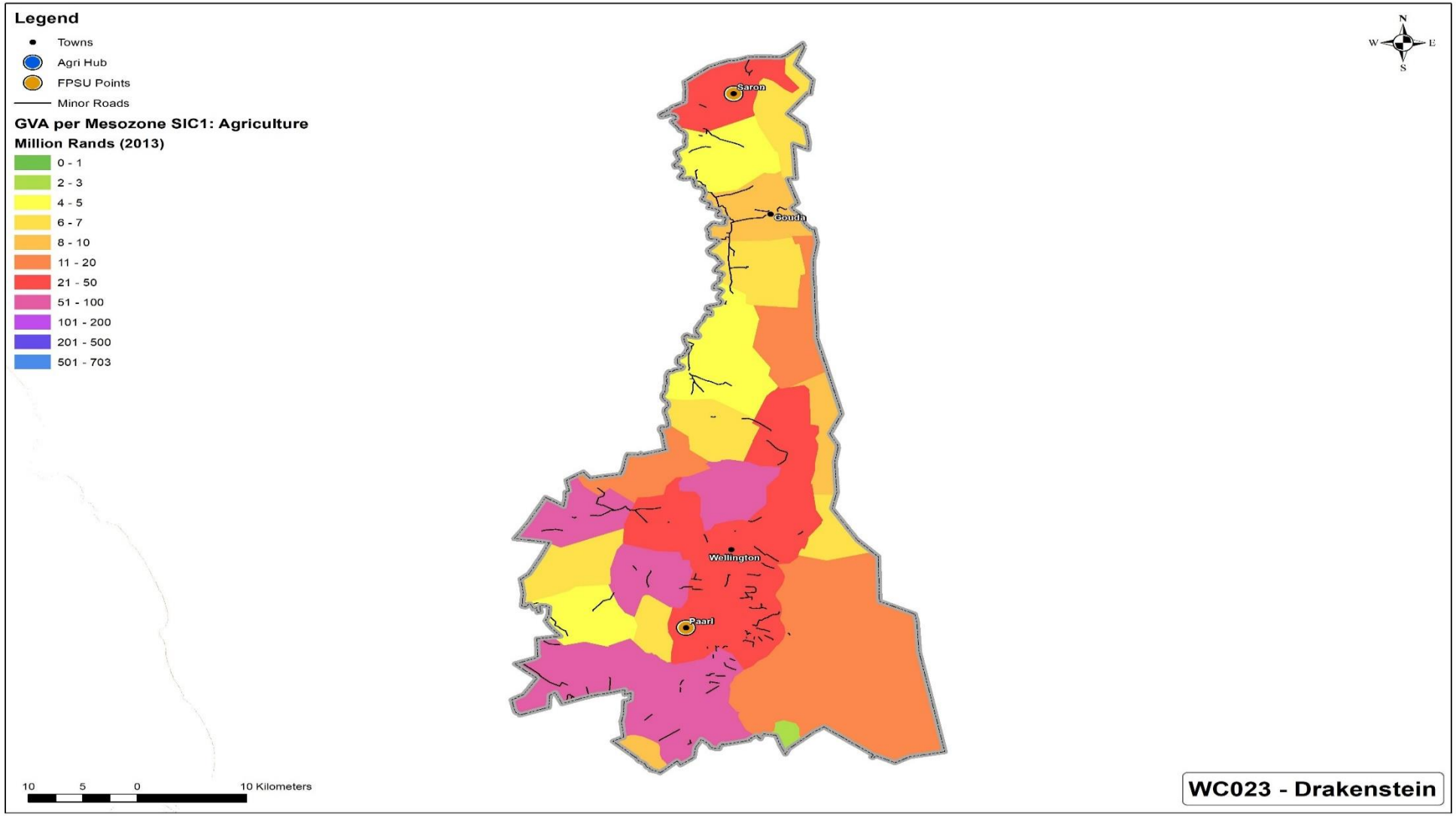
Map 22: Agri-Park components.

Map 23 illustrates the proposed Agri Park Components and Gross Value Added per Mesozone in terms of Agricultural production and important minor and primary routes. The CWDM fulfil a Roads agency function on behalf of the Western Cape Provincial Government. This function entails maintaining provincial roads but does not include important minor roads that are used by the agricultural sector due to insufficient funding that is provided by the Western Cape provincial government. It is crucial that these minor roads that at least fall within the middle to high end mesozones must be maintained due to regular use for transporting goods from these areas.

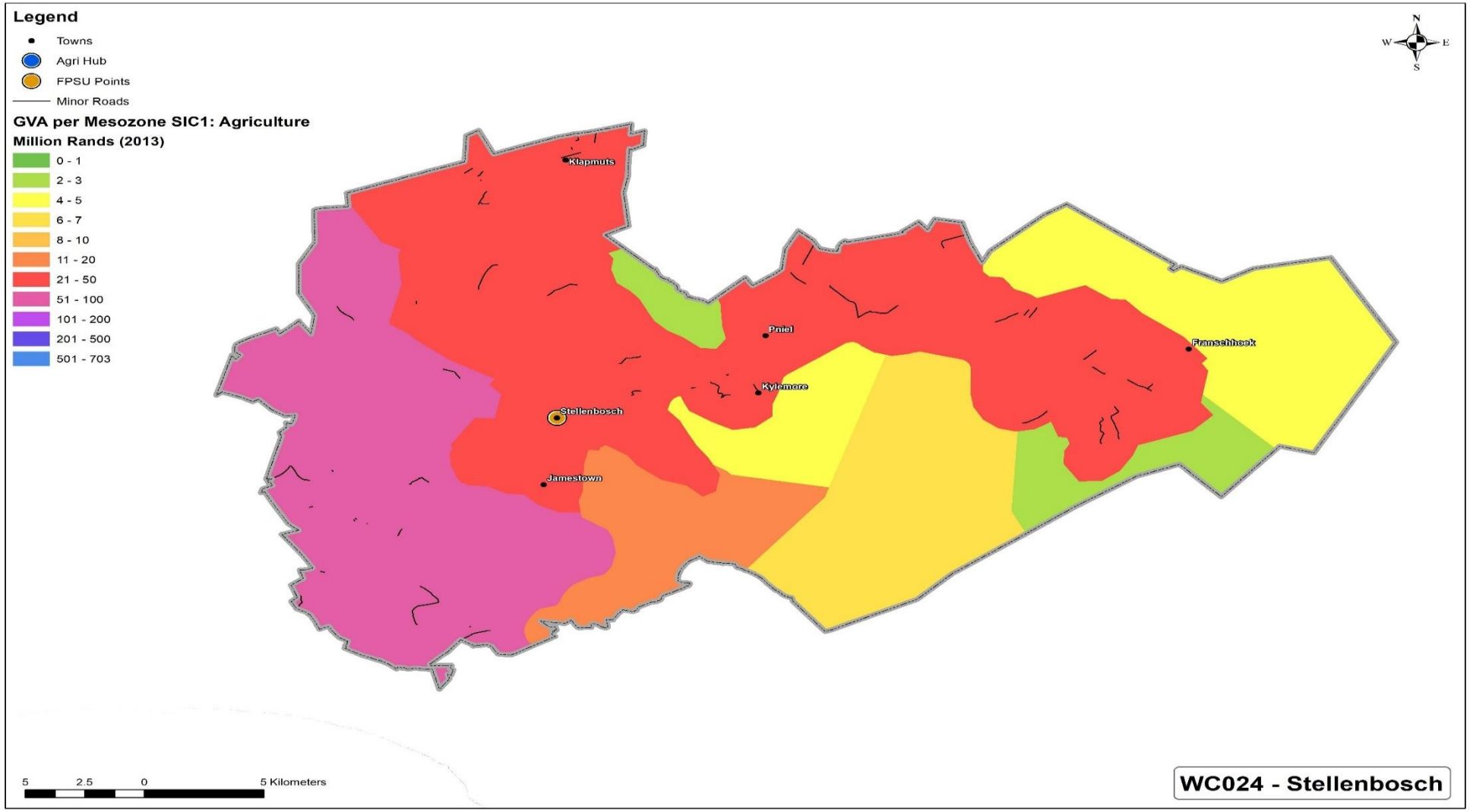




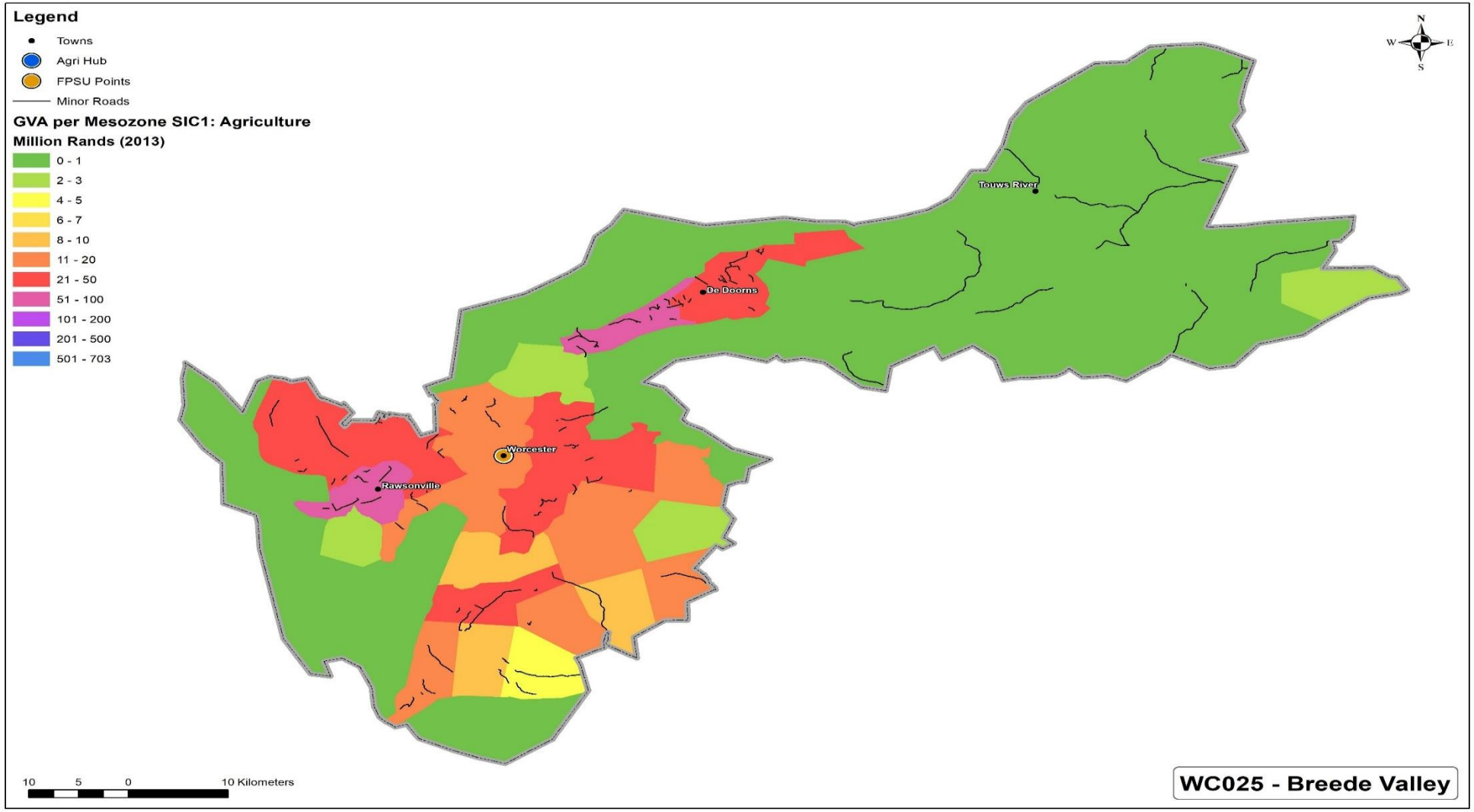
Map 24: Witzenberg agricultural mesozones and minor roads.



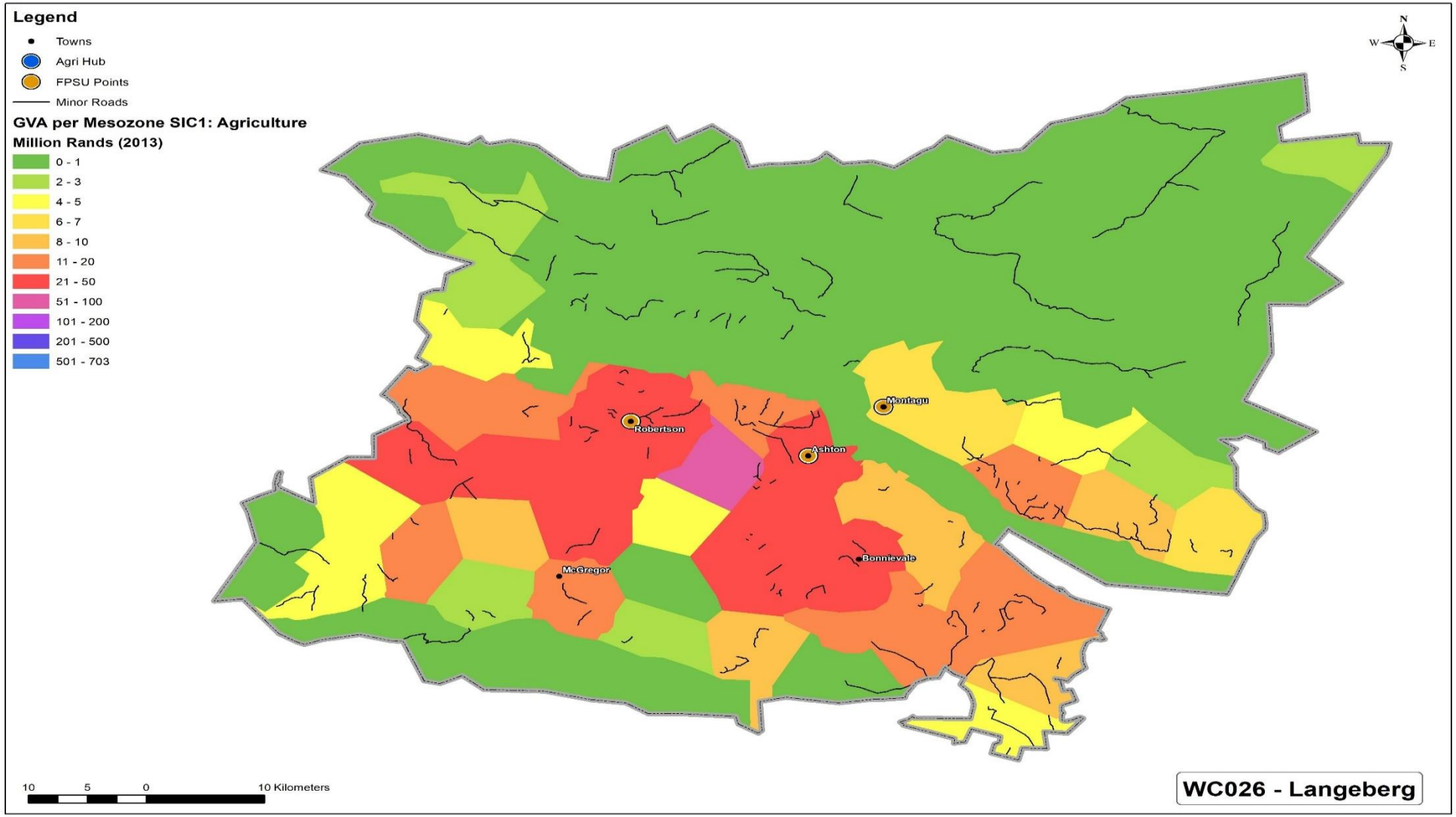
Map 25: Drakenstein agricultural mesozones and minor roads.



Map 26: Stellenbosch agricultural mesozones and minor roads.



Map 27: Breede Valley agricultural mesozones and minor roads.



Map 28: Langeberg agricultural mesozones and minor roads.

3.4.1 Key findings: Agri Parks District Level Implementation: Space Economy Linkages

3.4.1.1 Support is needed from all relevant stakeholders (National, Provincial, Local Government, NGO's and private sector) to ensure that the Agri Parks proposal is implemented successfully.

3.4.1.2 The CWDM fulfil a Roads agency function on behalf of the Western Cape Provincial Government. This function entails maintaining provincial roads but does not include important minor roads that are used by the agricultural sector due to insufficient funding that is provided by the Western Cape provincial government. It is crucial that these minor roads that at least fall within the middle to high end mesozones must be maintained due to regular use for transporting goods from these areas (refer to map 21).

3.4.1.3 The Department of Rural Development and Land Reform proposes the following agriculture related projects [Draft Rural Development Plan for the CWDM, 19 December 2016]; Table 20 (below): Agriculture projects; Livestock

Project Name	Project Description	Project Driver
Small scale farming on municipal commonage	This project entails the establishment of farming opportunities for existing small scale livestock farmers.	Witzenberg LM
Increasing the size of the communal in De Doorns	Communal land in De Doorns is being used for the grazing of livestock in the area. The demand for this land is exceeding supply, it is therefore proposed to make more land available.	To be determined (possibly Breede Valley LM)
The use of grey water for the irrigation of communal pasture	There is currently not enough water to irrigate the communal pasture in Worcester. It is therefore proposed that grey water/treated waste water be used for irrigation.	To be determined (possibly Breede Valley LM)
Agrarian reform program (Klapmuts)	This project entails the facilitation of grazing opportunities for small scale farmers on vacant land (portions of Erf 736 Klapmuts) and to support the local food chain	Drakenstein LM, CWDM
Commonage livestock pen in Ashton	Overcrowding of livestock and inappropriate housing of livestock has led to the realisation of the need for a livestock enclosure in the town of Ashton.	To be Determined
Osdam abattoir	This is an agri parks project aimed at increasing the meat processing capacity in Ceres (Skoonvlei industrial park). The abattoir will process sheep and cattle to produce red meat.	DRDLR
Local mobile egg farming operation	This is a mobile egg farming business. The owner of this business has been in operation for the past 43 weeks. He is currently seeking funding from DRDLR to expand his business as he believes there is considerable scope for demand for his product in the area.	To be determined

Table 21: Agriculture projects; Crops

Project Name	Project Description	Project Driver
Small farmers support program	This program supports small scale farmers in the district with the objectives of: • Promoting BBBEE • Creation of alternative income for seasonal and unemployed workers • Address issues of poverty and social development The program provides direct assistance such as the purchasing of equipment, provision of grants etc.to small scale farmers in various locations in the CWDM.	CWDM
Bella fruit cold storage	The BA Kamer company is seeking to build a controlled atmospheric complex (cold storage unit) for pears and apples in Bella Vista in Witzenberg LM. This will create the necessary capacity to meet the high demand for cold fruit storage in the area.	BA Kamer company /DRDLR
Agri life fruit project	This is a 65% black owned agricultural business focusing on agri processing and is situated in the town of Wolseley. The project aims to provide post-harvest services to fruit farmers in the Witzenberg area (mainly around the Ceres-Tulbagh area).	To be determined
CCS cold storage	This project entails the construction of a cold storage unit consisting/making use of 'dynamic control atmosphere' technology to increase the lifespan of fruits in storage. The project will be located in Ceres.	To be determined
Mentoring & training: Nduli	This project focuses on mentoring & training of a vegetable production enterprise which is a supplier to Freshmarkets and Ceres Spar.	DRDLR: REID

Table 22: Agriculture projects; Agri processing/

Project Name	Project Description	Project Driver
Cape Winelands District Municipality Skills Development	This project forms part of the Agri Parks Initiative and entails the skills development of the small holder farmers and farm workers in small scale agriculture, the fostering of business partnerships between private and public sector and the promotion of agricultural value chain linkages in the CWDM.	DRDLR
Agri processing hub (Saron)	Consolidate industrial requirements for surrounding farmers and local agriculture at central processing hub for small scale production and packaging. Identify and secure municipal land	Drakenstein LM
Upgrading of infrastructure to connect underutilised land in Worcester	Utilities infrastructure such as electricity cables and water pipes are needed to connect underutilised land in Worcester. It is envisioned that this land can serve the agricultural industry through creating new producers (small holder farmers on lease.)	To be determined (possibly Breede Valley LM)
Provision of an irrigation dam in the Touwsrivier area	It is proposed that an investigation into the provision of an irrigation dam is conducted, this dam is to supplement the available water for small holder farmers in the Breede Valley area.	To be determined (possibly Breede Valley LM)
Increasing the wall of the Brandvlei Dam	The aim of this project is to increase the water storage capacity of the Brandvlei dam. This may create further opportunities for increased agricultural activity.	Breede Valley LM
Agricultural Graduates (2015/16): Skills Development	This is the recruitment and placement of unemployed agricultural graduates on DRDLR: REID land reform projects. Graduates in the Cape Winelands specialise (as interns) in: Animal Production, Hydroponics, Plant Production, Agricultural Economics.	DRDLR: REID
Halaal Industrial park (possibly in Cape Winelands	Establishment of an industrial park dedicated to agri-processing of halaal food products for export and local consumption has been proposed. Cape Town and Stellenbosch has been proposed as possible sites for this project.	To be determined
Selfsorg centre – food garden in Prince Alfred Hamlet	The aim of this project is to enable the community to produce their own food and to beautify the town of Prince Alfred Hamlet. This will contribute to tourist activities as well as promote food security in the town.	WCDoA
Bella Vista food gardens	The aim of this project is to enable the community to produce their own food and to beautify the town of Bella Vista.	WCDoA
Bella Vista bakery	This project entails the funding of the construction of a bakery in Bela Vista which will focus on the processing of agricultural produce and the production of confectionary and pastry foods.	WCDoA/Casidra
Nduli food laboratory	This project will entail the establishment of a food lab in which the quality of food and agricultural products will be tested and graded before distribution.	WCDoA/Casidra
Agri processing plant in Ceres	The market for agri processing is not yet saturated. It has therefore been proposed that a new agri processing plant be developed focusing on the processing of crops such as deciduous and stone fruits.	To be determined
Ceres fruit growers' cold storage	Development of a fruit cold storage unit in the town of Ceres in order to overcome the seasonality of supply (especially of fruit).	Ceres Fruit Gowers Pty (Ltd) & DRDLR: REID

3.4.2 Implementation proposals:

FOCUS AREA:	AgriParks District Level Implementation: Space Economy Linkages
STRATEGIES	1. Strengthen rural support programmes for commercial and small-scale farming and develop the potential of the agricultural value chain. 2. Prioritize maintenance of minor roads in higher value mesozones.
PRIORITY:	HIGH

3.4.3 CWDM Implementation Plan: Agri Parks District Level Implementation: Space Economy Linkages

PROJECT/ACTIVITY:	BUDGET:	RESPONSIBLE:	DURATION:
Road Maintenance	R128 173 608, 00	Technical Services	2018/2019
Agri Parks Coordination	R47 500 & operational budget	Local Economic Development & Tourism Section	2018/2019
Infrastructure Rural Area Farmers	R1000 000, 00	Projects and Housing Section	Annually
Clearing of Road Reserves	R1 075 000, 00	Projects and Housing Section	Annually

4. BIODIVERSITY AND ECOSYSTEM SERVICES

4.1 BIODIVERSITY

The Cape Winelands District Municipality (CWDM) lies within one of the world's greatest biodiversity hotspots, the Cape Floristic Region (CFR) now known as the Core Cape Sub-Region (CCR), and includes parts of the Fynbos, Succulent Karoo, Albany Thicket and Afro-temperate Forest biomes[1]. The Fynbos and Succulent Karoo biomes have exceptionally high levels of plant diversity and endemism (species that occur only in a specific area and nowhere else). The CCR contains around 9383 vascular plant species with an endemism rate of just over 68%[1].

The high species diversity along with the range restriction of many species makes the CCR especially vulnerable. Of the 2577 taxa threatened nationally, 71% are located in the Western Cape[1]. They are predominantly from low-lying areas where agriculture and urbanisation has had the biggest Impact. Fynbos habitat loss is rated to be just over 30%. In the Fynbos biome 3087 taxa are of conservation concern with 1736 in danger of extinction[1]. 34% of taxa of conservation concern are due agricultural crops and 27% due to urbanisation and infrastructure developments. A further 20% of taxa are affected by invasive alien species. *Pinus* and *Hakea* species are affecting many mountain flora, a particularly important aspect for the CWDM which contains many mountainous areas.

Fire plays an important role in the health and maintenance of biodiversity in Fynbos. Many flower species have evolved to appear after fires and are then succeeded over the years by longer lived shrubs[1]. The composition of species is thus affected by the fire interval and the season in which a fire occurs. Increased fire frequency poses an especially big risk to slow growing alpine species and serotinous taxa. Those areas close to human settlements and roads are most at risk.

The Succulent Karoo boasts more than 5000 species with more than 50% of plant species endemic to the biome[2]. However, only around 5,8% of the biome is formally protected[3].

Being situated in such a unique area, the CWDM and local municipalities have a responsibility to aid in the protection of the CCR for present and future generations both locally and from around the world as it has such great value.

Development decisions should consider the Western Cape Biodiversity Spatial Plan and its accompanying handbook. Developments should especially avoid impacting on Critical Biodiversity Areas and Ecological Support Areas:

Critical Biodiversity Areas (CBAs): Areas that are required to meet biodiversity targets for species, ecosystems or ecological processes and infrastructure. These include:

- All areas required to meet biodiversity pattern (e.g. species, ecosystems) targets;
- Critically Endangered (CR) ecosystems (terrestrial, wetland and river types);

• All areas required to meet ecological infrastructure targets, which are aimed at ensuring the continued existence and functioning of ecosystems and delivery of essential ecosystem services; and

• Critical corridors to maintain landscape connectivity.

CBAs are areas of high biodiversity and ecological value and need to be kept in a natural or near-natural state, with no further loss of habitat or species. Degraded areas should be rehabilitated to natural or near-natural condition. Only low-impact, biodiversity-sensitive land uses are appropriate. In the maps, a distinction is made between CBAs that are likely to be in a natural condition (CBA 1) and those that are potentially degraded or represent secondary vegetation (CBA 2). This distinction is based on best available land cover data, but may not be an accurate or current reflection of condition.

Ecological Support Areas (ESAs): Areas that are not essential for meeting biodiversity targets, but that play an important role in supporting the functioning of PAs or CBAs, and are often vital for delivering ecosystem services. They support landscape connectivity, encompass the ecological infrastructure from which ecosystem goods and services flow, and strengthen resilience to climate change. They include features such as regional climate adaptation corridors, water source and recharge areas, riparian habitat surrounding rivers or wetlands, and Endangered vegetation.

ESAs need to be maintained in at least a functional and often natural state, in order to support the purpose for which they were identified, but some limited habitat loss may be acceptable. A greater range of land uses over wider areas is appropriate, subject to an authorisation process that ensures the underlying biodiversity objectives and ecological functioning are not compromised. Cumulative impacts should also be explicitly considered.

In the maps, a distinction is made between ESAs that are still likely to be functional (i.e. in a natural, near-natural or moderately degraded condition; ESA 1), and Ecological Support Areas that are severely degraded or have no natural cover remaining and therefore require restoration (ESA 2).

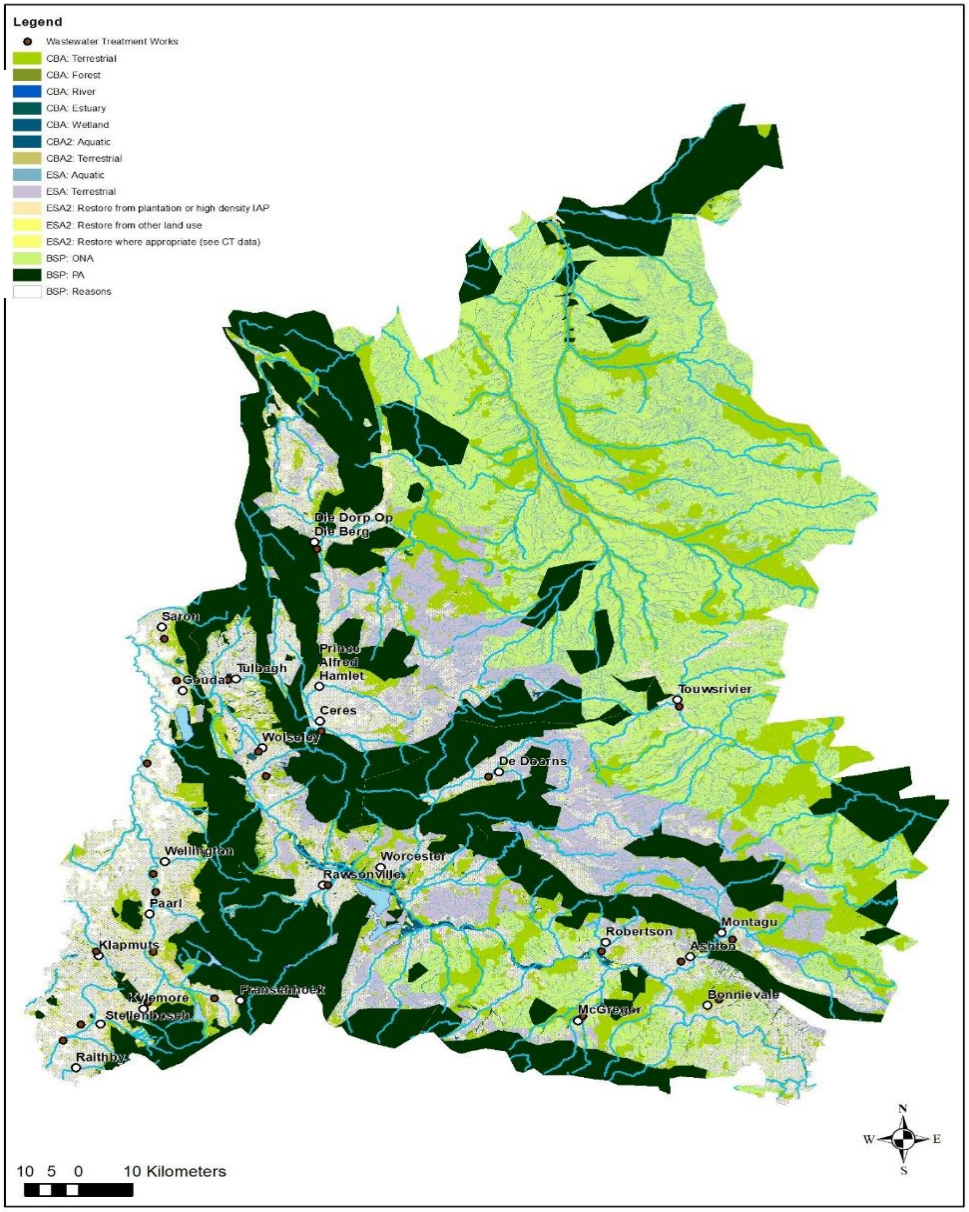
Other Natural Areas (ONAs): Areas that have not been identified as a priority in the current biodiversity spatial plan but retain most of their natural character and perform a range of biodiversity and ecological infrastructure functions. Although they have not been prioritised for meeting biodiversity targets, they are still an important part of the natural ecosystem.

ONAs should be managed or utilised in a manner that minimises habitat and species loss and ensures ecosystem functionality through strategic landscape planning. These 'other natural areas' offer considerable flexibility in terms of management objectives and permissible land uses, but some authorisation may still be required for high impact land uses.

Severely Modified to No Natural Remaining (NNR): Areas that have been modified by human activity to the extent that they are no longer natural, and do not contribute to biodiversity targets. These areas may still provide

limited biodiversity and ecological infrastructure functions, even if they are never prioritised for conservation action. These areas offer the most flexibility for land use, but these should be managed in a biodiversity-sensitive manner, aiming to maximise ecological functionality. Authorisation is still required for high-impact land uses.

Map 29 indicates areas important for the protection of biodiversity and ecosystem services (WCBSP 2017).



4.2 ECOSYSTEM SERVICES

Ecosystem services are the benefits humans get from ecosystems. These are grouped into four main categories: Provisioning (e.g. production of food and water), regulating (e.g. Control of climate and disease), supporting (e.g. Nutrient cycling and crop pollination) and cultural (e.g. Spiritual and recreational activities).

Sustainable cities are only possible through healthy ecosystems and incorporating ecosystem services into planning and development can lead to significant municipal savings, boost local economy and improve the quality of life for residents[4]. Maintaining ecosystem services is the most affordable approach to meeting people's needs[4].

The lack of understanding by policy makers of the economic value of fynbos ecosystems is often what leads to a lack of funding for environmental management[5]. This clearly demonstrates the need for local municipalities to evaluate the economic value of the ecosystems services in their area to facilitate funding. A 1997 study, taking into account water production, wildflower harvesting, hiker visitation, ecotourism visitation, endemic species and genetic storage, estimated the value of a 4km^2 area fynbos between R19 mil and R300 mil depending on the valuation and management methods (1USD = 4.50ZAR)[5].

The ICLEI TEEB Manual for Cities suggest the following steps to incorporate ecosystem services into urban management:

1. Specify and agree on the problem or policy issue with stakeholders
2. Identify which ecosystem services are most relevant
3. Determine what information is needed and select assessment methods
4. Assess (future changes in) ecosystem services
5. Identify and assess management/policy options
6. Assess the impact of the policy options on the range of stakeholders

Steps should be taken to ensure the protection of freshwater ecosystems due to the arid nature of the CWD and the Western Cape in general. Initiatives should be undertaken to clear alien species, restore/protect riparian zones and wetlands, and implement farming best practices, to maximise the amount of available water, its quality and maintain the flood regulating benefits gained from healthy freshwater ecosystems.

4.3 INVASIVE ALIEN SPECIES

Invasive alien plants are having a serious impact, not only on our biodiversity, but also on the ecosystem services provided by fynbos, especially relating to water provisioning. Invasive plants significantly increase the biomass and transpiration in water catchment areas reducing runoff and streamflow, meaning less water for the population. Reductions between 30 and 100 percent have been estimated for downstream yield due to alien species[5,6]. Furthermore, the increased fuel load created by alien plant infestations has increased fire frequency, a subsequent rise in surface water runoff and top soil erosion[6].

Invasive species are likely to have significant impacts on pollination, water purification, pest control, natural hazards and climate mitigation services obtained from ecosystems. They can narrow waterways and decrease water retaining capacity, thereby increasing flood risk[6].

Furthermore, invasive species can have detrimental effects on human wellbeing[7]. However, conflict can arise between those aiming to remove the invasive species and rural/poor communities who rely on the invasive populations for fuel and building material.

It has been demonstrated that invasive species can reduce the value of fynbos ecosystems by over US$11,75 million[7].

4.4 CAPE WINELANDS BIOSPHERE RESERVE

The Cape Winelands Biosphere Reserve (CWBR) was designated by UNESCO in accordance with the Man and the Biosphere (MAB) Programme

in September 2007. It covers an area of 322 030 ha. It is stated the CWBR would support the development of the Cape Winelands as "an area of excellence and good practice for people, culture and nature". The main purpose of the CWBR therefore is to promote biodiversity, sustainable development and education. It shares a border with the Kogelberg Biosphere Reserve in the south and covers an area northward along the Cape Fold Mountains and valleys of the Cape Winelands. It covers the Stellenbosch local Municipality and parts of the Breede Valley, Witzenberg and Theewaterskloof local municipalities (Map 30). It consists of three regions: the core (pristine area where no intrusive development is allowed), buffer zone (protects the core) and transition zone (sustainable land use practices are supported). Core areas are made up of wilderness areas, statutory protected areas, Critical Biodiversity Areas (CBA), Ecological Support Areas (ESAs), rivers and ecological corridors. Sections of the core area also form part of the extensive Cape Floral Region Protected Areas World Heritage Site. This was a serial nomination and the site was inscribed on the World Heritage List in 2004. It is made up of eight protected areas of which the Boland Mountain Complex includes, inter alia, the Hottentots Holland, Jonkershoek and Limietberg Nature Reserves, all of which form part of the CWBR core areas. The buffer areas are found next to core areas and are intended to reduce the impact of human activities on core areas as well as link core areas by creating biodiversity corridors. They mostly consist of natural and near-natural land which is not formally conserved in accordance with the Protected Areas Act, and could include private nature reserves and other conservation areas. Transitional areas allow for a variety of land uses, including intensive agriculture as well as urbanisation.

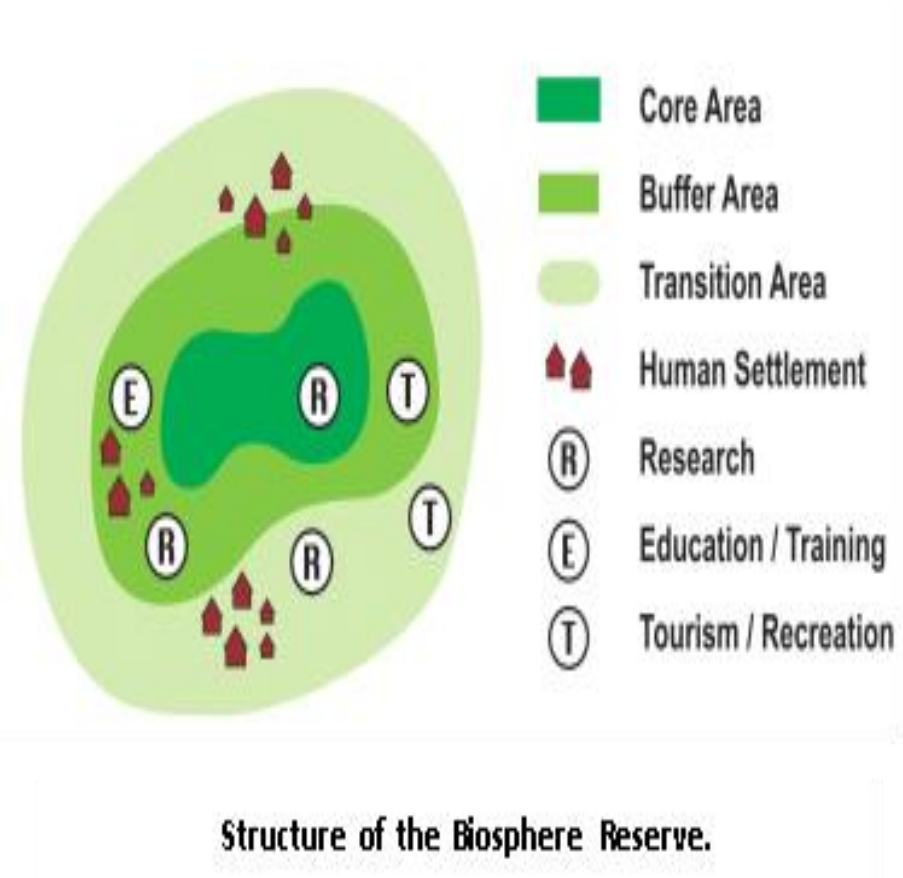
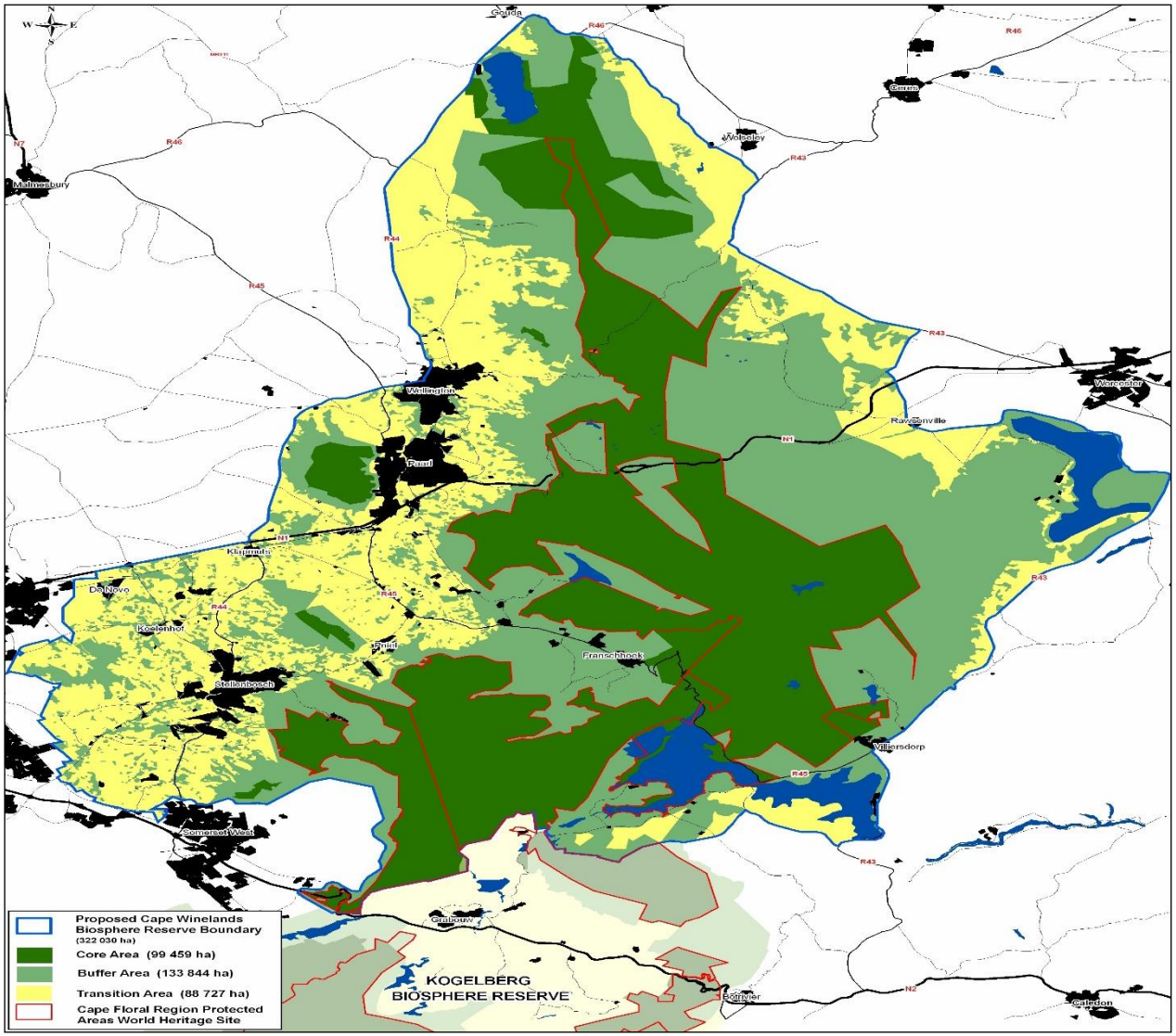


Figure 3; Structure of a Biosphere Reserve.



Map 30: Cape Winelands Biosphere Reserve

4.5 Key findings: Biodiversity and Ecosystem Services

4.5.1 Habitat loss.
4.5.2 Change in fire regime.
4.5.3 Invasive Alien Species.
4.5.4 Urban and agricultural development.
4.5.5 Over extraction of water sources.
4.5.6 Loss of ecosystem services.
4.5.7 River health/Lack of protection of freshwater ecosystems.
4.5.8 Integrate ecosystem services into planning and development.
4.5.9 Degradation of wetlands.
4.5.10 Stake holder disagreements relating to alien clearing.
4.5.11 Largely unknown economic value of ecosystem services.

4.6 Implementation proposals:

FOCUS AREA:	BIODIVERSITY AND ECOSYSTEM SERVICES
STRATEGIES:	1. Prevent the loss and degradation of Critical Biodiversity Areas (CBAs) and Ecosystem Support Areas (ESAs); incorporate CBAs into protected area networks. 2. Restore CBAs and ESAs where appropriate to maintain ecosystem services and protect biodiversity. 3. No further loss of wetlands; increase protection of freshwater ecosystems. 4. Ensure adequate buffer areas around wetlands and Core Areas. 5. Remove invasive alien species. 6. Maintain buffer areas of the Cape Winelands Biosphere Reserve to protect Core Areas and maintain the integrity of the reserve. 7. Ensure developments follow required processes and assessments and adhere to requirements of this document, the Western Cape Biodiversity Spatial Plan, the Cape Winelands Biosphere Reserve and other relevant SDFs and documents. 8. Promote conservation agriculture. 9. Improve and maintain ecological corridors across farms to facilitate the migration of flora and fauna. 10. Discourage the introduction of exotic species as outlined in the Biodiversity Act. 11. Minimise factors that impact on pattern and process integrity in Core Areas, CBAs and ESAs. 12. Encourage environmental education and non-consumptive low impact eco-tourism. 13. Harvest natural resources sustainably. 14. River bank development should be set back behind the ecological setback lines including flood and storm surge lines (1:50 year flood line: property boundaries; 1:100 years flood line: building platform).

TOOLS AND RESOURCES:	15. Cape Farm mapper: https://gis.elsenburg.com/apps/cfm/ 16. Western Cape Biodiversity Spatial Plan 2017: http://bgis.sanbi.org/Projects/Detail/194 17. Cape Winelands Biosphere Reserve: http://capewinelandsbiosphere.co.za/
PRIORITY:	High

4.7 CWDM Implementation Plan: Biodiversity Conservation

PROJECT/ACTIVITY:	BUDGET:	RESPONSIBLE:	DURATION:
EPWP Invasive Alien Vegetation Management	R 2 030 000, 00	Land Use and Spatial Planning Section	Annually
River Rehabilitation	R 360 000, 00	Land Use and Spatial Planning Section	Annually
Service Delivery Agreement with Cape Winelands Biosphere Reserve	R150 000, 00	Land Use and Spatial Planning Section	Annually

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5. CLIMATE CHANGE

5.1 RAIN AND TEMPERATURE

Although there are variations between models, some predictions of future climate patterns are more certain. Climate models indicate hotter and dryer conditions in the Western Cape in the mid future (2046 to 2065)[1–5]. In the CWDM we can expect a decrease in mean annual rainfall and the number of days with a rainfall above 5mm,10mm and 20mm[1]. Furthermore, there is a chance of a slight increase in the number of days with no rain in the CWDM[1]. Even though, the mean annual rainfall will likely decrease, it is possible that we may experience an increase in rainfall intensity. This would increase flooding risks.

Despite evidence of a drier future for the WC and CWDM, there are also predictions of increased rain over the mountains, and so in spite of predictions of a drier future it is important that planning takes into account the possibility of a wetter future[6]. However, since a drier future is of higher concern planning should prioritize preparing for it. There are also possibilities of rainfall shifting into autumn and spring[6].

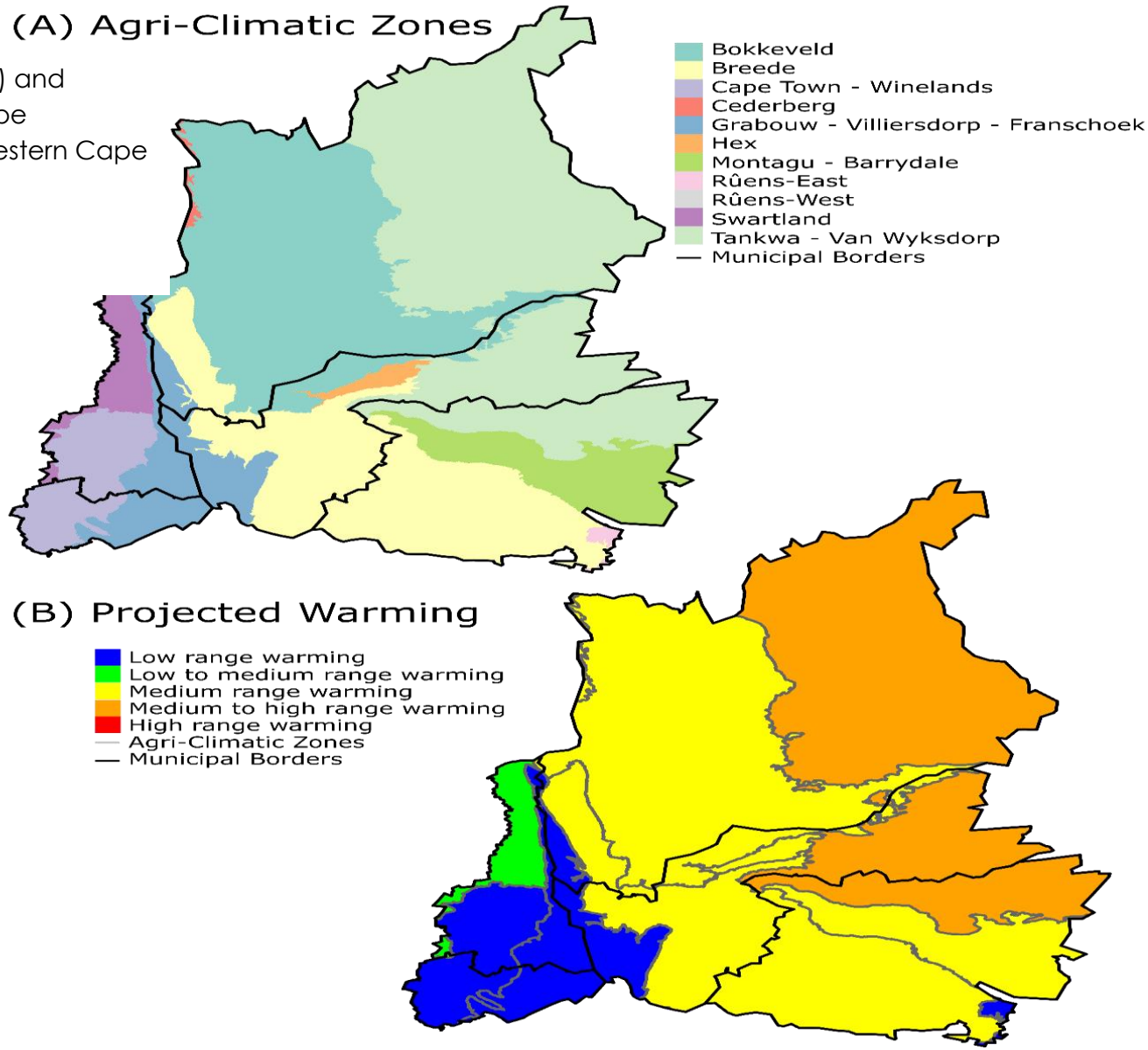
Streamflow is predicted to decrease in the future, with future demand for water to exceed the supply due to climate change[7,8]. A reduction in streamflow is predicted for the Breede River, to the point where it may drop below the ecological requirement[8]. The Breede River is an important water source during the summer months, and so a reduction in streamflow is of great concern.

Temperatures are predicted to increase by 1.5˚C to 3˚C across the Western Cape[9]. In the CWDM, local municipalities covering, and to the south west of the Boland Mountains, will experience low levels of warming (Fig). This includes Stellenbosch and Drakenstein municipalities as well as small parts of the Witzenberg and Breede Valley municipalities (Fig 4.1). However, the Langeberg Municipality and the majority of the Witzenberg and Breede Valley municipalities will experience medium to high warming (Map 32 (B)).

5.1.1 Agriculture

Due to the combination of decreased rainfall and increased temperatures, agricultural crops and livestock will experience increased heat and water stress. Increased evapotranspiration could lead to crops experiencing drought conditions even when rains have been good[5].

The total agricultural potential of the CWDM remains high as long as dams fill up in the future [6]. To the Southwest of the CWDM irrigation is extensive and due to the existing infrastructure, these producers are well positioned to deal with lower rainfall. However, the Tankwa-van Wyksdorp agro climatic region to the Northeast of the CWDM will experience a slow decline in productivity due to increased temperatures and decreased water availability[6].



Map 31: Agri-climatic zones (A) and projected warming for the Cape Winelands District (B). Data: Western Cape Department of Agriculture.

Increased reliance on irrigation would place even further stress on our water resources. Although, planting drought resistant crops or varieties could mitigate the reliance on irrigation.

Additionally, warming will have a significant impact on Daily Positive Chill Units (DPCU). In warmer areas, an increase in as little as 1˚C will severely affect apples, while an increase of 2˚C will cause all years to not reach the required 800DPCU target for current cultivars[10]. Cooler areas (Koue bokkeveld) will be able to absorb an increase of up to 2˚C, and still exceed 800DPCU.

Similarly, wine vineyards in the hotter areas are most at risk while those in cooler areas such as southern mountain slopes will have some buffering. Cultivars that are most at risk include Shiraz, Merlot, Sauvignon Blanc and Chardonnay[11]. Although there is differing views of the total impact on wine grape production, there is concern that vineyards may move higher up mountains into cooler regions causing conflict with conservation goals[11].

Of great concern is the water quality in the Lower Berg River. Irrigation water not complying with standards for export, could lead to serious economic impacts. Further impacts from climate change could include smaller fruit, changes in pest and disease levels, fruit colour, seasonal shifts and insufficient ground water recharge among others[10,12]. Because the relationship between climate change and agriculture is so complex, it's important that decision makers and planners make use of the resources provided by the SmartAgri project and consult experts since each crop and cultivar may require a different response.

Export markets are changing in response to climate change, with importers aiming to become carbon neutral by reducing "food miles". Most of the pressure to reduce their footprint is put on suppliers[6]. However, the main driver for this change is still profit. Local producers and suppliers can take advantage of this "green" market by supplying and producing "green" products.

Conservation agriculture (CA) has great potential to reduce greenhouse gas emissions (GHG) emissions from the agricultural sector and to improve food security. Reports of improved soil fertility, yields, water retention and a decrease in water and wind erosion have emanated from the practice of CA. A look into the effect of CA on wheat production showed that a no-till approach reduced diesel consumption by at least 60% compared to traditional methods.

The major sources of GHG emissions in the agricultural sector are electricity, due to the large-scale use of coal power stations, and diesel consumption. It is estimated that at a farming level, 70% of GHG emissions are from electricity consumption and 13% from diesel consumption for fruit and wine farms.

Table 23: Impact of climate change on agro-climatic zones of the CWDM (Source: Midgeley et al, 2016)

Agro-climatic zone	Municipalities	Crops	Agricultural Potential (2040-2060)
Cape Town- Winelands	Stellenbosch, Drakenstein Municipalities	Wine and table grapes, wheat, stone fruit, vegetables, olives, canola, berries, Broilers, egg layers, pigs	Remains high as long as dams fill up
Swartland	Stellenbosch, Drakenstein Municipalities	Wheat, wine and table grapes, canola, lovies, dairy, pigs, sheep, cattle	Remains high for small grains but with increasing yield variability
Grabouw-Villiersdorp-Franschhoek	Stellenbosch, Drakenstein, Breede Valley and Witzenberg Municipalities	Pome fruit, wine grapes, wheat, barley, stone fruit, berries	Remains high as long as dams fill up
Breede	Langeberg, Breede Valley and Witzenberg Municipalities	Wine grapes, wheat, stone fruit, pome fruit, olives, Broilers, egg layers	Remains high as long as dams fill up
Hex	Breede Valley Municipality	Table grapes, citrus	Remains high as long as dams fill up
Montagu-Barrydale	Langeberg Municipality	Stone fruit, wheat, barley, wine grapes, pome fruit, citrus, olives, sheep	Remains high as long as dams fill up
Tankwa-Van Wyksdorp	Langeberg, Breede Valley, Witzenberg Municipalities	Wheat, stone fruit, wine grapes, sheep, goats, pigs, cattle, game, ostrich, dairy	Slowly declining productivity constrained by heat and water availability
Bokkeveld	Breede Valley, Witzenberg Municipalities	Pome fruit, wheat, stone fruit, onions, potatoes, cattle	Remains high as long as dams fill up
Ruens-east	Langeberg Municipality	Wheat, barley, canola, sheep, cattle, dairy, pigs, ostrich	Currently becoming marginal for small grains but could improve given possible increases in rainfall

5.1.2 Biodiversity and Ecosystem Services

Biodiversity and intact ecosystem services will be vitally important for adaptation to climate change. "Soft" approaches, such as using intact wetlands for flood control, may be more effective and cost less than "hard", engineered approaches, such as building dams[13]. Linking biodiversity, development and social goals are thus important to adapting to climate change and building a sustainable future.

It has been estimated that climate change may lead to the extinction of 21% to40% of Protea species[14]. This is largely driven by the loss of suitable habitat range, especially the loss of suitable ranges within protected areas as ranges shift due to climate change[15]. It follows that corridors should be created to facilitate the movement of species in response to climate change. It is furthermore paramount that critical biodiversity and ecological support areas are conserved.

Fire will play a significant role in shaping biodiversity in the future. They are likely to increase in both frequency and intensity. Shorter fire intervals will decrease population viability compared to longer fire intervals[16]. Hence, fire management will play an important role in mitigating the impact on biodiversity.

Hannah et al. (2007) found that taking into account both current and future conservation goals simultaneously, can significantly reduce the area needed to attain conservation goals and so in turn the costs[17]. Consequently, it is recommended that environmental/conservation planners consider not only current conservation goals but also those of the future simultaneously.

*This does not account for land use change in the future, which will also be strongly affected by climate change

5.1.3 Infrastructure

Changes in temperature and precipitation will also affect the speed at which infrastructure decays and the amount of maintenance required to keep buildings and roads up to standard.

Higher temperatures will increase the rate at which new cracks form and reduce the expected lifetime of paved roads[18]. Increased bleeding, flushing and rutting may be expected on older or poorly constructed roads[18]. Increased rain intensity could cause erosion damage, especially to dirt roads, even though overall rainfall may decrease.

Costs incurred due to buildings is predicted to be of a much greater concern[19]. Most of the costs will be due to school buildings as they form the largest number of public buildings. However, of concern are the costs from hospitals, since this can be directly linked to health risks. Chinowsky et al (2012)[19] assumed in their analysis that costs due to damage to cladding and roofing would be minimal; thus costs are mainly attributed to heating, ventilation and air conditioning (HVAC) systems.

Early adaptation by upgrading roads and buildings may reduce the costs incurred by climate change in the long term. However, in some cases opportunity costs can be higher for the adaptation scenario than for the no adaptation scenario. Since data is lacking, especially at a district and local scale, it is important that studies are done to assess the impact for local municipalities to inform decision making.

5.1.4 Socio-economic

The poor and disadvantaged will be the most affected by climate change as they lack the resources to deal with the impacts. In the agricultural sector these include smallholder farmers, peri-urban farmers, new farmers and farm workers (especially seasonal and ad-hoc labourers)[6]. Attention should be given to women in these groups. They regularly face more obstacles as they are often the caretakers of the families and so are choice limited.

Climate extremes pose a significant threat to farm workers. Threats include among others heat stress, water borne diseases due to poor water quality, vector borne diseases and risks from fires[6]. Workers may also experience decreased productivity due to warming, worsened by food insecurity, hunger and malnutrition[6]. Climate change may also worsen existing health challenges related to HIV and TB.

Decreased agricultural production would lead to decreased employment.

It is predicted that urban-rural migration will form a large part of future urbanisation and suspected to be greatest in countries and regions most affected by climate change[20]. Increased urbanisation will place extra stress on cities to supply basic services to the increasing population. As subsistence farmers and small scale are likely to be hardest hit from climate change, and so migrate to cities, it will be important to introduce measures to help them adapt and allow them to continue to rely on natural resources for their livelihoods. However, curbing urbanisation is rarely successful and local governments should be prepared. Buhaug and Urdal(2013)[20] found that economic shock was one of the best predictors for social disorder and so local governments should likely focus more on mitigating the economic impacts of climate change than fight increased urbanisation due to climate change.

Adger et al. (2008)[21] argues that there are social limits to adaptation. These limits are affected by ethics (how and what we value), knowledge (how and what we know), risk (how and what we perceive) and culture (how and why we live). Social limits, however, are not constant and may be changed. Society's ability to adapt in a timely fashion is severely hampered by the interaction between individual and societal characteristics, and underlying values which form subjective yet changeable limits. Risk perceptions is a highly important characteristic, since individual adaptation affected by whether impacts, past or future, are perceived as a risk and should or could be acted on.

Nonetheless, community-based initiatives and activities can help individuals feel enabled and implement behavioural alternatives[21]. This suggests the importance for the continuation and implementation of education and community-based initiatives to be able to successfully adapt to climate change in the present and future. However, there is currently little indication of larger scale initiatives with equivalent outcomes.

5.2 Key findings: Climate Change

5.2.1 Increased dependence on irrigation due to warming and reduced rainfall.
5.2.2 Increased heat and water stress for citizens, animals and crops.
5.2.3 Increased flooding risk due to increased rainfall intensity.
5.2.4 Higher incidence of heat waves.
5.2.5 Increased fire risk – impacts agriculture, biodiversity and health.

5.2.6 Possible increase in prices of agricultural products due to reduced yields and/or increased farming costs.
5.2.7 Increased strain on ecosystem services.
5.2.8 Possible job losses due to impact on agriculture.
5.2.9 Potential reduction in agricultural exports due to decreased quality.
5.2.10 Loss of ecotourism due to biodiversity loss and degradation of natural environment.
5.2.11 Loss of biodiversity.
5.2.12 Loss of ecosystem services.
5.2.13 Increased food prices.
5.2.14 Loss of international export standards due to poor water quality in the Berg river.
5.2.15 Increased heat-island effect.
5.2.16 Social limits to adaptation.

5.3 Implementation proposals:

FOCUS AREA:	CLIMATE CHANGE
STRATEGIES:	1. Find ways to reduce water demand and investigate water efficient ways of expanding the agricultural economy 2. Clear alien invasive species 3. Protect riparian zones a. Allow for a buffer along river banks to protect the banks from flood damage b. No further development may be permitted on river banks that are prone to flooding and below the 1:50 year flood lines (erven) and the 1:100 year flood lines (building platforms) 4. Prevent the loss and degradation of Critical Biodiversity Areas (CBAs) and Ecosystem Support Areas (ESAs) 5. Restore CBAs and ESAs where appropriate to maintain ecosystem services and protect biodiversity 6. Prevent further loss and degradation of wetlands 7. Reduce greenhouse gas emissions 8. Ensure new developments to adhere to standards of high energy efficiency, low embedded carbon and good accessibility to public transport 9. Promote changes to existing developments that will increase the efficiency of energy use in power, heating and transport (e.g. insulation) 10. Promote land uses that serve as carbon sinks (e.g. community woodlands) 11. Encourage the development and use of renewable resources of energy, preferably local (e.g. solar, wind power, biomass etc.) 12. Reduce the amount of waste (particularly biodegradable waste), the volume sent to landfill and maximise capture and use of greenhouse gasses, particularly methane (e.g. waste minimisation, composting)

	13. Guide new development to locations that best offer protection from 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) 14. 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.) 15. Promote changes to existing development that will enhance its resilience or adaptability to likely impacts during its lifetime (e.g. improving site drainage; introducing grey water recycling etc.) 16. Increase in the length and width of ecological corridors in altitudinal, North-South and East-West directions 17. The current area of each of the natural areas should not be reduced or fragmented 18. Institute measurable outcomes to track successes and failures (Area covered by invasive plants, carbon emissions etc.)
TOOLS AND RESOURCES:	19. Cape Farm mapper: https://gis.elsenburg.com/apps/cfm/ 20. Western Cape Biodiversity Spatial Plan 2017: http://bgis.sanbi.org/Projects/Detail/194 21. Cape Winelands Biosphere Reserve: http://capewinelandsbiosphere.co.za/
PRIORITY:	High

5.4 CWDM Implementation Plan: Climate Change

PROJECT/ACTIVITY:	BUDGET:	RESPONSIBLE:	DURATION:
EPWP Invasive Alien Vegetation Management	R 2 030 000, 00	Land Use and Spatial Planning Section	Annually
River Rehabilitation	R 360 000, 00	Land Use and Spatial Planning Section	Annually
Service Delivery Agreement with Cape Winelands Biosphere Reserve	R150 000, 00	Land Use and Spatial Planning Section	Annually
Provision of Water to Schools (Water Tanks)	R500 000, 00	Projects and Housing	Annually
Infrastructure Rural Area Farmers (Renewable energy)	R1000 000, 00	Projects and Housing Section	Annually
Subsidy: Water/sanitation-Farms	R1000 000, 00	Municipal Health Services	
Revision of Risk Assessment	R243 500, 00	Disaster Management Section	2018/2019

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