



SIYATHEMBA LOCAL MUNICIPALITY

Water Services Development Plan: IDP Water Sector Input Report

for IDP incorporation as directed by the Water Services Act (Act 108 of 1997)

FY 2022/23

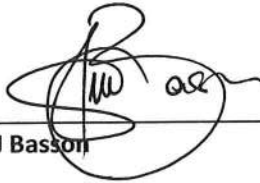
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Signed this 6th day, of April 2022 at Prieska.



J Basson

Infrastructure Manager

Signed this 6th day, of April 2022 at Prieska.



HH Meijing

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Abbreviations and Definitions

DWS	Department of Water and Sanitation
BDS	Blue Drop Certification System
FY:	Financial Year - means in relation to – <ul style="list-style-type: none"> • a national or provincial department, the year ending 31 March; or • a municipality, the year ending 30 June.
GDS	Green Drop Certification System
IDP:	Integrated Development Plan - An IDP is a legislative requirement for municipalities which identifies the municipality's key development priorities; formulates a clear vision, mission and values; formulates appropriate strategies; shows the appropriate organizational structure and systems to realize the vision and the mission and aligns resources with the development priorities.
MFMA	Local Government: Municipal Finance Management Act, 2003 (Act No. 56 of 2003)
m ³	cubic meters = 1 000 liter = 1 kiloliter
MI	Mega liter = 1 000 kiloliter = 1 000 000 liter
SDBIP:	Service Delivery Budget Implementation Plan; is a management, implementation and monitoring tool that enable the Municipal Manager to monitor the performance of senior managers, the Mayor to monitor the performance of the Municipal Manager, and for the community to monitor the performance of the municipality.
WSA:	Water Services Authority - means a municipality with the executive authority and the right to administer water services as authorized in terms of the Municipal Structures Act, 1998 (Act No. 117 of 1998)
WSDP:	Water Services Development Plan – means the plan to be developed and adopted by the WSA in terms of the Water Services Act, 1997 (Act No. 108 of 1997)
WSDP Guide Framework	Modular tool which has been developed by the DWS to support Water Services Authorities in complying with the Water Services Act with respect to Water Services Development Planning and which is also used by the DWS to regulate such compliance
WSP:	Water Services Provider - means any person or institution who provides water services to consumers or to another water services institution, but does not include a water services intermediary

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Introduction

The Siyathemba LM is authorized in terms of the Municipal Structures Act (Act No. 117 of 1998) and the Municipal Structures Amendment Act (Act No. 33 of 2000) as the Water Services Authority for its area of jurisdiction and therefore has a duty, as assigned to it in terms of the Water Services Act (Act No. 108 of 1997), to all consumers or potential consumers to progressively ensure efficient, affordable, economical and sustainable access to water services.

The Siyathemba WSA has elected to perform the water services provision function and is therefore also the Water Services Provider (WSP) including the functions of bulk water provision, water reticulation, sewerage services and bulk wastewater collection and treatment to the towns and villages in its area of jurisdiction.

The Water Services Act, 1997 (Act No. 108 of 1997) places a duty on Water Services Authorities to prepare a Water Services Development Plan as part of the process of preparing any integrated development plan. Section 15 (5) of the Water Services Act, 1997 states that:

A water services development plan must form part of any integrated development plan contemplated in the Local Government Transition Act, 1993 (Act No. 209 of 1993).

The purpose of this report is to provide relevant and summarized water services development planning inputs for incorporation into the Siyathemba integrated development planning process and is structured as follows:

Section A: Status Quo Overview: providing a summarized view of the water services status quo in terms of the water services functional business elements as aligned to the WSDP framework.

Section B: State of Water Services Planning: presents the status of- and references the water services development plan of the Water Services Authority.

Section C: Water Services Existing Needs Perspective: an overview of the WSA's assessment and interpretation of its water services, with specific focus on problem definition statements.

Section D: Water Services Objectives and Strategies: outlines the 5-year water services objectives and strategies as developed through the water services development planning process for incorporation in terms of the integrated development plan and aligned to the water services functional business elements.

Section E: Water Services MTEF Projects: the agreed water services projects for the medium-term expenditure framework and inclusive of funding sources.

Section F: WSDP Projects: presents the projects identified during the water services development planning process in order to meet the water services strategies of the water services authority, as aligned to the outflow from the situation analysis per water services business element.

Section A: Status Quo Overview

The abbreviated status quo overview of the Siyathemba water services function is presented in the next sections in terms of the water services functional business elements as aligned to the WSDP framework.

Business Element 1: Demographics

The Siyathemba LM comprises 3 towns namely Prieska, Marydale and Niekerkshoop. The table below provides an overview of the settlements within the WSA area of jurisdiction, with their corresponding population and household numbers, as per the WSA's water services planning baseline figures. It should be emphasized that the 2011 household and population figures have been aligned with the Census 2011 which determined the following for the Siyathemba LM:

Number of households per Census 2011:	5 831
Population per Census 2011:	21 591
Average number of people per household:	3.71

The 2022 household and population figures have been determined by applying the projected STATS SA growth rates to the 2011 baseline figures as follows:

Growth rate 2011 to 2015: 1.57%

The resulting household and population figures are aligned with the DWS National Geo-Referenced Database which forms the baseline for the WSDP Guide Framework.

The water services levels of the respective settlements are illustrated in the context of its adequacy (as per the WSDP Guide Framework definitions).

Table A.1 Water services overview (water)

Settlement Type	2 011		2 022		Water category									
	Households	Population	Households	Population	Adequate: Formal	Adequate: Informal	Adequate: Shared Services	Water resources needs only	O&M needs only	Infrastructure needs only	Infrastructure & O&M needs	Infrastructure, O&M & Resource need	No Services: Informal	No Services: Formal
URBAN														
Formal Town					Adequate			Below RDP					None	
Marydale	785	2912	1117	4144	✓			✓						
Niekerkshoop	493	1829	682	2530	✓									
Prieska	3 089	11460	4 405	16 343	✓						✓			
Sub-Total	4 367	16 202	6 204	23 017	3	0	0	0	0	0	1	0	0	0
Townships (Informal)					Adequate			Below RDP					None	
Marydale			191	707		✓								
Niekerkshoop			145	537		✓								
Prieska			472	1 746		✓								
Sub-Total:	0	0	808	2 990	0	3	0	0	0	0	0	0	0	0
RURAL														
Rural Small Village					Adequate			Below RDP					None	
Sub-Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rural Scattered					Adequate			Below RDP					None	
Sub-Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Working towns & service centres					Adequate			Below RDP					None	
	0	0	0	0										
Sub-Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Farming					Adequate			Below RDP					None	
Sub-Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-Total (Rural)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0	0	7 012	23 017	3	3	0	0	0	0	0	0	0	0

Note: * aligned with Census 2011

Table A.2 Water services overview (sanitation)

Settlement Type	2 011		2 022		Sanitation category									
	Households	Population	Households	Population	Adequate: Formal	Adequate: Informal	Adequate: Shared Services	Water resources needs only	O&M needs only	Infrastructure needs only	Infrastructure & O&M needs	Infrastructure, O&M & Resource need	No Services: Informal	No Services: Formal
URBAN														
Formal Town					Adequate			Below RDP			None			
Marydale	785	2912	1117	4144	✓									
Niekerkshoop	493	1829	682	2530	✓									
Prieska	3 089	11460	4 405	16 343	✓									
Sub-Total		4 367	16 202	6 204	23 017	3	0	0	0	0	0	0	0	0
Townships (Informal)					Adequate			Below RDP			None			
Marydale			191	707									✓	
Niekerkshoop			145	537									✓	
Prieska			472	1 746									✓	
Sub-Total:		0	0	808	2 990	0	0	0	0	0	0	0	3	0
RURAL														
Rural Small Village					Adequate			Below RDP			None			
Sub-Total		0	0	0	0	0	0	0	0	0	0	0	0	0
Rural Scattered					Adequate			Below RDP			None			
Sub-Total		0	0	0	0	0	0	0	0	0	0	0	0	0
Working towns & service centres					Adequate			Below RDP			None			
	0	0	0	0										
Sub-Total		0	0	0	0	0	0	0	0	0	0	0	0	0
Farming					Adequate			Below RDP			None			
Sub-Total		0	0	0	0	0	0	0	0	0	0	0	0	0
Sub-Total (Rural)		0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL		0	0	7 012	23 017	3	0	0	0	0	0	0	3	0

Note: * aligned with Census 2011

Business Element 2: Service Levels

The residential water services delivery access profile for Siyathemba LM has been aligned with the Census 2011 definitions and is presented in Table A.3 below. It is emphasized that the access profile does not consider quality- or adequacy of services.

The access profile represents a WSA perspective and hence, includes all settlements located within the municipal boundary. It should therefore be emphasized that the level of service provided to households in farming- and other privately serviced areas are included in the profiles, and that it can be stated that:

- The municipal records confirm that a basic- or higher level of water service has been implemented to its communities.
- Due to the increased number of households in informal settlements, the 2021 water services access profile shows an increased percentage of households serviced at a level of access to communal water points.

Figure A.2: Household water access profile

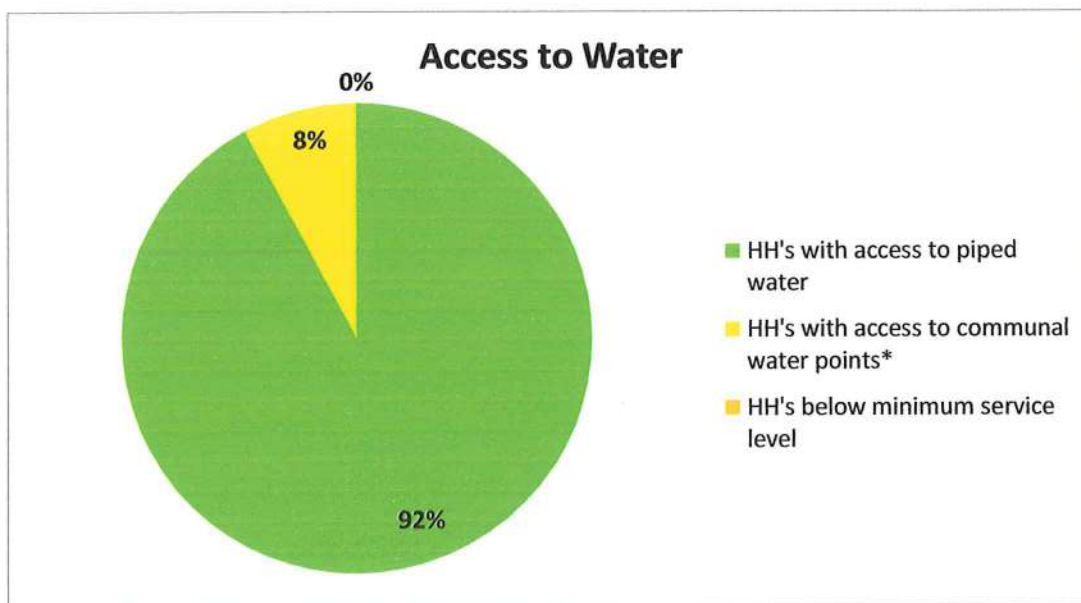


Table A.3: Residential water services delivery access profile: Water*Note: * aligned with Census 2011*

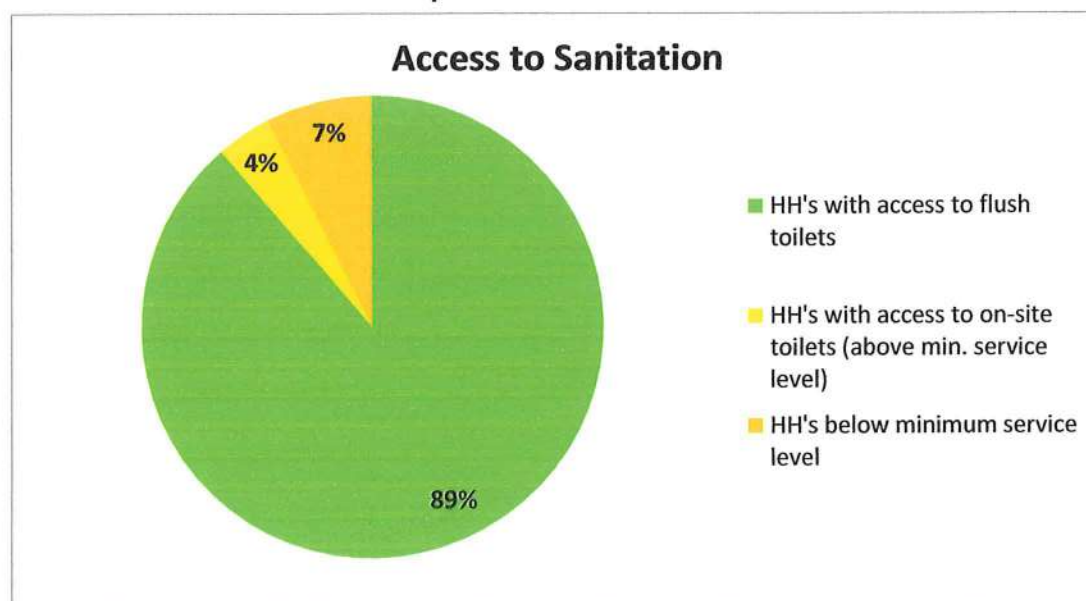
Census Category	Description	Year 0		Year -1		Year -2	
		FY2022		FY2021		FY2020	
		Nr	%	Nr	%	Nr	%
	WATER (ABOVE MIN LEVEL)						
Piped (tap) water inside dwelling/institution	House connections	3 461	81%	3 461	85%	3 461	86%
Piped (tap) water inside yard	Yard connections	472	11%	470	12%	470	12%
Piped (tap) water on community stand: distance less than 200m from dwelling/institution	Standpipe connection < 200 m	336	8%	150	4%	75	2%
	Sub-Total: Minimum Service Level and Above	4 269	100%	4 081	96%	4 006	100%
	WATER (BELOW MIN LEVEL)						
Piped (tap) water on community stand: distance between 200m and 500m from dwelling/institution	Standpipe connection: > 200 m < 500 m						0%
Piped (tap) water on community stand: distance between 500m and 1000m (1km) from dwelling /institution	Standpipe connection: > 500 m < 1 000 m		0%				0%
Piped (tap) water on community stand: distance greater than 1000m (1km) from dwelling/institution	Standpipe connection: > 1 000 m						0%
No access to piped (tap) water	No services		0%				0%
	Sub-Total: Below Minimum Service Level		0%				0%
	Total number of households	4 269	100%	4 081	100%	4 006	100%

Table A.4: Residential water services delivery access profile: Wastewater

Census Category	Description	Year 0		Year -1		Year -2	
		FY2022		FY2021		FY2020	
		Nr	%	Nr	%	Nr	%
SANITATION (ABOVE MIN LEVEL)							
Flush toilet (connected to sewerage system)	Waterborne	3 353	74%	3 353	74%	2 862	78%
	Waterborne: Low Flush	0	0%	0	0%	0	0%
Flush toilet (with septic tank)	Septic tanks / Conservancy	665	15%	665	15%	499	14%
Chemical toilet		0	0%	0	0%	0	0%
Pit toilet with ventilation (VIP)	Non-waterborne (above min. service level)	177	4%	135	3%	301	8%
Other		0	0%	0	0%	0	0%
Sub-Total: Minimum Service Level and Above		4 195	93%	4 153	92%	3 662	100%
SANITATION (BELOW MIN LEVEL)							
Pit toilet without ventilation	Pit toilet	0	0%	0	0%	0	0%
Bucket toilet	Bucket toilet	0	0%	0	0%	0	0%
Other toilet provision (below min. service level)	Other	336	7%	0	0%	0	0%
No toilet provisions	No services	0	0%	0	0%	0	0%
Sub-Total: Below Minimum Service Level		336	7%			0	0%
Total number of households		4 531	100%	4 153	0%	3 662	100%

Note: number of septic tanks and chemical toilets installed by private property owners, could not be confirmed and is therefore not similarly projected in FY2013 (as opposed to Census 2011)

Figure A.2: Household wastewater access profile



The residential water services delivery adequacy profile as presented in Table A.5 below aligns with the service level categories of the WSDP Guide Framework and considers the water resources-, operational- and infrastructure needs of the water services provided by Siyathemba Local Municipality. When interpreting the adequacy profile, it should be recognized that a specific settlement or area serviced by the municipality, may have more than one need and hence, that provision is made for double counting of households, where such duplicate needs have been identified. It should also be emphasized that where areas are serviced privately such as households residing on farms, that the adequacy service level has been identified as Adequate: Informal as per the guidelines for the DWS Reference Framework, meaning that any infrastructure development needs (as may be evident from the access profile) is not assigned for implementation by the Siyathemba municipality.

The adequacy profile is sourced from the water services planning information base as aligned with the Department of Water Affairs reference framework. The adequacy profile represents a WSA perspective and hence, includes all settlements located within the Siyathemba municipal boundary.

The Siyathemba LM water services adequacy profile contains the following needs:

1. There is a high need of refurbishment in Siyathemba for both its water and wastewater infrastructure. In order to address the households below minimum requirement for sanitation bulk infrastructure will need to be built and new top structures will need to be built.
2. Infrastructure- and services needs to be extended in the rural settlements of Siyathemba to make provision for growth / extended areas.

Table A.5 (a): Residential water services delivery adequacy profile (Water)

Water Categorisation	Number of settlements	FORMAL										INFORMAL							
		Adequate				Water Resource needs		O & M Needs		Infrastructure Needs			No services	Adequate	No services				
		House Connections	Yard Connections	Stand Pipes	Shared Services	HH	%	HH	%	HH	%	Upgrades	Extensions	Refurbishment	HH	%	HH	%	
1	9	3 461	100%	470	100%	182	100%					3 461	0	3 461	0	0	0	0	
2	23																		
3	0																		
4	29																		
5	0																		
6	0											3 461	100%						
7	3																		
8	0																		
9	0																		
10	0																		
Total Household Interventions required		3 461		470		182		0		0		3 461	0	3 461	0	0	0	0	

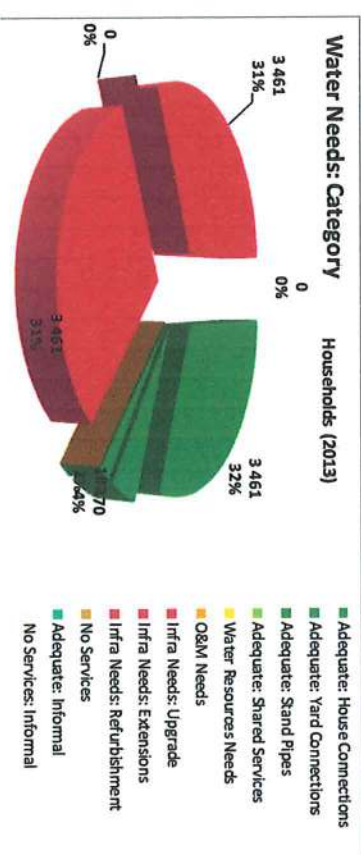
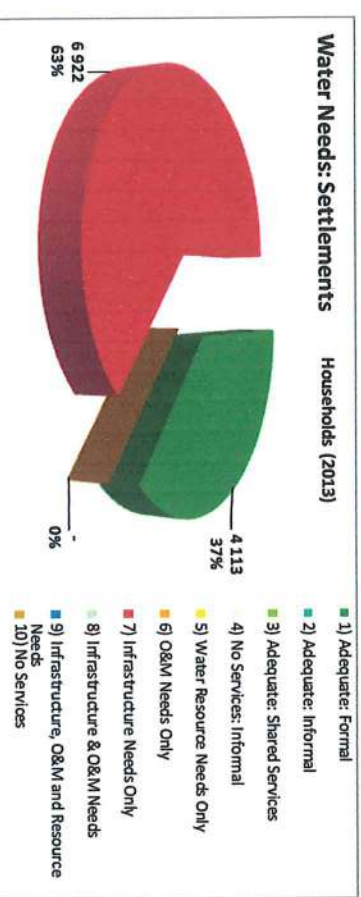
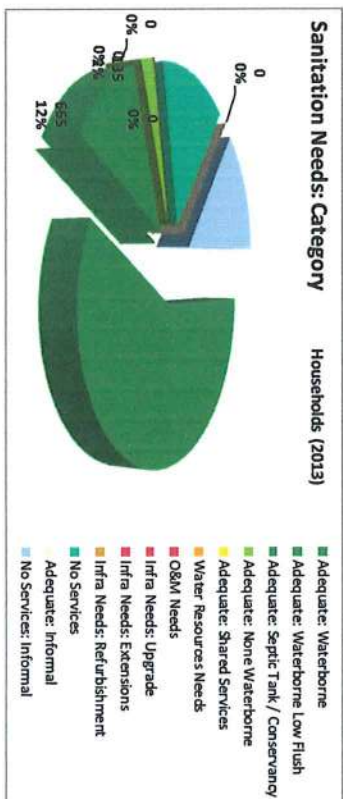
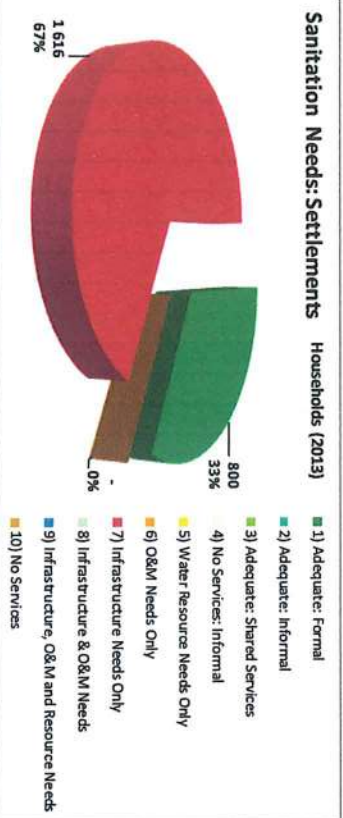


Table A.5 (b): Residential water services delivery adequacy profile (Wastewater)

Water Categorisation	Number of settlements		FORMAL										INFORMAL				
	HH	%	Waterborne	Waterborne Low Flush	Septic Tank/Conservancy	None Waterborne	Shared Services	Water Resource needs	O & M Needs	Infrastructure Needs			No services	Adequate	No services		
1	6	3 353	100%			665	100%	135	100%								
2	1																
3	49																
4	0																
5	0																
6	0																
7	6																
8	0																
9	0																
10	2																
Total Household Interventions required		3 353	0	665	135	0	0	0	0	0	0	0	0	808	100%	0	808



Business Element 4: Water Services Infrastructure Management (Infrastructure)

The Siyathemba municipality owns the water services infrastructure which has been established to service its residents. The following three (3) water supply schemes have been established to service the Siyathemba customers:

1. Siyathemba water supply scheme, supplying treated water to the urban areas of Prieska and Bulk water is purchased from the Department through an abstraction point in the Orange River. The water is purified at a water treatment plant and stored in seven (7) "ground" level reservoirs (11.88 MI) from where it is pumped to one (1) elevated reservoirs (0.771 MI) for distribution.
2. Niekerkshoop water supply scheme: Groundwater is abstracted from boreholes, disinfected (chlorine injected) and stored in 3 reservoirs for distribution to Niekerkshoop residents.
3. Marydale water supply scheme: Groundwater is abstracted from boreholes, disinfected (chlorine injected) and stored in 3 reservoirs for distribution to residents.
4. Siyathemba Municipality also provides water to Alkantpan. Purified water is pumped from Prieska WTW to Alkantpan, but Alkantpan is responsible for the pumps, motors and pipeline.

The bulk infrastructure of the Marydale water supply scheme was upgraded, through the Regional Bulk Infrastructure Program, including 3 new boreholes and one new elevated steel reservoir during the financial year of 2019/2020.

The urban residents of Prieska are provided with waterborne sanitation through the Prieska wastewater scheme which includes three sewage pump stations and a 3.6 MI/d Siyathemba wastewater treatment plant. The waste water treatment works was upgraded through the Water Services Infrastructure Grant during the financial year of 2020/21.

The residents of Niekerkshoop are provided with VIP toilets as well as Conservancy tanks. They also have a waste water treatment works.

The residents of Marydale are provided with VIP Toilets and Conservancy tanks and a waste water treatment works.

The Siyathemba LM has invested in the establishment of an asset management strategy, which is supported by a water services asset management system.

Business Element 5: Water services Infrastructure Management (O&M)

The Siyathemba municipality is the water services provider for its area of jurisdiction. The operations and maintenance function is rendered by the Infrastructure Directorate. Operations and maintenance challenges faced by the Siyathemba municipality is directly related to resources challenges including human resources- and financial resources.

The Siyathemba LM has implemented a comprehensive drinking water sampling program for its formal water supply schemes, which includes schemes supplied by groundwater. In terms of the Blue Drop assessment, the Siyathemba Water Services Authority (WSA) achieved Risk Rating of 55.48% in 2014 and a significant improvement in overall Blue Drop scores since 2010.

Blue Drop Score 2012	Blue Drop Score 2011	Blue Drop Score 2010
62.40	40.94	52.80

The summary from the 2012 report states:

“There was an improvement in drinking water quality (DWQ) management in the Siyathemba Local Municipality compared to the previous cycle of assessments. The positive attitude and commitment displayed by the WSA to the DWQ management processes was evident and was commended by the inspectors: “Despite the political landscape, the commitment to provision of compliant potable water is evident. Management commitment is visible, process controller competency and good harmony is also very much in evidence. There’s Council and DM commitment for capital projects and other DWS management processes for the next financial year.” However, the inspectors regarded this as a work-in-progress since there remain various areas where significant improvement is required, especially in terms of microbiological compliance.

Credit is given to the municipality for the efforts they have made to date with the support of the DWS Regional office. Despite the fact that the Siyathemba LM has been inundated with political controversy, they have still managed to secure council approval for the refurbishment of the Siyathemba WTW and they are currently awaiting final approval for this from the DWS Region Bulk Water Infrastructure section. The development of a water safety plan, as well as the registration of process controllers, should be prioritized.”

The Siyathemba LM has participated in the 2013 Blue Drop Certification program, and assessments were conducted during March 2014.

In terms of wastewater services, the Siyathemba LM has achieved a 94% Risk Rating during the 2011 assessments. The municipality has actioned the necessary infrastructure refurbishment and upgrades as well as improved operational- and compliance monitoring.

Green Score 2013	Green Drop Score 2011	Green Drop Score 2009
38.21	18.00	67.00

Business Element 6: Associated Services

The Siyathemba LM renders water services to schools and clinics as part of its water provision services to its urban- and rural customers. The municipality does not presently monitor or record the level of services rendered within schools and/or clinics. The billing system of the municipality confirms that accounts are rendered directly to seven (7) schools, and to the Department of Public Works.

Business Element 7: Water Resources

The water source for the Prieska water supply scheme, which services the urban areas of Prieska is the Orange River. The water source of Marydale and Niekerkshoop are groundwater supply by means of boreholes, which are equipped with electric motors and pumps.

All the Siyathemba water sources (groundwater supply) are licensed and the Siyathemba municipality pays the Department of Water Affairs for all its water sources.

Business Element 8: Conservation and Demand Management

The Siyathemba municipality has not yet consolidated its Water Conservation- and Demand Management strategy however, the requirements in this respect are further actioned herein. It should however be noted that due to the flat landscape within the municipal area, pressure reduction measures are not required.

Insufficient measuring devices (meters) are currently in place to enable the compilation of a comprehensive and detailed water balance. The municipality meters and bills its urban customers for water reticulation services. The average consumption of drinking water in Siyathemba amounts to 8 Ml/d. When considering the capacity requirements for the Siyathemba bulk water supply infrastructure, it is evident that the full water consumption is not billed and that water conservation- and demand management measures should therefore be prioritized.

Business Element 10: Water Services Institutional Arrangements

The Siyathemba municipality renders the water services provision function including the bulk- and retail functions in both its urban and rural areas. Additional resources and capacity requirements for institutional strengthening have been actioned further herein.

Business Element 11: Customer Service Requirements

The municipality renders a customer services function through its Finance Directorate which receives customer queries, requests and complaints. These queries, requests and complaints are routed to the Infrastructure Directorate for technical resolution. A client complaint register and service evaluation form has been developed in order to assist the municipality to better evaluate the aforementioned performance.

Section B: State of Water Services Planning

The Siyathemba Local Municipality as the Water Services Authority for its area of jurisdiction developed its first Water Services Development Plan in October 2004. Thereafter, a new WSDP was developed in May 2006 for the period FY2006 to FY2010. In March 2018, the municipality developed its latest Water Services Development Plan for the period FY2017 to FY2022. The municipality is currently busy updating the Water Services Development plan for the period FY2023 to FY 2028.

The Siyathemba LM participated in the DWS support program of 2010 to 2012, wherein the latest WSDP was used to populate DWS WSDP Guide Framework. The municipality then also participated in the assessment of its water services knowledge and plans and the strategic interpretation of its knowledge as established in Module 1 of the WSDP Guide Framework.

In FY2014, the Siyathemba LM was further supported by the Department to improve its water services planning maturity and compliance with the Water Services Act and resulted in the establishment of its FY2013 Water Services Development Plan Performance- and Water Services Audit Report (March 2014). The WSA was also supported to review its water services objectives and strategies as prompted by the situational assessment of its water services function. The outputs from this strategic review process are presented herein for incorporation into the SIYATHEMBA Integrated Development Plan.

It should also be highlighted that additional to the strategic-level water services development plan of the municipality, water services planning is rendered by the municipality at project level. The following project needs to be approved for the financial year 2022/23:

- Prieska Water Treatment Works upgrade/refurbishment

Section C: Water Services Existing Needs Perspective

The existing needs perspective as presented below was developed through a systematic and comprehensive review of the water services function in terms of the WSDP Guide Framework. The output from this process is presented below and includes compliance assessment in terms of:

- **quality** (assessment of current status against compliancy requirements)
- **quantity** (an indication of the representation of the total area to address the issue)
- **future plan assessment** (degree in which future demand has been established)
- **strategy assessment** (whether a strategy is in place to address the need).

The water services situation analysis prompted the development of problem statements which formed the input for the development of the water services objectives and strategies which follows in Section D.

Table C.1: Existing Needs Perspective and Problem Statements Water Services Development Planning

Administration (Topic 1)						
Overview of Topic		Status Quo and Knowledge Interpretation Statistics				
This topic provides knowledge on the status of the WSA's 5-year water services development plan as well as with the contact particulars of the key role-players which have contributed to the development of the WSDP.	Item	Quality (%) assessment of current status against compliancy requirements	Quantity (%) an indication of the representation of the total area to address the issue	Future Plan Assessment	Strategy Assessment	
			n/a	n/a	n/a	n/a
		TOTAL for Topic	n/a	n/a	n/a	n/a
Problem Definition Statements						
Nr	Statements					
1	Inadequate capacity for annual review of WSDP and performance					

Table C.2: Existing Needs Perspective and Problem Statements Demographics

Business Element 1: Demographics (Topic 2)					
Overview of Topic		Status Quo and Knowledge Interpretation Statistics			
This topic provides an overview of demographics of the WSA as sourced from the National Geo-Referenced Database, aligned to Census figures as well as the number of public amenities and private facilities within the jurisdictional area of the WSA.	Item	Quality (%) assessment of current status against compliancy requirements	Quantity (%) an indication of the representation of the total area to address the issue	Future Plan Assessment	Strategy Assessment
	Farming	0	n/a	n/a	n/a
	Rural	0	n/a	n/a	n/a
	Urban	100.00	100.00	n/a	n/a
	Public Amenities Consumer types	100.00	100.00	n/a	n/a
	TOTAL for Topic	100.00	100.00	n/a	n/a
Problem Definition Statements					
Nr	Statements				

Table C.3: Existing Needs Perspective and Problem Statements

Service Levels

Business Element 2: Service Levels (Topic 3)					
Overview of Topic		Status Quo and Knowledge Interpretation Statistics			
Topic 3 information is presented in terms of the Department of Water Affairs' service level classification which considers the adequacy of services in establishing the service level profile. The profile is presented in terms of settlements, population and households.	Item	Quality (%) assessment of current status against compliancy requirements	Quantity (%) an indication of the representation of the total area to address the issue	Future Plan Assessment	Strategy Assessment
	Water – Below: Infra Needs	100%	100%	100%	100%
	Water – Below: Infra, O&M & Resource Needs	100%	100%	100%	100%
	Water – Below: No Services Formal	n/a	n/a	n/a	n/a
	Below : No Services Informal	n/a	n/a	n/a	n/a
	Sanitation – Below: Infra Needs	100%	30%	100%	100%
	Sanitation – Below: No Services Formal	n/a	n/a	n/a	n/a
	Residential, Public Institutions and Industries Amenities	100%	100%	100%	100%
	TOTAL for Topic	100%	100%	100%	100%
	Problem Definition Statements				
Nr	Statements				
1	11% of the households in the Siyathemba Municipal area use septic tanks				
etc					

Table C.4: Existing Needs Perspective and Problem Statements

Socio-Economics

Socio-Economic (Topic 4)					
Overview of Topic	Status Quo and Knowledge Interpretation Statistics				
The socio-economic information contained in the WSDP provides a broad overview of the socio-economic status of the municipality in terms of population growth rates, age and gender profile, employment profile, migration patterns, household income and economics. The topic also contains a quick reference to water services affordability by expressing the typical monthly water bill in terms of average monthly income in the municipal area.	Item	Quality (%) assessment of current status against compliancy requirements	Quantity (%) an indication of the representation of the total area to address the issue	Future Plan Assessment	Strategy Assessment
		100%	100%	100%	100%
	TOTAL for Topic	100%	100%	100%	100%
Problem Definition Statements					
Nr	Statements				
1	55% of households in the municipal area registered as indigent.				
etc					

Table C.5: Existing Needs Perspective and Problem Statements

WS Infrastructure Management (1)

Business Element 4: Water Services Infrastructure Management (Topic 5.1)						
Overview of Topic	Status Quo and Knowledge Interpretation Statistics					
Topic 5.1 provides an overview of the extent-, functionality- and asset status of the municipality's water services infrastructure. It also provides an overview of the municipality's compliance in terms of legislation- and regulations concerning asset management, disaster management, water quality management, water resource licensing, etc. It should be emphasized that the topic does not provide the detail per infrastructure element, but provides an overview per each main water services infrastructure component.	Item	Quality (%)	Quantity (%)	Future Plan Assessment	Strategy Assessment	
		assessment of current status against compliancy requirements	an indication of the representation of the total area to address the issue			
	General Information	100%	80%	100%	100%	
	Operation	100%	90%	30%	25%	
	Monitoring and sample failure	100%	100%	100%	100%	
	Functionality	100%	100%	100%	100%	
	Institutional status	100%	100%	100%	100%	
	Asset assessment spectrum	100%	100%	100%	100%	
	Type and capacity	90%	90%	100%	100%	
	TOTAL for Topic	95%	85%	100%	100%	
Problem Definition Statements						
Nr	Statements					
1	Not all as built information available for Marydale					
2						

Table C.6: Existing Needs Perspective and Problem Statements

WS Infrastructure Management (2)

Business Element 5: Water Services Infrastructure Management (Topic 5.2)						
Overview of Topic	Status Quo and Knowledge Interpretation Statistics					
This topic provides an overview of the sufficiency of resources and processes in place to effectively operate and maintain the water services. It reflects whether the municipality has an Operation and Maintenance Plan in place. The topic also illustrates whether the WSA has implemented good practice as directed in the Blue- and Green Drop certification processes	Item	Quality (%)	Quantity (%)	Future Plan Assessment	Strategy Assessment	
		assessment of current status against compliancy requirements	an indication of the representation of the total area to address the issue			
	Operation & Maintenance Plan	0.00	0.00	50%	50%	
	Resources	100%	100%	100%	100%	
	Information	100%	100%	100%	100%	
	Activity Control & Management	100%	100%	100%	100%	
	Water Supply & Quality	90%	100%	100%	100%	
	Waste Water Supply & Quality	90%	100%	100%	100%	
	TOTAL for Topic	90%	100%	75%	75%	
	Problem Definition Statements					
Nr	Statements					
1	High cost to maintain old infrastructure					
2	Low Blue- and Green Drop compliance					
3	Insufficient number of O&M staff					
4	Lack of sufficient technical skills for service maintenance and operations					
5	Infrastructure/ Technical Manager not fully qualified					

Table C.7: Existing Needs Perspective and Problem Statements

Associated Services

Business Element 6: Associated Services (Topic 6)					
Overview of Topic	Status Quo and Knowledge Interpretation Statistics				
This topic has been established to ensure adequate focus on the water services levels and needs of educational and health facilities. The water services planner will use this information to establish short-term solutions and to prioritize water services infrastructure projects to educational- and health facilities.	Item	Quality (%)	Quantity (%)	Future Plan Assessment	Strategy Assessment
	Water services – Education	n/a	n/a	n/a	n/a
	Water services - Hospitals	n/a	n/a	n/a	n/a
	Water services – Health Centres	n/a	n/a	n/a	n/a
	Water services - Clinics	n/a	n/a	n/a	n/a
	Sanitation - Education	n/a	n/a	n/a	n/a
	Sanitation - Hospitals	n/a	n/a	n/a	n/a
	Sanitation – Health Centers	n/a	n/a	n/a	n/a
	Sanitation - Clinics	n/a	n/a	n/a	n/a
	TOTAL for Topic				
	Problem Definition Statements				
Nr	Statements				
1					
etc					

Table C.8: Existing Needs Perspective and Problem Statements

Water Resources

Business Element 7: Water Resources (Topic 8)					
Overview of Topic	Status Quo and Knowledge Interpretation Statistics				
The volumes and sources of raw water supply to the WSA are presented in this topic, which also presents the status of the WSA’s abstraction licenses and future needs. An overview of the WSA’s monitoring programme for its raw water sources is presented. The topic also outlines the degree of industrial and ‘raw’ water use and effluent discharge within the WSA.	Item	Quality (%)	Quantity (%)	Future Plan Assessment	Strategy Assessment
		assessment of current status against compliancy requirements	an indication of the representation of the total area to address the issue		
	Monitoring	100%	100%	100%	100%
	Water Quality	95%	100%	100%	100%
	Wet Industries	n/a	n/a	n/a	n/a
	Raw Water consumers	n/a	n/a	n/a	n/a
	Industrial Consumer Units	n/a	n/a	n/a	n/a
	Permitted effluent releases	100%	2%	n/a	n/a
	TOTAL for Topic	100%	51%	100%	100%
Problem Definition Statements					
Nr	Statements				
1	Water quality failure response/ incident management processes are in place				
etc					

Table C.9: Existing Needs Perspective and Problem Statements

WCDM (Water Resources)

Business Element 8: Conservation and Demand Management - Water Resource (Topic 7.1)					
Overview of Topic	Status Quo and Knowledge Interpretation Statistics				
The topic provides an overview of the activities pursued by the WSA in the past financial year towards water conservation and demand management. It also contains an overview of the water sources of the WSA.	Item	Quality (%) assessment of current status against compliancy requirements	Quantity (%) an indication of the representation of the total area to address the issue	Future Plan Assessment	Strategy Assessment
	Reducing unaccounted water and water inefficiencies	100%	29%	100%	100%
	Reducing high pressures for residential consumers	n/a	n/a	n/a	n/a
	Leak and meter repair programmes	90%	80%	100%	100%
	Consumer/end-use demand management	100%	100%	100%	100%
	TOTAL for Topic	100%	65%	100%	100%
Problem Definition Statements					
Nr	Statements				
1	Inadequate customer education and awareness campaigns WCDM				
2	No official WCDM strategy				
3	High percentage of water losses due to old infrastructure				
4	Insufficient customer meter management				
5	Frequent leaks High demand on O&M staff and resources				

Table C.10: Existing Needs Perspective and Problem Statements

WCDM (Water Balance)

Overview of Topic	Status Quo and Knowledge Interpretation Statistics				Strategy Assessment
The topic provides an overview of the activities pursued by the WSA in the past financial year towards water conservation and demand management. It also contains an overview of the water sources of the WSA.	Item	Quality (%) assessment of current status against compliancy requirements	Quantity (%) an indication of the representation of the total area to address the issue	Future Plan Assessment	Strategy Assessment
	purchased	80%	80%	95%	95%
	abstraction	100%	100%	100%	100%
	abstraction	80%	100%	95%	95%
	supplied	n/a	n/a	n/a	n/a
	Total Influent				
	Total treated TW	100%	100%	100%	100%
	other Neighbours	n/a	n/a	n/a	n/a
	Treated water	80%	45%	70%	70%
	Ground water not treated	n/a	n/a	n/a	n/a
	Authorised consumption	30%	35%	15%	15%
	Total losses	24%	24%	24%	24%
	Billed unmetered	n/a	n/a	n/a	n/a
	Apparent losses	24%	24%	24%	24%
	Waste water treatment works	80%	35%	35%	40%
	Recycled	n/a	n/a	n/a	n/a
	TOTAL for Topic	66%	60%	62%	63%
	Problem Definition Statements				
	Nr	Statements			
	1	Inadequate reporting on monthly water consumption patterns			
2	Lack of bulk meters at WTW for abstraction of raw water from the Orange River				

Table C.11: Existing Needs Perspective and Problem Statements

Financials

Financial Profile (Topic 9)					
Overview of Topic	Status Quo and Knowledge Interpretation Statistics				
The financial profile is aligned with the Water Services Standard Chart of Accounts [SCOA] which addresses the expenditure, revenue & capex for the water services function.	Item	Quality (%) assessment of current status against compliancy requirements	Quantity (%) an indication of the representation of the total area to address the issue	Future Plan Assessment	Strategy Assessment
		n/a	n/a	n/a	n/a
	TOTAL for Topic	n/a	n/a	n/a	n/a
Problem Definition Statements					
Nr	Statements				
1	Non-payment by serviced customers				
2	Poor revenue collection as current tariffs do not cover the actual costs				
3	Inadequate budget for improved water services provision				

Table C.12: Existing Needs Perspective and Problem Statements

WS Institutional Arrangements

Business Element 10: Water Services Institutional Arrangements (Topic 10)					
Overview of Topic	Status Quo and Knowledge Interpretation Statistics				
The institutional arrangements profiles presents an overview of the WSA's compliance with respect to water services regulations and policy and as aligned also with the Regulatory Performance Monitoring System. It also provides an overview of the water services provider arrangements which are in place, including the WSA's perception of the sufficiency of WSP staffing levels.	Item	Quality (%) assessment of current status against compliancy requirements	Quantity (%) an indication of the representation of the total area to address the issue	Future Plan Assessment	Strategy Assessment
	Policy development	100%	100%	100%	100%
	Regulation and tariffs	100%	100%	100%	100%
	Infrastructure development (projects)	100%	100%	100%	100%
	Performance management and monitoring	100%	100%	100%	100%
	WSDP	100%	100%	100%	100%
	Bulk and Retail functions	n/a	n/a	n/a	n/a
	TOTAL for Topic	100%	100%	100%	100%
	Problem Definition Statements				
Nr	Statements				
1	Understaffing				
2	Inadequate WSA focused performance monitoring				
3	Insufficient capacity for by-law enforcement				

Table C.13: Existing Needs Perspective and Problem Statements

Customer Service Requirements

Business Element 11: Customer Service Requirements (Topic 11)					
Overview of Topic		Status Quo and Knowledge Interpretation Statistics			
This topic provides an overview of the quality of the water services provision function when considered from a customer perspective including the summary of the WSA's responsiveness to customer complaints and queries.	Item	Quality (%) assessment of current status against compliancy requirements	Quantity (%) an indication of the representation of the total area to address the issue	Future Plan Assessment	Strategy Assessment
	Resources available to perform this function	100%	100%	100%	100%
	Attending to complaints for water	100%	100%	100%	100%
	Attending to complaints for Sanitation: Discharge to treatment works	100%	100%	100%	100%
	Attending to complaints for Sanitation: Pit/tank pumping	100%	100%	100%	100%
	TOTAL for Topic	100%	100%	100%	100%
Problem Definition Statements					
Nr	Statements				
1	Inadequate response to customer complaints				

Section D: Water Services Objectives and Strategies

The water services objectives and strategies presented below were derived from the water services situational analysis as summarized in Section C: Water Services Existing Needs Perspective and presents the 5-year Water Services objectives and strategies which will be incorporated and consolidated as part of the Siyathemba WSDP.

Table D1: WSDP FY2018: Water Services Objectives and Strategies

Nr	Objective Strategy	Key Performance Indicator	Baseline (FY2016 status quo)	Linked Project	WSDP Year 1	WSDP Year 2	WSDP Year 3	WSDP Year 4	WSDP Year 5
					FY2018 Target	FY2019 Target	FY2020 Target	FY2021 Target	FY2022 Target
WSDP Topic 1: Demographics									
1	Annual review of the demographics and service level profile of the municipality	Annual update of WSDP Settlements Database	FY2013 settlements database		Demographics and service level profile as at 2014 recorded	Demographics and service level profile as at 2015 recorded	Demographics and service level profile as at 2016 recorded	Demographics and service level profile as at 2017 recorded	Demographics and service level profile as at 2018 recorded
WSDP Topic 2: Service levels									
2,1	Develop an integrated housing and water services plan for the provision of higher levels of services	Number of households with consumer connections			Commitments in place	Integrated housing- and water services plan developed and adopted			
2,2	Provide basic sanitation services to all households in formal settlements	Number and percentage of households with access to basic sanitation			25% of backlog addressed	50% of backlog addressed	75% of backlog addressed	100% of backlog addressed	No backlogs
2,3	Develop- and implement a strategy to provide interim sanitation services to informal settlements	Informal settlement households with access to sanitation			Interim sanitation services strategy developed and adopted	25% implemented	50% implemented	75% implemented	100% implemented
2,4	Provide full waterborne/VIP in Prieska	Waterborne sanitation service to Prieska households	Replace some of the 459 existing Septic tanks by connecting to existing network		Feasibility study completed	Project 50% complete	Project 70% complete	Project 85% complete	Project 100% complete

2,5	Liaise with responsible authorities to ensure adequate services to educational and health facilities in municipal areas	Water services in schools and clinics reported to WSA			Service level adequacy profile for schools and clinics	Service level adequacy profile for schools and clinics	Service level adequacy profile for schools and clinics	Service level adequacy profile for schools and clinics	Service level adequacy profile for schools and clinics
2,6	Upgrading of Marydale BWS	Project status		NRC003/8; Marydale Bulk Water Supply	Commitments in place to secure cofunding25% Implementation	Implementation 100%			
2,7	Prieska Water Connections	Project status						Secure fundingSubmit technical report to MIG	Implementation 100%
2,8	Prieska Bulk water supply and rising main Phase 1	Project status	3461 Households					Secure fundingSubmit technical report to MIG	Implementation 100%
2,9	Prieska Bulk water supply and rising main Phase 2	Project status	3461 Households					Secure fundingSubmit technical report to DWS	75% implemented
2,10	Refurbishment/Upgrade of Prieska WWTW Phase 1	Project status			Secure funding Submit technical report to DWS	Implementation 100%			
2,11	Refurbishment/Upgrade of Prieska WWTW Phase 2	Project status			Secure funding Submit technical report to DWS		Implementation 100%		
2,12	Upgrading of the Prieska WTW (Mechanical)	Project status						Secure funding Submit technical report to DWS	Implementation 100%
2,13	VIP 's in Marydale	Project status	150 Households					Secure funding Submit technical report to DWS/MIG	Secure funding Submit technical report to DWS/MIG

2.14	Marydale Outfall Sewer	Project status	Secured funding Approved MIG BP		Implementation 100%					
WSDP Topic 3: Water Services Infrastructure Management										
3.1	A responsive and accountable, effective and efficient local government system. Maintain excellent asset management practices	Infrastructure management system up to date	Asset Management Strategy in place		Resources as signed and processes and procedures established	Asset management system maintained. Water services asset register updated	Asset management system maintained. Water services asset register updated	Asset management system maintained. Water services asset register updated	Asset management system maintained. Water services asset register updated	Asset management system maintained. Water services asset register updated
3.2	Secure the Municipality's water and waste water infrastructure against vandalism and theft	Number of incidents					Strategy developed Funding secured			
3.3	Replace old asbestos cement reticulation pipes in Prieska, Marydale and Niekerkshoop	Length of AC pipes replaced Percentage of AC pipes replaced	Budget for this project in the municipal revenue budget				Determine the length to be replace. Submit / develop technical report for possible funding	Implementation 100%		
WSDP Topic 4: Water Services O&M										
4 Water Services										
4.1	Develop a comprehensive O&M plan to quantify the full resource (tools, equipment, staff, funds) requirements for the operations and maintenance function	Adopted O&M Plan	None		Commitments in place to develop O&M Plan	O&M Plan developed and approved	O&M Plan developed and approved	O&M Plan developed and approved	O&M Plan developed and approved	O&M Plan developed and approved
4.2	Improve Blue Drop status and obtain Blue Drop Certification	Blue Drop Status/score	2014 Blue drop Status: 62.36%		Blue drop Status: 62.36%	Blue drop Status: 70%	Blue drop Status: 80%	Blue Drop Certification (95%)		Maintain Blue Drop Certification

4,3	Improve Green Drop status and obtain Green Drop Certification	Green Drop Status/Score	2014 Green Drop Risk status: 66.7%	Green Drop Risk status: 66.7%	Green Drop Risk status: 50%	Green Drop Risk status: 45%	Green Drop Risk status: 40%	Green Drop Risk status: 35%
WSDP Topic 5.1: Water Services Infrastructure Management								
WSDP Topic 5.2: Water Services Infrastructure Management								
WSDP Topic 6: Water Resources								
6,1	Ensure compliance to water quality monitoring programmes	Monthly compliance report to sampling programme	12 x reports	12 x reports	12 x reports	12 x reports	12 x reports	12 x reports
6,2	Monitor bulk water quality compliance on a monthly basis as per of Blue Drop requirements	Monthly compliance report to sampling programme	12 x reports	12 x reports	12 x reports	12 x reports	12 x reports	12 x reports
6,3	Improve monitoring of effluent releases	Monthly compliance report to sampling programme	12 x reports	12 x reports	12 x reports	12 x reports	12 x reports	12 x reports
WSDP Topic 7.1: Conservation and Demand management - Water Resource Management								
7.1.1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
WSDP Topic 7.2: Conservation and Demand management - Water Balance								
7.2.1	Introduce- and maintain water balance performance monitoring	Monthly water balance reports	Business processes developed and implemented	Complete water balance recorded each month (x 12)	Complete water balance recorded each month (x 12)	Complete water balance recorded each month (x 12)	Complete water balance recorded each month (x 12)	Complete water balance recorded each month (x 12)
WSDP Topic 8: Water Resources								

8,1	Develop new source of potable water	Progress as per RBIG IRS quarterly reports	SRK bore hole investigation completed and approved by DWS	RBIG Funding approved by DWS	Start with project	Project 50% completed	Project 100% completed	
WSDP Topic 9: Financial profile								
9,1	Improved budget planning towards ensuring adequate provision for water services O & M	O&M budget is aligned with WSP functional requirements	FY2016 budget	O&M budget meets > 50% of O&M plan cost	O&M budget meets > 75% of O&M plan cost	O&M budget meets > 80% of O&M plan cost	O&M budget meets > 90% of O&M plan cost	O&M budget meets > 100% of O&M plan cost
9,2	Review the water services tariff structure for improved cost recovery	Tariff mode informs the tariffs		Tariff mode developed	Tariff mode reviewed	Tariff mode reviewed	Tariff mode reviewed	Tariff mode reviewed
WSDP Topic 10: Institutional Arrangements profile								
10,1	Monitor the WSP function in accordance with a performance monitoring framework	WSP performance framework Monthly reports		WSP performance monitoring framework developed	12 x reports	12 x reports	12 x reports	12 x reports
WSDP Topic 11: Customer service requirements								
11,1	Improved reporting on customer complaints	Monthly reports		Business processes established	12 x reports	12 x reports	12 x reports	12 x reports

Section E: Water Services MTEF Projects

The Siyathemba Water Services Medium-Term Expenditure Framework (MTEF) Projects are presented below and outlines the water services projects which are funded for implementation within the next three years. Table E.1 provides the summary of projects identified for implementation in FY2019 to FY2021. Table E.2a to 2c provides the projects identified for implementation in specific Financial Years.

It should be highlighted that the projects included herein, represents only projects for which funding has already been secured, and therefore does not comprise the comprehensive water services project requirements of the Siyathemba WSA.

The municipality plan to do the following projects over the next 5 years:

- Refurbishment of Prieska WTW
- New Reservoirs for Prieska
- Toilet top structures for Prieska, Marydale and Niekerskooop
- Marydale Bulk sewer line, pump station and rising main phase 2
- Niekerkshoop Bulk sewer line, pump station and rising main phase 1
- Upgrade of Niekerkshoop WWTW
- Upgrade of Niekerkshoop WTW
- Upgrade of Marydale WTW
- Prieska replacement of asbestos lines
- Prieska water borne sewerage for industrial area
- Niekerkshoop connection of existing boreholes to bulk infrastructure

The summary of the MTEF water services projects may be presented as follows:

Table E.1: Summary of MTEF Projects

Project Main Category	FY2020		2021		2022		MTEF Total	
	Nr	Value (R'000)	Nr	Value (R'000)	Nr	Value (R'000)	Nr	Value (R'000)
Prieska Bulk Water Supply and Rising main	1	18,200		7,400		-		46,938
Refurbishment/Upgrade of Prieska WWTW Phase 1/2	1	26,271	2	10,200		-		41,846
Refurbishment/Upgrade of Prieska WTW		-		-	1	TBD		TBD
TOTAL	1	44,471		17,600		TBD		88,784

Section F: WSDP Projects

The WSDP project list as presented in Table F.1 below, references both the funded MTEF water services projects as well as additional water services projects defined as part of the water services development planning process for achievement of the water services objectives and strategies as presented in Section D of this report. The WSDP project list is aligned with the existing needs perspective (problem statements) and the identified water services strategies.

The current needs projects have been determined and are included in the MTEF project list (Table E.2a to 2c). It should however be emphasized that additional funding will be required to address the full achievement of the water services strategies as outlined in Section D and that the extent of such additional funding can only be determined, once initial investigations and activities have been concluded.

Table F.1: WSDP project list

Nr	Situation Assessment (problem definition)	Solution description as defined by topic situation assessment	Conceptual project	Is there an existing project addressing this problem? Yes/No	Existing Projects Information			Does this current project address the problem totally? Yes/No	Approved by Council, in project database and part of 5 year IDP cycle projects? Yes/No	Project listed in 3yr MTEF - cycle? Yes/No
					Project Referenc e Number	Project Title	Project Cost R'000			
CURRENT NEEDS										
Water Services Development Planning										
W1	Siyathemba Municipality does not have a WSDP	Compliance to the Water Services Act and regulations with respect to the WSDP and annual WSDP performance - and Water services audit		None	n/a	n/a	n/a	n/a	n/a	n/a
W2	Inadequate capacity for development of a WSDP	Compliance to the Water Services Act and regulations with respect to the WSDP and annual WSDP performance - and Water services audit		None	n/a	n/a	n/a	n/a	n/a	n/a
Business Element 1: Demographics (Topic 2)										
2.1	Information of with different data sets and different quantities used for planning	Annual review of the demographics and service level profile of the municipality		None	n/a	n/a	n/a	n/a	n/a	n/a
2.2										

Nr	Situation Assessment (problem definition)	Solution description as defined by topic situation assessment	Conceptual project	Is there an existing project addressing this problem? Yes/No	Existing Projects Information			Does this current listed project address the problem totally? Yes/No	Approved by Council in project database and part of 5 year IDP cycle projects? Yes/No	Project listed in 3yr MTEF - cycle? Yes/No
					Project Reference Number	Project Title	Project Cost R'000			
CURRENT NEEDS										
Business Element 2: Service Levels (Topic 3)										
3.1	11 % of the households in the Siyathemba Municipal area use septic tanks	Provide full waterborne services		None	n/a	n/a	n/a	No	n/a	n/a
3.2										
Business Element 3: Socio-Economic Background (Topic 4)										
4.1	55% of households in the municipal area registered as indigent			None	n/a	n/a	n/a	n/a	n/a	n/a
4.2										
Business Element 4: Water Services Infrastructure Management (Topic 5 - Part 1)										
5.1	Theft and Vandalism of infrastructure	Secure treatment and purification works		None	n/a	n/a	n/a	n/a	n/a	n/a
5.2	Licensing of oxidation treatment works	Upgrading of oxidation pond to comply with legislation		No	n/a	n/a	n/a	n/a	n/a	n/a
5.3	Ageing of inadequate infrastructure asbestos pipes in Prieska, Marydale and Niekerkshoop	Replace old Asbestos Cement reticulation pipes	Replacement of AC pipes	None	n/a	n/a	n/a	No	No	No
5.4	Insufficient capacity for growth at Prieska (oxidation treatment works)	Assess, design and implement improved capacity	Cleaning of the anaerobic ponds of oxidation treatment works	None	n/a	n/a	n/a	n/a	n/a	n/a

Nr	Situation Assessment (problem definition)	Solution description as defined by topic situation assessment	Conceptual project	Is there an existing project addressing this problem? Yes/No	Existing Projects Information				Does this current listed project address the problem totally? Yes/No	Approved by Council, in project database and part of 5 year IDP cycle projects? Yes/No	Project listed in 3yr MTEF - cycle? Yes/No
					Project Reference Number	Project Title	Project Cost R'000				
CURRENT NEEDS											
Business Element 5: Water Services Infrastructure Management (Topic 5 - Part 2)											
5.5	High cost to maintain old infrastructure	Prioritise improved maintenance and rehabilitation of infrastructure	Develop an infrastructure rehabilitation plan. Develop a preventative maintenance programme	No	n/a	n/a	no	no	no	no	
5.6	Low Blue- and Green Drop compliance	Improve Blue Drop status and obtain Blue Drop Certification, Improve Green Drop status and obtain Green Drop Certification	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
5.7	Insufficient number of O&M staff	Develop a comprehensive O&M plan to quantify the full resource (tools, equipment, staff, funds) requirements for the operations and maintenance function	Develop O&M Plan	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
5.8	Lack of sufficient technical skills for service maintenance and operations	Develop a comprehensive O&M plan to quantify the full resource (tools, equipment, staff, funds) requirements for the operations and maintenance function	Develop O&M Plan	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
5.9	Infrastructure/Technical Manager post vacant	Requirement of technical skills	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	

Nr	Situation Assessment (problem definition)	Solution description as defined by topic situation assessment	Conceptual project	Is there an existing project addressing this problem? Yes/No	Existing Projects Information				Does this current listed project address the problem totally? Yes/No	Approved by Council, in project database and part of 5 year IDP cycle projects? Yes/No	Project listed in 3yr MTEF - cycle? Yes/No
					Project Reference Number	Project Title	Project Cost R1000				
CURRENT NEEDS											
Business Element 6 : Associated Services (Topic 6)											
6.1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Business Element 7: Water Resources (Topic 8)											
7.1	No water quality/failure response/ incident management processes not in place	Improve Blue Drop status and obtain Blue Drop certificate	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Business Element 8: Conservation and Demand Management - Water Resource (Topic 7.1)											
8.1	Inadequate customer education and awareness campaigns WCDM	Introduce consumer awareness campaigns For WCDM (Addressing also the problem of vandalism)	Develop WCDM Plan/Strategy	n/a	n/a	n/a	No	No	No	No	
8.2	No WCDM Strategy	Development and implement a comprehensive WCDM plan	Develop WCDM Plan/Strategy	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
8.3	High percentage of water losses due to old infrastructure	Development and implement a comprehensive WCDM plan	Develop WCDM Plan/Strategy	no	n/a	n/a	n/a	n/a	n/a	n/a	
8.4	Insufficient customer meter management	Introduce necessary processes and procedures for improved customer meter management	Develop WCDM Plan/Strategy	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
8.5	Frequent leaks high demand on O & M staff resources	Development and implement a comprehensive WCDM plan	Develop WCDM Plan/Strategy	n/a	n/a	n/a	n/a	n/a	n/a	n/a	

Nr	Situation Assessment (problem definition)	Solution description as defined by topic situation assessment	Conceptual project	Is there an existing project addressing this problem? Yes/No	Existing Projects Information				Does this current listed project address the problem totally? Yes/No	Approved by Council, in project database and part of 5 year IDP cycle projects? Yes/No	Project listed in 3yr MTEF-cycle? Yes/No
					Project Reference Number	Project Title	Project Cost R000				
CURRENT NEEDS											
Business Element 8: Conservation and Demand Management – Water Balance (Topic 7.2)											
8.6	Inadequate reporting on monthly water consumption patterns	Introduce and maintain water balance performance monitoring	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
8.7	Lack of bulkmeter at WTW for raw water abstraction	Implement bulk metering for improved water balancing	Implement metering at Prieska	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
8.8	No effluent metering at WTW	Implement bulk metering for improved water balancing	Implement metering at Prieska	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Business Element 9: Financial Profile											
9.1	Insufficient funding provision for maintenance	No other income resources	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
9.2	Over dependence on grant funding	No other income resources	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
9.3	Culture of non-payment of serviced customers	55% of household are indigent	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
9.4	Limited capital funding to improved water services level and to ensure adequate capacity	Develop and maintain a Water Services Infrastructure Investment Framework (Infrastructure capital requirement)	Develop a Water Services Infrastructure Investment Framework (Comprehensive long term infrastructure requirements)	No	n/a	N/a	No	No	No	No	No
9.5	No skilled personnel to write business plans for capital projects		Addressed in 5.2, 5.5 and 5.6	No	No	No	No	No	No	No	No

Nr	Situation Assessment (problem definition)	Solution description as defined by topic situation assessment	Conceptual project	Is there an existing project addressing this problem? Yes/No	Existing Projects Information				Does this project listed address the problem totally? Yes/No	Approved by Council, in project database and part of 5 year IDP cycle projects? Yes/No	Project listed in 3yr MTEF - cycle? Yes/No
					Project Reference Number	Project Title	Project Cost R'000				
CURRENT NEEDS											
Business Element 10: Water Services Institutional Arrangements (Topic 10)											
10.1	Understaffing	Confirm the Human Resource requirements (Number and skills) for WSA and WSP function	Addressed in 5.2, 5.5 and 5.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
10.2	Insufficient capacity for by-law enforcement	Confirm the Human Resource requirements (Number and skills) for WSA and WSP function	Addressed in 5.2, 5.5 and 5.6	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
10.3	Inadequate WSA focused performance monitoring	Monitoring function in accordance with a performance monitoring framework	Development performance monitoring framework	No	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Business Element 11: Social and Customer Service Requirements (Topic 11)											
11.1	Inadequate responds on customer complaints	Improve responds on customer complaints	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
11.2											
TOTAL: CURRENT NEEDS											
	Funded										R 0
	% funded										
FUTURE NEEDS											
Infrastructure											
Resources											
TOTAL: FUTURE NEEDS											
											R 0