BREEDE VALLEY

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Water Services Development Plan- IDP Water Sector Input Report

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

FY 2021 - 2022

Version Control:

		Description	*Date*	*Reference*
Version 1	BVM WSDP-IDP DRAFT	BVM - IDP Water Sector Input Report	15 March 2022	BVM WSDP 2018 - 2023
Version 2				
Version 3				
Approval				

Prepared by:

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Abbreviations and Definitions

DM	District Municipality
DWA	Department of Water Affairs
BDS	Blue Drop Certification System
FY:	Financial Year - means in relation to – • 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 organisational structure and systems to realise the vision and the mission and aligns resources with the development priorities.
LM	Local Municipality
MuSSA	Municipal Strategic Self-Assessment
MPAP	Municipal Priority Action Plan
m^3	cubic metres = 1 000 liter = 1 kiloliter
Ml	Megaliter = 1 000 kiloliter = 1 000 000 liter
NDP	National Development Plan
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 authorised 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 o f1997)
WSDP Guide Framework	Modular tool which has been developed by the DWA to support Water Services Authorities in complying to the Water Services Act with respect to Water Services Development Planning and which is also used by the DWA 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 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 ADM 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

In terms of provincial notice 490/2000 (Provincial Gazette Extraordinary 5590) of 22 September 2000, the former municipalities of De Doorns, Rawsonville, Touws River and Worcester Transitional Council were dissolved and the Breede Valley Municipality (WC 025) was established. Latter came into effect on 6 December 2000. The Breede Valley Municipality is classified as a Category B municipality.

The Breede Valley Municipality covers an area of approximately 3 833 km² stretching from the Du Toitskloof Mountains in the south-west to the Kwadousberg Mountains in the south-east and including the towns of Rawsonville, Worcester, De Doorns and Touwsrivier as well as the rural areas adjacent to and between these towns and the Matroosberg rural area. The most striking feature of the Breede Valley in the Western Cape is its scenic beauty. Majestic mountains, fertile valleys, vineyards and vast plains, covered with indigenous semi-desert vegetation, captivate the soul. According to the Census 2011 figures the region has a counted population of 166 825 (inclusive of the informal settlements). Population size provides an indication of the volume of demand for government services in a particular geographical space. It also serves as a planning measure to assist budget planners to match available resources to address the relative demand for services.

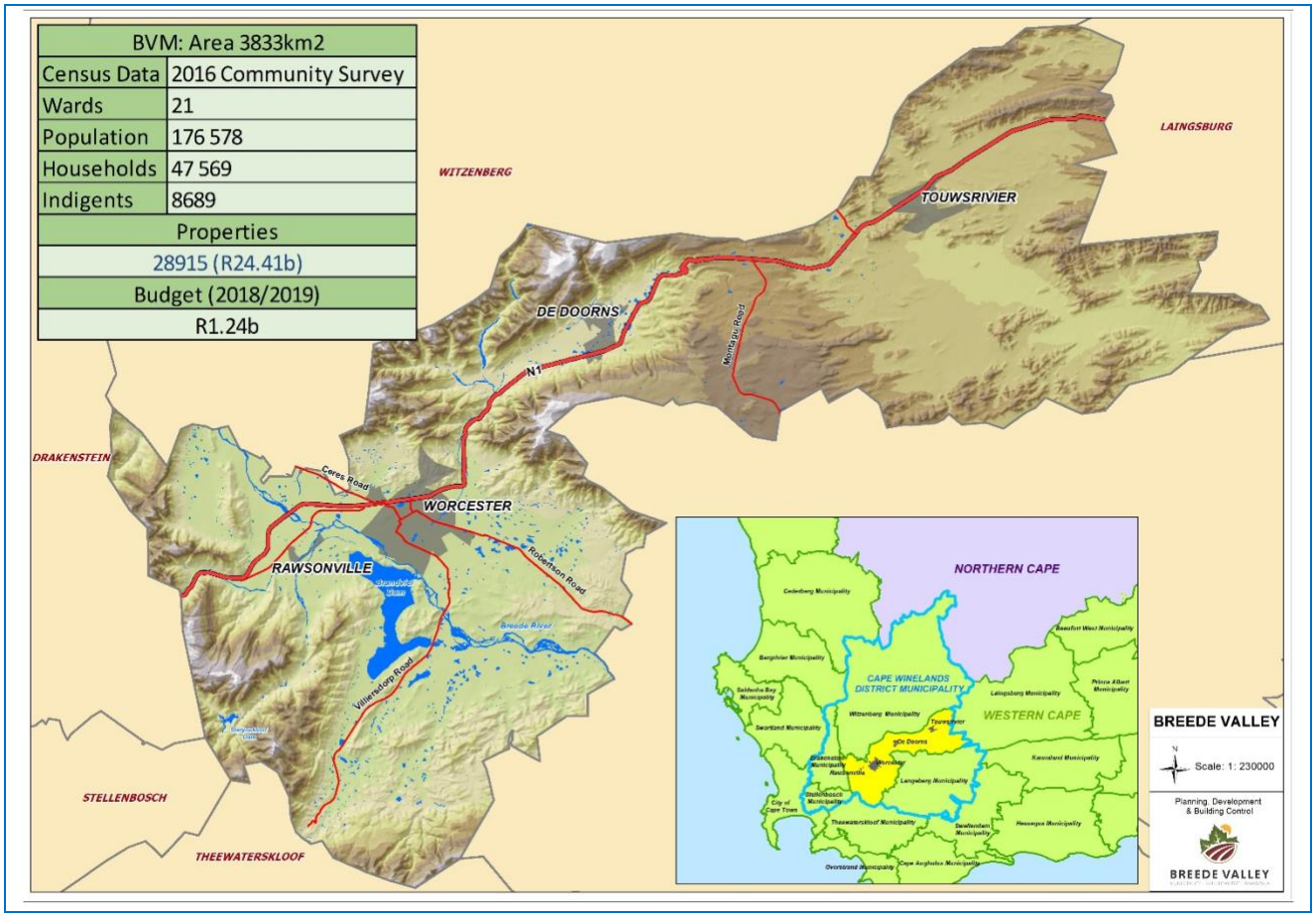
The local municipality is approximately 100 kilometres east of Cape Town. It is part of the Cape Winelands District municipality. Breede Valley has the 2nd largest population in the Cape Winelands District which has a population size of 787 490. Breede Valley municipality's head office is located in Worcester.
Figure A1.1below indicates the location of Breede Valley Municipality in respect with the Cape Winelands District Municipality and Western Cape Provincial.

Figure A1.1: Location of Breede Valley Municipality Province

Topic 1: Settlements and Demographics

The population of Breede Valley was counted at 166 825 during the 2011 census which comprised approximately 42 527 households. The households are spread over a number of formal and informal settlement areas, which subsequent to the 2011 local elections were split into 21 wards. The increase in households and counted residents/households provides for a possible revenue increase in revenue, but also an increase in the demand for services. Figure A1.2 below indicates the location of Breede Valley Municipality authority area of jurisdiction.

Figure A1.2: Map of WSA area of jurisdiction



The Breede Valley Municipality is currently structured into 21 wards. The region has a counted population of 176 578 comprising of 47 569 households, based on the Community Survey 2016 StatsSA data, of which approximately 14,7% (7000) are classified as indigent.

Figure A1.3: Location of Municipal Wards within the Breede Valley Municipality

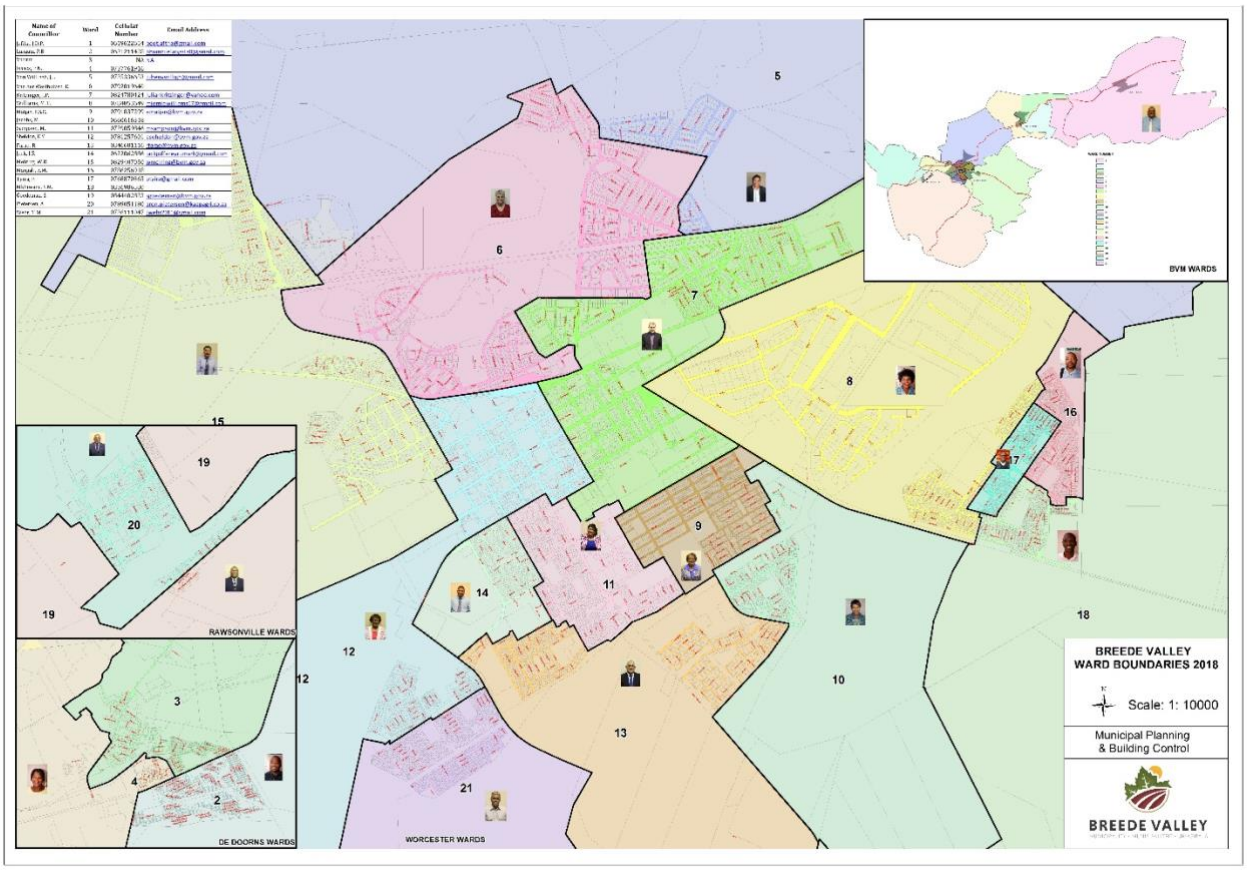


Table A1.1 Water services overview (water)

Settlement Type		2011*		2 018		2 019		2 020		Sanitation category									
		Households	Population	Households	Population	Households	Population	Households	Population	Adequate: Formal	Adequate: Informal	Adequate: Sahred 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																			
Ward	Area									Adequate			Below RDP					None	
1	The entire commgunity of Touwsrivier, including business and residential area.	2 071	8 751	2 316	10 298	2 351	10 428	2 385	10 658	✓	✓	✓							
2	De Doorns South, Stofland and adjacent farms	3 361	9 413	3 760	10 393	3 816	10 525	3 873	10 756	✓		✓							
3	The centre of De Doorns, Hasie Square, Ekuphumleni and adjacent farm areas.	2 155	9 592	2 410	10 595	2 446	10 729	2 482	10 965	✓	✓	✓							
4	Section of De Doorns town centre, Orchards and adjacent farm areas.	2 276	9 981	2 546	11 004	2 584	11 143	2 622	11 389	✓									
5	De Doorns farming areas including Brandwag, De Wet and Sandhills	2 719	11 442	3 041	12 544	3 087	12 703	3 132	12 982	✓	✓	✓							
6	N1 Worcester entrance, Altona, Tuindorp, Bergsig, Van Riebeeck Park, Panorama, Hosp. Hills & Fairway Heights	1 654	5 349	1 851	6 124	1 879	6 202	1 906	6 338	✓									
7	Paglande, Meirings Park, Part of Roux Park, De La Bat, Fairy Glen, Industrial area.	2 152	6 187	2 407	7 007	2 443	7 096	2 479	7 252	✓									
8	The Chessis and part of Worcester south (Zweletemba)	2 328	8 911	2 604	9 877	2 643	10 002	2 682	10 222	✓									
9	Roodewal area and Esselen Park	1 513	6 847	1 693	7 702	1 718	7 800	1 744	7 971	✓									
10	Hexpark, Johnsonspark and Roodewal Flats	1 633	7 924	1 827	8 838	1 854	8 950	1 882	9 147	✓									
11	OVD, Riverview and Parkersdam	1 757	6 694	1 966	7 541	1 996	7 637	2 025	7 805	✓									
12	Part of Avian Park, CBD and Russell Scheme	1 525	7 183	1 706	8 056	1 732	8 158	1 757	8 338	✓									
13	Johnsons Park 1, 2 & part of 3, part of Noble Park and Riverview houses.	1 749	7 592	1 956	8 487	1 985	8 595	2 015	8 784	✓									
14	Riverview flats & Victoria Park	1 321	5 924	1 477	6 730	1 499	6 815	1 521	6 965	✓									
15	Langrug, Worcester West, Somerset Park and Goudini farms	2 045	8 105	2 287	9 028	2 321	9 142	2 355	9 343	✓									
16	Zweletemba	2 703	7 938	3 023	8 861	3 068	8 973	3 113	9 171	✓	✓	✓							
17	Zweletemba	927	3 378	1 037	4 045	1 053	4 096	1 068	4 186	✓	✓	✓							
18	Zweletemba & farms from Overhex, Nonna, etc.	2 060	8 111	2 304	9 029	2 339	9 143	2 373	9 345	✓	✓	✓							
19	Part of centre of Rawsonville and outlaying farming community.	1 398	6 124	1 564	6 937	1 587	7 025	1 611	7 179	✓		✓							
20	Part of the centre of Rawsonville and areas towards N1.	1 828	7 627	2 044	8 519	2 075	8 627	2 105	8 817	✓	✓	✓							
21	Avian Park and all surrounding informal areas.	3 353	13 752	3 750	14 969	3 806	15 159	3 862	15 492	✓	✓	✓							
TOTAL		**42 528**	**166 825**	**47 569**	**186 584**	**48 283**	**188 948**	**48 993**	**193 104**	**21**	**8**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Table A2.2 Water services overview (sanitation)

Settlement Type		2011*		2 018		2 019		2 020		Sanitation category										
		Households	Population	Households	Population	Households	Population	Households	Population	Adequate: Formal	Adequate: Informal	Adequate: Sahred 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																				
Ward	**Area**									**Adequate**			**Below RDP**						**None**	
1	The entire commgunity of Touwsrivier, including business and residential area.	2 071	8 751	2 316	10 298	2 351	10 428	2 385	10 658	✓	✓	✓								
2	De Doorns South, Stofland and adjacent farms	3 361	9 413	3 760	10 393	3 816	10 525	3 873	10 756	✓		✓								
3	The centre of De Doorns, Hasie Square, Ekuphumleni and adjacent farm areas.	2 155	9 592	2 410	10 595	2 446	10 729	2 482	10 965	✓	✓	✓								
4	Section of De Doorns town centre, Orchards and adjacent farm areas.	2 276	9 981	2 546	11 004	2 584	11 143	2 622	11 389	✓										
5	De Doorns farming areas including Brandwag, De Wet and Sandhills	2 719	11 442	3 041	12 544	3 087	12 703	3 132	12 982	✓	✓	✓								
6	N1 Worcester entrance, Altona, Tuindorp, Bergsig, Van Riebeeck Park, Panorama, Hosp. Hills & Fairway Heights	1 654	5 349	1 851	6 124	1 879	6 202	1 906	6 338	✓										
7	Paglande, Meirings Park, Part of Roux Park, De La Bat, Fairy Glen, Industrial area.	2 152	6 187	2 407	7 007	2 443	7 096	2 479	7 252	✓										
8	The Chessis and part of Worcester south (Zweletemba)	2 328	8 911	2 604	9 877	2 643	10 002	2 682	10 222	✓										
9	Roodewal area and Esselen Park	1 513	6 847	1 693	7 702	1 718	7 800	1 744	7 971	✓										
10	Hexpark, Johnsonspark and Roodewal Flats	1 633	7 924	1 827	8 838	1 854	8 950	1 882	9 147	✓										
11	OVD, Riverview and Parkersdam	1 757	6 694	1 966	7 541	1 996	7 637	2 025	7 805	✓										
12	Part of Avian Park, CBD and Russell Scheme	1 525	7 183	1 706	8 056	1 732	8 158	1 757	8 338	✓										
13	Johnsons Park 1, 2 & part of 3, part of Noble Park and Riverview houses.	1 749	7 592	1 956	8 487	1 985	8 595	2 015	8 784	✓										
14	Riverview flats & Victoria Park	1 321	5 924	1 477	6 730	1 499	6 815	1 521	6 965	✓										
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16	Zweletemba	2 703	7 938	3 023	8 861	3 068	8 973	3 113	9 171	✓	✓	✓								
17	Zweletemba	927	3 378	1 037	4 045	1 053	4 096	1 068	4 186	✓	✓	✓								
18	Zweletemba & farms from Overhex, Nonna, etc.	2 060	8 111	2 304	9 029	2 339	9 143	2 373	9 345	✓	✓	✓								
19	Part of centre of Rawsonville and outlaying farming community.	1 398	6 124	1 564	6 937	1 587	7 025	1 611	7 179	✓		✓								
20	Part of the centre of Rawsonville and areas towards N1.	1 828	7 627	2 044	8 519	2 075	8 627	2 105	8 817	✓	✓	✓								
21	Avian Park and all surrounding informal areas.	3 353	13 752	3 750	14 969	3 806	15 159	3 862	15 492	✓	✓	✓								
TOTAL		**42 528**	**166 825**	**47 569**	**186 584**	**48 283**	**188 948**	**48 993**	**193 104**	**21**	**8**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Table 1: Settlement Summary

1.1 Settlements Summary

Section	Value	Assessment Score
1.1 Total Population	193 104	100%
1.2 Total Number of Households	48 993	100%
1.3 Average Household Size	3.8	100%
1.4 Total Number of Settlements	4	100%

Table 2: Urban/Rural Split

1.2 Summary by Settlement Group

Settlement Type	Settlements	Population	Households	Assessment Score
Rural				
Urban	4	193 104	48 993	100%

Table 3: Settlement Type

1.3 Assessment Score by Settlement Type

Main Type	Settlement Type	Settlements	Population	Households	Avg. Household Size	Assessment Score
Rural	Rural - Small Village <= 5000	-				
Rural	Rural - Dense Village > 5000	-				
Rural	Rural Scattered	-				
Rural	Farming	-				
Rural	Working Towns and Service Centres - Mines, Prisons etc.	-				
Urban	Urban - Former Township	-				
Urban	Urban - Informal Settlements (Squatter Camp)	-				
Urban	Urban - Formal Town	4	193 104	48 993	3.8	100%

Table 4: Health & Education Facilities

1.4 Amenities Summary

Amenity Type	Number of Amenities	Assessment Score
Health Facilities	18	100%
Educational facilities	58	100%

Topic 2: Service Levels

Breede Valley Municipality has a comprehensive Performance Management System in place which is used to monitor organisational performance. The SDBIP is the process plan and performance indicator / evaluation for the execution of the budget. The SDBIP is being used as a management, implementation and monitoring tool that assists and guide the Executive Mayor, Councillors, Municipal Manager, Senior Managers and the community. The plan serves as an input to the performance agreements of the Municipal Manager and Directors. It also forms the basis for the monthly, quarterly, mid-year and the annual assessment report and performance assessments of the Municipal Manager and Directors. The Performance Audit Committee reviews the municipality's performance management system, which includes the quarterly reports produced and submitted by Internal Audit.

The performance evaluation of the water and sanitation indicators / targets, as included in the SDBIP and completed for the end of June 2020, is as follows (KPIs for Capital Projects and the Operational Performance):

Service Delivery Indicators for Water and Sanitation Services

Ref	KPI Name	Unit of Measurement	Wards	2019/20		Overall Performance for 2020/21		
				Target	Actual	Target	Actual	R
TL10	Number of formal residential properties that are billed for water as at 30 June 2021	Number of residential properties that are billed for residential consumption water meters charged residential domestic tariffs or residential flat rate tariffs using an erf as a household except municipal rental flats which will be measured by using the number of rental units.	All	20890	21259	21 260	21 370	G2
TL22	Limit unaccounted water losses to less than 25% by 30 June 2021 {(Number of kilolitres water available from reservoirs - number of kilolitres water sold) / (number of kilolitres water purchased or purified) x 100}	% unaccounted for water	All	21%	31.12%	25.00%	24.28%	B
TL33	Review 5 year Water Service Development Plan (WSDP) and submit to Council for approval by 31 May 2021	Reviewed WSDP submitted to Council by 31 May 2021	All	1	1	1	1	G
TL31	Achieve 95% average water quality level as measured per SANS 241 criteria during the 2020/21 financial year	% water quality level per quarter	All	95%	96.50%	95.00%	95.13%	G2

Residential water services delivery access profile

The residential water services delivery access profile is presented below and is aligned with the format proposed for the Municipal Annual Report as contemplated in the MFMA. It is emphasized that this access profile does not consider quality- or adequacy of services as presented in the next section. It also has to be noted that the figures below indicate the service level within the urban edge only. There are a number of households outside the urban edge such as farms that are not serviced by the municipality. No detail information on the level of service is available for these households. The census 2011 does indicate there are a number of households outside the urban edge that do not have access to adequate water and sanitation services. The provision of services to these areas however falls outside the mandate of the Municipality. Reporting is therefore done on the areas within the urban edge.

Table: Residential water services delivery access profile: Water

Census Category	Description	Year 0		Year -1		Year -2	
		FY2021		FY2020		FY2019	
		Nr	%	Nr	%	Nr	%
	WATER (ABOVE MIN LEVEL)						
Piped (tap) water inside dwelling/institution	House connections	22 298	69%	20 860	69%	21 380	73%
Piped (tap) water inside yard	Yard connections	0	0%	0	0%	0	0%
Piped (tap) water on community stand: distance less than 200m from dwelling/institution	Standpipe connection < 200 m	9 521	27%	9 467	31%	7 969	27%
	Sub-Total: Minimum Serivce Level and Above	**31 819**	100%	**30 327**	100%	**29 349**	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	0	0	0%	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		0	
No access to piped (tap) water	No services	0		0	0%	0	0%
	Sub-Total: Below Minimum Service Level	**0**		**0**	**0%**	**0**	**0%**
	Total number of households	**31 819**	**100%**	**30 327**	**100%**	**29 349**	**100%**

Table 5: Improvement in Eradicating the Water Backlog

LM	Urban / Rural	2020/21		2019/20 (-Y1)	
		Water backlog HH	Water Backlog Population	Water backlog HH	Water Backlog Population
BVM	Rural	-	-	-	-
BVM	Urban	9 521	38 084	9 467	37 868

The table below provide a summary of the level of service for sanitation services within the urban edge of the Breede Valley Municipality. The service provided by Breede Valley Municipality is relatively high/acceptable. All formal areas have access to waterborne sanitation services. In informal areas chemical toilets are provided in accordance with the prescribed ratio (per person's toilet).

Table: Residential water services delivery access profile: Sanitation

Census Category	Description	Year 0		Year -1		Year -2	
		FY2021		FY2020		FY2019	
		Nr	%	Nr	%	Nr	%
	SANITATION (ABOVE MIN LEVEL)						
Flush toilet (connected to sewerage system)	Waterborne	23 275	95%	22 726	95%	21 405	95%
	Waterborne: Low Flush	0		0	0%	0	0%
Flush toilet (with septic tank)	Septic tanks / Conservancy	415	2%	408	2%	385	2%
Chemical toilet	Non-waterborne (above min. service level)	890	3%	700	3%	670	3%
Pit toilet with ventilation (VIP)		0		0	0%	0	0%
Other		0		0	0%	0	0%
	Sub-Total: Minimum Serivce Level and Above	**24 850**	**100%**	**23 834**	**100%**	**22 460**	**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	0	0%	0	0%	0	0%
No toilet provisions	No services	0	0%	0	0%	0	0%
	Sub-Total: Below Minimum Service Level	**0**	**0%**	**0**	**0%**	**0**	**0%**
	Total number of households	**24 850**	**0%**	**22 460**	**100%**	**22 460**	**100%**

Table 6: Improvement in Eradicating the Sanitation Backlog

LM	Urban / Rural	2020/21		2019/20 (-Y1)	
		Sanitation backlog HH	Sanitation Backlog Population	Sanitation backlog HH	Sanitation Backlog Population
BVM	Rural	-	-	-	-
BVM	Urban	1 108	4 432	1 055	4 220

Table 7: Direct Backlog (Water and Sanitation)

Direct Backlog (Water & Sanitation)	Totals	Assessment Score
Direct settlement backlog water households. Total household of settlement with a water need (irrelevant the type of need)	9 521	100 %
Direct settlement backlog water population. Total population of settlement with a water need (irrelevant the type of need)	38 084	100 %
Direct settlement backlog sanitation households. Total household of settlement with a sanitation need (irrelevant the type of need)	1 108	100 %
Direct settlement backlog sanitation population. Total population of settlement with a sanitation need (irrelevant the type of need)	4 432	100 %

The residential water services delivery adequacy profile as presented below aligns with the service level category of the WSDP Guide Framework and considers the water resources-, operational- and infrastructure needs of the water services provider by the Breede Valley Municipality. In essence, the above, paves the way for the identification of projects to address the relevant needs. When interpreting the adequacy profile, it should be recognised that a specific settlement that are serviced by the municipality, may have more than one need and hence, that provision is made for double counting of households, where such duplication 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 DWA Reference Framework, meaning that any infrastructure development needs (as may be evident from the access profile) is not assigned for implementation by the Breede Valley Municipality.

It must be noted that the adequacy profile is based on levels of service for the areas within the urban edge and aligned with the Department of Water Affairs, reference framework figures. The adequacy profile represents a WSA perspective and hence, includes all wards located within the Breede Valley municipal boundary.

The Breede Valley Municipality's water services adequacy profile contains the following needs:

1. Infrastructure- and services needs to be extended in informal settlements of Rawsonville, Avian Park, Zweletemba, Sand Hills, Orchards and Touws River.
2. There is a high need of refurbishment for both the water- and sewer infrastructure.

Table 8: Water Supply Level Profile

Water Profile	Totals	Assessment Score
Section: Water Services Infrastructure Supply Level Profile		
Piped water inside the dwelling/house-Households	22 298	
Piped water inside yard-Households	0	
Piped water distance <200m - Households	9 521	
Piped water distance >201m - Households	0	
Borehole in the yard – Households	27	
Rain-water tank in yard – Households	0	
Water vendor-carrier/tanker - Households	0	-
Stagnant water - dam/pool - Households	0	-
Flowing water/spring/ stream/river - Households	0	-
Water Other – Households	0	-

Table 9: Water Reliability Profile

Section: Water Reliability Profile	Totals	Assessment Score
Water Supply System	3	
Total Number of Households having Reliable Service. (Interpret Direct Backlog field above)	22 298	100%
Total Number of Households NOT having Reliable Service due to: Resource - Conservation & Demand Management	-	-
Total Number of Households NOT having Reliable Service due to: Infrastructure – EXTENSION	-	-

Table 10: Sanitation Level of Service

Sanitation Profile	Totals	Assessment Score
Section: Sanitation Service Infrastructure Supply Level Profile		
Bucket toilet – Households	0	
Pit without ventilation – Households	0	
Pit toilet with ventilation (VIP) – Households	0	
Chemical Toilet – Households	890	
Flush toilet (with septic tank) – Households	415	
Flush toilet (connected to sewerage system) – Households	23 275	
None – Households	0	

Table 11: Sanitation Reliability Profile

Section: Sanitation Reliability Profile	Totals	Assessment Score
Infrastructure to be upgraded: None to VIP (HH)	-	
Infrastructure requirement: None to waterborne. (HH)	-	
Infrastructure to be upgraded: Pit to VIP (HH)	-	
Household not having reliable service due to Resource - Water Security	-	
Household not having reliable service due to Functionality	-	
Household requiring Existing Scheme Refurbishment	-	
Household requiring VIP Refurbishment	-	

Table 12: Water Service Levels: Education Facilities

Associated services facility	Number of facilities	Facilities with No Services	Facilities with Inadequate Services	Total Potential Cost (basic level) (RM)
Water				
2.1.1 Education Plan				
Primary School and Secondary	56	0	0	-
Tertiary	2	0	0	-
	Total			
2.1.2 Health Plan				
Hospitals	4	0	0	-
Clinics	14	0	0	-
	Total			

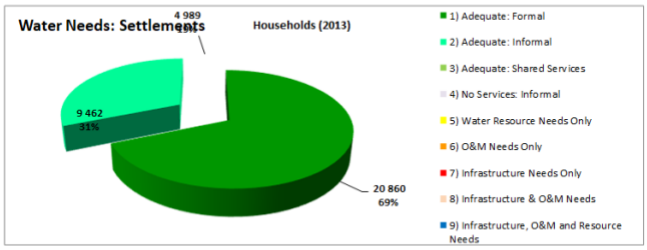
Table 13: Sanitation Service Levels: Health Facilities

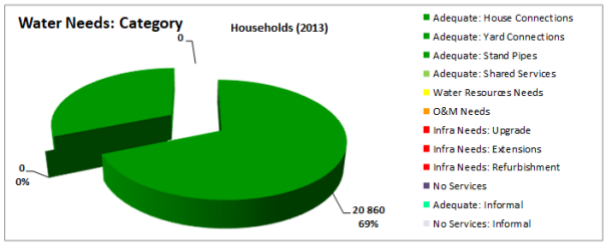
Associated services facility	Number of facilities	Facilities with No Services	Facilities with Inadequate Services	Total Potential Cost (basic level) (RM)
Sanitation				
2.1.1 Education Plan				
Primary & Secondary Schools	56	0	0	-
Tertiary	2	0	0	-
	Total			
2.1.2 Health Plan				
Hospitals	4	0	0	-
Clinics	14	0	0	-
	Total			

Residential water services delivery adequacy profile (Water)

Table C2.3 (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						Upgrades		Extensions		Refurbishment							
		HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%
1	21	20 860	100%																						
2	3					9 462	31																		
3	12																								
4	0																								
5	0																								
6	0																								
7	12																								
8	0																								
9	0																								
10	0																								
Total Household Interventions required		20 860		0		9 462		0		0		0		0		0		0		0		0		0	



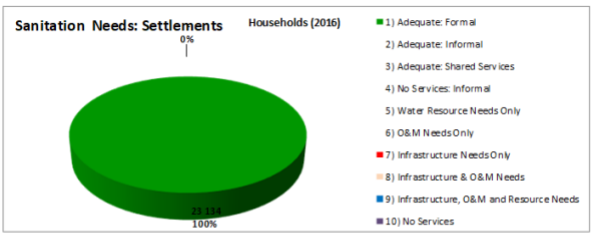


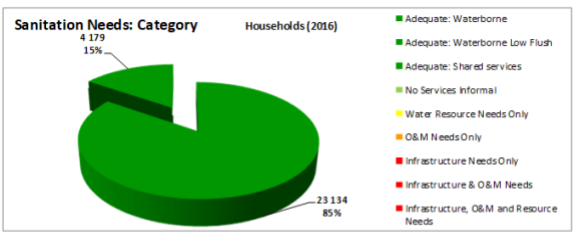
1	Adequate	3	Adequate: Shared services	5	Water Resources Needs Only	7	Infrastructure Needs Only	9	Infrastructure, O&M & Resource Needs
2	Adequate: Informal	4	No Services: Formal	6	O & M Needs Only	8	Infrastructure& O&M needs	10	No Services

Residential water services delivery adequacy profile (Sanitation)

Table C2.3 (b): Residential water services delivery adequacy profile (Sanitation)

Water Categorisation	Number of settlements	FORMAL																		INFORMAL			
		Adequate										Water Resource needs		O & M Needs		Infrastructure Needs						Adequate		No services	
		Waterborne		Waterborne Low flush		Septic Tank/ Conservancy		None Waterborne		Shared Services						Upgrades		Extensions		Refurbishment					
		HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%	HH	%
1	21	22 726	98%			408	2%																		
2	0																								
3	0																								
4	0																								
5	0																								
6	0																								
7	4																								
8	0																								
9	0																								
10	4																								
Total Household Interventions required		22 726		0		408		0		0		0		0		0		0		0		0		0	





1	Adequate	3	Adequate: Shared services	5	Water Resources Needs Only	7	Infrastructure Needs Only	9	Infrastructure, O&M & Resource Needs
2	Adequate: Informal	4	No Services: Formal	6	O & M Needs Only	8	Infrastructure& O&M needs	10	No Services

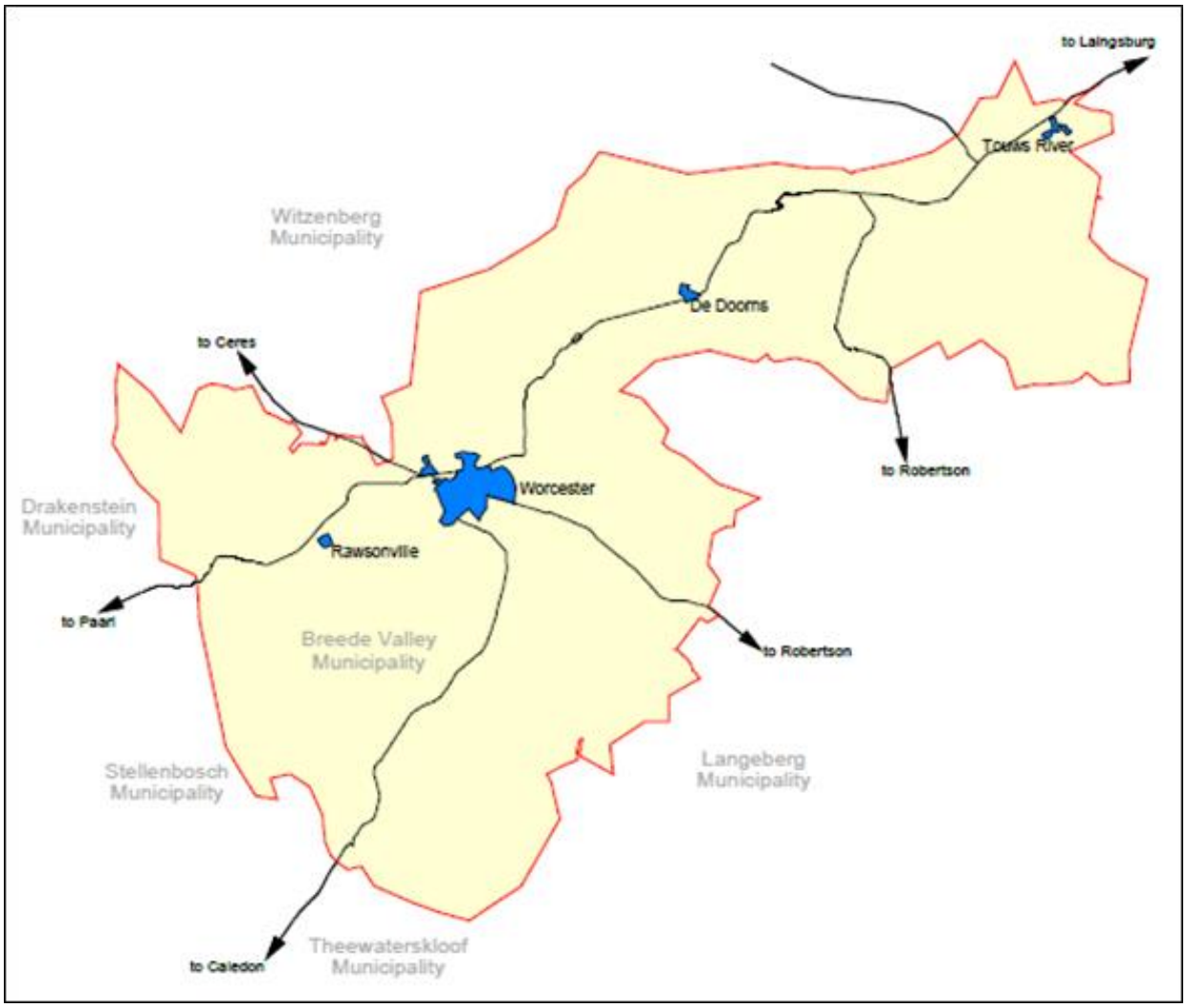
Topic 3:

Water Services Infrastructure Management (Infrastructure)

The following section provides a summary overview of the Water Infrastructure and supply area for the Breede Valley Municipality. The supply of water in the Breede Valley Municipal Area can be divided into three supply areas, they are:

- Worcester and Rawsonville Supply Area
- De Doorns Supply Area
- Touwsriver Supply Area

The map below indicates the four supply areas within the Breede Valley Municipality



Water Infrastructure Summary

AREA	INFRASTRUCTURE TYPE	EXTENT	CAPACITY
Worcester	Water Treatment Works (Stettynskloof)	1	60Ml/d
	Water Treatment Works (Fairy Glen)	1	10Ml/d
	Reservoirs (including Towers) Worcester	8	93.24Ml
	Pumpstation/s Worcester	6	-
	Pipe Length (Worcester)	345km	-
Rawsonville	Boreholes (Rawsonville – Emergencies only)	4	0.8Ml/d
	Reservoirs (including Towers) Rawsonville	3	2.83Ml
	Pumpstation/s Rawsonville	1	-
	Pipe Length (Rawsonville)	16.8km	-
De Doorns	Water Treatment Works	1	4.8Ml/d
	Reservoirs (including Towers)	7	8.79Ml
	Pumpstation/s	2	-
	Pipe Length	57.7km	-
Touws River	Water Treatment Works	1	3.2Ml/d
	Reservoirs (including Towers)	3	6.045Ml
	Pumpstation/s	0	-
	Pipe Length	89.2km	-

Worcester Supply Area

Worcester is supplied with potable water from two different sources. The main water source is Stettynskloof Dam that is situated approximately 32 km from Worcester in the Du Toitskloof Mountains. The other source, Fairy Glen Dam is much smaller in capacity and is situated closer to Worcester. The water is treated at both sources before released into the potable drinking water system. A total of 32 km of pipelines, ranging from 375 mm to 1 075 mm in diameter transfer the bulk water within the Worcester areas to various storage reservoirs. These reservoirs range from 2 Mℓ up to 20 Mℓ providing a total treated water holding capacity of 93 Mℓ.

The system is operated in 7 zones supplied from 4 sets of reservoirs. The Preload zone is the largest of the zones and supplies 70% of the total water demand (TWD). Three booster pumping zones are present in the high lying areas.

The Preload reservoir supplies the Worcester West Sump with water under gravity. The Worcester West Upper reservoir is in turn supplied from the Worcester West Sump via the Brandwacht pumping station and rising main.

The De Koppen reservoir could be supplied by the Preload reservoir via the Panorama pumping station in an emergency.

The total water reticulation network consists of 345 km of pipework ranging from 45 mm to 1075mm diameter pipes.

Rawsonville Supply Area

The system is operated in one zone, supplied with water from the Rawsonville 2.0 Mℓ reservoir through a 5.7 km 250 mm diameter ductile iron pipeline. Water pressure before the town is relieved through a PRV.

The Rawsonville reservoir is supplied with water from the Stettynskloof pipeline, which also supplies water to Worcester.

There is a total of 16.8km of pipeline that supply the town's reticulation network.

De Doorns Supply Area

The system is operated in 5 separate zones, viz. the De Doorns Upper zone, De Doorns Lower zone, Stofland reservoir zone, Stofland PRV zone and the Orchard zone.

Water is pumped from the N1 pump station, located adjacent to the N1 reservoirs, through the upper zone distribution network into the Upper reservoir, Lower reservoirs and Orchard reservoir and distributed into the zones respectively.

The Stofland reservoir is supplied with water from the N1 reservoirs through the Stofland pump station (also located on the N1 reservoir site) and accompanying 200 mm diameter rising main. The Stofland pumpstation supplies the Stofland reservoir and Stofland PRV zones.

Water for De Doorns is provided by Hex Valley Water Users Association Irrigation Board.

There are six reservoirs ranging from 0.4mℓ to 2.3mℓ and two pump stations. Only one pump station is currently operational and delivering 3mℓ/day at an operating head of 80m. The construction of the other pump station is complete and is in the commissioning process.

There is a total of 57.6km of pipeline that supply the town's reticulation network.

Touwsriver Supply Area

The bulk water supply lines from the Bokrivier Water Treatment Plant feed 3 separate reservoirs. These reservoirs feed into 3 separate zones respectively.

Touws River receives water from two diversions in the Donkerkloof and Waterkloof. These water sources are supplemented by boreholes and natural springs. The total of this water can be diverted to be collected and stored in the Bok River balancing dam. The water is then channelled to a water treatment facility from where the treated water is stored in three reservoirs. These reservoirs range from 0.05mℓ to 4.5mℓ with a total storage of 6mℓ.

The pipelines that supply bulk water from the source to the treatment works are 28km long and vary in diameter from 200mm to 300mm. The water reticulation network consists of 61km of pipe work and varies from 45mm to 225 in diameter.

Existing Water Pipeline Infrastructure

PIPES	Length (m)			
Diam. (mm)	Bulk	Network	Total	%
DE DOORNS				
≤ 45	0	0	0	0
> 45 ≤ 75	0	2 040	2 040	4
> 75 ≤ 125	960	33 930	34 890	61
> 125 ≤ 175	3 920	9 110	13 030	23
> 175 ≤ 275	5 245	1 825	7 070	12
> 275	535	65	600	1
De Doorns Total	**10 660**	**46 970**	**57 630**	**100**
RAWSONVILLE				
≤ 45	0	0	0	0
> 45 ≤ 75	0	5 685	5 685	34
> 75 ≤ 125	25	4 700	4 725	28
> 125 ≤ 175	405	125	530	3
> 175 ≤ 275	85	5 750	5 835	35
> 275	0	25	25	0
Rawsonville Total	**515**	**16 285**	**16 800**	**100**
TOUWS RIVER				
≤ 45	0	0	0	0
> 45 ≤ 75	0	8 065	8 065	9
> 75 ≤ 125	0	7 110	7 110	8
> 125 ≤ 175	870	17 405	18 255	21
> 175 ≤ 275	55 735	5	55 765	62
> 275	0	0	0	0
Touws River Total	**56 600**	**32 615**	**89 215**	**100**
WORCESTER				
≤ 45	0	950	950	0
> 45 ≤ 75	0	25 798	25 795	7
> 75 ≤ 125	0	150 140	150 140	43
> 125 ≤ 175	0	80 785	80 785	0
> 175 ≤ 275	0	30 110	30 131	9
> 275 ≤ 375	0	14 815	14 815	4
> 375 ≤ 475	0	10 036	10 035	3
> 475 ≤ 575	0	1 680	1 680	0
> 575 ≤ 675	0	1 035	1 735	1
> 675 ≤ 775	27 825	0	28 893	8
> 875	0	0	0	0
WORCESTER TOTAL	**27 879**	**317 080**	**344 959**	**75**
BREEDE VALLEY TOTAL	**95 654**	**412 950**	**508 604**	**100**

Existing Reservoirs and Water Towers

NAME	TYPE	CAPACITY (k ℓ)	TWL (m a.s.l.)
De Doorns			
De Doorns Lower	Reservoir	2 270	542,5
De Doorns Upper 1	Reservoir	1 000	564,2
De Doorns Upper 2	Reservoir	1 000	564,2
Orchard	Reservoir	500	484,0
N1 Reservoir 1	Reservoir	1 154	490,2
N1 Reservoir 2	Reservoir	364	489,7
Stofland	Reservoir	2 500	615.0
TOTAL		**8 788**	
Rawsonville			
Rawsonville Old Reservoir	Reservoir	580	225.6
Rawsonville 2.0 ML	Reservoir	2 000	296.8
Rawsonville Tower	Reservoir	250	234.4
TOTAL		**2 830**	
Touws River			
Crescent Lower	Reservoir	4 500	793,3
Crescent Upper	Reservoir	45	801,0
Steenvliet	Reservoir	1 500	810,9
TOTAL		**6 045**	
Worcester			
De Koppen	Reservoir	11 370	366,0
Langerug	Reservoir	13 630	291,3
Preloads	Reservoir	45 510	304,8
Worcester West Sump	Reservoir	680	285,0
Worcester West Upper	Reservoir	2 050	318,0
TOTAL		**73 240**	
BREEDE VALLEY MUNICIPALITY TOTAL		**90 933**	

Existing Water Pumps

TOWN OR ZONE	NAME	CAPACITY (ℓ / s)	HEAD (m)
DE DOORNS	N1 Pump Station	35	80
	Stofland PS	38	166
RAWSONVILLE	Rawsonville	*20	*30
	De Nova	*10	*30
TOUWS RIVER	None		
WORCESTER	Brandwacht	30	40

Sewer Infrastructure Summary

AREA	INFRASTRUCTURE TYPE	EXTENT	CAPACITY
Worcester	Wastewater Treatment Works	1	30Ml/d
	Pumpstation/s	9	-
	Pipe Length	276.4	-
Rawsonville	Wastewater Treatment Works	1	0.25Ml/d
	Pumpstation/s	1	-
	Pipe Length	10.1	
De Doorns	Wastewater Treatment Works	1	2.35Ml/d
	Pumpstation/s	1	-
	Pipe Length	51.2km	
Touws River	Wastewater Treatment Works	1	0.84Ml/d
	Pumpstation/s	8	-
	Pipe Length	22.5	-

Sewer Pipeline Infrastructure

BREAKDOWN OF PIPE LENGTHS ACCORDING TO DIAMETER		
Normal Pipe Diameter (mm Ø)	**Gravity Pipes (km)**	**Rising Mains (km)**
DE DOORNS		
≤ 125	2.1	2.2
> 125 ≤ 175	39.6	0.0
> 175 ≤ 225	2.0	0.0
> 225 ≤ 275	5.3	0.0
> 275 ≤ 275	0.0	0.0
> 325	0.0	0.0
Sub-total	**49.0**	**2.2**
RAWSONVILLE		
≤ 125	0.0	0.0
> 125 ≤ 175	8.7	1.4
> 175 ≤ 225	0.0	0.0
> 225 ≤ 275	0.0	0.0
> 275 ≤ 325	0.0	0.0
> 325	0.0	0.0
Sub-total	**8.7**	**1.4**
TOUWS RIVER		
≤ 125	0.0	3.5
> 125 ≤ 175	15.9	1.5
> 175 ≤ 225	1.6	0.0
> 225 ≤ 275	0.1	0.0
> 275 ≤ 325	0.0	0.0
> 325	0.0	0.0
Sub-total	**17.7**	**5.0**
WORCESTER		
≤ 125	0.0	0.6

BREAKDOWN OF PIPE LENGTHS ACCORDING TO DIAMETER		
Normal Pipe Diameter (mm Ø)	**Gravity Pipes (km)**	**Rising Mains (km)**
> 125 ≤ 175	13.3	1.9
> 175 ≤ 225	14.8	0.0
> 225 ≤ 275	6.5	2.1
> 275 ≤ 325	10.6	0.0
> 325 ≤ 375	7.7	0.0
> 375 ≤ 425	2.1	0.0
> 425 ≤ 475	3.1	0.0
> 475 ≤ 525	0.4	0.0
> 525 ≤ 575	1.1	0.0
> 575 ≤ 675	2.9	0.0
> 675	0.6	0.0
Sub-total	**263.0**	**4.7**
TOTAL	**338.5**	**13.3**

Wastewater Treatment Plants

DETAILS OF BULK DISCHARGE POINTS AND WASTEWATER TREATMENT PLANTS (WWTP'S)			
Name	**Capacity (kℓ/d)**	**IPDWF (ℓ / s)**	**Process**
De Doorns WWTP	650	±15	Activated sludge
Rawsonville WWTP	250	40	Activated sludge
Touws River WWTP	840		Activated sludge
Worcester WWTP	28 200	±645	Activated sludge

Sewer Pump Stations

EXISTING PUMPING STATION			
Town or Zone	**Name**	**Capacity (ℓ / s)**	**Diameter of rising main (mm)**
DE DOORNS	Orchard	**12	100
RAWSONVILLE	Rawsonville	*12	150
TOUWS RIVER	Dahlia Street	*8	100
	Du Plessis Street	*12	100
	Hopland	*8	100
	Hotel	*2	50
	Loop Street	*4	75
	Noord	*12	100
	Steenvliet	*12	150

EXISTING PUMPING STATION			
Town or Zone	**Name**	**Capacity (ℓ / s)**	**Diameter of rising main (mm)**
	Total	*5	100
WORCESTER	Avian Park[1]	48	250
	Johnson Park	35.3	150
	Noble Park	6.5	100
	Mountain Mill	*12	160
	Santa Weida	**35	150
	Zweletemba	13	100

* Required minimum capacity – to be verified

** to be verified

Table 14: Infrastructure Components

Assets	Boreholes	Abstraction Points	WTW	Water Pump Stations	Sewer Pump Stations	Water Bulk Pipelines	Sewer Bulk Pipelines	Reservoirs	WWTW	Assessment Score
3.1.1 Total number of components / km of pipeline / units	0	4	4	9	19	508.7 km	360.2 km	20	4	

Table 15: Refurbishment Need & O&M Occurrence

	Refurbishment Need			O&M Occurrence			Observation		
	High	Medium	Low	Regular	Periodic	None	Dysfunctional	Operational	Prime Condition
Boreholes	x				x			x	
Reservoirs		x			x			x	
Water Pump Stations		x			x			x	
Bulk Lines			x		x			x	
WTW		x			x			x	
WwTW		x			x			x	

Topic 4: Water services Infrastructure Management (O&M)

The Breede valley Municipality has a detailed Water and Sewer Master Plan that was completed in June 2014. The planning scenario for the master plans is based on the approved Spatial Development Framework. Detailed computer models for the water and sewer system were done and linking the models to the stand and water meter database of the treasury financial system. All networks were evaluated for the current and future models to determine the infrastructure requirements based on the specific planning scenario. Detail infrastructure requirements and timeframes is the main output of the master plans. The master plans also assist with the evaluation of new development applications to ensure that the required infrastructure for the development will be adequate.

An output of the Master Plans is also detailed infrastructure plans of the current infrastructure. This can be used for asset register verification and/or updating of the asset register. All information is available in an electronic system for easy viewing and planning purposes. Al water and sewer information is integrated in one system.

The Transhex development was approved and is in implementation stage. This is a huge development consisting of approximately 8 000 new households. The project will be implemented in phases. The first phase consisting of 1 500 households. This will have a major impact on the current infrastructure in the Worcester area as well as capacity to manage the additional infrastructure required for this scale of development. Currently the bulk infrastructure for this development is in place to ensure that sufficient capacity is available for this development. The infrastructure requirements were identified through the master planning process.

The current master Plan for Water and Sewer is sufficient for the development trends in the Breede Valley Municipality. Should the Spatial development Framework be updated the master Plans will be realigned to ensure integration with the planning scenarios as indicated in the Spatial Development Framework.

Groundwater Infrastructure

There are only three new boreholes that will be used for drinking purposes in De Doorns. These boreholes are still in process of development. The other existing boreholes will be available for emergencies. The water quality will however be tested on a monthly basis. The depth, yield of the borehole and the abstraction will be recorded as part of the operating procedures. The abstraction of the boreholes will be registered with the Department of Water Affairs.

Surface Water Infrastructure

The dam safety registration for the Stettynskloof, Fairy Glen and Bokriver dams are in place. This is not needed for the other dams in De Doorns and Rawsonville. Abstraction is recorded for all the surface water sources and is registered with the Department of Water and Sanitation.

The infrastructure is routinely inspected and maintained. There is however no operation and maintenance manual or procedure for these specific tasks in place. Physically the condition of the surface water infrastructure is in a good and sound condition.

Water Treatment Works

Water is treated at the sources before released into the reticulation network. Worcester has two treatment works, one at Stettynskloof dam and the other at De Koppen for the Fairy Glen dam. Rawsonville, De Doorns and Touws River each have one treatment facility. These treatment facilities operate 24 hours per day for Stettynskloof, De Doorns and Touws River and eight hours per day for De Koppen and Rawsonville. The abstraction of all the treatment facilities is monitored, recorded and registered with the Department of Water Affairs.

The physical condition of all the treatment facilities is in good condition. There is no fixed maintenance programme in place for the treatment facilities. Spare parts are readily available and stored at the facilities or in the municipal general store.

Pump Stations

There are nine pump stations in total that are owned by the BVM. One in De Doorns (N1 Pump Station), two in Rawsonville (Rawsonville and De Nova) and six in Worcester (Brandwacht, Carinus Street, Fairway Heights, Langerug, Main and Panorama). These pump stations and pumps are all in a good condition and have a maintenance programme in place. The pump stations are all situated within a formal building and are electrically operated. The pumps operate 24 hours per day and each have a standby pump set available.

Wastewater Treatment Works

Each town within the Breede Valley Municipality has their own wastewater treatment works. These treatment works operate 24 hours per day and discharge the treated effluent into the Breede River, Smalblaar River and Hex River respectively. For Worcester, Touws River and De Doorns a portion of the treated effluent is used by other end users for irrigation. Only Touws River does not discharge any treated effluent back into the river, but all is disposed of for irrigation. Water quality is measured at Worcester on a weekly basis and monthly for the other towns. 100% of the effluent that leaves the treatment works is chlorinated.

The Municipality is responsible for the following systems:

- Worcester WWTW
- Rawsonsville WWTW
- De Doorns WWTW
- Touwsrivier WWTW

The physical condition of the treatment works is good/average and the infrastructure is well maintained. Although the treatment works does experience infrequent breakages/failures during operation there are spare parts available on site and problems can be fixed quickly.

By laws affecting water services

The by-laws for the provision of water and sewer are in place for the Breede Valley Municipality.

WATER AND SANITATION RESOURCE AVAILABILITY

BULK AND RETAIL FUNCTIONS OF BVM (THE WSP)	Resources available to perform function			
	Budget	By-laws	Infrastructure	Personnel
Water service providers (retail water)	Yes	Yes	Yes	Yes
Water service providers (sanitation)	Yes	Yes	Yes	Yes
Water service providers (bulk water)	Yes	Yes	Yes	Yes
Water service providers (bulk sanitation)	Yes	Yes	Yes	Yes
Support service agents (water)	No	n. a	n. a	n. a
Sanitation promotion agent	No	n. a	n. a	n. a
Support service contracts	No	n. a	n. a	n. a
Water service institutions	No	n. a	n. a	n. a
WSP staffing levels: water	Yes	n. a	Yes	Yes
WSP staffing levels: sanitation	Yes	n. a	Yes	Yes
WSP training programme	No	n. a	No	No

Table 16: Operation & Maintenance

Compliancy i.t.o. staff, external resources, tools, spare parts, budget	Existing Ground water Infrastructure	Existing Surface Water Infrastructure	Existing Water Treatment Works Infrastructure	Existing Wastewater Treatment Works Infrastructure	Existing Pump Station Infrastructure	Existing Bulk Pipeline Infrastructure	Existing Tower & Reservoir Infrastructure	Existing Reticulation Infrastructure
Resources	0%	90%	90%	75%	90%	80%	90%	75%
Information	0%	80%	80%	60%	80%	75%	80%	50%
Activity Control & Management	0%	50%	50%	20%	50%	50%	50%	70%

Topic 5: Water Conservation and Demand Management

Table 14: Reducing Unaccounted Water

Reducing unaccounted water and water inefficiencies			Assessment Score
	5.1.1 Night flow metering	Yes	100%
	5.1.2 Day flow metering	Yes	100%
	5.1.3 Reticulation leaks	Yes	70%
	5.1.4 Illegal connections	Yes	90%
	5.1.5 Un-metered connections	Yes	80%
	Topic: 5.2 Leak and meter repair programmes. Consumer units targeted by:		
	5.2.1 Leak repair assistance programme	Yes	70%
	5.2.2 Retro-fitting of water inefficient toilets	No	N/A
	5.2.3 Meter repair programme	Yes	70%
	Topic: 5.3 Consumer/end-use demand management: Public Information & Education Programmes		
	5.3.1 Schools targeted by education programmes	Yes	70%
	5.3.2 Consumers targeted by public information programmes	Yes	70%

Overview of water conservation and demand management activities

WSDP Ref. #	Regulations Ref. #	Description	Year 0		Year - 1		Year - 2	
			2021-2022	2020-2021	2019-2020	2018-2017	2015-2016	2014-2015
7.1.1	10.2.g.iii	**REDUCING UNACCOUNTED FOR WATER AND WATER INEFFICIENCIES**						
		Number of customers where the following activities have been pursued:	**Nr**	**% of total**	**Nr**	**% of total**	**Nr**	**% of total**
7.1.1.1		Night flow metering	31 992	100%	29 521	100%	26 120	100%
7.1.1.2		Day flow metering	31 992	100%	29 521	100%	26 120	100%
7.1.1.3		Reticulation leaks fixed	470	100%	522	100%	344	100%
7.1.1.4		Illegal connections formalized	0		0		0	
7.1.1.5		Un-metered connections, metered	0		0		0	
7.1.2	10.2.g.iii	**REDUCING HIGH PRESSURES FOR RESIDENTIAL CONSUMERS**						
		Number of residential consumers with water supply pressure of:	**Nr**	**% of total**	**Nr**	**% of total**	**Nr**	**% of total**
7.1.2.1		< 300 kPa						
7.1.2.2		300 kPa - 600 kPa						
7.1.2.3		600 kPa - 900 kPa						
7.1.2.4	10.2.b.iii	> 900 kPa			0		0	
7.1.3	10.2.g.iii	**LEAK AND METER REPAIR PROGRAMMES**						
		Number of consumer units targeted by:	Nr	**% of total**	**Nr**	**% of total**	**Nr**	**% of total**
7.1.3.1		Leak repair assistance programme	0		0		0	
7.1.3.2	10.2.g.iv	Retro-fitting of water inefficient toilets	0		0		0	
7.1.3.3		Meter repair programme					737	
7.1.4	10.2.g.iii	**CONSUMER / END-USE DEMAND MANAGEMENT: PUBLIC INFO AND EDUCATION PROGRAMMES**						
					Nr	**% of total**	**Nr**	**% of total**
7.1.4.1		Number of schools targeted by education programmes	3	4%	3	4%	3	4%
7.1.4.2		Number of consumers (people) targeted by public information programmes						

Topic 6: Water Resources

Water Resources

Water sources ranges from boreholes to surface water. The BVM is independent from other external water suppliers and operates and maintain their own water systems, management and infrastructure.

De Doorns

The water to de Doorns is provided by Hex Valley Water Users Association Irrigation Board from the Roodeels Dam as well as the Grootkloof River. Water is supplied to the De Doorns Water Treatment Plant before distribution.

Resource capacities (Licensed Abstraction Mℓ/a)

Hex Valley Water Users Association - Grootkloof River	250 Mℓ/a
Hex Valley Water Users Association - Hex Valley	400 Mℓ/a
Hex Valley Water Users Association - Osplaas	200 Mℓ/a
TOTAL	**850 Mℓ/a**

Sewer water is treated at the De Doorns WWTW to an acceptable standard for irrigation and supplied to Hex Valley Water Users Association Irrigation Board of approximately 1.5Ml/d. This volume in turn then provided by the Hex Valley Water Users Association Irrigation Board in potable water to the De Doorns water treatment plant for distribution.

A borehole is also used for drinking water and also pumped to the WTW 13kl/h. There are also 3 new boreholes drilled in De Doorns of 2x8.2 kl/h, 10.5kl/h. This water will also be used as drinking water to the WTW. The boreholes will be managed by BVM.

There are three different operation zones. This is the De Doorns upper zone, the De Doorns lower zone and the Orchards zone. Water is pumped from the N1 pumpstation through the upper zone reticulation network into the upper, lower and Orchards reservoirs respectively. From there the distribution to the respective networks is supplied.

Rawsonville

Water for Rawsonville is supplied from Stettynskloof Dam to the newly constructed Reservoir. The boreholes are no longer operational but is maintained for emergency purposes when required.

Resource capacities (Licensed Abstraction Mℓ/a)

Smalblaar River	67 Mℓ/a
Ground Water	622 Mℓ/a
TOTAL	**689 Mℓ/a**

There are two different operation zones. This is the Rawsonville town zone and the De Nova zone. Two separate submersible pumps pump potable water from the Rawsonville reservoir into the Rawsonville town zone and De Nova zone respectively. The water for the Rawsonville town zone is also pumped into a water tower that serves as an emergency off peak supply.

Touws River

The main water supply to Touws River is from the Bokrivier storage dam. The Bokrivier dam is situated 30 km west of Touws River and comprises two weir diversions namely the Waterkloof River and Donkerkloof River. Another supply utilised during the drier summer months to supplement the network is the Witklip Borehole. Furthermore, there are three springs that feed into canals. All these above sources supply water to the 90Mℓ Bokriver Reservoir.

Resource capacities (Licensed Abstraction Mℓ/a)

Waterkloof / Donkerkloof	412	Mℓ/a
Witklip Borehole	7	Mℓ/a
Matroosberg Spring	207	Mℓ/a
TOTAL	**626**	**Mℓ/a**

There are three different operation zones. Water is pumped from the Bokrivier water treatment facility to the different reservoirs and distributed to the reticulation network respectively.

Worcester

Two water sources supply Worcester with potable water with a combined yield of 26 000 Mℓ/year. Stettynskloof dam is situated in the Du Toitskloof Mountains and Fairy Glen dam situated in the Brandwacht Mountains. The main source is from the Stettynskloof Dam with more than 90% contribution to the total water demand. Another source is from a diversion in the Hex River for Irrigation to some parts of the town.

Resource capacities (Licensed Abstraction Mℓ/a)

Stettynskloof	15 000	Mℓ/a
Fairy Glen	216	Mℓ/a
Hex River	2 727	Mℓ/a
TOTAL	**17 943**	**Mℓ/a**

There are seven different operation zones. These zones are supplied by four sets of reservoirs with the Preload reservoirs the largest and supplies 70% of the total water demand. For the higher lying areas there are three booster pumping zones to maintain the prescribed operational pressure. The Preload reservoir supplies the Worcester West Sump with water under gravity. The Worcester West Upper Reservoir in turn is supplied by the Worcester West sump via the Brandwacht pumping station and rising main. The De Koppen reservoir could be supplied by the Preload reservoir via the Panorama pumping station in case of an emergency.

Table 15: Water Resources

* Number of sources	* Current abstraction (Mm3/A)	Components abstraction registered	Components abstraction recorded	* Licensed abstraction (Mm3/A)	Community water supply		Assessment Score
					Rural	Urban	
Boreholes	0			0			N/A
Surface Water Abstract	15 424			17 943		11845	100%
External Sources (Bulk Purchase)							N/A
Water returned to source							N/A
Conjunctive Use							N/A

Table 169: Additional Sources from External Providers

Additional Source Available	* Number of sources	Potential Volume	* Licensed abstraction (Mm3/A)	Assessment Score
Ground Water	0			N/A
Surface Water				N/A
External Sources (Bulk Purchase)	1	2727	2727	100%

Table 20: Monitoring

Topic: 6.2 Monitoring		Assessment Score
6.2.1 % of water abstracted monitored: Surface water		95%
6.2.2 % of water abstracted monitored: Ground water		5%
Topic: 6.2 Monitoring		**Assessment Score**
6.2.4 Surface water levels (1: daily, 2: weekly, 3: monthly, 4: annually, 5: never)	Weekly	90%
6.2.5 Ground water levels (1: daily, 2: weekly, 3: monthly, 4: annually, 5: never)	Never	0
6.2.6 Water quality for formal schemes? (1: daily, 2: weekly, 3: monthly, 4: annually, 5: never)	Monthly	100%
6.2.7 Water quality for rudimentary schemes? (1: daily, 2: weekly, 3: monthly, 4: annually, 5: never)	Annually	100%
6.2.8 Borehole abstraction? (1: daily, 2: weekly, 3: monthly, 4: annually, 5: never)	Never	0

Table 21: Water Quality

Topic: 6.3 Water Quality	In place	Status Quo	Assessment Score
6.3.1 Reporting on quality of water taken from source: urban & rural	Yes		100%
6.3.2 Quality of water returned to the resource: urban	Yes		100%
6.3.3 Quality of water returned to the resource: rural	Yes		100%
6.3.4 Is there a Pollution contingency measures plan in place?	No		
6.3.5 Quality of water taken from source: urban - % monitored by WSA self?	Yes		100%
6.3.6 Quality of water taken from source: rural - % monitored by WSA self?	Yes		100%
6.3.7 Quality of water returned to the source: urban - % monitored by WSA self?	Yes		100%
6.3.8 Quality of water returned to the source: rural - % monitored by WSA self?	Yes		100%
6.3.9 Are these results available in electronic format? (Yes/no)	Yes		100%
6.3.10 % Time (days) within SANS 241 standards per year	Yes		100%
6.4 Abstraction IS registered with DWS	Yes		100%
6.4.1.2 The abstraction IS NOT registered with DWS			
6.4.2.1 The abstraction IS recorded	Yes		100%
6.4.2.2 The abstraction IS NOT recorded			

Topic 7: Finance

7.1 Metering, Billing and Free Basic Services

An overview of the Breede Valley Municipality's metering and billing information is presented in Table 7.2 below and highlights that 100 % of the house- and dwelling connections are currently metered and billed. Due to the structuring of the municipal water services tariffs, all consumers receive free basic water services of 6 kl/ month.

Table 22: Tariffs

No	Category	Sector	Unit	Tariff (VAT excluded)			% Increase Year 0
				Year 0	Year - 1	Year - 2	
				FY2021	FY2020	FY2019	
1,1	**BASIC CHARGES**						
	Residential		R/c/m	43.48	34.78	0,00	25.01%
	Sport clubs/ Educational/ Institutions and Churches		R/c/m	43.48	34.78	26,09	25.01%
	Handel / Business/Commerce		R/c/m	217.39	173.91	121,74	25.01%
	Connection greater than- 149 mm		R/c/m	260.87	217.39	143,48	20.00%
2	**VOLUME CHARGES**						
	0 - 6 Kl	Residential	R/Kl	4.52	4,26	4,02	6,00%
	7 - 20 Kl	Residential	R/Kl	7.46	7,46	7,04	6,00%
	21 - 70 Kl	Residential	R/Kl	12.79	12,79	9,05	6,00%
	71 + Kl	Residential	R/Kl	23.44	23,44	22,11	6,00%
	0 - 20 Kl	Commercial	R/Kl	16.60	10,00	9,43	6,00%
	21 - 40 Kl	Commercial	R/Kl	11.46	10,81	10,20	6,00%
	41 - 60 Kl	Commercial	R/Kl	12.58	11,87	11,20	6,00%
	61 - 100 Kl	Commercial	R/Kl	14.10	13,30	12,55	6,00%
	101 - 150 Kl	Commercial	R/Kl	14.69	13,85	13,07	6,00%
	151 - 300 Kl	Commercial	R/Kl	SCRAP	13,85	12,24	N/A
	301 - 600 Kl	Commercial	R/Kl	SCRAP	13,85	10,51	N/A
		Sport Clubs	R/Kl	4.52	4,26	4,02	6,00%
	Excluding private schools/colleges	Educational (schools and Colleges)	R/Kl	4.52	4,26	4,02	6,00%
		Welfare and Old Age Homes	R/Kl	4.52	4,26	4.02	6,00%
	Excludes rectory if consumption metered separately	Churches	R/Kl	4.52	4,26	4,02	6,00%
		Municipal	R/Kl	4.52	4,26	4,02	6,00%
		Fire Fighting	R/Kl	4.52	4,26	4,02	6,00%
	IRRIGATION						
	Purified		R/Kl	N/A	N/A	9,05	6,00
	Non-purified		R/Kl	1.47	1,39	1,31	6.00

Note: All cost excluding VAT

Table 23: Overview of metering, billing and Free Basic Services

Regulations Ref. #	Description	Unit	Year 0	Year - 1	Year - 2
			FY2021	FY2020	FY2019
	UNITS SUPPLIED (as per water services access profile)	-	-	-	
10.2 (b) (i)	Household water connections (house and yard connections)	Nr	22 298	20 860	20 906
10.2 (b) (iv)	Household sewerage connections	Nr	23 275	22 726	20 458
	METERING				
	Metered Water Connections (aligned with Billing System)				
	Residential	Nr	22 298	20 860	20 906
	Commercial / Business	Nr	794	794	794
	Industrial	Nr	26	26	26
	Government / Institutional	Nr	819	819	819
	etc.	Nr			
	Sub-Total: Metered Water Connections	**Nr**	**23 937**	**22 499**	**22 545**
	Proportion of metered connections (residential)	%			100%
	Total number of meters	Nr	22 298	20 860	20 610
10.2 (b) (vi)	Total number of new connections (aligned with Table C.2.1)	Nr		110	218
10.2 (e) (i)	Total number of new meters installed	Nr		110	218
	Proportion of new connections, metered	%		100%	100%
	Number of meters tested	Nr			
10.2 (e) (ii)	Proportion of meters tested to total number of meters	%		0	0
	Number of meters replaced	Nr			
10.2 (e) (ii)	Proportion of meters replaced to total number of meters	%		0	0
	BILLING				
	Customer billing (water and sewerage)				
	Residential	Nr	22 298	20 860	20 860
	Commercial / Business	Nr	794	794	794
	Industrial	Nr	26	26	26
	Government / Institutional	Nr	819	819	819
	etc.	Nr			
	Sub-Total: Customers billed	Nr	23 937	22 499	22 545
	Proportion of bills to metered connections	%	100%	100%	103,9%
	Residential	%	100%	100%	100,0%
	Commercial / Business	%	100%	100%	100,0%
	Industrial	%	100%	100%	100,0%
	Government / Institutional	%	0,0%	0,0%	0,0%
	etc.	%	100%	100%	100,0%
	FREE BASIC SERVICES				
	Nr customers receiving:				
	Free Basic Water	Nr		8 891	7 860
10.2 (b) (v)	Free Basic Sanitation	Nr		8 891	7 860
	Proportion of Free Basic Services				
	Water	%		43%	38%
	Sewerage	%		39%	43%

Topic 8: Water Services Institutional Arrangements and Customer Care

8.1 WSA functions and outputs

BVM is the official Water Services Authority (WSA) within this municipality. Its functions and outputs are briefly summarised in the following table.
(Y – Yes, N – No, I – Insufficient/inadequate, NA – Not Applicable)

Table 24: Function and Outputs and Outputs

WSA Functions/ Outputs	In Place?	Resources Available to Perform Function?				If no, when will it be in place?	Support required (Yes/No)
		Budget	By-laws	Infrastructure	Personnel		
Policy Development							
Indigent policy	Yes	Yes	Yes	Yes	Yes	n/a	No
Free basic water policy (including equitable share)							
Procurement policy							
Credit control and debt collection policy							
Regulation and tariffs							
Water services by-laws with conditions as required by the Water Services Act	Yes	Yes	Yes	Yes	Yes	n/a	Yes-legal
Mechanisms to ensure compliance with by-laws	No	No	No		No	Not known	Not known
Tariff structure	Yes	Yes	Yes		Yes	n/a	No
Tariffs promulgated	Yes	Yes	Yes		Yes	n/a	No
Infrastructure development (projects)							
Mechanisms to undertake project feasibility studies	Yes	Yes	Yes	Yes	Yes	n/a	No
Criteria for prioritising projects							
Mechanisms to assess and approve project business							
Mechanisms for selecting, contracting, managing and monitoring implementing agents							
Mechanisms to monitor project implementation							

Functions and Output (Continue)

WSA Functions/ Outputs	In Place?	Resources Available to Perform Function?				If no, when will it be in place?	Support required (Yes/No)
		Budget	By-laws	Infrastructure	Personnel		
Water conservation and demand management strategy							
Water conservation and demand management strategy	No	No	Yes	Yes	No	In Process	Yes
Performance management and monitoring							
Performance management system	Performance contracts are in place at Municipal Manager and Director level. No individual performance reviews are undertaken below that level. The provision of water and sanitation services is monitored against Key Performance Indicators (KPIs)					With entire municipality	No
WSDP							
WSDP information system Mechanisms for stakeholder participation Mechanisms to monitor and report on WSDP implementation	Yes	Yes	n.a yet	Yes	Yes	n/a	No
WSP institutional arrangements							
Criteria to select appropriate WSP's Mechanisms to contract, manage and monitor WSP's Mechanisms to approve WSP business plans	Yes	Yes	n.a yet	Yes	Yes	n/a	No
WSA overall capacity							
Sufficient staff and systems to fulfil all WSA functions	Yes					n/a	No

8.2 WSA Capacity Development

Training and awareness development is continuously promoted by the BVM although funding limits the extent of these awareness campaigns. Wherever new or upgrade developments occur the end users are informed of the benefits and management of these services. The installation of these services makes provision for emerging contractors and contractor training.

Table 25: Public Awareness and Skills Development

WSA PRIORITIES FOR CAPACITY DEVELOPMENT	CAPACITY NEEDS ASSESSMENT CONDUCTED	FORMAL SKILLS TRAINING REQUIRED	PROPOSED TIMEFRAME FOR CAPACITY DEVELOPMENT	ESTIMATED COST
Public awareness of basic sanitation and health practises.	Yes	Yes	Ongoing	Annual costs vary and are continuous
Staff Skills Development	Yes	Yes	Ongoing	R15000 per person

8.3 By laws affecting water services

The by-laws for the provision of water and sewer are in place for the Breede Valley Municipality.

Table 26: Water and Sanitation Resource Availability

BULK AND RETAIL FUNCTIONS OF BVM (THE WSP)	Resources available to perform function			
	Budget	By-laws	Infrastructure	Personnel
Water service providers (retail water)	Yes	Yes	Yes	Yes
Water service providers (sanitation)	Yes	Yes	Yes	Yes
Water service providers (bulk water)	Yes	Yes	Yes	Yes
Water service providers (bulk sanitation)	Yes	Yes	Yes	Yes
Support service agents (water)	No	n.a	n.a	n.a
Sanitation promotion agent	No	n.a	n.a	n.a
Support service contracts	No	n.a	n.a	n.a
Water service institutions	No	n.a	n.a	n.a
WSP staffing levels: water	Yes	n.a	Yes	Yes
WSP staffing levels: sanitation	Yes	n.a	Yes	Yes
WSP training programme	No	n.a	No	No

8.4 Water services providers (retail water) – current year

The Breede Valley Municipality is the Water Services Provider for retail water. The Hex Valley Water Users Association Irrigation Board provides bulk water to BVM for the De Doorns area.

The Breede Valley Municipality is the only Water Service Provider for sanitation in all the areas in the Breede Valley Municipality. The following tables represent the information on staffing levels for the provision of water and sanitation services.

Table 27: Personnel Status Quo: Water

CATEGORY	Number of Employees					
	Executive and Senior Management	Middle Management	Clerical	Supervisory And Artisan	Technical worker	Total
Bulk Water	1	1		5	14	**21**
Civil Works - Water	1	2	1	4	41	**56**
Civil Works - Sewer	1	3	1	5	14	**24**
Bulk Sewage	1	2	1	5	36	**45**

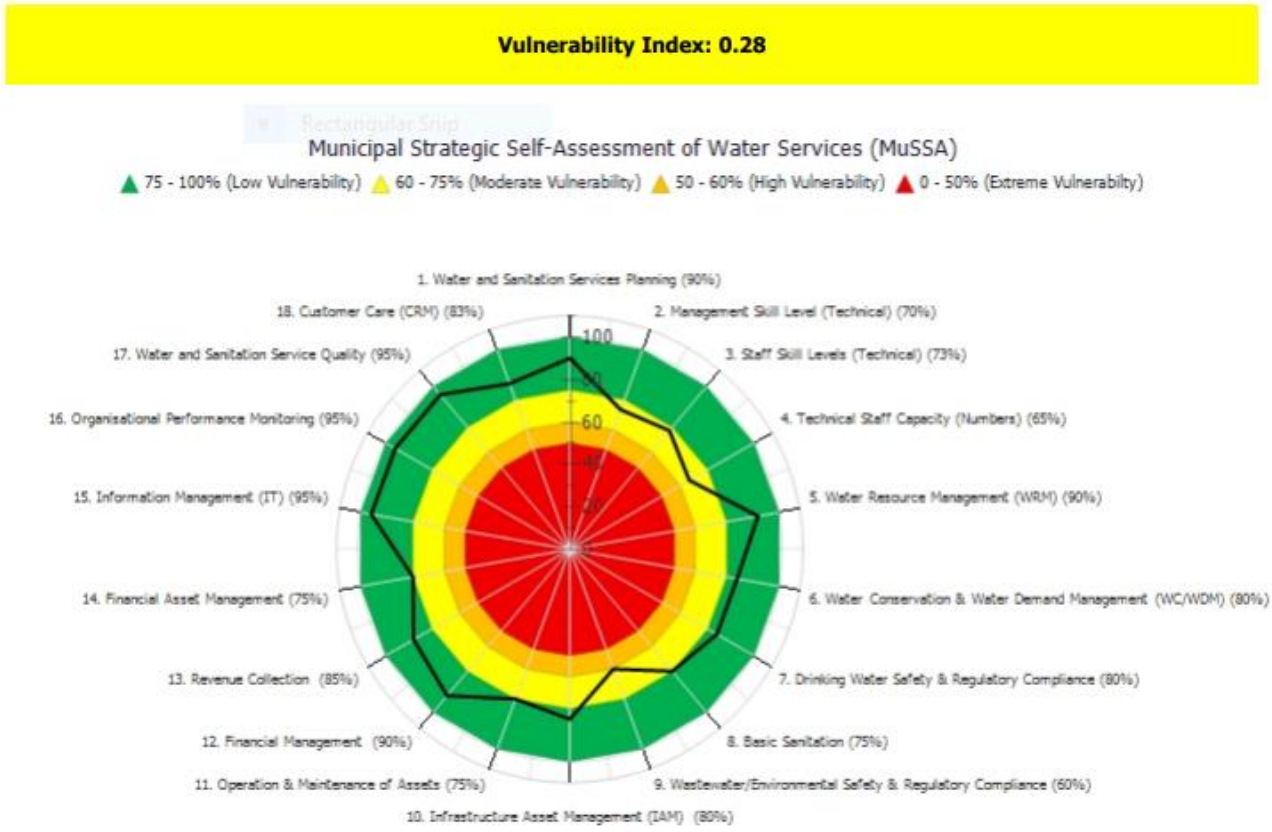
8.5 Municipal Strategic Self-Assessment (MuSSA)

The Department of Water and Sanitation has overseen the annual use of the MuSSA to survey and assess the overall "business health" of a Municipality when fulfilling its water services function. The MuSSA asks senior municipal financial and technical managers 5 clear and relatively simple "essence" questions that cover 18 key business health attributes, and thereby generates key strategic flags (as opposed to deep technical detail, which is captured elsewhere). Responses to the questions are reflected in your MuSSA Spider Diagram below which illustrates the vulnerability levels across key service areas/business attributes.

To address MuSSA vulnerability findings, both the Department of Water and Sanitation (DWS) and the South African Local Government Association (SALGA) recommends the adoption of "a start-to-finish management approach" (i.e., a "Plan-Do-Check-Act" framework) and has developed a structured Municipal Priority Action Planning (MPAP) process to support such. The MPAP comprises the following four parts:

- Step I – Analyse the current situation via the MuSSA, whereby both the WSA and
- Regional DWS jointly prioritise where the WSA needs to improve and set associated
- targets.
- Step II – Determine the approaches on how to achieve the desired improvements.
- Step III – Set Actions to achieve these improvements and targets.
- Step IV – Monitor, Evaluate and Communicate progress (including updating the MuSSA), by both the WSA and DWS regional office.

The MuSSA and MPAP are planning tools and form integral components of support for the Water Services Development Plan (WSDP) process at a strategic level. In so doing the MuSSA and MPAP will also guide the DWS Master Planning process and subsequent Feasibility Studies to be undertaken. Inclusion of the MuSSA and MPAP within the WSDP processes ensures that the WSDP (which informs the IDP) will include an appropriate and supported allocation of resources to systematically address the prioritized vulnerabilities. This will in turn lead to an improvement to the overall water services business health of your WSA.



8.6: Customer Service Requirements

The Breede Valley Municipality has a central customer care 24-hour reporting centre. All queries are then distributed to the responsible directorate for attention. A Customer Service Charter is in place and adopted by Council. The water and sanitation by-laws are in place. The service standards as indicated in the Customer Charter for water and sanitation is indicated in the table below as an example.

Table 28: Service Standards

Water and Sanitation	
A new connection	Within 20 working days or as agreed, within 1 metre of client's erf
Repair or replacement of a broken water meter	Within 5 working days
Attend to a burst water pipe	Close system within 2 hours after burst. Repair system within 8 hours of burst during daylight hours.
Attend to leaking water pipe or valve or hydrant	Within 4 working days
Fire Hydrant is faulty	Within 20 working days
Attend to water service delivery Testing the water quality after a repair	Within 24 hours
Attend to burst main water pipe Investigate the quality of drinking water - colour or smell or taste	Within 48 hours
Attend to a blockage in leiwater system resulting in reduced or no flow	Within 5 working days
Attend to a serious overflowing sewer manhole A pump station is not working and resulting in sewer spill from manholes	Within 4 hours
A main sewer blocked A blocked sewer on a private property	Within 24 hours. A private plumber should preferably be used.

8.7 Attending to complaints

Limited information is available on the response time of all the queries. The system is however being refined to include accurate data capturing for reporting purposes. Generally complaints within the urban and rural areas (farm areas excluded) are attended to within 24hrs. Information from the customer care service relating to pipe burst and sewer blockages are captured on a GIS. The information assists with the planning of proactive management of the water and sewer infrastructure

8.8 Education and pollution awareness

BVM has no formal Education or Pollution awareness programme in place. In the past there has been an initiative to promote these initiatives but there is currently not sufficient funding or personnel to support this system. Add hoc initiatives are currently being done.

8.9 Gap Identification and recommendations

- Streamline the customer care facility and log detail information for each query.
- Initialise a formal education and pollution awareness programme.
- Funding for educational and pollution awareness programmes.

Section B: State of Water Services Planning

The Breede Valley Municipality developed its first Water Services Development Plan in June 2011 for the period to June 2016. A new Water Service Development Plan was developed and adopted in March 2018 for the period to 2023.

Table 29 WSDP- and reporting reference

Nr	WSDP Title and Reference	Status	Date	WSDP Year	Financial Year	Reporting year
1	Breede Valley Municipality Water Services Development Plan (WSDP) 2018 - 2023	Drafted:	March 2018	Year 1	**FY2014**	Year -4
		Comment submit:		Year 2	**FY2015**	Year -3
		Finalised:		Year 3	**FY2016**	Year -2
		Adopted:		Year 4	**FY2017**	Year -1
		Published:		Year 5	**FY2018**	Year 0

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:

- The intervention required to address the gap;
- The proposed solution to address the gap; and the
- The Future plan / identified project that would meet the requirement.

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.

Existing Needs Perspective and Problem Statements

Topic 1 - Settlement Demographics & Public Amenities						
Section	**Intervention Required**	**%**	**Solution description as identified by Master Plan**	**%**	**Is there an Existing project/activity addressing this problem?**	**Current Demand Overall Scoring %**
1.1 Settlements Summary	No					100%
1.2 Summary by Settlement Group	No					100%
1.3 Assessment Score by Settlement Type	No					100%
1.4 Amenities Summary	No					100%

Topic 2 - Service Levels Profile						
Section	**Intervention Required?**	**%**	**Solution description as defined by topic situation assessment**	**%**	**Is there an Existing project/activity addressing this problem?**	**Current Demand Overall Scoring %**
Direct Backlog Water	No				Yes	90%
Direct Backlog Sanitation	No				Yes	90%
Water Services Infrastructure Supply Level Profile	No				Yes	90%
Water Reliability Profile	No				Yes	90%
Sanitation Service Infrastructure Supply Level Profile	No				Yes	90%
Sanitation Reliability Profile	No				Yes	90%
Water Services: Education	No				No	90%
Water Services: Health	No				No	90%
Sanitation Services: Education	No				No	90%
Sanitation Services: Health	No				No	90%
Health and Educational Facilities	No				No	90%

Topic 3 - Water Services Asset Management						
Section	**Intervention Required?**	**%**	**Solution description as defined by topic situation assessment**	**%**	**Is there an Existing project/activity addressing this problem?**	**Current Demand Overall Scoring %**
3.1 General Information	No				Yes	90%
3.2 Operation	No				Yes	90%
3.3 Functionality Observation	No				Yes	90%
3.4 Asset Assessment Spectrum	No				Yes	90%
3.5 Water and Sanitation schemes	No				Yes	90%

Topic 4 - Water Services O&M						
Section	**Intervention Required?**	**%**	**Solution description as defined by topic situation assessment**	**%**	**Is there an Existing project/activity addressing this problem?**	**Current Demand Overall Scoring %**
4.1 Operation & Maintenance Plan	No				Yes	80%
4.1.1 Is There an Operation and Maintenance Plan?	Yes				Yes	80%
4.2 Resources	No				Yes	70%
4.3 Information	No				Yes	80%
4.4 Activity Control & Management	No				Yes	80%

Topic 5.1 - Conservation & Demand Management - Water Resource Management						
Section	**Intervention Required?**	**%**	**Solution description as defined by topic situation assessment**	**%**	**Is there an Existing project/activity addressing this problem?**	**Current Demand Overall Scoring %**
5.1 Reducing unaccounted water and water inefficiencies	No				Yes	90%
5.2 Leak and meter repair programmes.	No				Yes	90%
5.3 Consumer/end-use demand management: Public Information & Education Programmes	No				Yes	90%
5.4: Conjunctive use of surface - and groundwater	No				Yes	90%
5.5 Working for Water	No				Yes	90%

Topic 5.2 - Conservation & Demand Management - Water Balance						
Section	**Intervention Required?**	**%**	**Solution description as defined by topic situation assessment**	**%**	**Is there an Existing project/activity addressing this problem?**	**Current Demand Overall Scoring %**
5.2 Water Balance	No				Yes	100%

Topic 6 - Water Resource						
Section	**Intervention Required?**	**%**	**Solution description as defined by topic situation assessment**	**%**	**Is there an Existing project/activity addressing this problem?**	**Current Demand Overall Scoring %**
6.1.2 Additional Sources Available	Yes		Shortage of Funding for the Augmentation of the Stetynskloof dam		Yes	80%
6.2 Monitoring	No				Yes	90%
6.3 Water Quality	No				Yes	90%
6.4 Operation	No				Yes	90%

Section D: Water Services Objectives and Strategies

The water services objectives and strategies presented below were derived from the water services Service delivery Business Implementation Plan (SDBIP) for 2017/18. The link to the National and NDP objectives are also indicated in the table below.

Table D1: Water Services Strategic Objectives

National Outcome	Strategic Objective	National KPA	NDP Objectives	Municipal KPI	Unit of Measurement	Performance Standard	Annual Target
A responsive and accountable, effective and efficient local government system	Assure a sustainable future through sound financial management, continuous revenue growth corporate governance and risk management practices	Municipal Financial Viability and Management	Developing a capable and Development State	Submit monthly reports to the Director by the 15th of each month that include the following: Progress on OH&S, priority risk areas, procurement plan, Collab items, scheduled maintenance programs, OPEX expenditure, security measures and incidents, RPM/BLUE/ GREEN/NO DROP and positions filled	Number of reports submitted	12	12
An effective, competitive and responsive economic infrastructure network	To ensure a safe, healthy, clean and sustainable external environment for all Breede Valley's people	Basic Service Delivery	Economy and Development	Complete 90% of the scheduled maintenance programme as per the maintenance schedule captured on Onkey system	% of scheduled maintenance programme completed	90% of scheduled maintenance completed	90%
An effective, competitive and responsive economic infrastructure network	To ensure a safe, healthy, clean and sustainable external environment for all Breede Valley's people	Basic Service Delivery	Economy and Development	Submit a status report at the end of December of licenses of all the WTW and WWTW	Annual Status report submitted by the end of December	Annual status report in December	1
An effective, competitive and responsive economic infrastructure network	To ensure a safe, healthy, clean and sustainable external	Basic Service Delivery	Economy and Development	Conduct monthly monitoring of ambient air quality	Monthly report	12 Per annum	12

National Outcome	Strategic Objective	National KPA	NDP Objectives	Municipal KPI	Unit of Measurement	Performance Standard	Annual Target
	environment for all Breede Valley's people						
A responsive and accountable, effective and efficient local government system	Provide democratic, accountable government for local communities and encourage involvement of communities and community organizations in the matters of local government	Good Governance and Public Participation	Developing a capable and Development State	Attend to Collaborator inbox items within 30 days of receipt	% of items attended to within 30 days	Within 30 days	100%
A responsive and accountable, effective and efficient local government system	Provide democratic, accountable government for local communities and encourage involvement of communities and community organizations in the matters of local government	Good Governance and Public Participation	Developing a capable and Development State	Hold monthly meetings with staff	Number of meetings held	Monthly meetings held	10
A responsive and accountable, effective and efficient local government system	Provide democratic, accountable government for local communities and encourage involvement of communities and community	Good Governance and Public Participation	Developing a capable and Development State	Conduct bi-weekly site inspections of division operations	Number of site inspections	Regular site inspections	24

National Outcome	Strategic Objective	National KPA	NDP Objectives	Municipal KPI	Unit of Measurement	Performance Standard	Annual Target
	organizations in the matters of local government						
An effective, competitive and responsive economic infrastructure network	To provide and maintain basic services and ensure social upliftment of the Breede Valley community	Basic Service Delivery	Environmental Sustainability and Resilience	Achieve 95% average water quality level as measured per SANS 241 criteria during the 2017/18 financial year	% water quality level	Achieve Top Layer kpi's for 2017/18	95%
An effective, competitive and responsive economic infrastructure network	To provide and maintain basic services and ensure social upliftment of the Breede Valley community	Basic Service Delivery	Environmental Sustainability and Resilience	Compile a new 5-year Water Service Development Plan (WSDP) and submit to MayCo for approval by 31 December 2017	WSDP submitted by 31 December 2017	Achieve Top Layer kpi's for 2017/18	1
An effective, competitive and responsive economic infrastructure network	To provide and maintain basic services and ensure social upliftment of the Breede Valley community	Basic Service Delivery	Environmental Sustainability and Resilience	80% of sewerage samples comply with effluent standard {(Number of sewerage samples that comply with SANS/Number of sewerage samples tested) x100} during the 2017/18 financial year	% of sewerage samples compliant	Achieve Top Layer kpi's for 2017/18	80%

Section E: Water Services MTREF Projects

The following Provisional Water and Sewer projects are provided for the 2020/21 financial year. The proposed budget is dependant of the approval of the final budget by Council.

Description	Project code	MIG Year	BSB	Mstrc	Service	Dept	Finance Source	Finance code	Cost code	U-Key	Asset ID	Asset type	New / Renewal / Upgrading	Ward	Final Budget	Roll overs from 2021/22	Variments	Other Adjustments/ Additional funding	Adjustments Feb 2022	Total Funded budget 2021/22	Mig Claimed	Revised DPP Jan 2022	Requests issued	Expenditure (Shadow)	Expenditure (Cash)	Total Expenditure	Balance not spend	Available incl Requests
Technical Services																												
Rawsonville WwTW																												
Extension of WwTW (0,24 Ml/day)	CP_0004			BREED	RATES	6907	ILO	CNMIG	50101000411	20210702013786	157080	PURWK	New	19, 20	6,296,742					6,296,742	1,080,807.20	6,296,742			1,112,291.13	1,112,291.13	5,184,450.87	5,184,450.87
Rawsonville																												
Pre-loads	CP_0018	m		BREED	WATER	8412	ILO	CNMIG	50102154361	20170418059021	157549	TANKW	Renewal	5, 9, 10,					15,971,780	15,971,780	79,762.94	15,971,780					15,971,780.00	15,971,780.00
Klipvallei/ Transhex Residential Development (13 000 erven)																												
Electrical Reticulation	CP_0009			BREED	ELEC	8112	IL2	CNINE	50101000041	20200629051891	157495	SUPRE	New	18	21,000,000					21,000,000					1,404,985.91	1,404,985.91	19,595,014.09	19,595,014.09
Resealing of Roads																												
Reseaing of Municipal Roads - Rawsonville	CP_0065			BREED	RATES	1539	3.2	CRR	50102154311	20170418059006	157496	ROMA5	Renewal	1 to 21	500,000					500,000					141,172.42	141,172.42	358,827.58	358,827.58
Resealing of Municipal Roads - Worcester																												
MIG	CP_0066	m		BREED	RATES	1539	ILO	CNMIG	50101000451	20200828061788	157497	ROMA5	Renewal	1 to 21	25,776,245		-6,250,157		-19,526,091		329,841.30				286,818.52	286,818.52	-286,818.52	-286,818.52
CRR	CP_0066	m		BREED	RATES	1539	3.0	CRR	50101002271	20170714096260	157498	ROMA5	Renewal	1 to 21	2,000,000					2,000,000					2,000,000.00	2,000,000.00		
Reseaing of Municipal Roads - Avian Park	CP_0424			BREED	RATES	1539	ILO	CNMIG	50101000901	20210702013897	157117	ROMA5	Renewal	21	1,124,263				-45,512	1,169,775		1,169,775					1,169,775.00	1,169,775.00
Reseaing of Municipal Roads - Touwsrivier	CP_0450			BREED	RATES	1539	ILO	CNMIG	50101001851	20220225060740	157539	ROMA5	New	1,2,3					3,339,937	3,339,937		3,339,937					3,339,937.00	3,339,937.00
Reseaing of Municipal Roads - Rawsonville	CP_0451			BREED	RATES	1539	ILO	CNMIG	50101001841	20220225060737	157538	ROMA5	New	20					2,941,699	2,941,699		2,941,699					2,941,699.00	2,941,699.00
Reseaing of Municipal Roads - De Doorns	CP_0067			BREED	RATES	1539	3.0	CRR	50101001211	20170712092874	157499	ROMA5	Renewal	2, 3, 4	1,000,000					1,000,000				77,385.00		77,385.00	922,615.00	922,615.00
Traffic Circles																												
Traffic Circles: (High and Louis Lange)	CP_0398			BREED	RATES	1539	3.0	CRR	50101001171	20210702013945	157133	ROMA5	New		6,000,000		-5,500,000			500,000					134,362.50	134,362.50	365,637.50	365,637.50
Networks																												
Replacement of Water Network (Roll-over)	CP_0071			BREED	WATER	8412	3.0	CRR	50101000081	20200629051903	157500	SUPRW	Renewal	1 to 21	1,000,000		-1,000,000											
Electricity (8112)																												
Refurbishment of electrical system	CP_0076			BREED	ELEC	8112	3.0	CRR	50101003361	20180704061588	157501	SUPRE	Renewal	1 to 21	4,500,000	1,209,135	-2,800,000		-650,000	2,259,135			173,913.05		1,172,840.00	1,172,840.00	1,086,295.00	912,381.95
Refurbishment of substations	CP_0452			BREED	ELEC	8112	3.0	CRR	50101001761	20220225060713	157530	SUBEO	New	1 to 21					650,000	650,000							650,000.00	650,000.00
Cherry Picker vehicles	CP_0258			BREED	ELEC	8112	3.0	CRR	50101003861	20180704061738	157502	VEHTK	New	1 to 21	3,860,114		-655,000			3,205,114				3,204,571.49		3,204,571.49	542.51	542.51
Quality of supply data loggers and monitoring equipment.	CP_0172			BREED	ELEC	8112	3.0	CRR	50101000631	20210702013834	157096	COMHW	New	1 to 21	1,000,000					1,000,000							1,000,000.00	1,000,000.00
Alana new Electrical Substation	CP_0426			BREED	ELEC	8112	3.0	CRR	50101000091	20210702013717	157057	SUBEO	New	1 to 21	6,000,000		2,800,000			8,800,000					5,789,215.96	5,789,215.96	10,784.04	10,784.04
Electricity - Vehicles	CP_0427			BREED	ELEC	8112	3.0	CRR	50101000011	20210702013702	157052	VEHTK	New	1 to 21	750,000		-41,000			709,000				41,500.00	667,215.00	708,715.00	285.00	285.00
Electricity - Machinery and Equipment	CP_0428			BREED	ELEC	8112	3.0	CRR	50101000701	20210702013849	157101	GENPL	New	1 to 21	500,000		41,000			541,000			166,370.80	186,980.00	185,534.57	372,514.57	168,485.43	2,114.63
Civil Engineering																												
LDV	CP_0429			BREED	RATES	1503	3.0	CRR	50101000071	20210702013714	157056	VEHTK	New	1 to 21	250,000				-25,000	225,000					234,044.35	234,044.35	955.65	955.65
Survey Equipment	CP_0430			BREED	RATES	1503	3.0	CRR	50101000711	20210702013852	157102	SUREQ	New	1 to 21	50,000		-6,530		-462	43,008					43,008.00	43,008.00		
Office Furniture	CP_0431			BREED	RATES	1503	3.0	CRR	50101000781	20210702013870	157108	MISCF	Renewal	1 to 21	30,000		-30,000											
SOLID WASTE MANAGEMENT																												
WORCESTER																												
Wheelebins	CP_0178			BREED	RATES	6503	3.0	CRR	50101002661	20190630031759	157503	BINSW	Renewal	1 to 21	1,000,000				-627,500	372,500					172,500.00	172,500.00	200,000.00	200,000.00
Ward Priorities																												
Speed Humps	CP_0432			BREED	RATES	1539	3.0	CRR	50101001031	20210702013903	157119	ROAD5	New	1 to 21	2,000,000		-253,470			1,746,530				19,129.00	274,604.11	293,733.11	1,452,796.89	1,452,796.89
High Mast lights	CP_0433			BREED	ELEC	1536	3.0	CRR	50101000151	20210702013732	157062	STLIT	New	1 to 21	3,900,000					3,900,000			485,849.82		841,694.10	841,694.10	3,058,305.90	2,572,456.08
Development of Playparks	CP_0434			BREED	RATES	5151	3.0	CRR	50101001451	20210702014026	157160	PARKS	New	1 to 21	1,000,000				-20,000	980,000							980,000.00	980,000.00
Fencing of Substations	CP_0435			BREED	ELEC	8112	3.0	CRR	50101000101	20210702013720	157058	FENSH	New	1 to 21	250,000					250,000					230,698.70	230,698.70	19,301.30	19,301.30
Bus Stop / Shelter	CP_0436			BREED	RATES	1539	3.0	CRR	50101001051	20210702013909	157121	BTERM	New	1 to 21	100,000					100,000							100,000.00	100,000.00
Outdoor Gym	CP_0395			BREED	RATES	5151	3.0	CRR	50101001361	20210702013999	157151	PARKS	New		98,000				20,000	118,000							118,000.00	118,000.00
Ward 2																												
De Doorns : Transfer Station	CP_0122			BREED	RATES	6503	ILO	CNMIG	50101000501	20210702013804	157086	TIPST	New	2, 3, 4	516,145				-516,145									
De Doorns Water Purification Works : Augmentation of DAF Unit (MIG funding)	CP_0130			BREED	WATER	8412	ILO	CNMIG	50101000301	20210702013768	157074	WAPWS	New	2	2,546,602				-2,546,602						133,924.99	133,924.99	-133,924.99	-133,924.99
Ward 7																												
High to Protea Str. slip lane	CP_0373			BREED	RATES	1539	3.0	CRR	50101002481	20190630031717	157504	ROMA5	New	7		640,000			-31,115	608,885					608,884.84	608,884.84	0.16	0.16
Ward 8																												
Upgrading of Gravel Roads	CP_0268			BREED	RATES	1539	3.0	CRR	50101001161	20210702013942	157132	ROAD5	Upgrading	8	3,000,000					3,000,000					42,720.00	42,720.00	2,957,280.00	2,957,280.00
Replace 11 Kv cable from Mt. Alliston to Field Sub (1 600 m @ 185	CP_0137			BREED	ELEC	8112	3.1	CRR	50102150521	20170612991868	157505	LINUN	Renewal	8		1,054,390				1,054,390					1,048,149.84	1,048,149.84	6,240.16	6,240.16
Erosion Protection of Hex River (Zwelethemba)																												
Erosion Protection of Hex River : Phase 2 (300m @ R13,333.33	CP_0338			BREED	RATES	1533	3.0	CRR	50101000521	20200629052045	157506	STOWC	Renewal	8	3,150,000	678,081	4,000,000			7,828,081					7,575,138.29	7,575,138.29	252,942.71	252,942.71
Erosion Protection of Hex River : Phase 2 (300m @ R13,333.33	CP_0338			BREED	RATES	1533	5.0	CGRDM	50101002931	20190630031834	157550	STOWC	New	8					428,755	428,755							428,755.00	428,755.00
Ward 12																												
Upgrading of Gravel Road	CP_0268			BREED	RATES	1539	3.0	CRR	50101001151	20210702013939	157131	ROAD5	Upgrading	12	6,000,000	123,233	-3,000,000	5,500,000		8,623,233				54,612.59	6,414,035.56	6,468,648.15	2,154,584.85	2,154,584.85
Upgrading of gravel roads	CP_0268			BREED	RATES	1539	ILO	CNMIG	50102150051	20210923012310	157493	ROAD5	Upgrading	12			6,250,157			6,250,157	5,010,632.41	6,250,157				6,250,157.00	6,250,157.00		
Ward 21																												
Upgrading of gravel roads	CP_0268			BREED	RATES	1539	3.0	CRR	50101001081	20210702013918	157124	ROAD5	Upgrading	21	1,000,000		-1,000,000											

High Mast Light	CP_0433			BREED	ELEC	1536	3.0	CRR	50101000161	20210702013735	157063	FLDLT	New	21	600,000					600,000	233,461.87		395,461.87				600,000.00	204,538.13
High Mast Light	CP_0433			BREED	ELEC	1536	8.0	CNMIG	50101001771	20220225060716	157531	FLDLT	New	21				289,910	289,910		289,910					289,910.00	289,910.00
SERVICE CONNECTIONS (Depending on Public Contr)																										
Sewer Connections	CP_0165			BREED	RATES	6912	3.3	CRR	50102150611	20170612991895	157507	SEWER	New	1 to 21	1,120,000					1,120,000			225.72				1,120,000.00	1,119,774.28
Electricity Connections	CP_0166			BREED	ELEC	8112	3.3	CRR	50102151061	20170716182045	157508	METE	New	1 to 21	1,000,000					1,000,000			108,874.20	125,756.94	141,341.16	267,098.10	732,901.90	624,027.70
Water Connections	CP_0167			BREED	WATER	8412	3.3	CRR	50102150211	20170612991775	157509	METW	New	1 to 21	2,719,200					2,719,200					368,535.91	368,535.91	2,350,664.09	2,350,664.09
Water & Sewer Networks																										
Machinery and Equipment	CP_0281			BREED	RATES	6912	3.0	CRR	50101003971	20180704061771	157510	GENPL	New	1 to 21	1,000,000		-86,000			914,000			193,369.60	220,569.12	319,988.13	540,557.25	373,442.75	180,073.15
Municipal Vehicles (LDV)	CP_0284			BREED	RATES	6912	3.0	CRR	50101003211	20180704061543	157511	VEHTK	New	1 to 21	1,500,000		1,650,000			3,150,000			447,640.00		2,503,250.27	2,503,250.27	656,749.73	209,109.73
Upgrading of Sewer Network	CP_0453			BREED	RATES	6912	3.0	CRR	50101001781	20220225060719	157532	SEWER	New					200,000		200,000							200,000.00	200,000.00
ROADS AND STORMWATER																										
Machinery and Equipment	CP_0438			BREED	RATES	1539	3.0	CRR	50101000591	20210702013825	157093	GENPL	New		1,000,000		-173,000			827,000			323,296.76	244,947.20	243,162.50	488,109.70	338,890.30	15,593.54
Public Services - Vehicles	CP_0439			BREED	RATES	1539	3.0	CRR	50101000021	20210702013705	157053	VEH	New		1,500,000		-702,000			798,000			9,374.80		714,420.00	714,420.00	83,580.00	74,205.20
Building Control																										
Furniture and Office Equipment	CP_0454			BREED	RATES	1509	3.0	CRR	50101001801	20220225060725	157534	MISCF	New					15,000		15,000							15,000.00	15,000.00
Airconditioner	CP_0455			BREED	RATES	1509	3.0	CRR	50101001811	20220225060728	157535	AIRCN	New					25,000		25,000							25,000.00	25,000.00
Land Infill Developments																										
Johnsons Park - Water	CP_0389			BREED	WATER	8412	3.0	CRR	50101000211	20210702013747	157067	SUPRW	New		292,085			98,981		391,066							391,066.00	391,066.00
Johnsons Park - Sewer	CP_0390			BREED	RATES	6912	3.0	CRR	50101000461	20210702013795	157083	SEWER	New		876,009			274,183		1,150,192			112.86	23,485.00		23,485.00	1,126,707.00	1,126,594.14
Johnsons Park - Stormwater	CP_0392			BREED	RATES	1533	3.0	CRR	50101001221	20210702013957	157137	STOWC	New		189,856			68,058		257,914							257,914.00	257,914.00
Johnsons Park - Electricity	CP_0393			BREED	ELEC	8112	3.0	CRR	50101000191	20210702013741	157065	SUPRE	New		1,980,000		-1,050,000			920,000			347,826.10				920,000.00	572,173.90
Johnsons Park - Roads	CP_0456			BREED	RATES	1539	3.0	CRR	50101001831	20220225060734	157537	ROADS	New					824,487		824,487							824,487.00	824,487.00
Site D - Avian Park (25 Erven) Roads	CP_0391			BREED	RATES	1539	3.0	CRR	50101002711	20190630031771	157512	ROADS	New	12		257,109		-257,109										
Site D - Avian Park (25 Erven) Stormwater	CP_0392			BREED	RATES	1533	3.0	CRR	50101002901	20190630031825	157513	STOWC	New	12		275,000		-275,000										
Avian Park Industrial - Water	CP_0389			BREED	WATER	8412	3.0	CRR	50101002561	20190630031735	157514	SUPRW	New		100,000			-100,000										
Avian Park Industrial - Sewer	CP_0390			BREED	RATES	6912	3.0	CRR	50101002621	20190630031750	157515	SEWER	New		100,000			-100,000										
Avian Park Industrial - Stormwater	CP_0392			BREED	RATES	1533	3.0	CRR	50101001191	20210702013951	157135	STOWC	New		100,000			-100,000										
Avian Park Industrial - Electricity	CP_0393			BREED	ELEC	8112	3.0	CRR	50101002511	20190630031726	157516	SUPRE	New		100,000			-100,000										
Avian Park Industrial - Sewer Pumpstation	CP_0440			BREED	WATER	8412	3.0	CRR	50101000481	20210702013801	157085	SPUMP	New		600,000			-333,600		266,400			22,416.01				266,400.00	243,983.99
Somerset Park - Water	CP_0389			BREED	WATER	8412	3.0	CRR	50101000241	20210702013756	157070	SUPRW	New		50,000					50,000							50,000.00	50,000.00
Somerset Park - Sewer	CP_0390			BREED	RATES	6912	3.0	CRR	50101000471	20210702013798	157084	SEWER	New		50,000					50,000							50,000.00	50,000.00
Somerset Park - Stormwater	CP_0392			BREED	RATES	1533	3.0	CRR	50101002911	20190630031828	157517	STOWC	New		100,000					100,000					19,066.09	19,066.09	80,933.91	80,933.91
Somerset Park - Electricity	CP_0393			BREED	ELEC	8112	3.0	CRR	50101000111	20210702013723	157059	SUPRE	New		50,000					50,000							50,000.00	50,000.00
SWIMMING POOL: Zwelethemba - 5125																										
Zwelethemba - New Swimming Pool	CP_0042			BREED	RATES	5136	3.0	CRR	50101001271	20210702013972	157142	SWIMP	New		15,500,000					15,500,000					15,485,279.34	15,485,279.34	14,720.66	14,720.66
Municipal Manager																										
Admin - 0603																										
Furniture and Equipment	CP_0021			BREED	RATES	0603	3.0	CRR	50102150311	20170612991805	157518	MISCF	New	1 to 21	5,000			45,000		50,000					42,082.62	42,082.62	7,917.38	7,917.38
Community Services																										
ADMIN - 0903																										
Furniture & Equipment	CP_0181			BREED	RATES	0903	4.0	CRR	50102150501	20170612991862	157519	MISCF	New	1 to 21	5,000		-2,043			2,957					2,956.53	2,956.53	0.47	0.47
SPORT: Esselen Park																										
Replacement of fence perimeter	CP_0326			BREED	RATES	5133	3.0	CRR	50101001301	20210702013981	157145	FENCM	Upgrading	2, 3, 4	6,000,000		-1,000,000		-4,700,000	300,000							300,000.00	300,000.00
SPORT: Steenvliet																										
Machinery and Equipment	CP_0442			BREED	RATES	5139	3.0	CRR	50101000741	20210702013861	157105	GENPL	New	1	100,000					100,000				97,005.66		97,005.66	2,994.34	2,994.34
WATERLOO LIBRARY - 4506																										
Replace equipment	CP_0057	m		BREED	RATES	4506	3.0	CRR	50101000761	20210702013867	157107	GENPL	New	7	30,000		3,747			33,747			15,993.00		17,753.34	17,753.34	15,993.66	0.66
Replace equipment	CP_0057	m		BREED	RATES	4506	6.1	CPLIB	50101000751	20210702013864	157106	GENPL	New	7	100,000			-100,000										
Upgrade ramp	CP_0457	s		BREED	RATES	4506	6.1	CPLIB	50101001821	20220225060731	157536	LIBR	New	7				100,000		100,000							100,000.00	100,000.00
TRAFFIC																										
Machinery and Equipment	CP_0443			BREED	RATES	2703	3.0	CRR	50101000681	20210702013843	157099	GENPL	New	1 to 21	100,000		-29,704	1,000,000	-185,040	885,256			47,614.05	62,399.82	592,889.70	655,289.52	229,966.48	182,352.43
Traffic - Vehicles	CP_0444			BREED	RATES	2703	3.0	CRR	50101000031	20210702013708	157054	VEHTK	New	1 to 21	500,000		1,000,000			1,500,000			243,580.00		960,022.17	960,022.17	539,977.83	296,397.83
FIRE DEPARTMENT: ADMIN - 4203																										
Machinery and Equipment	CP_0301			BREED	RATES	4203	3.0	CRR	50101000661	20210702013840	157098	GENPL	New	1 to 21	500,000					500,000			211,362.61	160,821.51	122,710.39	283,531.90	216,468.10	5,105.49
HOUSING : ADMIN - 7503																										
Machinery and Equipment	CP_0458			BREED	HOUSE	7503	3.0	CRR	50101001791	20220225060722	157533	GENPL	New	1 to 21				80,000		80,000							80,000.00	80,000.00
FINANCIAL SERVICES																										
Admin																										
Furniture and Equipment	CP_0182			BREED	RATES	2403	4.0	CRR	50102150191	20170612991769	157520	MISCF	New	1 to 21	5,000			750,000		755,000			309,375.43	153,803.95	287,692.48	441,496.43	313,503.57	4,128.14
Computer Equipment	CP_0120			BREED	RATES	2403	4.0	CRR	50101000931	20210226062928	157521	COMHW	Renewal	1 to 21		200,000	-15,000			185,000					175,369.91	175,369.91	9,630.09	9,630.09
Financial Planning																										
Safeguarding of Assets	CP_0115			BREED	RATES	2406	12.0	IF	50101004671	20180704061981	157522	ACCES	New	1 to 21	400,000					400,000			196,306.71	23,748.96		23,748.96	376,251.04	179,944.33
Insurance claims	CP_0193			BREED	RATES	2406	12.0	IF	50101005551	20190630031915	157523	GENPL	Renewal	1 to 21	400,000	584,000				984,000					554,903.97	554,903.97	429,096.03	429,096.03
Vehicle Distribution																										
Fleet - Major parts and components	CP_0459			BREED	RATES	8860	3.0	CRR	50101001751	20220225060710	157529	VEH	New					300,000		300,000							300,000.00	300,000.00

COUNCIL & MAYCO																												
MAYORAL OFFICE - 0306																												
Furniture and Equipment	CP_0183			BREED	RATES	0306	3.0	CRR	50102150171	20170612991763	157524	MISCF	New	1 to 21	5,000					5,000			2,277.00				5,000.00	2,723.00
STRATEGIC SUPPORT SERVICES																												
STRATEGIC SUPPORT - ADMIN - 2103																												
Furniture and Equipment	CP_0183			BREED	RATES	2103	4.0	CRR	50102150021	20170612991708	157525	MISCF	New	1 to 21	5,000					5,000			892.98				5,000.00	4,107.02
CIVIC CENTRE WORCESTER - 3903																												
Solar pannel - conversion	CP_0375			BREED	RATES	3903	3.0	CRR	50101001601	20210702014071	157175	SUPRE	New	1 to 21	500,000					500,000				51,524.00		51,524.00	448,476.00	448,476.00
OTHER BUILDINGS - 3915																												
Upgrading of municipal building	CP_0460			BREED	RATES	3903	3.0	CRR	50101001941	20220225060767	New	OFBLD	New	1 to 21					50,000	50,000							50,000.00	50,000.00
INFORMATION TECHNOLOGY - 2114																												
ICT - Computer Equipment	CP_0120			BREED	RATES	2114	3.0	CRR	50102150011	20170612991701	157526	COMHW	Renewal	1 to 21	3,000,000		3,466,617	572,220	630,000	7,668,837					304,148.47	304,148.47	7,364,688.53	7,364,688.53
Call Center & Telephone (PBX) System	CP_0445			BREED	RATES	2114	3.0	CRR	50101000581	20210702013822	157092	COMHW	New	1 to 21	2,500,000		-1,079,250			1,420,750							1,420,750.00	1,420,750.00
Biometric system	CP_0117			BREED	RATES	2114	3.0	CRR	50102150161	20170612991757	157527	COMHW	Renewal	1 to 21	150,000					150,000					138,830.83	138,830.83	11,169.17	11,169.17
Fire Alarm (DR site)	CP_0446			BREED	RATES	2114	3.0	CRR	50101000691	20210702013846	157100	ALARZ	New	1 to 21	150,000		-138,367			11,633					11,633.00	11,633.00		
Airconditioner (DR Site)	CP_0367			BREED	RATES	2114	3.0	CRR	50101005431	20190227063535	157528	AIRCN	New	1 to 21	50,000		100,000			150,000							150,000.00	150,000.00

Section F: WSDP Projects

Table F.1 below presents the municipality's water services projects with the focus on the projects which were implemented in the 2020/21 financial year.

Table F.1: Water Services projects status and performance

No.	Project Title and Description	Inclusion		Total Project Cost R'000	Year 0 Performance - FY2021			Funding Source(s)	Project Category / Type	Planned Period		Project Status	Actual Completion Year
		WSDP	IDP		FY Budget R'000	Expended R'000	%			From FY	To FY		
1	Pre - Loads Reservoir	√	√	R 71 000 000	R 15 971 780	R 0	0%	MIG & Own Funding	Bulk Water	2020	2021	Contractor Appointed	2023
2	Rawsonville WWTW Extension	√	√	R 26 000 000	R 6 296 742	R 1 112 291	0%	MIG & Own Funding	Waste - Water	2020	2021	Contractor Appointed	2023
	Total			**97 000 000**	**22 268 522**	**1 112 291**							