

INTEGRATED WASTE MANAGEMENT PLAN (IWMP)

APRIL 2016

Tswelopele Local Municipality



TSWELOPELE
LOCAL MUNICIPALITY
A MUNICIPALITY IN PROGRESS

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1. Defining the geographical area

The Tswelopele Local Municipality was established in terms of section 14 of the Local Government: Municipal Structures Act, Act No 117 of 1998) and was published in Provincial Gazette no 109 dated 28 September 2000 and came into being on 06 December 2000. The new Local Municipality is a category B Municipality with a plenary executive system as contemplated in Section 3(b) of the determination of types of Municipality Act, 2000 (Act No 1 of 2000). Tswelopele Local Municipality is situated in the north western part of the Free State within the regional boundaries of Lejweleputswa District Municipality. The Local Municipality comprises two urban areas/ centres namely Hoopstad/ Tikwana and Bultfontein/ Phahameng, which are 60 km from each other, as well as their surrounding commercial farmland, and rural areas as demarcated by Municipal Demarcation Board.

Tswelopele borders the North West province to the North West, Nala local municipality to the north east, Tokologo local municipality to the west, Masilonyane local municipality to the south east and Machabeng local Municipality to the east.

The depiction of where Tswelopele is situated in Lejweleputswa District Municipality is shown in figure 1 below:

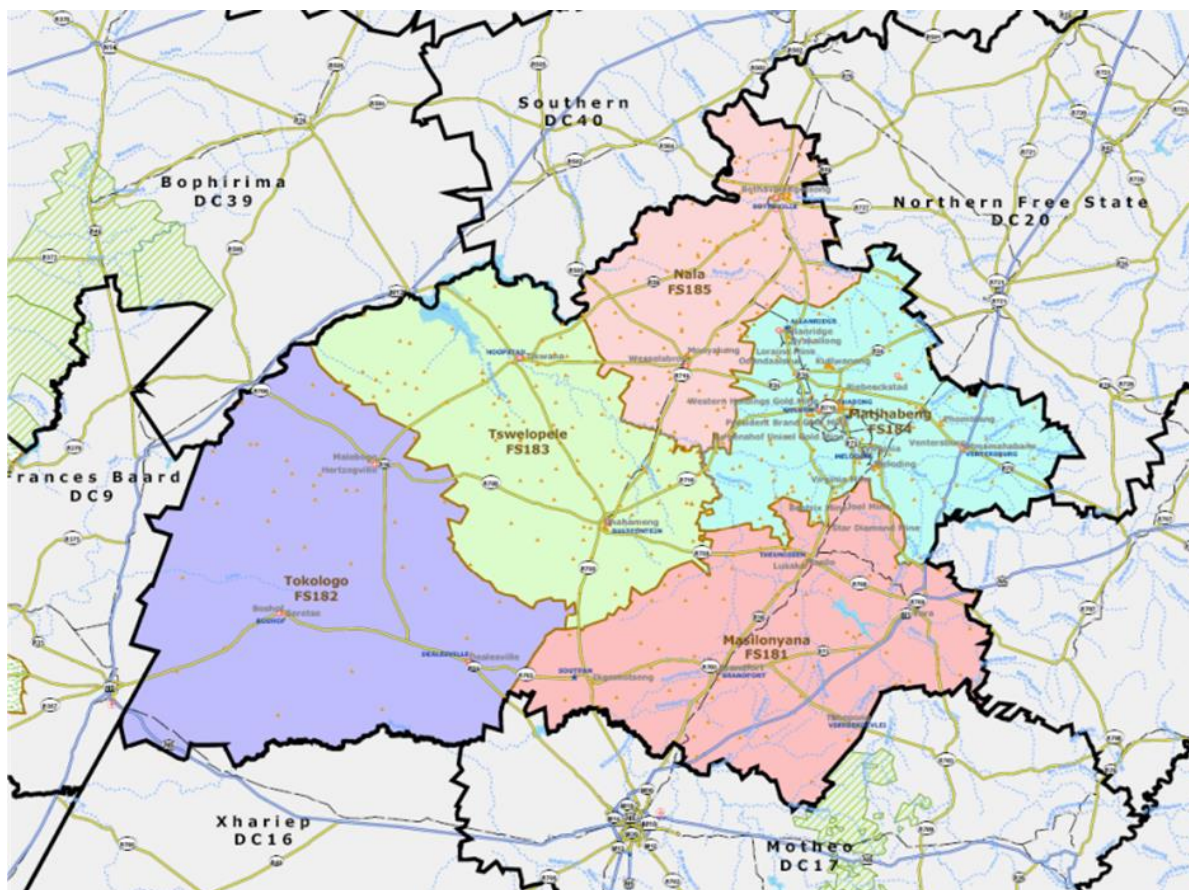


Figure 1: Locality Map of Tswelopele local municipality

Source: Garmap (African Series)

Tswelopele Local Municipality is the third largest municipality in the Lejweleputswa District municipality in size as presented in the following table below:

MUNICIPALITY	AREA IN KM²	%
MASILONYANA	6 775.97	21.4%
MATJHABENG	9 298.32	29.3%
TSWELOPELE	6 506.68	20.5%
NALA	5 142.40	16.2%
TOKOLOGO	3 963.01	12.5%
TOTAL	31 686.38	

2. Situation analysis

2.1. DEMOGRAPHICS (POPULATION AND DEVELOPMENT PROFILES)

2.1.1. High income, low density settlement

Population growth	
Base population	3334.00
Current growth estimates per annum	0.00
Future population estimates	5000.00
Population distribution	
Age:	
Youth	1100
Middle age	2000
Old age	180
Gender:	
Male	1600
Female	1734
Education:	
Primary	1000
Secondary	833
Tertiary	500
Employment:	
Employed	2334
Unemployed	1000

Population distribution graphs:

<p>Graph 1 If you are reading this message, please be sure to enter all of the relevant data to obtain a graph.</p>	<p>Graph 2 If you are reading this message, please be sure to enter all of the relevant data to obtain a graph.</p>
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<p>Graph 3 If you are reading this message, please be sure to enter all of the relevant data to obtain a graph.</p>	<p>Graph 4 If you are reading this message, please be sure to enter all of the relevant data to obtain a graph.</p>
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2.1.2. Middle income, middle density settlement

Population growth	
Base population	6905.00
Current growth estimates per annum	0.00
Future population estimates	7500.00
Population distribution	
Age:	
Youth	2071
Middle age	4143
Old age	373
Gender:	
Male	2900
Female	4005
Education:	
Primary	2072
Secondary	1726
Tertiary	1035
Employment:	
Employed	4143
Unemployed	2762

Population distribution graphs:

<p>Graph 5 If you are reading this message, please be sure to enter all of the relevant data to obtain a graph.</p>	<p>Graph 6 If you are reading this message, please be sure to enter all of the relevant data to obtain a graph.</p>
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Graph 7
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Graph 8
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2.1.3. Low Income, High Density (Including Informal Settlements)

Population growth	
Base population	35719.00
Current growth estimates per annum	35547.20
Future population estimates	35547.20
Population distribution	
Age:	
Youth	11787
Middle age	21431
Old age	1929
Gender:	
Male	15002
Female	20717
Education:	
Primary	10715
Secondary	8929
Tertiary	5357
Employment:	
Employed	16074
Unemployed	19645

Population distribution graphs:

<p>Graph 9 If you are reading this message, please be sure to enter all of the relevant data to obtain a graph.</p>	<p>Graph 10 If you are reading this message, please be sure to enter all of the relevant data to obtain a graph.</p>
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Graph 11
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Graph 12
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2.1.4. Rural Settlements

Population growth	
Base population	11906.00
Current growth estimates per annum	11906.80
Future population estimates	11906.80
Population distribution	
Age:	
Youth	3929
Middle age	7144
Old age	643
Gender:	
Male	5715
Female	6191
Education:	
Primary	3571
Secondary	2977
Tertiary	1786
Employment:	
Employed	5834
Unemployed	6072

Population distribution graphs:

<p>Graph 13 If you are reading this message, please be sure to enter all of the relevant data to obtain a graph.</p>	<p>Graph 14 If you are reading this message, please be sure to enter all of the relevant data to obtain a graph.</p>
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Graph 15
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Graph 16
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2.2. DETERMINING CURRENT WASTE GENERATION AND ESTIMATING FUTURE WASTE GENERATION RATES AND QUANTITIES

2.2.1. High income, low density

The following were calculated on the assumptions that:

In “High income” areas a person produces so much waste per day = 1.29kg/person/day or (1.29kgx365days) = 470.85kg/person/year.

Population growth	
Base population	3334.00
Current growth estimates per annum	0.00
Future population estimates	5000.00
Current waste generation and estimated future waste generation	
Current domestic waste generation rates per capita	1569.65
Future domestic waste generation rates per capita (in 10 years)	7848.24

2.2.2. Middle income, middle density

The below calculations were based on the assumptions that:

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

Population growth	
Base population	6905.00
Current growth estimates per annum	0.00
Future population estimates	7500.00
Current waste generation and estimated future waste generation	
Current domestic waste generation rates per capita	1865.04
Future domestic waste generation rates per capita (in 10 years)	9325.00

2.2.3. Low income, high density (including Informal settlement)

The following were calculated on the assumptions that:

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

Population growth	
Base population	35719.00
Current growth estimates per annum	35547.20
Future population estimates	35547.20
Current waste generation and estimated future waste generation	
Current domestic waste generation rates per capita	5345.35
Future domestic waste generation rates per capita (in 10 years)	26726.80

2.2.4. Rural settlements

The following were calculated on the assumptions that:

Individuals in rural settlement = 0.41kg/per person/day or (0.41kgx365 days)=149.65kg/person/year

Population growth	
Base population	11906.00
Current growth estimates per annum	11906.80
Future population estimates	11906.80
Current waste generation and estimated future waste generation	
Current domestic waste generation rates per capita	1781.73
Future domestic waste generation rates per capita (in 10 years)	8908.67

The following graphs depict the future waste generation in the different settlements. There will be significant increase across the board, notably there will be tremendous increase in waste generation within the “low income- high density settlements”.

Estimations of future waste per settlement graph:

<p>Graph 17 If you are reading this message, please be sure to enter all of the relevant data to obtain a graph.</p>	<p>Graph 18 If you are reading this message, please be sure to enter all of the relevant data to obtain a graph.</p>
<p>Graph 19 If you are reading this message, please be sure to enter all of the relevant data to obtain a graph.</p>	<p>Graph 20 If you are reading this message, please be sure to enter all of the relevant data to obtain a graph.</p>

2.3. WASTE QUANTITIES AND TYPES

2.3.1. Weighbridge

The Tswelopele Local municipality does not have a weighbridge in any of its two landfills currently. In as much as the municipality acknowledges the importance of recording the quantities of waste that enter the waste disposal facilities for reporting to the National Waste Information System, it does not have enough financial resources to secure this equipment but in future such will be considered.

2.3.2. Volume density estimation system

Bultfontein		
Waste type/streams	Waste generated per annum (tons)	Total percentages
Organic waste	6048.00	45.89 %
Cans	90.72	0.69 %
Paper	538.27	4.08 %
Glass	544.32	4.13 %
Plastic	846.72	6.43 %
Construction and demolition waste	5100.00	38.70 %
Tyres	10.00	0.08 %
Other	0.00	0.00 %
Total	13178.00	100.00 %

hoopstad		
Waste type/streams	Waste generated per annum (tons)	Total percentages
Organic waste	2952.00	49.95 %
Cans	44.28	0.75 %
Paper	262.72	4.45 %
Glass	265.68	4.50 %
Plastic	413.28	6.99 %
Construction and demolition waste	1967.00	33.28 %
Tyres	5.18	0.09 %
Other	0.00	0.00 %
Total	5910.14	100.00 %

2.3.3. Waste stream analysis

The above tables indicate the different waste types that make up the waste stream in the two towns. It is evident that the waste stream comprises mainly of organic waste that comes mainly from households and garden waste. A lot of the garden waste is generated in summer during the rainy season. In winter a significant amount of organic waste is also generated during autumn when trees shed leaves. Building or construction waste is the second biggest component of the waste. Construction waste or building rubble results from big and small developments that occur in the two towns. In certain instances the rubble is dumped illegally in municipal open spaces becoming the municipality's burden. Plastic, glass and paper also occupy a significant portion when compared to cans. Tires make up the smallest portion of the waste stream.

2.4. WASTE RECYCLING, TREATMENT AND DISPOSAL

2.4.1. Status Quo of Waste Disposal Facilities

There are two landfill sites that are used by the municipality. One is located in Hoopstad and the other is located in Bultfontein, the Bultfontein landfill is licensed. The Hoopstad landfill site needs fencing. Access control should be improved in the two sites. Waste is not covered on daily basis due to lack of machinery and poor management of the sites.

There is a landfill attendant at the Bultfontein landfill site who records the volumes of waste that enter the site on daily basis. There are no recycling facilities or waste storage facilities in the two sites. A number of individual reclaimers are active in both the sites. There is no signage on site. Ablution facilities within the sites should be improved.

There are no weigh pads or weigh bridges at the two sites.

2.4.2. Status Quo of Waste Treatment Facilities

There are no waste treatment facilities in Bultfontein, the hospital in Hoopstad does not treat any waste. All medical waste produced in the municipality is transferred outside the municipal area by authorized companies such as Compass and Clinix waste management. The municipality does not handle any medical or hazardous waste.

2.4.3. Status Quo of Waste Recyclers

Currently there are no formal municipal driven recycling initiatives. There are however individuals who collect recyclable materials for income generating purposes. There are also a few scrap metal buyers in the municipal area. There is one corporative that is involved in the collection and sale of recyclable materials.

2.4.4. Status Quo of other types of facilities

There is a project funded by the National Department of Environmental Affairs whose aim is to upgrade the Hoopstad landfill site. One of the deliverables that would be developed by the project is a waste storage facility which will be used for keeping recyclables before they are sold to recycling companies.

2.5. STATUS OF WASTE COLLECTION SERVICES

2.5.1. High income, low density settlement

Item	Total number
Households	1443
Serviced households	1443
Unserviced households	0
Indigent households	49
Unserviced indigent households	0

Waste collection services graph:

Graph 21
If you are reading this message, please be sure to enter all of the relevant data to obtain a graph.

2.5.2. Middle income, middle density settlement

Item	Total number
Households	4000
Serviced households	4000
Unserviced households	0
Indigent households	2900
Unserviced indigent households	0

Waste collection services graph:

Graph 22

If you are reading this message, please be sure to enter all of the relevant data to obtain a graph.

2.5.3. Low Income, High Density (Including Informal Settlements)

Item	Total number
Households	7158
Serviced households	7185
Unserviced households	0
Indigent households	7185
Unserviced indigent households	0

Waste collection services graph:

Graph 23

If you are reading this message, please be sure to enter all of the relevant data to obtain a graph.

2.5.4. Rural Settlements

Item	Total number
Households	600
Serviced households	0
Unserviced households	0
Indigent households	0
Unserviced indigent households	0

Waste collection services graph:

Graph 24

If you are reading this message, please be sure to enter all of the relevant data to obtain a graph.

2.6. FINANCING OF WASTE MANAGEMENT

2.6.1. Budget: Income and expenditure

Item	Amount
Collection	
Transportation	R 0.00
Capex-purchase (vehicles)	R 0.00
Maintenance	R 300000.00
Fuel	R 305000.00
Receptacles	R 0.00
General	R 0.00
Free basic service, Vehicle licenses, Protective clothing, Refuse bags	R 930100.00
Subtotal	R 1535100.00
Governance	
Staff (remuneration)	R 4028000.00
Education and awareness	R 60000.00
IWMPS	R 0.00
By-laws	R 5000.00
Overtime, Standby, Allowance other, Industrial council, Medical aid, Pension Fund, Provident Fund, UIF, SDL, Prov for BadDebts, worksmans comp	R 1665860.00
Subtotal	R 5758860.00
Disposal	
Transfer station	R 0.00
Disposal sites	R 0.00
Acquisition of land, equipment	R 0.00
Regulatory compliance, EIA's and licence	R 0.00
	R 0.00
Subtotal	R 0.00
Total	R 7293960.00

Budget graph:

Graph 25
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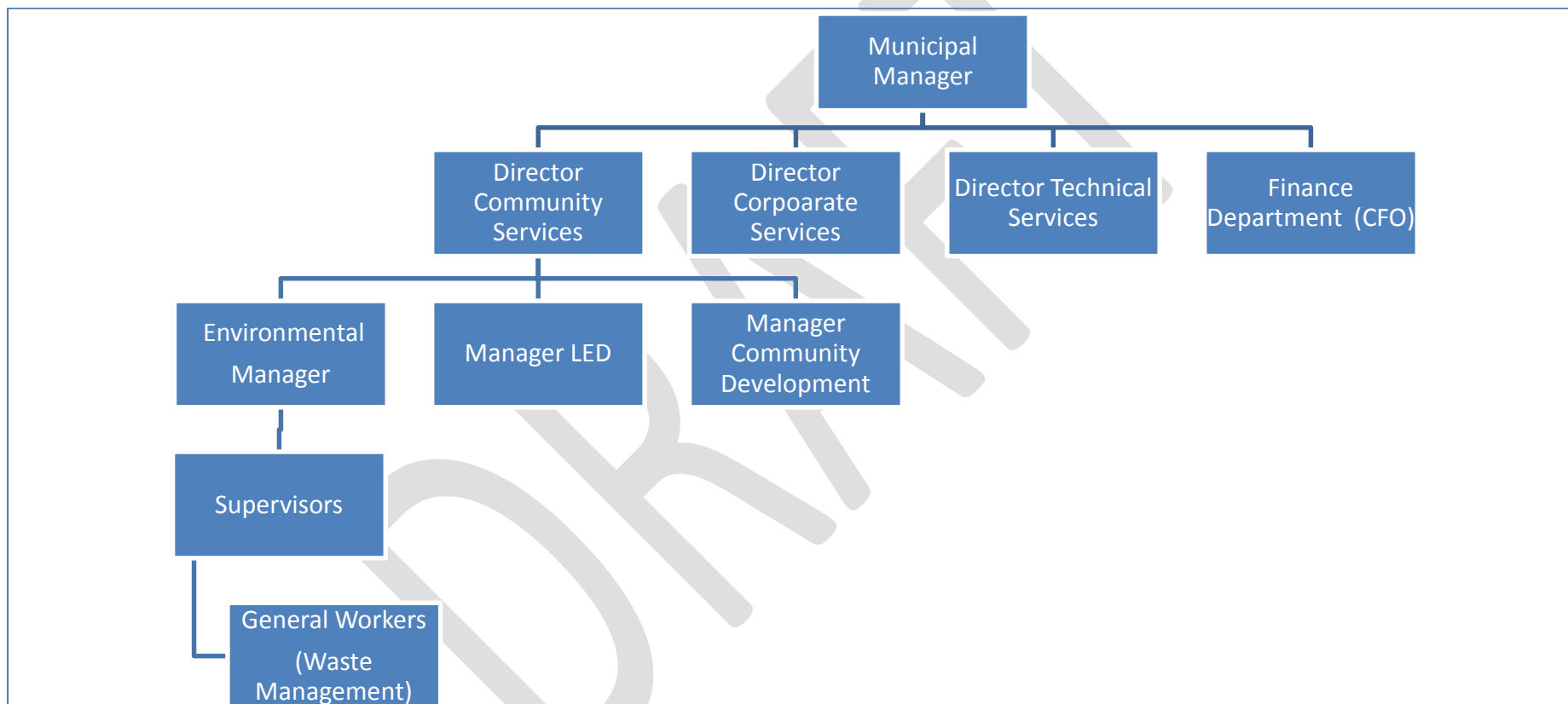
2.6.2. Revenue sources

Source	Amount
Funding sources	R 0.00
MIG Funding	R 0.00
Equitable share funding	R 8256640.00
Revenue from waste disposal fees	R 3409510.00
	R 1100.00
Total	R 11667200.00

2.6.4. Organisational and institutional matters

Organogram:

Please note that focus is given to the Community Services Department as it is responsible for waste management. Detail on other departments is omitted deliberately.



As reflected above, the waste management function is housed within the Community Services Department, Headed by a Director who is supported by the Environmental Manager.

3. Desired end state

3.1. SETTING STRATEGIC GOALS, TARGETS AND INDICATORS

Goal 1: Promote recycling and recovery of waste			
Objectives	Targets	Activities	Timeframe
To support local recycling initiators	Support 1 local group of recyclers	1. Formalise the agreement between the municipality and the identified recyclers.	June 2016
		2. Provide a recyclable waste storage facility to formalised recyclers in Hoopstad	June 2016
To promote waste separation at source in order to promote waste hierarchy	Identify 2 schools to pilot the project and 1 municipal regional office	1. Enter into an agreement with a recycling company	June 2016
		2. Enter into an agreement with two schools	June 2016
		3. Procure wheelie bins for the storing of recycling materials for identified schools	June 2016
To encourage composting of organic waste	Two composting plants established-one in each town	1. Identify partners for composting	June 2017

		<ul style="list-style-type: none"> 2. Identify sites for the project 3. Procure materials and equipment 4. Implement the project 	<ul style="list-style-type: none"> June 2017 June 2018 June 2018
To support local recycling initiators	Establish two recyclers forums one in each town	<ul style="list-style-type: none"> 1. Identify and compile a list of recyclers in Hoopstad and Bultfontien 2. Establish a forum of recyclers 	<ul style="list-style-type: none"> June 2017 June 2017

Goal 2: Ensure the effective and efficient delivery of waste services			
Objectives	Targets	Activities	Timeframe
To provide weekly house to house waste collection to residents and businesses in the municipality	Provide weekly waste collection to all formalised households and businesses within the jurisdiction of the municipality	<ol style="list-style-type: none"> 1. Develop an Integrated Waste Management Plan 2. Provide dustbins to all formalised households 3. Procure machinery/equipment for collection of waste 4. To provide weekly waste collection to Households and businesses 	<p>June 2016</p> <p>June 2017</p> <p>June 2018</p> <p>June 2016</p>
To operate compliant waste disposal facilities	<p>Ensure the licensing of the two landfill sites.</p> <p>Ensure adherence to minimum requirements for waste disposal by landfill</p>	<ol style="list-style-type: none"> 1. License the Hoopstad landfill site 2. Procure yellow fleet to operate at municipal landfill sites to ensure covering and compaction of waste 	<p>June 2016</p> <p>June 2019</p>
To operate and maintain equipment that is suitable for waste management	Two compactor trucks purchased for collection of waste	Procure two compactor trucks	June 2018

To maintain an effective and efficient human resource capital for the management of waste	To maintain the correct number of able bodied men and women for the management of waste	Create new posts to have a full contingent of waste management workers	June 2018
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Goal 3: Ensure that legislative tools are developed to deliver on the Waste Act and other applicable legislation			
Objectives	Targets	Activities	Timeframe
To develop a legislative framework that will guide the management of waste in Tswelopele local municipality's area of jurisdiction	Develop waste management bylaws that are aligned to the National Acts (an in house project).	1. Develop waste management bylaws 2. Implement the waste management bylaw 3. Enforce the waste management Bylaw	June 2016 July 2016 July 2016
To develop a legislative framework that will guide the management of waste in Tswelopele local municipality's area of jurisdiction	Develop the Integrated Waste Management Plan for the municipality	Develop the Integrated Waste Management Plan using the DEA portal	June 2016

Goal 4: Sound budgeting and financing of waste management services

Objectives	Targets	Activities	Timeframe
To ensure that adequate resources are available for the provision of waste management services.	To ensure adequate budget is available to fund all waste management activities	Ensure that waste tariffs are adequate to sustain the provision of the service by charging the appropriate fees.	June 2016
To ensure that adequate resources are available for the provision of waste management services.	To ensure adequate budget is available to fund all waste management activities	Ensure that the free basic service is provided to deserving households only as reflected on the indigent list	June 2016

Goal 5: Ensure the safe and proper disposal of waste			
Objectives	Targets	Activities	Timeframe
To operate compliant waste disposal facilities	<p>Ensure the licensing of the two landfill sites.</p> <p>Ensure adherence to minimum requirements for waste disposal by landfill</p>	<p>1. License the Hoopstad landfill site</p> <p>2. Procure yellow fleet to operate at municipal landfill sites to ensure covering and compaction of waste</p>	<p>June 2016</p> <p>June 2019</p>
To maintain clean open spaces that are free of waste dumps	To eliminate illegal waste dumps	1. Conduct a survey to determine the cause/s of illegal dumping	June 2016

Goal 6: Education and awareness			
Objectives	Targets	Activities	Timeframe
To capacitate communities and pupils on waste management and recycling	To encourage recycling at both school and household levels	1. Conduct awareness campaigns at schools 2. Celebrate Environmental Calendar days with communities members and schools	June 2016 June 2016

Goal 7: Compliance and enforcement			
Objectives	Targets	Activities	Timeframe
To comply with all waste related legislation	To implement and enforce the National Environmental Management Waste Act, Act No.59 of 2008	Designate Waste Management Officer Register on the National Waste Information System and provide regular reports	June 2016 June 2016

4. Identify, evaluate and select alternatives

4.1. STRATEGIC GOALS, TARGETS, TIMEFRAME, BUDGET

Goal 1: Promote recycling and recovery of waste			
Objectives	Targets	Alternatives	Budget
To support local recycling initiators	Support 1 local group of recyclers	<ol style="list-style-type: none"> 1. Purchase equipment such as bailing machines for three recycling groups 2. Purchase a truck for a recycling group to collect recyclables in and around the municipal area 3. Provide land and electricity to recycling groups 	<p>R2 500 000</p> <p>R500 000</p> <p>R 550 000</p>
To promote waste separation at source in order to promote the waste hierarchy	Identify 2 schools to pilot the project and 1 municipal regional office	<ol style="list-style-type: none"> 1. Initiate a separation at source project for communities who reside in town 	R70 000

		2. Roll out waste separation in Tikwana and Phahameng townships	R150 000
To encourage composting of organic waste	Two composting plants established-one in each town	1. Dispose organic waste at the landfill site	R 200 000

Goal 2: Ensure the effective and efficient delivery of waste services			
Objectives	Targets	Alternatives	Budget
To provide weekly house to house waste collection to residents and businesses in the municipality	Provide weekly waste collection to all formalised households and businesses within the jurisdiction of the municipality	<ol style="list-style-type: none"> 1. Introduce community drop off points in Tikwana and Phahameng to use as central collection points by municipality 2. Outsource the waste management function to a private company 	<p>R 350 000</p> <p>R700 000</p>

Goal 3: Ensure that legislative tools are developed to deliver on the Waste Act and other applicable legislation

Objectives	Targets	Alternatives	Budget
To develop a legislative framework that will guide the management of waste in Tswelopele Local municipality's area of jurisdiction	Develop waste management bylaws that are aligned to the National Acts (an in House project)	Use an external service provider to develop the bylaws for the municipality	R300 000
	Develop the Integrated Waste Management Plan for the municipality using the DEA portal(in house project)	Use an external service provider to develop the Integrated Waste Management Plan for the municipality	R300 000

Goal 4: Sound budgeting and financing of waste management services

Objectives	Targets	Alternatives	Budget
To ensure that adequate resources are available for the provision of waste management services.	To ensure adequate budget is available to fund all planned waste management activities	Source funding from Agencies and Government departments	R10 000 000
	To ensure adequate budget is available to fund all planned waste management activities	Enter into a service delivery agreement with a private service provider to manage waste in the municipality	R 7 000 000

Goal 5: Ensure the safe and proper disposal of waste			
Objectives	Targets	Alternatives	Budget
To operate compliant waste disposal facilities	Ensure the licensing of the two landfill sites. Ensure adherence to minimum requirements for waste disposal by landfill	Identify a service provider to operate and manage the landfill sites on behalf of the municipality	R1 700 000
To maintain clean open spaces that are free of waste dumps	To eliminate illegal waste dumps	Purchase skip bins to avoid illegal dumping	R400 000

Goal 6: Education and awareness			
Objectives	Targets	Alternatives	Budget
To capacitate communities and pupils on waste management and recycling	To encourage recycling at both school and household levels through quarterly awareness campaigns	Recruit an Environmental Extension Officer(Educator)	R 200 000
To capacitate communities and pupils on waste management and recycling	To encourage recycling at both school and household level through quarterly awareness campaigns	Build an environmental education centre	R 600 000

Goal 7: Compliance and enforcement			
Objectives	Targets	Alternatives	Budget
To comply with all waste related legislation	To implement and enforce the National Environmental Management Waste Act, Act No.59 of 2008	<ol style="list-style-type: none"> 1. Identify two officials and train them as "Green Scorpions". 2. Recruit two rangers 	<p>R 40 000</p> <p>R 240 000</p>

5. Communication and Stakeholder Participation

5.1. CONSULTATION PROCESS SUMMARY

Stakeholder	Issues raised/ Concerns	Municipality's response	General comments
Phahameng Community including extension 7& 8	Need for waste receptacles for households and skip bins in open spaces	They municipality currently does not have budget for bins, but in the coming years provision will be made for such.	Bins were distributed to all residents of extension 7&8 in 2014, a new residential area in Bultfontein. The waste collection service was also extended to this new development to ensure the attainment of a 100% coverage in formalised residential areas.
Bultfontein and Hoopstad (Town) Community	Challenge of garden waste- The municipality should collect garden waste on a regular basis	The municipality had in the past collected garden waste for free from household but due to financial constraints the municipality will charge a fee as reflected on the official garden waste	Residents should pay for collection of garden waste especially for the bulky materials such as tree cuttings etc.
Tikwana Community	Illegal dumping is a huge challenge. The municipality must provide dust bins with	They municipality currently does not have budget for bins, but in the coming years	The municipality has a schedule to collect waste at least once a week from all households and businesses, but illegal dumping still remains a challenge

	enough capacity to keep waste until collection.	provision will be made for such.	
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6. Implementation Instruments

6.1. PARTNERSHIPS

The municipality is currently operating without any partnerships, but will in the future explore partnerships that will be beneficial to the municipality. The municipality has realised the need to enter into partnership especially with regards to recycling and associated processes. For example, establishment of buy-back centres in the two towns will need the municipality to partner with an external stakeholder/s. Another situation that will need partnering is the “waste separation at source project”.

6.2. LEGISLATIVE INSTRUMENTS: DEVELOPMENT AND ENFORCEMENT OF BY-LAWS

The municipality is in the process to develop by-Laws. The by-laws will be implemented in the 2016/17 financial year. Currently the municipality relies on its Traffic Officers for Law enforcement. The same Officers will be used for ensuring the implementation and enforcement of the waste by- laws. The municipality will explore the possibility of training officials to become Environmental Management Inspectors (Green Scorpions). These will then ensure compliance with the by-Laws and Environmental Legislation as a whole.

6.3. FUNDING MECHANISMS

The municipality is mainly depended on external funding for management of waste. Interdepartmental contribution, namely equitable share, is the main contributor towards the management of waste. Service charges also contribute a significant amount but there is need to conduct a full cost accounting of how much it cost to deliver the waste management service. This will enable the municipality to charge tariffs that are reflective of the cost of rendering the waste management service.

Other funding sources such as the Treasury and the Department of Environmental Affairs will also be considered in future to assist the municipality with waste management initiatives.

6.4. IMPLEMENTATION PLAN (SUMMARY OF AN IWMP PLANNING PROCESS)

DRAFT

Situation Analysis	Desired end state (Goals)	Targets	Y1	Y2	Y3	Y4	Y5	Selected alternatives	(Implementation mechanisms) Resources		
									Human Resource (HR)	Equipment (EQP)	Finance (HR+EQP)
Minimal Support is given to local recyclers/reclaimers	To support local recyclers	Support one local recycling group each year	x	x	x	x		<ul style="list-style-type: none"> • Purchase equipment such as bailing machines for three recycling groups • Purchase a truck for a recycling group to collect recyclables in and around the municipal area 		R 2.5 Mil	R 2.5 Mil
										R 500K	R 500k

									<ul style="list-style-type: none"> • Provide land and electricity to recycling groups 		R 550k	R 550k
Waste recycling initiatives not supported by the municipality. There's need to encourage community members to participate in waste reduction.	To promote waste separation at source in order to promote the waste hierarchy	Identify 2 schools to pilot the project and 1 municipal regional office	x	x					<ul style="list-style-type: none"> • Initiate a separation at source project for communities who reside in town • Roll out waste separation in Tikwana and Phahameng townships 		R 70K	R 70K
											R150K	R 150K
Composting not done in the municipal area	To develop composting plants/centres	Develop two composting plants - one in each town	x	x					<ul style="list-style-type: none"> • Dispose organic waste at the landfill site 	R 130K	R 20K	R 150K

No formal structure to coordinate recyclers	Establish a formal body that will coordinate all recyclers	Establish two recyclers forums	x								
Inconsistent collection of waste from formalised residential areas and businesses	Provide weekly waste collection to all formalized households and businesses within the jurisdiction of the municipality	Weekly collection of waste from formalised residential areas and business	X	X	X	X	X	<ul style="list-style-type: none"> • Introduce community drop off points in Tikwana and Phahameng to use as central collection points by municipality • Outsource the waste management function to a private company 		R 350K	R350K
										R 700K	R 700K

Municipality is using unconventional equipment for waste collection	To use equipment suitable for waste collection	Procure compactor 2 trucks			x	x			•			
Lack of legislative framework to enforce the Waste Act.	To develop an effective legislative framework aligned to the National Environmental Management Waste Act No.59 of 2008	Develop and implement waste management by-laws that are aligned to the National Environmental Waste Act (an in House project)	x	x	x	x	x		• Use an external service provider to develop by-laws for the municipality		R 300K	R 300K
Lack of legislative framework to enforce the Waste Act.	To develop an effective legislative framework aligned to the	Develop and implement the Integrated Waste Management	x	x	x	x	x		• Outsource the development of Integrated Waste management		R 300K	R 300K

	National Environmental Management Waste Act No.59 of 2008	Plan. Review the plan annually							plan to a Service provider				
Lack of resource for the management of waste	To ensure adequate resources are available for management of waste	To ensure adequate budget is available to fund all planned waste management activities	x	x	x	x	x		<ul style="list-style-type: none"> • Source funding from Agencies and Government departments • Enter into a service delivery agreement with a private service provider to manage waste on behalf of the municipality 	R 10 Mil	R 10 Mil	R 7 Mil	R 7 Million

Waste disposal sites not complying to minimum requirements	To operate compliant waste disposal facilities	Ensure the licensing of the Hoopstad landfill site Ensure adherence to minimum requirements for waste disposal by landfill	X						<ul style="list-style-type: none"> Identify a service provider to operate and manage the landfill sites on behalf of the municipality 		R 1.7 mil	R 1.7 Mil
Uncontrolled illegal dumping in municipal Open spaces	To eliminate illegal dumping of waste	Provide weekly waste collection to formalized residential areas	x	x	x	x	x		<ul style="list-style-type: none"> Purchase skip bins to avoid illegal dumping 		R 40k	R 40K

Communities are not capacitated and lack awareness regarding waste management	Communities that are well informed in waste management	Encourage waste management practices that meet National standards through quarterly awareness campaigns	x	x	x	x	x	<ul style="list-style-type: none"> Recruit an Environmental Extension Officer(Educator) Build an environmental education center 	R 200K	R 600K	R 200K	R 600k
Municipality not fully complying and enforcing National Environmental Management Act and the Waste Act.	Fully comply and enforce the National Environmental Management Act.	To implement and enforce the National Environmental Management Waste Act, Act No.59 of 2008		x	x	x	x	<ul style="list-style-type: none"> Identify two officials and train them as "Green Scorpions". Recruit two rangers for enforcement 	R 40k	R120k	R 40k	R120K

7. Reporting on Monitoring

7.1. STRATEGIC ISSUES

OBJECTIVE	TARGET	INDICATOR	Target date	Responsible Person
To support local recycling initiators	Support 1 local group of recyclers	Report on reflecting support given to a recycling group	June 2017	Environmental Manager
To promote waste separation at source in order to promote the waste hierarchy	Identify 2 schools to pilot the project and 1 municipal regional office	Report on pilot projects initiated	June 2017	Environmental Manager
To provide weekly house to house waste collection to residents and businesses in the municipality	Provide weekly waste collection to all formalized households and businesses within the jurisdiction of the municipality	Monthly reports reflecting weekly waste collection	June 2017	Environmental Manager
To encourage composting of organic waste	To develop two composting centers	Developed composting centers - A report	June 2017 and June 2018	Environmental Manager
To operate and maintain equipment that is suitable for waste management	Procure two waste compactor trucks	Two compactor trucks procured - one per year	June 2019 and June 2020	Environmental Manager
To develop a legislative	Develop waste management	Approved By-Laws	June 2017	Environmental Manager

framework that will guide the management of waste in Tswelopele Local municipality's area of jurisdiction	by-laws that are aligned to the National Acts			
To develop a legislative framework that will guide the management of waste in Tswelopele Local municipality's area of jurisdiction	Develop the Integrated Waste Management Plan	Approved Integrated Waste Management Plan	June 2017	Environmental Manager
To ensure that adequate resources are available for the provision of waste management services	To ensure adequate budget is available to fund all planned waste management activities	Municipal budget reflecting adequate budget for waste management	June 2017	Environmental Manager
To operate compliant waste disposal facilities	License the Hoopstad landfill site	License for the Hoopstad landfill site	June 2017	Environmental Manager
To capacitate communities and pupils on waste	Conduct quarterly awareness campaigns	Report of awareness campaigns held	June 2017	Environmental manager

management and recycling				
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7.2. PERFORMANCE

The Municipality's Integrated Waste Management Plan will be implemented by the Community Services Department. The document will be reviewed annually to ensure relevance to prevailing conditions in the municipality. The objectives of the plan will be reflected in the municipality's strategic documents depending on the availability of funds to implement such objectives.

7.3. PUBLIC ACCOUNTABILITY

The municipality will communicate achievements and challenges experienced during the implementation of the Integrated Waste Management Plan. This feedback will be done during public participation process as would be organised by the relevant municipal office/s.

7.4. COMMUNICATION AND PUBLIC PARTICIPATION PLAN

As mentioned above (7.3), The Implementation of the Integrated Waste Management plan will be guided by among other things community and stakeholder needs and priorities. Communication of the plan will be aligned to other municipal planning process, such as the IDP, to ensure alignment.

ANNEXURE OR REFERENCES