2nd Generation

Integrated Waste Management Plan (IWMP)

Prepared for

PRINCE ALBERT MUNICIPALITY

Private Bag X53, Prince Albert, 6930
Tel: 023 5411320 Fax: 023 5411321
E-mail: karin@pamun.gov.za; pedro@pamun.gov.za

By

The Department of Environmental Affairs and Development Planning

4th Floor, Property Centre
1 Dorp Street, Cape Town
Tel: 021 483 2712 Fax: 021 483 0750

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1. INTRODUCTION AND GENERAL DESCRIPTION

1.1 INTRODUCTION

The Prince Albert Municipality drafted the first generation Integrated Waste Management Plan (IWMP) in 2005 and the Department of Environmental Affairs and Development Planning (DEADP) assessed the IWMP and provided recommendations which were dealt with in the following manner –

- The Public Participation Process in the Prince Albert Municipality is hampered by the vast distances between the respective towns/communities and the lack of interest in attending ward committee or public meetings (according to a municipal communication survey conducted in October/ November 2013). The municipality's main communication mechanisms include the following –
    - preference for communication directly from the municipal offices;
    - notices on strategic notice boards within the community (Community centres); and
    - telephone calls and word of mouth notifications via the Community Liaison Officers;
- The current municipal waste management by-law is under review and will be replaced by an Integrated Waste Management By-law which is currently being drafted.
- The municipality experiences challenges with illegal dumping due to the lack of funding for waste management awareness and education. The municipality will establish procedures and mechanisms to identify and record illegal dumping (waste types, quantities and removal cost) hotspots in order to minimise illegal dumping.
- Public Health Care Risk Waste Facilities have been registered on the Integrated Pollutant and Waste Information System (IPWIS) and the Prince Albert Hospital is reporting via IPWIS. The municipality will be able to request quantities for health care risk health care risk waste reported via IPWIS and this will also be compared to quantities that will be requested from the health care service provider, Solid Waste Technology.
- Health care risk waste is an area of great concern in Prince Albert Municipality. The illegal dumping and co-disposal of health care risk waste with general

household waste on unsuitable sites is on the increase (Prince Albert Spatial Development Framework (SDF), February 2014). Furthermore, the general methods currently employed to destroy and dispose of health care risk waste are in many instances simply unacceptable.

- Low educational levels are prevalent especially in the low income areas of the municipality and therefore a large sector of this community is unemployed and waste is not a priority.

Municipalities are required in terms of section 11(4) of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) ("Waste Act") to submit IWMPs to the Member of the Executive Council (MEC) for endorsement. The promulgation of the Waste Act on 1 July 2009 was a key milestone in the transformation of waste legislation and in improving waste management practices to include all aspects of the waste management hierarchical approach (**Figure 1**). This approach is at the centre of the National Waste Management Strategy (NWMS, 2011) and focuses mostly on the prevention and minimisation of waste generation through sustainable practices as well as ensuring the minimal disposal of waste on landfills.

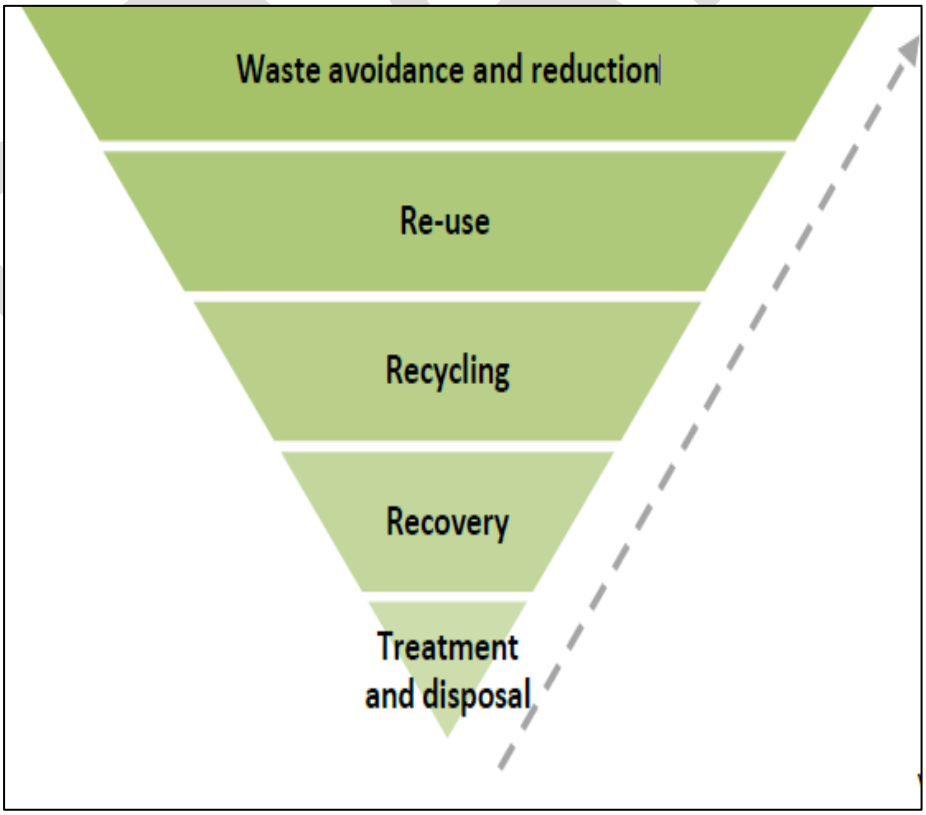


Figure1: The Waste Management Hierarchy, NWMS 2011

1.2 GENERAL DESCRIPTION

Prince Albert is located about 400km north of Cape Town and about 170km south of Beaufort West on the N1. The municipal area covers 8 153 km^2 (**Figure 2**) with a population of 2 people per hectare and it is divided into 4 Wards (**Table 1**).

Table 1: Ward areas of the Prince Albert Municipality	
Wards	**Areas**
1	Leeu Gamka & Prince Albert Road
2	Prince Albert North
3	Prince Albert South
4	Prince Albert North-end (Rondomskrik) & Klaarstroom

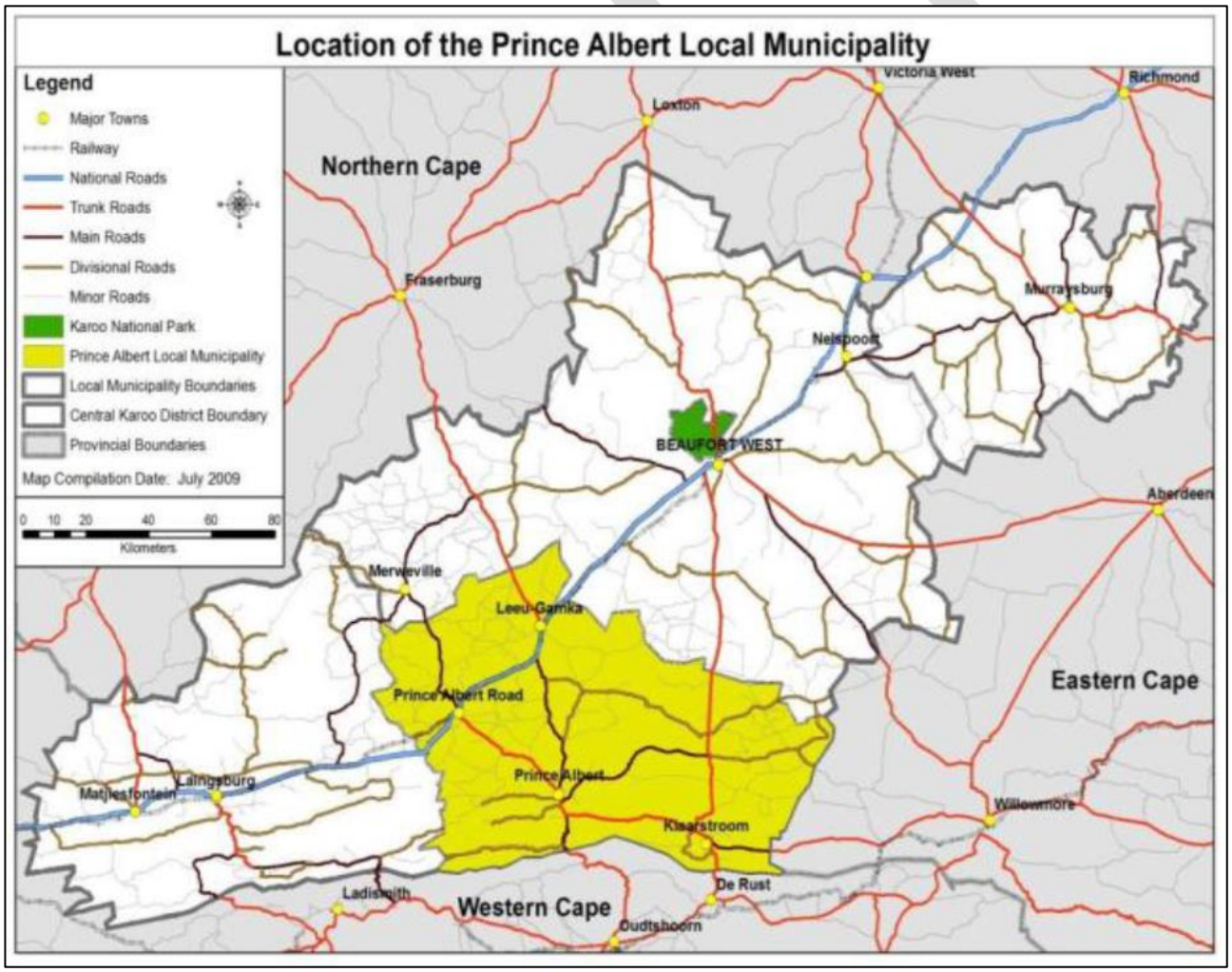


Figure 2: Prince Albert Municipal area (Integrated Development Plan (IDP), 2013-14)

Topography

The topography of the Prince Albert Municipality consists of gently undulating plains and the Swartberg mountain rage towards the south of provides a natural barrier between the interior and the Southern Cape coast. The Swartberg mountain range is one of the longest in South Africa that spans some 230 km form Laingsburg in the west to Willowmore and Uniondale in the east. This range of mountains comprises predominantly of the Table Mountain group with sand stone strata and rock formations and was once considered almost impenetrable, until the Meiringspoort and Seweweekspoort mountains were constructed.

Climate

The mean annual temperature for Prince Albert Municipality ranges between 17 and 20°C towards the north western side of the municipality, between 8 and 12°C towards the south eastern side and between 13 and 16°C towards the southern side. The maximum temperatures are experienced between December and February and reach levels of up to 30°C varying between 17°C and 30°C. The minimum temperature is experienced between June and August and reaches a low of 4°C, varying between 4°C and 17 °C.

The mean annual precipitation towards the Groot Swartberg mountain range, south of Prince Albert, ranges between 474 and 926 mm. The highest rainfall months are generally recorded in April and October and November is generally the lowest rainfall month.

Geology

Figure 3 below depicts the geology of the municipal area which comprises of four types of geological formations, namely Mudstone, Arenite, Shale and Tillite. The majority (75%) of the municipality comprises of Mudstone and occurs within a succession of coarse-grained sandstone alternating with fine-grained mudrock. Arenite typically occurs along the coastlines of Southern Africa within the sand deposits and are formed when weathered grains are consolidated into rock via consolidation and cementation. Shale which covers 57% of the municipality occurs within a succession of coarse-grained sandstone altering with fine-grained shale (mudrock). Tillite consists of a fine-grained groundmass of fragments of a number of rock types and occurs along the rim of the Karoo Basin.

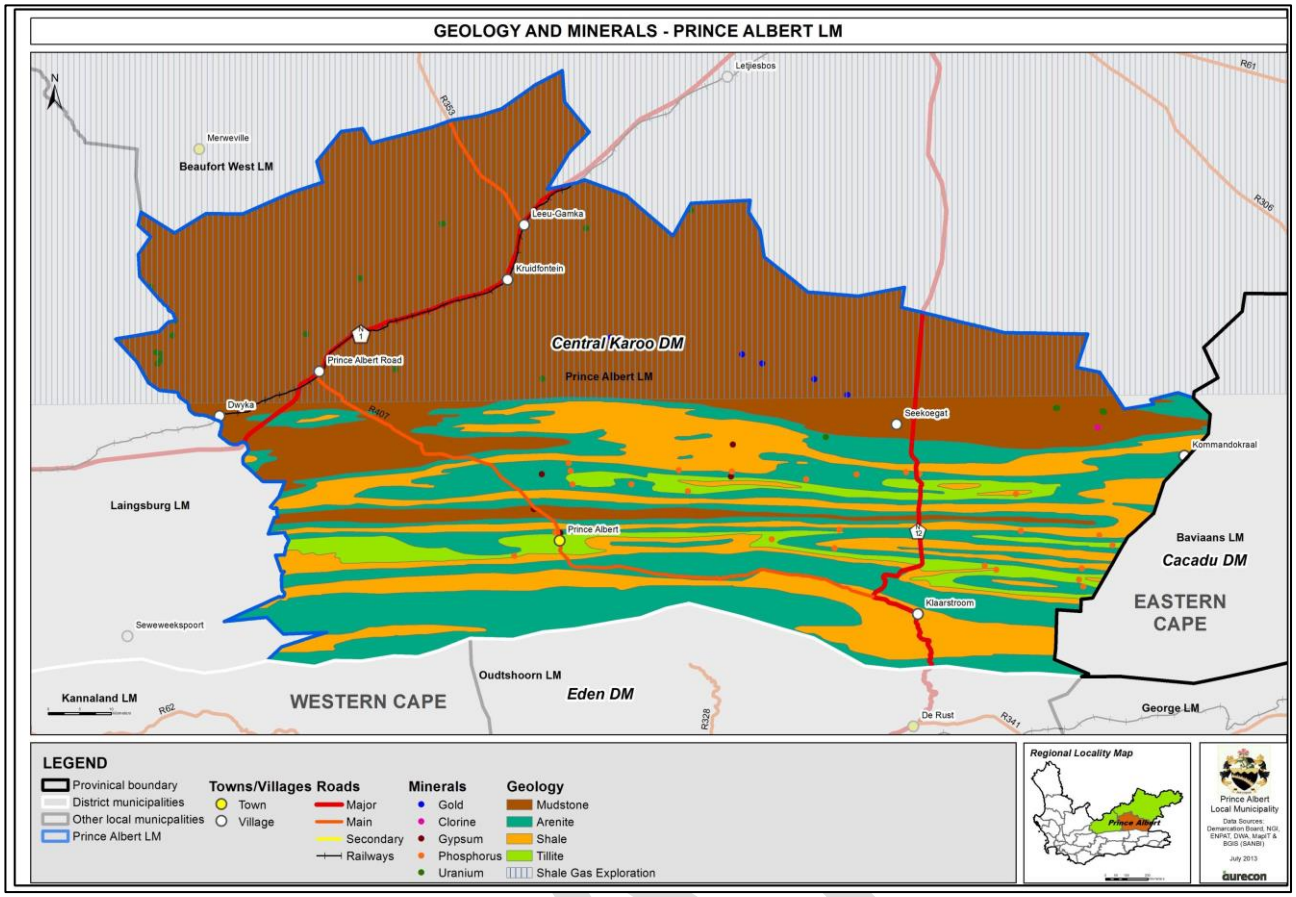


Figure 3: Depicts the Prince Albert geology and minerals within the municipality (SDF, 2014)

Hydrology

Groundwater is one of the key environmental resources in the municipal area. The Prince Albert Municipality is situated in the Gouritz Water Management Area (**Figure 4**). There are three large dams situated in the municipality, namely Gamkapoort Dam, Oukloof Dam and Leeu-Gamka Dam and four perennial rivers, namely the Gamka, Dwyka, Aaps and Groot River. According to the State of Rivers Report the health of the rivers situated within the borders of the Prince Albert Municipality are as follows:

- Gamka River – is in a fair status of health
- Dwyka River – is in a good status of health
- Groot River – is in a good status of health

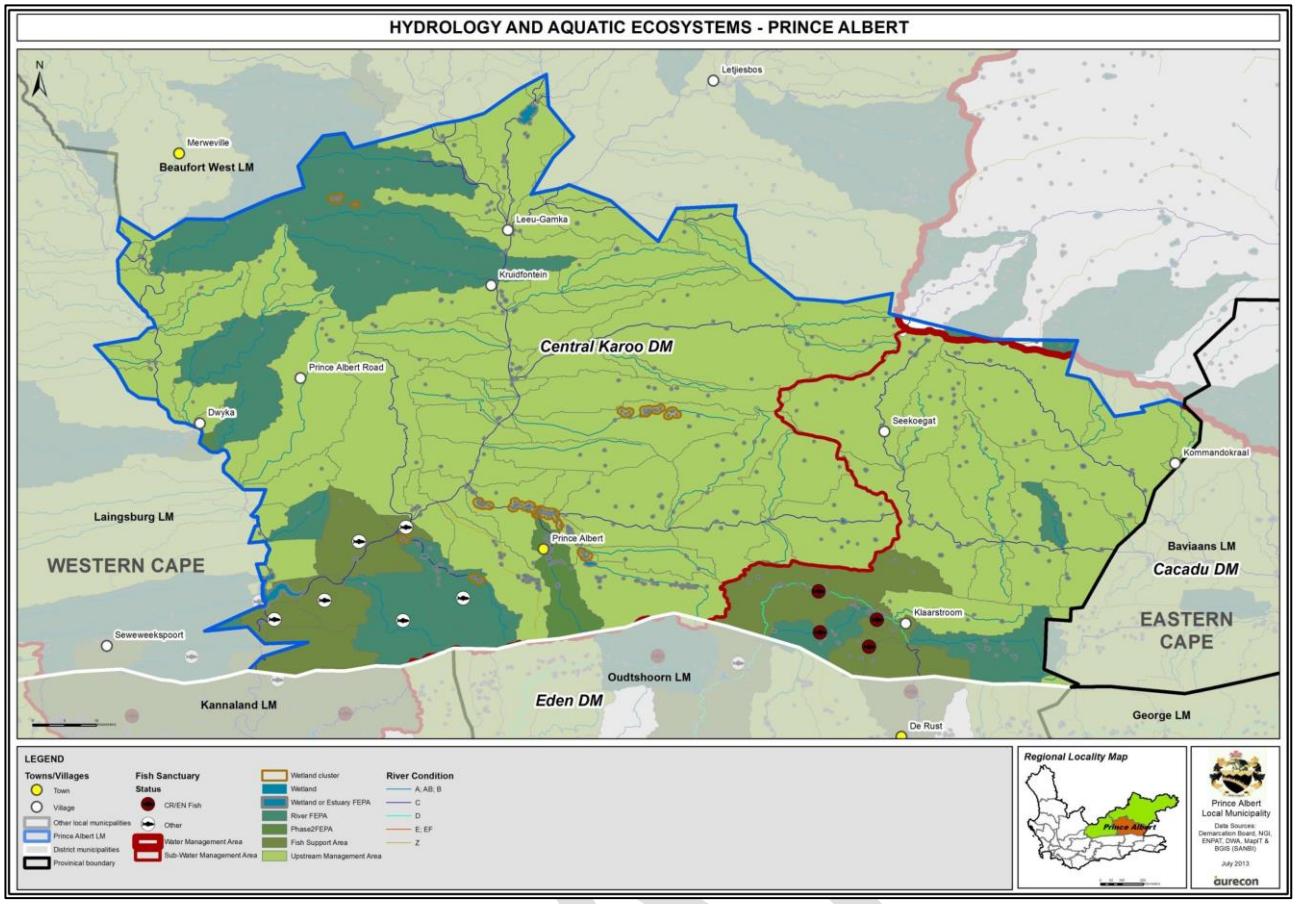


Figure 4: Depicts the freshwater ecosystem priority areas within Prince Albert SDF, 2014

2. STRATEGIC LINKAGES

Linkages with the Western Cape Integrated Waste Management Plan (WCIWMP) and the National Waste Management Strategy (NWMS) are shown in **Table 2** below as well as how these align with the municipal objectives.

Table 2: COMPARISON AND ALIGNMENT OF NATIONAL, PROVINCIAL AND MUNICIPAL GOALS, OBJECTIVES& KPAs

NDP	NWMS (2011)	Western Cape IWMP	Municipal IWMP goals	IDP (Strategic Objectives)	Provincial SDF	District SDF	Municipal SDF
Strategic objective: Environmental sustainability and resilience **Objective:** Absolute reductions in the total volume of waste disposed to landfill each	**Goal 4:** Ensure that people are aware of the impact of waste on their health, well-being and the environment	**Goal 1:** Educate, strengthen capacity and raise awareness in Integrated Waste Management	**Goal 1:** Promote, educate and raise awareness with respect to integrated waste management	**SO1:** Sustained improvement of the status of the municipal area & the eradication of the spatial legacy. **SO3:** To improve the general living standards of living. **SO4:** To provide quality, affordable & sustainable services on an equitable basis.	Sustainable use of Provincial Assets –Resource Consumption and Disposal	A waste management plan drafted in terms of an environmental management plan should also address waste minimisation and the impact of waste on water resources (including minimisation, containment, modification and removal of waste from water resources)	Avoiding waste through recycling and safe disposal
	Goal 5: Achieve integrated waste management planning	**Goal 2:** Improve waste information management	**Goal 2:** Improve waste information management				

year **Action:** Municipal regulations to achieve scale in stimulating waste recycling	**Goal 2:** Ensure the effective and efficient delivery of waste services	**Goal 3:** Promote sound, adequate and equitable waste management practices	**Goal 3:** Ensure the effective and efficient delivery of integrated waste Management services	**SO6:** To commit to continuous improvement of human skills & resources to delivery of effective services.			
	Goal 5: Achieve integrated waste management planning	**Goal 4:** Mainstream Integrated Waste Management planning in municipalities and industry	**Goal 3:** Ensure the effective and efficient delivery of integrated waste				
	Goal 1: Promote waste minimisation, re-use, recycling and recovery of waste	**Goal 5:** Mainstream sustainable waste management practices	**Goal 4:** Promote waste minimisation through the re-use, recycling and recovery of waste				
	Goal 3: Grow the contribution of the waste sector to the green economy.	**Goal 5:** Mainstream sustainable waste management practices	**Goal 7:** Ensure the sound budgeting and financial management for IWM service	**SO2:** To stimulate, strengthen and improve the economy for sustainable growth		Proper and suitable waste management guidelines should be developed to assist the Local Municipalities in achieving optimal levels of service and to ensure	The burning of waste at landfill sites in Prince Albert, Leeu-Gamka and Klaarstroom emits toxic gasses. Upgrading of the current waste disposal site in Prince Albert.
	Goal 8: Establish effective compliance with and enforcement of the Waste Act	**Goal 6:** Strengthen the waste regulatory system/framework	**Goal 5:** Improve regulatory compliance				
	Goal 7: Provide measures to remediate contaminated land	**Goal 7:** Ensure the safe an integrated management of hazardous waste	**Goal 6:** Ensure the safe and integrated management of hazardous waste				

	Goal 6: Ensure sound budgeting and financial management for waste services	**Goal 8:** Facilitate access to funds to implement Integrated Waste Management in the province	**Goal 7:** Ensure the sound budgeting and financial management for IWM service	**SO5:** To maintain financial viability & sustainability through prudent expenditure, and sound financial systems.		compliance with legislation	Close down the illegal waste disposal site in Leeu Gamka, provision of a temporary Waste Transfer Station, an EIA and the development of a new waste disposal site.

3. PUBLIC PARTICIPATION

The Prince Albert Municipality will provide the public and other stakeholders an opportunity to comment on the draft IWMP document by making it available at libraries, municipal offices, and community centres. The stakeholders will be informed of the draft document through municipal notice boards and accounts and will be given a 30 day commenting period. The IWMP will be included in the 2015/16 IDP annual review.

4. IWMP STATUS QUO/ SITUATIONAL ANALYSIS

4.1 LEGISLATION

The most important and relevant legislative requirements in terms of waste management are contained in the following statutes and national policies.

4.1.1 The Hazardous Substances Act, 1973 (Act 15 of 1973) & Regulations

The act provides for the control and management of substances which may be hazardous to human health.

4.1.2 The National Health Act (Act 63 of 1977)

This act provides for the promotion of the health of South Africans.

4.1.3 The Road Traffic Act, 1989 (Act 29 of 1989)

This act provides for road traffic matters including the control of transportation of dangerous goods.

4.1.4 The Environment Conservation Act, 1989 (Act No. 73 of 1989) (ECA)

Some of the provisions of this Act are still in force as they were not repealed. The Waste Tyre Regulations (2008), which came into effect on 30 June 2009 in terms of section 24B of the ECA and make provision for effective and integrated management of waste tyres.

4.1.5 The Occupational Health and Safety Act, 1993 (Act 85 of 1993) and Regulations

The act provides for the protection of the health and safety of persons in the work place against hazards arising out of or in connection with the activities of persons at work.

4.1.6 Constitution of the Republic of South Africa Act, 1996 (Act No108 of 1996)

The Constitution's Bill of Rights (section 24) states that everyone in the republic has a right to live in a safe and healthy environment that should be protected for all

generations through legislation and other measures. A more relevant part of the Constitution is Schedule 5B, which requires municipalities to provide cleansing, refuse removal and disposal services.

4.1.7 The National Environmental Management Act, 1998 (Act No 107 of 1998) (NEMA)

This act provides the legislative framework for environmental management and contains environmental management principles that ensure that the environment is protected from degradation by taking a preventive approach before it takes place or a precautionary approach when scientific knowledge is lacking and holding any person who causes environmental degradation responsible for paying for the damage.

4.1.8 The National Water Act, 1998 (Act 36 of 1998) (NWA)

The purpose of this act is to ensure that water resources are protected, used equitably, and conserved in consideration of the protection of aquatic ecosystems; to meet basic human needs and to ensure the reduction and prevention of pollution.

4.1.9 The Local Government Municipal Structures Act, 1998 (Act 117 of 1998)

This Act provides 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.

4.1.10 White Paper on Integrated Pollution and Waste Management for South Africa (Government Gazette 20978, 17 March 2000)

The White Paper introduced an integrated approach to be adopted by the government in order to deal with the issues relating to waste management and pollution.

4.1.11 The Local Government Municipal Systems Act, 2000 (Act 32 of 2000)

This act provides for the core principles, mechanisms and processes that are necessary to enable municipalities to move progressively towards the social and economic upliftment of local communities. It ensures the access to essential

services that are affordable to all and defines the legal nature of a municipality as including the local community within the municipal area, working in partnership with the municipality's political and administrative structures.

4.1.12 The Local Government Municipal Finance Management Act, 2003 (Act 56 of 2003)

This Act provides for the secure and sustainable management of the financial affairs of municipalities and other institutions in the local sphere of government.

4.1.13 National Environmental Management: Waste Management Act, 2008 (Act No. 59 of 2008) (NEMWA)

The Waste Act came into effect on 1 July 2009 to reform the fragmented legislation governing waste management in South Africa in order to protect the environment. The Waste Act also repealed Section 20 of the Environment Conservation Act, 1989 (Act No. 73 of 1989) ("ECA") as well as introduced new provisions regarding the licensing of waste management activities.

4.1.14 Waste Tyre Regulations, 2008 (Government Gazette 31901)

The Waste Tyre Regulations were published on 13 February 2009 and came into effect on 30 June 2009 in terms of section 24B of the ECA and make provision for effective and integrated management of waste tyres.

4.1.15 Consumer Protection Act (CPA), 2008 (Act 68 of 2008)

Section 59 of this act provides for producers, suppliers or distributers of goods (designated products or their components) that may not be disposed of into a common waste collection system to be recovered and safely disposed.

4.1.16 By-law relating to Refuse Removal and Disposal, 19 June 2009 (Provincial Gazette 6637)

The Constitution provides municipalities with the legislative authority to draft their own by-laws relating to refuse removal. The purpose of the Refuse Removal and Disposal by-law dated 19 June 2009, is as follows:-

- To promote the achievement of a safe and healthy environment for the benefit of the residents in the area of jurisdiction of the municipality.
- To provide for procedures, methods and practices to regulate the dumping of refuse and the removal thereof.

4.1.17 National Environmental Management: Waste Act (59/2008): List of Waste Management Activities that have, or are likely to have a detrimental effect on the environment. GN 32368, 3 July 2009

This notice lists the activities that trigger a waste license requirement and 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.

4.1.18 National Environmental Management Act, 1998 (Act No. 107 of 1998):Environmental Impact Assessment ("EIA") Regulations, 18 June 2010

These Regulations standardise the procedure and criteria as contemplated in Chapter 5 of the NEMA 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 cannot be avoided, ensure mitigation and management of impacts to acceptable levels, and to optimise positive environmental impacts, and for matters pertaining thereto.

4.1.19 National Waste Management Strategy (NWMS) (14 November 2011)

The purpose of the strategy is to give effect to the objects of the Waste Act as required in terms of section 6(1).

4.1.20 Western Cape Health Care Waste Management Act, 2007 (Act 7 of 2007), Amendment Act, 2010 (No. 6 of 2010), Regulations, 2013

The Act, Amendment Act and Regulations provides for the effective management (handling, storage, collection, transportation, treatment and disposal) of health care waste by all persons in the Western Cape.

4.1.21 National Environmental Management: Waste Act: National Waste Information Regulations, January 2013

These Regulations instruct waste generators and holders to register and report to the National and Provincial waste information systems. The waste generators and holders in the Western Cape Province must register on the Integrated Pollutant and Waste Information System (IPWIS).

4.1.22 National Organic Waste Composting Strategy: Draft Strategy Report and Guideline (February 2013)

The Draft Strategy has been developed to promote composting as one method to beneficiate organic waste and to divert organics from landfill disposal. The Guideline Document aims to provide a practical conceptual-level information tool

to assist authorities and other interested parties to identify viable and sustainable composting opportunities.

4.1.23 The National Environmental Management: Waste Act: Waste Classification & Management Regulations (Government Gazette No. 36784, 23 August 2013)

The Regulations serve to regulate the classification and management of waste in a manner which supports and implements the provisions of the Waste Act and provide for safe and appropriate handling, storage, recovery, reuse, recycling, treatment and disposal of waste and will also enable accurate and relevant reporting on waste generation and management.

4.1.24 National Environmental Management: Waste Act: National Norms and Standards for Disposal of Waste to Landfill (Government Gazette No. 36784, 23 August 2013)

These Norms and Standards determine the requirements for the disposal of waste to landfill as contemplated in Regulation 8(1) (b) and (c).

4.1.25 National Environmental Management: Waste Act: National Norms and Standards for Assessment of Waste to Landfill (Government Gazette No. 36784, 23 August 2013)

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

4.1.26 National Environmental Management: Waste Act (59/2008): List of Waste Management Activities that have, or are likely to have a detrimental effect on the environment. GN 32368, 3 July 2009

This notice lists the activities that trigger a waste license requirement and 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.

4.1.27 Basel Convention

This convention is an international treaty that controls the transboundary movements and disposal of hazardous waste (excluding the movement of radioactive waste) between nations and in particular to prevent the transfer of hazardous waste from developed to less developed countries.

4.1.28 Montreal Protocol

This protocol is an international agreement to the Vienna Convention for the Protection of the Ozone Layer and is centred on groups of halogenated carbons, which have been shown to play a role in ozone depletion. It provides a timetable on which the production of these substances must be phased out and eventually eliminated.

4.1.29 Rotterdam Convention

This convention is a treaty aimed at promoting shared responsibilities in relation to importation of hazardous chemicals. The responsibilities include the open exchange of information and calls on exporters of hazardous chemicals to use proper labelling, include directions on safe handling, and inform purchasers of any known restrictions or bans. Signatory nations can decide whether to allow or ban the importation of chemicals listed in the treaty, and exporting countries are obliged make sure that producers within their jurisdiction comply.

4.1.30 Stockholm Convention

This convention is an international environmental treaty on Persistent Organic Pollutants (POPs) that aims to eliminate or restrict the production and use of POPs.

4.2 DEMOGRAPHIC PROFILE

The total population of the Prince Albert Municipality is 13 136 and the majority of the population resides in the Prince Albert town area. According to the 2011 Census Western Cape Municipal Report, the municipality's growth rate from 2001 to 2011 was 2.2% and this was used to estimate the population for 2013 and 2020 as shown in **Table 3** below.

Table 3: Population figures for the Prince Albert Municipality

Year	1996	2001	2011	2013	2020
Population	9 474	10 512	13 136	13 720	15 977

The projected population for 2013 and 2020 was calculated using a population calculator from the following Website - http://www.metamorphosisalpha.com/ias/population.php

The municipality is structured into 4 ward areas with the majority of the population residing in ward 4 (32.9%; **Table 4**). Both ward 2 and 3 have a population at 20% (**Table 4**). According to the Integrated Development Plan (IDP) Annual Review (2013/14), during the 2011 Census the majority of households (3 245) had brick, concrete block structures on a separate stand, backyard or on a farm. There are also 108 and 57 informal dwellings with informal settlements and backyard dwellers respectively.

Table 4: Population distribution according to ward areas			
Ward	**Area**	**Population**	**Population %**
1	Leeu Gamka & Prince Albert Road	3 521	26.8
2	Prince Albert North	2 636	20.1
3	Prince Albert South	2 647	20.2
4	Prince Albert North-end (Rondomskrik) & Klaarstroom	4 332	32.9
Total		**13 136**	**100**

The pie chart (**Figure 5**) below depicts that 84.5% of the population consists of the Coloured population followed by 11.8%, 2.8%, 0.6% and 0.3% from the White, Black African, Other and Indian/ Asian populations respectively (IDP Annual Review, 2013/14). The population classified as other (0.6%) is considered to be as a result of the migration of other African nationalities into the Prince Albert municipal area (IDP Annual Review, 2013/14).

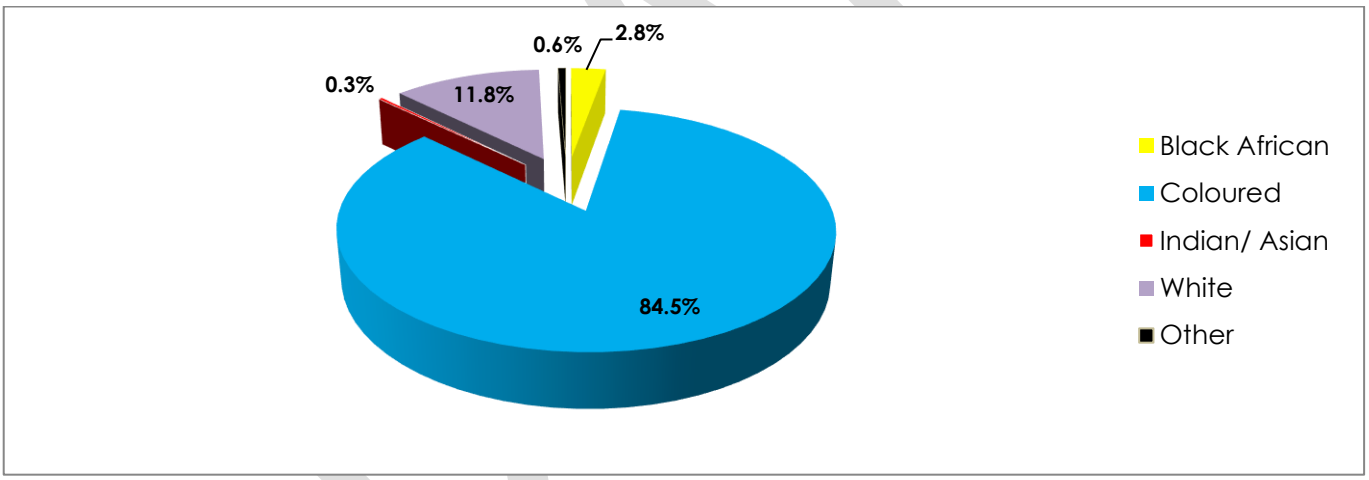


Figure 5: Distribution of the Prince Albert population

The Prince Albert Municipality has a gender distribution of 49.45% males and 50.55% females. The labour force between the ages of 15 and 64 (the middle age), is where the population is mostly distributed (**Table 5**). However in 2011 only 3 488 out of 8 410 people within the economically active population were employed (**Table 6**).

Table 5: Distribution of the population by age group and gender (Census 2011)				
Group	**Age**	**Male**	**Female**	**Total**
Youth	0 - 14	1 906	1 980	3 885
Middle	15 - 64	4 210	4 199	8 410
Old	64 +	380	461	841
Total		**6 496**	**6 640**	**13 136**

The unemployment rate decreased from 35.2% to 19.4% between 2001 and 2011 with 3 488 and 841 people employed and unemployed respectively in 2011(**Table 6**). However, according to the IDP Annual Review (2013/14) and as depicted in **Table 6**, the unemployment rate increased to 38.2% during the 2013/14 financial year and more women (56%) were unemployed compared to men (44%).

Table 6: Employment status of the Prince Albert Municipality				
	1996	**2001**	**2011**	**2013/14**
Employed	2 392	2 483	3 488	3 513
Unemployed	591	1 346	841	1 341
Unemployment rate (%)	19.8%	35.2%	19.4%	38.2%

Table 7 below depicts that the majority (79%) of households within the municipality fall within the low income group level. The municipality needs to concentrate its job creation efforts within the waste sector, particularly for the youth.

Table 7: Annual Income levels of households		
Income levels	**Households**	**Percentage (%)**
Low income (No income – R76 400)	2 827	79
Middle income (R76 401 – R614 400)	716	20
High income (R614 001 – R2 457 601 or more)	36	1
Total	**3 579**	**100**

4.3 WASTE MANAGEMENT COST AND FINANCING

Table 8: Municipal budget for income and expenditure					
Item	**Financial Year**	**Financial Year**	**Financial Year**	**Current Financial Year**	**Outer Years**
	2012/13	**2013/14**	**2014/15**	**2015/ 16**	**2016/ 17**
Income					
Transfers recognised - operational	R 0.00		R 975 200.00		
Service charges - refuse revenue	R 0.00		R 974 450.00		
Other revenue	R 0.00		R 0.00		
Fuel	R 0.00		R 0.00		
Receptacles	R 0.00		R 0.00		
General	R 0.00		R 0.00		
Subtotal	R 0.00		**R 1 949 650.00**		
Expenditure					
Staff (remuneration)	R 662.00		R -731 792.00		
Other Expenditure	R 69.00		R -363 230.00		
Debt impairment	R 952.00		R -500 000.00		
Depreciation & asset impairment	R 0.00		R -70 000.00		
Subtotal	R 0.00		**R -1 665 022.00**		

Surplus	**R 1683.00**		**R 284 628.00**		
Governance					
IWMP	R 0.00		R 200 000.00		
By-laws	R 0.00		R 0.00		
Subtotal	**R 0.00**		**R 200 000.00**		
Disposal					
Recycling	**R 0.00**		R 5 500 000.00		
Transfer station	R 0.00				
Disposal sites	R 0.00		R 9 700 000.00		
Acquisition of land, equipment (TLB)	R 0.00		R 0.00		
Regulatory compliance, EIA's and licence	R 0.00		R 0.00		
Subtotal	**R 0.00**		**R 24 705 500.00**		
TOTAL	**R 1683.00**		**R 25 190 128.00**		

Table 8 above and **Table 9** below, provides the estimated budget for income and expenditure of the municipality to date. Prince Albert is a relatively small and rural municipal area that struggles to generate revenue through the rendered services and this is partly due to the high unemployment rate within the area which in turn results in a high number of indigent households that register for free basic services. In addition to this, considerations for municipal budgeting prioritise housing, water and sanitation needs over waste management issues.

Table 9: Reconciliation of IDP strategic objectives and budget (2012/13 Annual Report)										
Revenue										
Strategic Objective	**Goal**	**2010/11**	**2011/12**	**2012/13**	**2013/14**	**2014/15 Medium Term Revenue & Expenditure Framework**				
R ('000)	To provide quality, affordable and sustainable services on an equitable basis	Audited outcome	Audited outcome	Audited outcome	Original budget	Adjusted budget	Full year forecast	Budget year 2014/15	Budget year +1 2015/16	Budget year +2 2015/2017
Waste Management		2 840	3 072	1 419	1 905	1 992	1 992	1 950	2 047	2 199
Operating Expenditure										
Strategic Objective	**Goal**	**2010/11**	**2011/12**	**2012/13**	**2013/14**	**2014/15 Medium Term Revenue & Expenditure Framework**				
R ('000)	To provide quality, affordable and sustainable services on an equitable basis	Audited outcome	Audited outcome	Audited outcome	Original budget	Adjusted budget	Full year forecast	Budget year 2014/15	Budget year +1 2015/16	Budget year +2 2015/2017
Waste Management		2 516	1 301	1 683	1 462	1 384	1 384	1 665	1 749	1 834
Capital Expenditure										
Strategic Objective	**Goal**	**2010/11**	**2011/12**	**2012/13**	**2013/14**	**2014/15 Medium Term Revenue & Expenditure Framework**				
R ('000)	To provide quality, affordable and sustainable services on an equitable basis	Audited outcome	Audited outcome	Audited outcome	Original budget	Adjusted budget	Full year forecast	Budget year 2014/15	Budget year +1 2015/16	Budget year +2 2015/2017
Waste Management								50	-	1 400

Table 10: Depicts the current tariff structure of the municipality	
Service	**Cost**
Refuse Removal	
Prince Albert	
Businesses: for the removal of standard refuse drum with 85 Litre 2 times per week.	R128.66/year/85 litre bin
Residential: for the removal of 2 bags one time per week – municipal supply bags every fourth month.	R 58.42/year/85 litre bin
Garden refuse	R 57.00 /load
Klaarstroom	
Businesses (scheme house)	R 128 /p/month
Residential (scheme house)	R 58.42 /p/month
Garden refuse (scheme house)	R 57.00 /load
Leeu Gamka	
Businesses	R 128.66 /p/drum
Residential (other)	R 47.45 /p/drum
Residential (scheme house)	R 47.45 /month
Garden refuse(scheme houses)	R 114.00 /load

Table 10 above depicts the current tariff structure of the municipality and **Table 11** below provides the average increases in tariff charges for the outer financial years.

Table 11: Average increases in tariff charges			
MTREF	**2014/15 %**	**2015/16 %**	**2016/17 %**
Refuse	8,00%	8,00%	8,00%

4.4 SERVICES AND SERVICE DELIVERY

Table 12: Depicts the number of households with refuse removal (Census 2011 Municipal Report)		
Removed by local authority/private company at least once a week	2 642	74.91
Communal/ Own refuse dump	772	21.89
No rubbish disposal	113	3.20
Total	**3 527**	**100**

All communities within the Prince Albert municipal area have access to a minimum standard of refuse removal service delivery. **Table 12** above and **Figure 6** below depicts that the Prince Albert Municipality provides a refuse removal service to approximately 75% of the households within the municipal area at least once a week while 3% receives no service and 22% of the households either have a communal service(in informal settlements) or farms which have their own refuse dump. Free basic services were provided to 783 indigent households in the 2011/ 2012 financial year according to the 2012/ 2013 annual report.

The current basic services and free basic services statistics from Local Government (February 2015) indicate that as at December 2014, the total number of households within the municipality is 5 475 and of these 4 829 are formal households with only 2 411 receiving a refuse removal service. The total indigent households (646) registered with the municipality all receive a free basic refuse removal service. Of the 5 475 households within the municipality, 2 418 do not receive a refuse removal service. Domestic and commercial service points all receive a weekly waste collection service and the municipality has a black bag system in place. The bags are provided by the municipality and each service point is restricted to the utilisation of only two bags per removal.

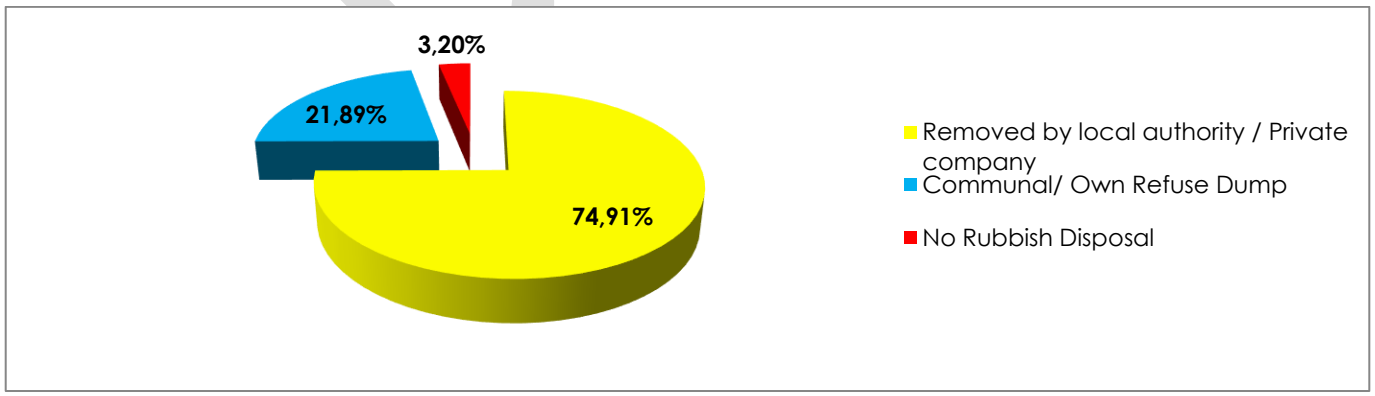


Figure 6: Access to refuse removal within the Prince Albert Municipality according to the Census 2011 report

The Prince Albert Municipality is not responsible for the collection and disposal of waste in Prince Albert Road as that responsibility currently lies with **Transnet**. The municipality has two refuse

removal vehicles, one open tractor-trailer used for garden refuse removal and a closed tractor-trailer for domestic refuse removal. The tractors are old and need to be repaired on a regular basis resulting in staff needing to work over time. Each of the waste collection tractor-trailers are operated by a three-man crew and waste is removed at weekly intervals.

Refuse removal services were upgraded in Prince Albert with the procurement of a new refuse truck and a new truck for infrastructure works. The replacement of the ageing fleet remains a challenge that we will have to find a solution for. Street cleansing is done on a daily basis. Landfills are continuously set alight by citizens resulting in the smouldering of plastics and the release of toxic fumes which pollutes the air. No separation of waste at source takes place. Household waste, builder's rubble and garden waste is co-disposed at the Prince Albert Waste Disposal Facility (WDF).

There are five (5) mini transfer stations constructed within North End in Prince Albert and each station is supplied with black bags on a weekly basis by the municipality. These mini transfer stations each consists of three walls approximately 1m high by 2.5m in length, strictly constructed for the disposal of garden waste. The public disposes of their garden waste at these sites from where it is then transported by the municipality to the Prince Albert WDF. Garden waste takes up approximately 10% of the general waste stream and is co-disposed with general waste. Domestic waste and dead household pets are however being disposed of at these mini transfer stations.

The municipality is not responsible for the collection and disposal of Health Care Risk Waste (HCRW), the Health Care Facilities use a service provider, Solid Waste Technology to manage their HCRW. There is one District Hospital (Prince Albert Hospital), one Community Day Care Centre (Prince Albert Primary Health Care (PHC)), two Clinics with one in Leeu Gamka and the other in Merweville, one Satellite Clinic in Klaarstroom and a Mobile Clinic in the Prince Albert farm area (**Table 13**). **Table 13** below also provides the status of the Health Care Facilities with regard to registration and reporting onto IPWIS.

Table 13: Health Care Facilities within the Prince Albert Municipality

Facility name	Public/ Private	Registered on IPWIS	Reporting on IPWIS	Contact person	Address

Prince Albert Hospital	Public	Yes	Yes	Johanna Gous	Laër Mark Street, Prince Albert, 6930
Prince Albert PHC Clinic	Public	No	No	Johanna Gous	
Prince Albert Mobile Clinic	Public	No	No	Johanna Gous	Lower Mark Street, Prince Albert, 6930
Merweville Clinic	Public	No	No	Johanna Gous	
Leeu Gamka PHC Mobile Unit	Public	Yes	No	Johanna Gous	Duiker Street, Beaufort West, 6930
Klaarstroom Satellite Clinic	Public	No	No	Johanna Gous	
Prince Albert Farm Area Mobile Clinic	Public	No	No	Johanna Gous	

The HCRW from the clinics and hospital mainly consists of needles and bandages. The HCRW from the clinics is sent to the Prince Albert Hospital where it is then collected by Solid Waste Technology for safe treatment and disposal at Vissershok. The Prince Albert Hospital started reporting the total infectious, pathological and sharp waste onto IPWIS from August to December 2014 (**Table 14**). The quantities reported over this five-month period were then averaged and calculated for an annual estimate of the HCRW generated within the municipal area. The first generation Integrated Waste Management Plan (IWMP) reported that an estimated 100 m³ HCRW is generated within the municipal area per annum (September, 2005).

Table 14: Health Care Risk Waste Quantities reported onto IPWIS (Tonnage, 2014)

Waste stream	August	September	October	November	December	Average	Annual Estimate (tons/annum)
Infectious waste	0.1792	0.1183	0.1166	0.1097	0.0932	0.1234	1.481
Pathological waste	0.0212	0.0085	0.0100	0.0000	0.0078	0.0095	0.114
Sharps	0.0370	0.0296	0.0133	0.0120	0.0232	0.02302	0.276
Total	**0.2374**	**0.1564**	**0.1399**	**0.1217**	**0.1242**	**0.15592**	**1.871**

Based on the annual estimates (**Table 14** above), the infectious waste accounts for the majority of HCRW generated at the Health Care Facilities within the Prince Albert municipal area (**Figure 7**). The municipality will source correct quantities from Solid Waste Technologies to verify these

estimates and to keep a record of the accurate quantities of HCRW generated within the municipal area.

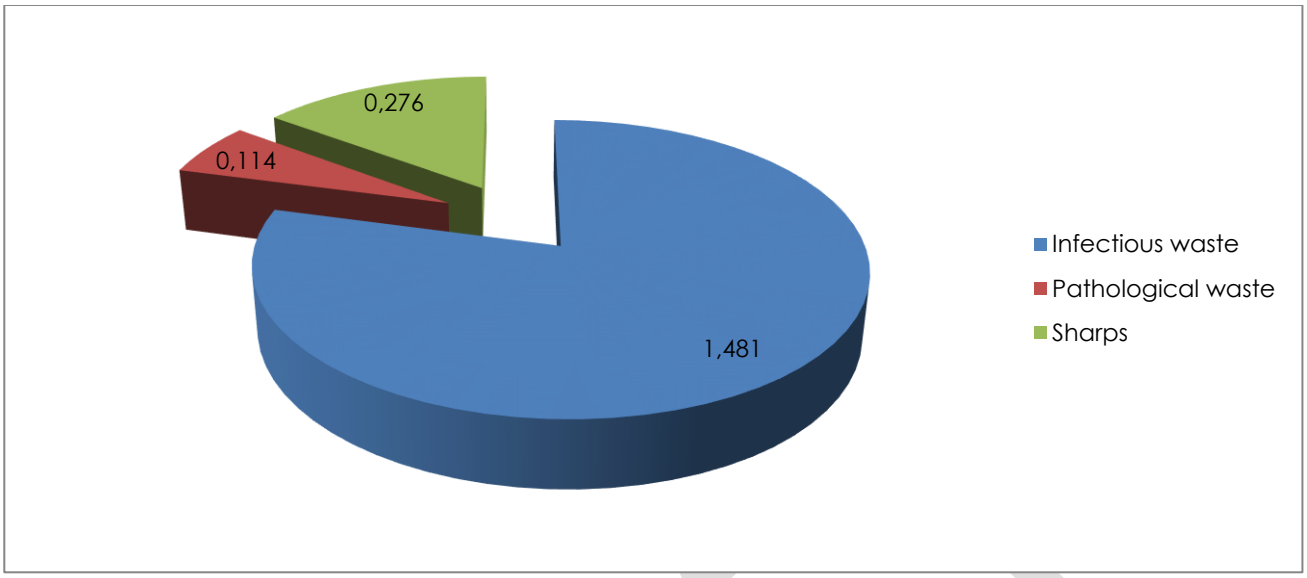


Figure 7: Depicts estimate quantities of HCRW generated within the Prince Albert Municipality

4.5 COMPLIANCE AND ENFORCEMENT

Status Quo of Waste Management Facilities: Waste recycling, treatment and disposal

There are four waste management facilities within the Prince Albert municipal area (**Table 15**). These include three Waste Disposal Facilities (WDF), namely, the Prince Albert, Klaarstroom and the Leeu Gamka as well as a Prince Albert Road Drop-off facility operated by Transnet. Materials recovery takes place at the Prince Albert WDF but needs to be formalised into a Materials Recovery Facility (MRF). All three waste disposal facilities are operational; one WDF has a permit and licence applications for the two unlicensed WDFs are in process. The Prince Albert Municipality has conducted costing for the Klaarstroom and Leeu Gamka waste disposal facilities, which were estimated at R1, 715, 018.08 and R5, 942, 641.73 respectively (Prince Albert SDF, February 2014). The Prince Albert Road waste disposal facility is in possession of a Section 20 ECA permit. The waste licensing unit indicated that the Prince Albert Road drop-off facility does not require a licence at this stage.

Table 15: Prince Albert Municipal waste management facilities						
TOWN	**FACILITY NAME**	**FACILITY TYPE**	**OPERATIONAL**	**LICENCED/ PERMITTED**	**LICENCE/ PERMIT NO & DATE OF ISSUE**	**LEGAL STATUS/ COMMENT**
Klaarstroom	Klaarstroom WDF	WDF	Yes	No		Licence application in process
Leeu-Gamka	Leeu-Gamka WDF	WDF	Yes	No		Licence application in process
Prince Albert	Prince Albert WDF	WDF	Yes	Yes	16/2/7/C222/D3/Z5/ P384 issued in August 2000	Operational, has a permit; requires variation of permit
Prince Albert	Prince Albert MRF	MRF	Yes	No		Requires licence
Prince Albert Road	Prince Albert Road Drop-off	Drop-off facility	Yes	No		No licence required

PRINCE ALBERT WASTE DISPOSAL FACILITY

The Prince Albert WDF is the only facility that operates with a permit (Table 16) and it will reach its operating capacity within 2015. This WDF also receives green waste disposed by the public at the five (5) mini transfer stations. Waste is burned on a daily basis and household, garden waste and builder's rubble are co-disposed in a haphazard manner. Currently the waste disposal facilities are inadequately managed and the municipality needs to prioritise solid waste management and redress the situation. It should be noted that the dump in Prince Albert is adjacent to a tributary of the Dorpsriver and there is no containment barrier to prevent contamination by seepage from the dump.

TABLE 16: The status of the Prince Albert Waste Disposal Facility	
Position of site:	The site is located approximately 1.0 km north of Prince Albert next to the Prince Albert Waste Water Treatment Works.
Year issued:	2000
Classification of site:	GCB-
Type of Operation (end – tip, trench, cell):	End tip, waste is burned on a regular basis.
Estimated size of site:	Approximately 3 ha.
Estimated remaining life of site:	The site will reach maximum capacity by 2015.
Separation of fresh and contaminated water:	Yes
Groundwater monitoring:	No groundwater monitoring is done.
Volumes per day, week or month:	Estimated at 3.8 tonnes per day
Is cover material available?	Yes
Is the drainage sufficient?	No, the site is relatively flat and dumping practices would facilitate ponding.
Is there access control?	Yes, but the person in control allows illegal pickers to enter the site. There is no recording of who enters the facility or waste volumes being disposed. This will be addressed through the Youth Jobs in Waste Programme of the Department of Environmental Affairs (DEA).
Is the site fenced?	Yes, the recycling area is fenced, but a mere one-meter high fence that is broken in places demarcates the disposal area.
Does the site have a sufficient buffer zone?	Yes, there are no houses within 500 meters of the site.
Type of equipment utilised on site:	Tractor and open-trailer is used to collect garden waste and a tractor and closed-trailer collects household wastes.

Operating hours:	Dumping is limited to working hours, five days a week.
Site facilities, i.e. ablutions, guard house:	No, the ablution facilities of the Waste Water Treatment works are utilised. The Youth Jobs in Waste Programme of the DEA will erect site offices with ablution facilities.
Estimating cost for closure:	R 926,278.70
Municipal Saving plan for closure:	The municipality must identify sources of funding and allocate these funds in their IDP for the closure of the facility

RECYCLING

The Prince Albert WDF has an on-site recycling area adjacent to the waste disposal area. Recyclables are collected on a weekly basis, separately to household waste, and sorted at the recycling area. The "Retain, Reuse and Recycle" (RRR) company located in Oudtshoorn removes the recyclables on a weekly basis. Furthermore a buy-back project exists in Prince Albert which allows residents to sell their recyclables. Unfortunately, this project is currently on hold due to the unavailability of funds. The solid waste management cost estimate report (Prince Albert SDF, February 2014) recommends that the Prince Albert Municipality subsidise the project. Two residents from Prince Albert bought a chipper and are very interested in entering into a contract with the municipality to undertake the processing of garden waste on behalf of the municipality. The solid waste management cost estimate recommends the municipality to investigate this option in earnest. Further to the above a proposal to manage garden waste was submitted to the municipality in 2008. It is proposed that this programme be considered by the municipality.

KLAARSTROOM WASTE DISPOSAL FACILITY

The Prince Albert Municipality is in the process of applying for a permit for the Klaarstroom WDF and the facility will reach its maximum capacity in 2025 (**Table 17**). All general waste types produced in Klaarstroom are collected on a weekly basis using a tractor and an open-trailer.

Table 17: The status of the Klaarstroom Waste Disposal Facility

Position of site:	Opposite the Klaarstroom residential area, approximately 500m off the N12.
Permit:	In the process of licensing.
Year issued:	N/A
Classification of site:	GCB
Type of Operation (end – tip, trench, cell):	Burning waste, no trenches.
Estimated size of site:	6680 m^2
Estimated remaining life of site:	The site will reach maximum capacity by 2025.
Separation of fresh and contaminated water:	Uncertain
Groundwater monitoring:	No monitoring of ground water takes place.
Volumes per day, week or month:	Approximately 0.4 tonnes/day
Is cover material available?	Yes, waste is however not covered on a regular basis
Is the drainage sufficient?	No
Is there access control?	No
Is the site fenced?	Yes
Does the site have a sufficient buffer zone?	Yes, there are no houses within 500m of the site.
Type of equipment utilised on site:	A tractor and trailer are utilised for collection and offloading purposes.
Operating hours:	Dumping is limited to working hours, five days a week.
Site facilities, i.e. ablutions, guard house:	None

Estimating cost for closure:	R2,133,695.28
Municipal Saving plan for closure:	The municipality must identify sources of funding and allocate these funds in their IDP for the closure of the facility

RECYCLING

There are no formal recycling programs in place at the Klaarstroom WDF at present.

LEEU GAMKA WASTE DISPOSAL FACILITY

The Prince Albert Municipality is in the process of applying for a permit for the Leeu Gamka WDF (**Table 18**) and the facility was estimated to reach its maximum capacity by 2013. Waste is removed at weekly intervals with a tractor-trailer and no source separation of waste takes place in the area. Household waste, builder's rubble and garden waste is co-disposed at the facility.

Table 18: The status of the Leeu Gamka Waste Disposal Facility	
Position of site:	The site is 750 m from the N1 on the Frazerburg turn-off.
Permit:	In the process of licensing.
Year issued:	N/A
Classification of site:	GCB
Type of Operation (end – tip, trench, cell):	Burning of Waste
Estimated size of site:	9500 m^2
Estimated remaining life of site:	The site reached maximum capacity by 2013.
Separation of fresh and contaminated water:	None in place

Groundwater monitoring:	No monitoring of ground water takes place.
Volumes per day, week or month:	Approximately 1.49 tons per day
Is cover material available?	No
Is the drainage sufficient?	No
Is there access control?	Yes
Is the site fenced?	Yes
Does the site have a sufficient buffer zone?	Yes, there are no houses within 500m from the site.
Type of equipment utilised on site:	Tractor and trailer
Operating hours:	Operating during office hours, five days a week.
Site facilities, i.e. ablutions, guard house:	None
Estimating cost for closure:	R578,177.75
Municipal Saving plan for closure:	The municipality must identify sources of funding and allocate these funds in their IDP for the closure of the facility

RECYCLING

There are currently no formalised recycling initiatives taking place at the Leeu Gamka WDF.

PRINCE ALBERT ROAD DROP-OFF FACILITY

Transnet currently operates the Drop-off facility at Prince Albert Road and the waste is then collected by the Municipality and transported to the Prince Albert WDF.

4.6 WASTE CHARACTERISATION

A waste characterisation study was conducted by DEADP with assistance from the EPWP municipal workers from Prince Albert. A representative sample (black bags of mixed waste as well as clear bags for recyclables) was collected from Prince Albert South (Households and Recycling), Prince Albert North (Households) and from Rondomskrik households also situated in the northern area of the Municipality (**Figure 8**). The waste was then separated in 25 litre plastic basins, weighed on an electronic platform scale and volume estimated according to the following domestic waste streams i.e. soft plastic, plastic bottles, paper, cardboard, metal, food and greens, nappies/ sanitary/ condoms, clothing, glass and other (including batteries, gloves, etc.) as depicted in **Figure 9** & **Table 19** below.

The sample size included 507 bags which had a total mass of 2114.26kg; the most bags (217) and quantity of waste material (1026.35kg; 49%) were collected from households in Prince Albert North and the least number of bags and quantity of waste material (66; 212.81kg; 10%) were collected from households in Prince Albert South. (**Table 19, Figure 8**). **Figure 9** below depicts that organics (30%) formed the majority of the waste collected from the sample size followed by glass (15%), soft plastic (10%), plastic bottles and paper at 9% respectively. The least collected material (batteries, globes, etc.) accounted for only 3% of the sample size (**Figure 9**).

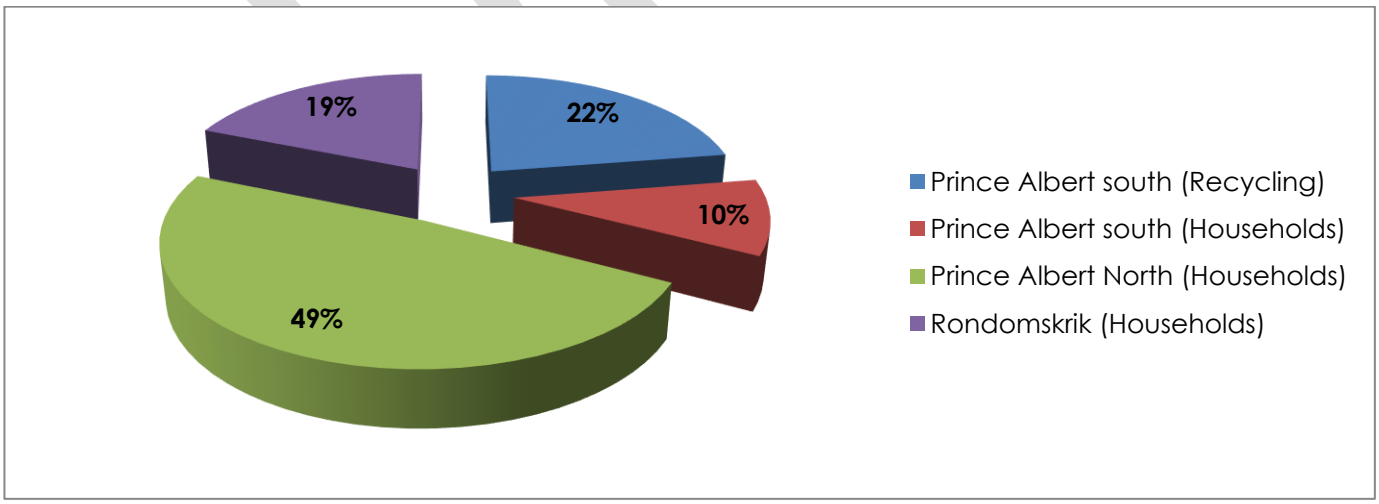


Figure 8: Depicts the percentage of waste collected by area

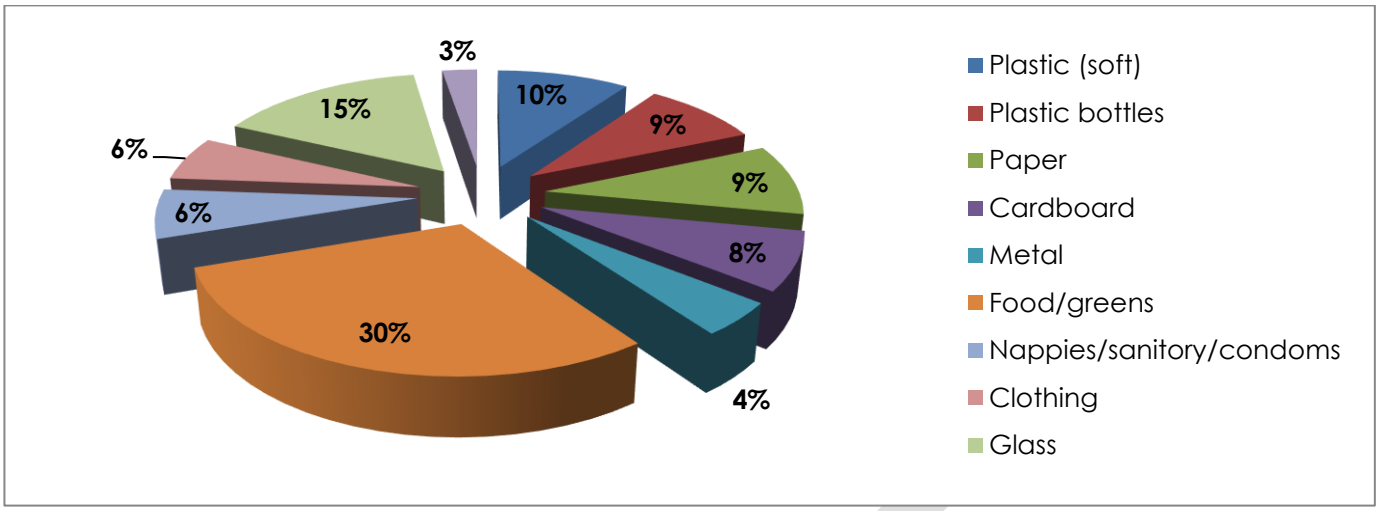


Figure 9: Depicts the percentage of the different waste streams from the sample size collected within the municipality

Table 20 below depicts estimated calculations of the quantity of the waste streams that could be collected annually based on the assumption that the sample size was collected from 375 households. These quantities can be used as a baseline for determining which waste streams have a feasible recycling potential to focus on or to extend the municipality's existing waste minimisation initiatives. The estimated tonnage for organics and glass generated annually within the municipality is 312.4 and 161.3 respectively (**Table 20**).

Table 20: Calculations of the different waste streams that could be collected annually												
Units	**# Bags Sampled**	**Number of Households (HH)**	**Plastic (soft) (kg)**	**Plastic bottles (kg)**	**Paper (kg)**	**Cardboard (kg)**	**Metal (kg)**	**Food/ Greens (kg)**	**Nappies/ sanitary pads/ Condoms (kg)**	**Clothing (kg)**	**Glass (kg)**	**Other (batteries, globes etc.) (kg)**
	507	375	208.2	185.7	198.0	161.4	92.7	629.6	135.5	123.4	325.0	54.8
		1	0.56	0.50	0.53	0.43	0.25	1.68	0.36	0.33	0.87	0.15
kg/w		3578	1986.4	1771.5	1889.0	1539.6	884.7	6006.8	1292.9	1177.6	3101.4	523.0
kg/annum	52		103293.3	92120.0	98225.7	80058.7	46003.0	312351.6	67233.2	61234.8	161272.3	27193.9
tons/annum	1000		**103.3**	**92.1**	**98.2**	**80.1**	**46.0**	**312.4**	**67.2**	**61.2**	**161.3**	**27.2**

In **Table 21** below, the sample size of 507 bags was assumed to be collected from 375 households with a total mass of 2114.26kg (2.12 tons) generated weekly. This total mass for the sample size was used to calculate the mass generated by one household and then extrapolated for the total number of households within the municipality as per the 2011 census. The mass generated by the municipality annually was then calculated at 1 041 914kg (1 042 tons). The assumptions made to calculate this mass were done so because the total number of bags generated by each household within the sample size was not recorded during the waste characterisation study (**Table 21**).

Table 21: Prince Albert municipality Waste Characterisation study (kg)															
Area	**# Bags Sampled**	**Income level**	**Bags/ income level**	**Number of Households (HH)**	**Plastic (soft)**	**Plastic bottles**	**Paper**	**Cardboard**	**Metal**	**Food/ greens**	**Nappies/ sanitary pads/ condoms**	**Clothing**	**Glass**	**Other (batteries, globes etc.)**	**Total**
Prince Albert South Recycling	132	Middle/ High	3	44	30.46	32.80	56.98	56.60	24.42	65.49	3.00	5.76	195.00	5.68	**476.19**
Prince Albert South Household	66	Middle/ High	3	22	19.33	16.43	20.62	18.78	8.55	70.48	9.02	1.18	43.36	5.06	**212.81**
Prince Albert North Household	217	Low	1	217	112.98	101.62	89.99	65.70	46.29	353.52	79.16	79.00	63.15	34.94	**1026.35**
Rondomskrik	92	Low	1	92	45.42	34.82	30.39	20.28	13.46	140.06	44.33	37.48	23.54	9.13	**398.91**
Total	**507**			**375**	**208.19**	**185.67**	**197.98**	**161.36**	**92.72**	**629.55**	**135.51**	**123.42**	**325.05**	**159.86**	**2114.26**
ASSUMPTIONS: 1. Low income households generate 1 bag per week; 2. Middle income households generate 2 bags per week; 3. High income households generate 3 bags per week															
CALCULATIONS: 375HH - generate - 2114.26kg/w → 1HH - generates - 5.6kg: 3578HH - generate - 20 36.8kg/w															
Per annum: 20 036.8kg/w * 52 weeks → **1 041 913.6kg/annum** → **1 041.9 tons/annum** In this calculation it is assumed that the sample size was collected from 375 HH based on the number of bags generated by each income group.															

A different method was also used to determine the mass generated by the municipality using the census 2011 population figure. The waste generated in tons/ person/ year in **Table 22** below, was calculated using the generation rates per income category, which were obtained from the Department of Environmental Affairs (DEA) IWMP Portal. The population figure was not divided among the income group categories, however, the number of households was divided and this was used to provide the percentage of households per income group category and then the assumption was made that the same percentages would apply for the population figure. The population per income group category was then calculated based on this assumption and this calculation was also done for the projected 2013 and 2020 population figures. Using the DEA waste generation rate per income group (kg/person/year) from the IWMP Portal, the total waste generated/person/year was calculated for the lower, middle and higher income group categories for the 2011 population from census data as well as the projected population for 2013 and 2020.

Table 22: Shows the calculations for waste generated per person per year for the Price Albert population					
Annual Income levels (2011)			**Low income (No income – R76 400)**	**Middle income (R76 401 – R614 400)**	**High income (R614 001 – R2 457 601 or more)**
Total Households			2 826.62	715.6	35.78
% Households			79.0	20.0	1.0
Total Population	**2011**	13 136	10377.4	2627.2	131.4
	2013	13 720	10838.8	2744.0	137.2
	2020	15 977	12621.8	3195.4	159.8
DEA waste generation rate per income group (kg/person/year)			**149.65**	**270.10**	**470.85**
Waste generated/person/year in kg	**2011**		1552983.9	709607	61851
	2013		1622026.4	741154	64601
	2020		1888856.9	863078	75228
Waste generated/person/year in tons	**2011**		1553	710	62
	2013		1622	741	65
	2020		1889	863	75

Estimations on the amount of waste generated can be calculated per week, per month or per year. The 2006 State of the Environment Report (SOER) indicated that South Africa generated 42 million m^3 of solid waste per year. This amounted to 0,7kg's per person per day. The generation rates were further broken down into generation rates per income category and the results were as follows:

Low income= 0.41kg/per person/day or (0.41kgx365 days)=149.65kg/person/year

Middle income=0.74kg/per person/day or (0.74kgx 365days) = 270.1kg/person/year

High income= 1.29kg/person/day or (1.29kgx365days) = 470.85kg/person/year

4.7 WASTE MINIMISATION

The Prince Albert Municipality has two minimisation initiatives, namely, the Recycling and Pick-a-Piece projects**.** In the recycling project, the recyclables are collected Thursdays (two bag system/ source separation?) and are then transported to the Prince Albert WDF for sorting. The sorted material is then collected by a company based in Oudtshoorn, Retain Reuse Recycle for recycling.

The Pick-a-Piece project is based on the example of the Recycle Swop Shop in Hermanus championed by the Overstrand Municipality. The Prince Albert Municipality's Pick-a-Piece project is an innovative structure where children between the ages of 7 and 16 are awarded points in exchange for recyclables and/or street rubbish that they collect and bring to a central point. The children can then redeem the points on the spot for basic need items from a 'shop' that operates where the recyclables and rubbish are handed in. The shop stocks basic need items such as soap, toilet paper, toothpaste, towels, second hand clothes, basic school requirements as well as toys and these are "priced" in points. This empowers children who, as a result of poverty, illness or the social problems of addiction, irresponsibility and/ or neglect, cannot otherwise find a way to buy these items. It also creates an incentive for cleaning the town, teaches the value of effort for reward and creates awareness about basic waste management and hygiene.

The exchange of recyclables takes place after school hours, which is a good time to talk to the children about other educational topics. The children are encouraged to assist with the weighing of the materials as well as the calculation of the value of the points. The points awarded for recyclable goods are not based solely on the value of the goods, because if this was the case, then the children would never be able to save up enough points to get something meaningful from the 'shop'. Points are rather a reflection of the value of the goods as well as reward for the effort made. In this way the project does not follow the usual rules of the economy, but rather becomes a tool to change mind-sets and to educate while relieving dire need. Instead of just being a hand-out charity, the structure encourages hand-up growth and development of the community. The Prince Albert Municipality's Pick-a-Piece project receives a lot of support from the community, but it will always strive to achieve even more.

4.8 ORGANISATIONAL STRUCTURE AND STAFF CAPACITY

PROPOSED ORGANISATIONAL STRUCTURE: PRINCE ALBERT MUNICIPALITY (01-08-2013): DIVISION INFRASTRUCTURE SERVICES

PURPOSE: To maximise infrastructure development and service delivery to all communities

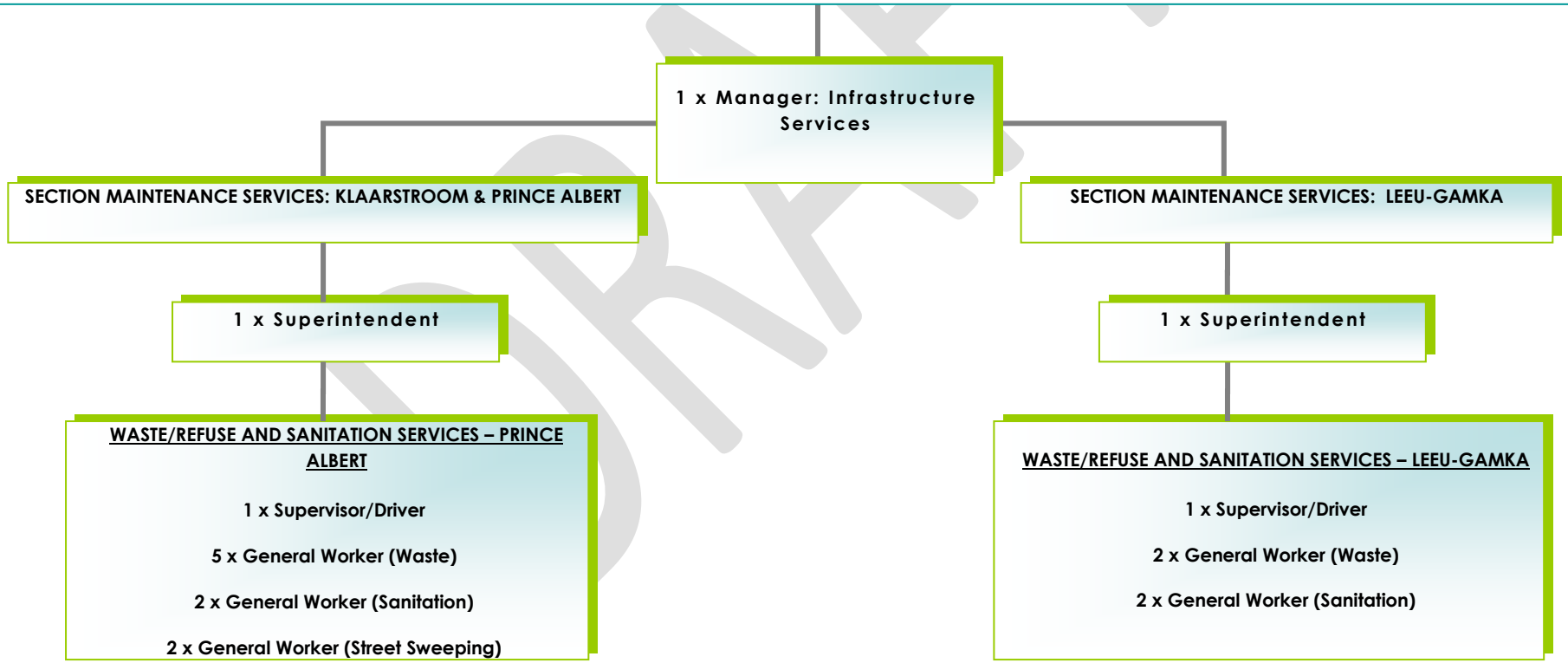
FUNCTIONS: (i) Provide a maintenance service for Water, Sewer, Roads and Storm Water Infrastructure in Klaarstroom, Prince Albert and Leeu-Gamka

(ii) Provide and maintain water and waste water purification plants/ systems

(iii) Coordinate all technical projects

(iv) Manage the maintenance of the electricity distribution networks and installations

(v) Render spatial development planning and building control services



4.9 WASTE AWARENESS AND EDUCATION

The Youth Jobs in Waste Management, Environmental Awareness and Education Group as well as the Pick a Piece Project conducts education and awareness programmes in the municipality.

4.10 WASTE INFORMATION MANAGEMENT

The Prince Albert Municipality has recently appointed a waste manager, however the official has not been designated as a Waste Management Officer (WMO) as required in terms of section 10(3) of the National Environmental Management: Waste Act, 2008 (Act 59 of 2008). Out of five waste management facilities only the Prince Albert waste disposal facility is registered on the Integrated Pollutant and Waste Information System (IPWIS). The municipality does not have a weighbridge but is using the IPWIS Waste Calculator as a waste quantification system at the Prince Albert WDF to estimate disposal quantities. The municipality will also use weigh pads that will be issued by the Department of Environmental Affairs (DEA) under the Youth in Waste programme.

5. GAP AND NEEDS ANALYSIS

The Prince Albert Municipality has very specific problem areas and requires several systems to be in place in order to deliver an effective waste management service and these include the following -

- Mismanagement and illegal dumping remains the most significant issue at all the waste disposal facilities. Lack of awareness, training and funding for infrastructure as well as operational and maintenance costs are another major issue for the municipality.
- The co-disposal of garden waste with household waste results in limited landfill space.
- There are no mechanisms in place for record keeping of waste generated.
- There is no groundwater monitoring at all WDFs.
- Not all the waste management facilities within the municipality are registered and reporting via IPWIS.
- The following issues were identified for the Prince Albert WDF: -
    - There is no compaction or covering of waste on a daily basis;
    - There is no storm water management or waste separation;
    - Lack of proper management of the five mini-transfer stations;

- Inadequate fencing of the waste disposal area; and
- There are illegal scavengers on-site

- The following issues were identified for the Klaarstroom WDF: -
  - There is no separation of the different waste types;
  - There is no compaction or covering of waste on a daily basis which results in windblown litter;
  - The fencing is broken;
  - Waste collection vehicles need to be replaced; and
  - There is possible water contamination

- The following issues were identified for the Leeu Gamka WDF: -
  - There is no separation of the different waste types;
  - There is no compaction or covering of waste on a daily basis which results in windblown litter;
  - Illegal burning of waste takes place;
  - There is inadequate fencing;
  - There is no gate at the entrance to control access;
  - There are illegal scavengers on-site;
  - There is broken glass on site, making is unsafe for illegal scavengers; and
  - Waste collection vehicles need to be replaced

- The following issues were identified for the Prince Albert Road Drop-off facility that is operated by Transnet: -
  - Some essential infrastructure needs to be constructed in order to meet the minimum requirements of a waste disposal facility permit; and
  - There is no buffer zone between landfill site and adjoining RDP development creating a health and safety risk

- Although recycling takes place, there are challenges with regards to people accessing the various sites

- The issues experienced with the waste disposal facilities remain a great challenge in the Central Karoo region because incineration plants are not nearby and to transport waste to the nearest plant will result in massive expenditure

- There is no funding to source equipment that can be used to reduce landfill airspace

- Lack of finance remains a challenge for the initiation and improvement of waste minimisation efforts with respect to transport costs and the sourcing of waste companies to collect the different waste types and the recyclable quantities collected within the municipality also do not justify the operation of a recycling process over such distances

- The staff capacity for waste management remains a challenge since the Council does not have the funding to deploy staff on a permanent or contractual basis to oversee the waste management facilities. The lack of operational staff at these facilities results in vandalism, unsafe acts and other related problems

- Due to lack of funding an official to manage an education and awareness campaign has not been deployed and the Youth in Waste programme is currently used to create waste awareness.

6. OBJECTIVES AND TARGETS

The Prince Albert Municipality should determine the suitability of specific programmes for their specific needs and utilise the most appropriate systems for the municipal area. Goals and objectives have been set based on the gaps and needs identified within the municipality –

- Develop an Integrated Waste Management By-law for the municipality using the DEA By-law model or the municipality can adopt a By-law that has been drafted by another district/ municipality within the province. DEADP is also in the process of drafting a model By-law

- The municipality needs to develop an illegal dumping strategy which will provide specific details about the roles that will be played by the different departments responsible for waste functions including law enforcement to ensure that this problem is reduced within the municipal area

- Source financial resources for –

    - New waste management equipment as well as maintenance thereof to ensure an equitable waste management service throughout the municipal area as per legislative requirements

- To appoint additional staff that is skilled in waste management to ensure the efficient delivery of integrated waste management services

- There is no formal awareness and education programme but the Youth in Waste programme is used to create awareness within the community. The municipality also uses ward committee meetings to create waste awareness and these are held on a monthly basis. The municipality needs to develop a formal awareness and education programme once funding has been sourced. The programme needs to focus on informing the entire community within the municipal area regarding integrated waste management and what the municipality is doing to improve waste management

- The municipality does not currently have the expertise or funding to implement a hazardous waste management programme, however the compilation of a database of the problematic hazardous waste types observed at waste disposal facilities will be done once funding is sourced to hire a skilled official to run with such a project. This will enable the municipality to focus awareness raising campaigns on the problematic hazardous waste with the aim to obtain assistance from the community, business and industry in minimising the identified hazardous waste

- The licensing process for the Klaarstroom and Leeu-Gamka waste disposal facilities is underway and the municipality needs to ensure that funding will be sourced to ensure that license conditions will be adhered to once the Environmental Authorisations have been granted

- The municipality needs to register all waste management facilities onto IPWIS so they can start reporting on waste quantities, which will be obtained using the waste calculator (estimates) developed by DEADP until the weigh pads that will be supplied by DEA are available

- The municipality will have to liaise with farmers within the municipal area regarding integrated waste management and to ensure that they manage their agricultural and general waste in a sustainable manner to comply with legislative requirements should they continue to manage their own waste
- The municipality must ensure that all households within the municipal area receive a basic waste management service

- Although recycling takes place, there are challenges with regards to people accessing the various sites. The income generated from the recyclables collected by the company in Oudtshoorn ensures that the municipality reaches a break-even point to cover the expenses

- A formal waste minimisation programme will be considered that will be aimed at incorporating the landfill salvagers into the municipal system

- It is therefore proposed, that all waste is to be disposed of through a regional waste disposal facility at a central location within distance from the local municipalities, where it will be sorted, crushed and disposed of through the authorised channels at the centralised depot in the Central Karoo District for safe disposal. This process must be governed by the District Municipality to ensure that the system is maintained.

7. IWMP IMPLEMENTATION

IWMP GOAL 1: PROMOTE, EDUCATE, AND RAISE AWARENESS WRT INTEGRATED WASTE MANAGEMENT							
OBJECTIVES	**TARGETS**	**ACTIVITIES**	**TIME FRAMES**			**RESPONSIBLE ENTITY**	**SOURCE OF FUNDING**
			2014 to 2019	**2020 to 2025**	**2025 Onward**		
1.1 <u>OBJECTIVE</u>: Promote integrated waste management within communities, schools, businesses and other institutions within the municipality	1.1.1 Achieve education and awareness wrt Integrated Waste Management within schools	1.1.1.1 Implement waste education and awareness through the WAME programme (Waste Management Education and Schools)	X			DEADP/ PAM	DEADP/PAM
		1.1.1.2 Conduct awareness sessions in collaboration with different stakeholders through public private partnerships (e.g. Nestle, Tiger brands, Woolworths, etc.) for the sponsoring of the Pick a Piece initiative for primary school children **NB NOTE:** DEADP to play a facilitating role between the between the Municipality and the Private Sector	X	X	X	PAM/DEADP	Nestle, Tiger Brands, Woolworths, etc.
	1.1.2 Achieve education and awareness wrt Integrated Waste Management within communities	1.1.2.1 Progressively establish and implement the two (blue) bag system within all communities	X	X	X	PAM	DEA (youth jobs in waste programme)
		1.1.2.2 Develop awareness raising materials e.g. pamphlets, rates accounts, community newspapers for dissemination within communities and civic associations	X	X	X	PAM	DEA (youth jobs in waste programme)

IWMP GOAL 1: PROMOTE, EDUCATE, AND RAISE AWARENESS WRT INTEGRATED WASTE MANAGEMENT							
OBJECTIVES	**TARGETS**	**ACTIVITIES**	**TIME FRAMES**			**RESPONSIBLE ENTITY**	**SOURCE OF FUNDING**
			2014 to 2019	**2020 to 2025**	**2025 Onward**		
1.1 <u>OBJECTIVE</u>: Promote integrated waste management within communities, schools, businesses and other institutions within the municipality	1.1.3 Achieve education and awareness wrt Integrated Waste Management within businesses	1.1.3.1 Develop awareness raising materials around integrated waste management for businesses 1.1.3.2 Conduct workshops with businesses around the creation of awareness and education in integrated waste management.	X	X		Technical Services /Industry	PAM / Industry
	1.1.4 Achieve education and awareness wrt Integrated Waste Management within other institutions e.g. health care facilities	1.1.4.1 Develop awareness raising materials around integrated waste management for hospitals, clinics and other institutions 1.1.4.2 Conduct workshops with all institutions around the creation of awareness and education in integrated waste management	X	X		Technical Services/ institutions/ sector departments (DOH, Correctional Services) (Central Karoo District Municipality) DEA	PAM / institutions/ sector departments (DOH, Correctional Services) (Central Karoo District Municipality) DEA

IWMP GOAL 2: IMPROVE WASTE INFORMATION MANAGEMENT							
OBJECTIVES	**TARGETS**	**ACTIVITIES**	**TIME FRAMES**			**RESPONSIBLE ENTITY**	**SOURCE OF FUNDING**
			2014 to 2019	**2020 to 2025**	**2025 Onward**		
2.1 <u>OBJECTIVE</u>: Establish and Implement an accurate waste quantification system	2.1.1 All waste management facilities to have a waste quantification system in place	2.1.1.1 Train officials on the waste quantification system	X	X	X	DEADP/PAM	N/A
		2.1.1.2 Implement the waste calculator at their integrated waste management facilities	X			PAM	N/A
		2.1.1.3 Allocate funding to install weighbridges at all waste management facilities		X	X	PAM	Secure MIG/ Donor funding
		2.1.1.4 Allocate funding to calibrate weigh pads/weighbridges at all waste management facilities (swop with 5 below)	X	X	X	Community services	PAM
		2.1.1.5 Acquire weigh pads/ weighbridges for their waste management facilities	X			PAM	DEA

IWMP GOAL 2: IMPROVE WASTE INFORMATION MANAGEMENT							
OBJECTIVES	**TARGETS**	**ACTIVITIES**	**TIME FRAMES**			**RESPONSIBLE ENTITY**	**SOURCE OF FUNDING**
			2014 to 2019	**2020 to 2025**	**2025 Onward**		
2.1 <u>OBJECTIVE</u>: Establish and Implement an accurate waste quantification system	2.1.2 Monitor the movement of Hazardous Waste	2.1.2.1 Identify sources of hazardous waste within the municipality and compile a database	X	X	X	PAM/DEADP	PAM/DEADP
		2.1.2.2 Introduce a hazardous waste manifest system by targeting the priority hazardous waste streams	X	X	X	PAM/DEADP	PAM/DEADP

IWMP GOAL 3: ENSURE THE EFFECTIVE AND EFFICIENT DELIVERY OF INTEGRATED WASTE MANAGEMENT SERVICES							
OBJECTIVES	**TARGETS**	**ACTIVITIES**	**TIME FRAMES**			**RESPONSIBLE ENTITY**	**SOURCE OF FUNDING**
			2014 to 2019	**2020 to 202**	**2025 Onward**		
3.1 OBJECTIVE: Capacitate waste managers in the public and private sectors with regard to the basic principles of sound waste management	3.1.1 All vacant posts in waste management are filled with properly qualified staff	3.1.1.1 Source and secure funding for the filling of posts 3.1.1.2 Recruit properly qualified staff	X	X	X	PAM	PAM
	3.1.2 Ensure proper training of municipal officials in integrated waste management principles	3.1.2.1 Municipal officials to attend integrated waste management training sessions/courses	X	X		DEADP/ PAM	DEADP/ PAM
3.2 OBJECTIVE: Ensure that Integrated WM functions are executed in an environmentally and socially acceptable manner	3.2.1 Establish the current basic service levels within Prince Albert Municipality	3.2.1.1 Conduct an analysis of current waste management services and compare with best practices	X	X	X	PAM	PAM/ Possible assistance from DEA (youth jobs in waste programme)
	3.2.2 Upgrade and improve service levels in those municipal areas identified as sub standard	3.2.2.1 Implement integrated waste management services aligned to best practices	X	X	X	PAM	PAM
	3.2.3 Ensure the provision of adequate and reliable vehicles, equipment and machinery	3.2.3.1 Source, upgrade and maintain all necessary vehicles, equipment and machinery	X	X	X	PAM	PAM

IWMP GOAL 3: ENSURE THE EFFECTIVE AND EFFICIENT DELIVERY OF INTEGRATED WASTE MANAGEMENT SERVICES							
OBJECTIVES	**TARGETS**	**ACTIVITIES**	**TIME FRAMES**			**RESPONSIBLE ENTITY**	**SOURCE OF FUNDING**
			2014 to 2019	**2020 to 202**	**2025 Onward**		
IWMP GOAL 4: PROMOTE WASTE MINIMISATION THROUGH THE RE-USE, RECYCLINGAND RECOVERY OF WASTE							
OBJECTIVES	**TARGETS**	**ACTIVITIES**	**TIME FRAMES**			**RESPONSIBLE ENTITY**	**SOURCE OF FUNDING**
			2014 to 2019	**2020 to 2025**	**2025 Onward**		
4.1 <u>OBJECTIVE:</u> Mainstream source separation of waste within all areas in the municipality	4.1.1 Promote and improve the blue bag system within the higher income areas	4.1.1.1 Identify willing households to participate in source separation	X	X	X	PAM	PAM DEA (youth jobs in waste programme)
	4.1.2 Establish the blue bag system within the other income areas	4.1.2.1 Pilot source separation in lower to middle income areas	X	X	X	PAM	PAM DEA (youth jobs in waste programme)
4.2 <u>OBJECTIVE:</u> <u>Formalise the recovery of</u>	4.2.2 Recover and recycle/reuse	4.2.1.1 4.2.2.1 Conduct an assessment to explore different options for the recycling and/or reuse of organics and builders rubble	X	X	X	PAM/ Industry	PAM/ Industry

IWMP GOAL 3: ENSURE THE EFFECTIVE AND EFFICIENT DELIVERY OF INTEGRATED WASTE MANAGEMENT SERVICES								
OBJECTIVES	**TARGETS**	**ACTIVITIES**	**TIME FRAMES**			**RESPONSIBLE ENTITY**	**SOURCE OF FUNDING**
			2014 to 2019	**2020 to 202**	**2025 Onward**		
recyclables, organics and builder's rubble	organics and builders rubble	4.2.2.2 Identify and implement appropriate technologies for the recycling and/or reuse of organics and builders rubble	X	X	X	PAM/ Industry	PAM/ Industry

IWMP GOAL 5: IMPROVE REGULATORY COMPLIANCE							
OBJECTIVES	**TARGETS**	**ACTIVITIES**	**TIME FRAMES**			**RESPONSIBLE ENTITY**	**SOURCE OF FUNDING**
			2014 to 2019	**2020 to 2025**	**2025 Onward**		
5.1 OBJECTIVE: License all unlicensed operational	5.1.1 All unlicensed Waste Disposal Facilities to be licensed	5.1.1.1 Appoint a EAP to assist with the authorisation process to license unlicensed waste disposal facilities	X			DEADP/DEA/PAM	AECOM: appointed to licence all unlicensed facilities

IWMP GOAL 5: IMPROVE REGULATORY COMPLIANCE							
OBJECTIVES	**TARGETS**	**ACTIVITIES**	**TIME FRAMES**			**RESPONSIBLE ENTITY**	**SOURCE OF FUNDING**
			2014 to 2019	**2020 to 2025**	**2025 Onward**		
or closed waste disposal facilities							within the municipal area
		5.1.1.2 Conducting a Basic Assessment Report (BAR) process for unlicensed Waste Disposal Facilities	X			EAP/ PAM	AECOM: appointed to licence all unlicensed facilities within the municipal area
		5.1.1.3 Ensure compliance with all Environmental Authorisations and Norms and Standards in respect of the provisions as stipulated in the Waste Act	X			DEADP	DEADP
	5.1.2 License and rehabilitate all closed waste disposal facilities	5.1.2.1 Allocate funding for the closure, rehabilitation and monitoring of the waste disposal facility	X			PAM	AECOM: appointed to licence all unlicensed facilities within the municipal area
		5.1.2.2 Appoint an EAP for the rehabilitation and closure of a waste disposal facility	X			PAM	DEADP
		5.1.2.3 Monitoring of rehabilitated waste disposal facility				PAM	PAM/CKDM

IWMP GOAL 5: IMPROVE REGULATORY COMPLIANCE							
OBJECTIVES	**TARGETS**	**ACTIVITIES**	**TIME FRAMES**			**RESPONSIBLE ENTITY**	**SOURCE OF FUNDING**
			2014 to 2019	**2020 to 2025**	**2025 Onward**		
5.2 <u>OBJECTIVE</u>: Ensure compliance of all waste disposal facilities with license conditions	5.2.1 Improve compliance monitoring, auditing and enforcement of waste disposal facilities	5.2.1.1 Conduct compliance audits	X	X	X	DEADP	DEADP/ Licence Holders
		5.2.1.2 Conduct internal and external audits as determined by licence conditions	X	X	X	DEADP/ PAM /Consultants	DEADP/ PAM
		5.2.1.3 Communicate compliance audit results	X	X	X	DEADP/ PAM/Consultants	DEADP/ PAM
		5.2.1.4 Monitor progress of audit actions implemented	X	X	X	DEADP/ PAM	DEADP/ PAM
		5.2.1.5 Monitor contraventions of the Waste Act and Municipal By-Laws	X	X	X	DEADP/ PAM	DEADP/PAM
		5.2.1.6 Develop Environmental Management Inspection (EMI) capacity in the municipalities	X			PAM	PAM/DEADP
5.3 <u>OBJECTIVE</u>: Establish integrated waste management facilities (drop off sites, MRFs,	5.3.1 Develop integrated waste management facilities	5.3.1.1 Identify the integrated waste management facilities that will be established in the municipality	X	X		DEADP/CKDM	DEADP
		5.3.1.2 Determine licensing requirements for facilities	X	X	X	DEADP	DEADP
		5.3.1.3 Appoint an Environmental Assessment Practitioner (EAP) for waste management facilities requiring licenses		X	X	DEADP/DEA	DEADP/DEA

IWMP GOAL 5: IMPROVE REGULATORY COMPLIANCE							
OBJECTIVES	**TARGETS**	**ACTIVITIES**	**TIME FRAMES**			**RESPONSIBLE ENTITY**	**SOURCE OF FUNDING**
			2014 to 2019	**2020 to 2025**	**2025 Onward**		
Transfer stations, composting, buy-back centres, swop shops etc.)		5.3.1.4 License waste management facilities		X		DEADP	PAM
5.4 <u>OBJECTIVE</u>: Develop an integrated waste management By-law	5.4.1 An integrated waste management By-law.	5.4.1.1 Revoke the existing municipal By-law	X	X		DEADP/PAM	DEADP/PAM

IWMP GOAL 6: ENSURE THE SAFEAND INTEGRATED MANAGEMENT OF HAZARDOUS WASTE							
OBJECTIVES	**TARGETS**	**ACTIVITIES**	**TIME FRAMES**			**RESPONSIBLE ENTITY**	**SOURCE OF FUNDING**
			2014 to 2019	**2020 to 2025**	**2025 Onward**		
6.1 <u>OBJECTIVE</u>: Promote safe handling, storage, transportation and disposal of hazardous waste	6.1.1 Facilitate awareness and training on the safe management of chemical and hazardous waste	6.1.1.1 Promote compliance with emergency incident management and reporting (section 30 of NEMA)	X	X	X	PAM /DEADP	PAM
		6.1.1.2 Facilitate training on emergency spill response to municipalities	X	X	X	PAM / DEADP	PAM
		6.1.1.3 Ensure municipal officials are trained on the Waste Classification and Management Regulations, the Standard for assessment of waste for landfill disposal, the Standard for disposal of waste to landfill and other relevant legislation	X	X	X	PAM /DEADP	PAM
	6.1.2 Remove household hazardous waste from the general waste stream	6.1.2.1 Promote source separation and diversion of household hazardous waste from the general waste stream	X	X	X	PAM/CKDM	PAM /DEA
	6.1.3 Manage Health Care Risk Waste in accordance with provincial legislation	6.1.3.1 Implement Health Care Risk Waste management legislation	X	X	X	PAM / DEADP	PAM

IWMP GOAL 6: ENSURE THE SAFEAND INTEGRATED MANAGEMENT OF HAZARDOUS WASTE							
OBJECTIVES	**TARGETS**	**ACTIVITIES**	**TIME FRAMES**			**RESPONSIBLE ENTITY**	**SOURCE OF FUNDING**
			2014 to 2019	**2020 to 2025**	**2025 Onward**		
6.1 <u>OBJECTIVE</u>: Promote safe handling, storage, transportation and disposal of hazardous waste	6.1.3 Manage Health Care Risk Waste in accordance with provincial legislation	6.1.3.2 Facilitate health care risk waste awareness amongst home-based care givers (safe disposal of HCRW generated at home) as well as other health-care facilities	X			PAM / CKDM	PAM
	6.1.4 Improve hazardous waste management	6.1.4.1 Engage the Departments of Agriculture and Education regarding the management of hazardous waste at their respective experimental farms and schools, respectively	X	X		PAM	PAM
		6.2.1.2 Facilitate co-ordinated and effective enforcement between various spheres of government	X	X	X	DEADP/ PAM / Other Authorities	DEADP/ PAM / Other Authorities

IWMP GOAL 7: ENSURE THE SOUND BUDGETING AND FINANCIAL MANAGEMENT FOR IWM SERVICE							
OBJECTIVES	**TARGETS**	**ACTIVITIES**	**TIME FRAMES**			**RESPONSIBLE ENTITY**	**SOURCE OF FUNDING**
			2014 to 2019	**2020 to 2025**	**2025 Onward**		
7.1 OBJECTIVE: Address funding constraints of waste management authorities	7.1.1 Identify different sources of funding	7.1.1.1 Explore and facilitate access to alternative funding sources	X	X	X	PAM/ DEADP/ CKDM	
7.2 OBJECTIVE: Capacitate waste authorities on financial aspects with regard to improving waste management service	7.2.1 Train officials within the waste management department within the municipality on financial management	7.2.1.1 Identify financial management courses or other training opportunities for inclusion in the performance agreements of municipal officials (Shouldn't the finance departmental officials be trained on financial aspects with regard to waste management?	X	X	X	PAM	PAM
7.3 OBJECTIVE: Improve funding for waste management services	7.3.1 Secure a sustainable funding stream for IWM	7.3.1.1 Municipalities to implement a revised tariff system based on full-cost accounting	X			PAM	PAM
		7.3.1.2 Engage financial institutions to finance waste infrastructure and technologies	X	X	X	PAM/ DEADP	PAM
		7.3.1.3 Engage the departments of Cooperative Governance and Traditional Affairs (COGTA) and Local Government on reviewing and increasing the allocation of Municipal Infrastructure Grant (MIG) for waste management infrastructure	X	X	X	PAM/ DEADP	PAM

8. MONITORING AND REVIEW

The Prince Albert Municipal Department: Community Services ensures that progress w.r.t the implementation of the 2nd generation IWMP is monitored (see table 23) by reporting to Council on a monthly basis, by conducting monthly meetings and site inspections with the Public Works Department which is the main funder of all the municipal infrastructure projects through the Municipal Infrastructure Grant (MIG). Once the final IWMP second generation document is approved by Council the resolution with the plan will be submitted to the Member of the Executive Council (MEC) for endorsement. This approval date will serve as the base for the implementation of the plan, although some base work on certain activities may have been started by the municipality. The municipality will also provide a quarterly report on the implementation of their 2nd IWMP to the DEADP. **Table 23** and **Table 24** below will be used to monitor and review the implementation of projects respectively in order to ensure that they are on schedule and to determine if any changes to the objectives need to be made.

Table 23: Monitoring of IWMP Implementation Plan

Monitoring of Activities	On Schedule	If Not, Reasons?	Action To Rectify	Responsible Person/s

Table 24: Review of IWMP Implementation Plan

Objectives	Are These Still Relevant	Amendment Required	Review Date	Responsible Person/s