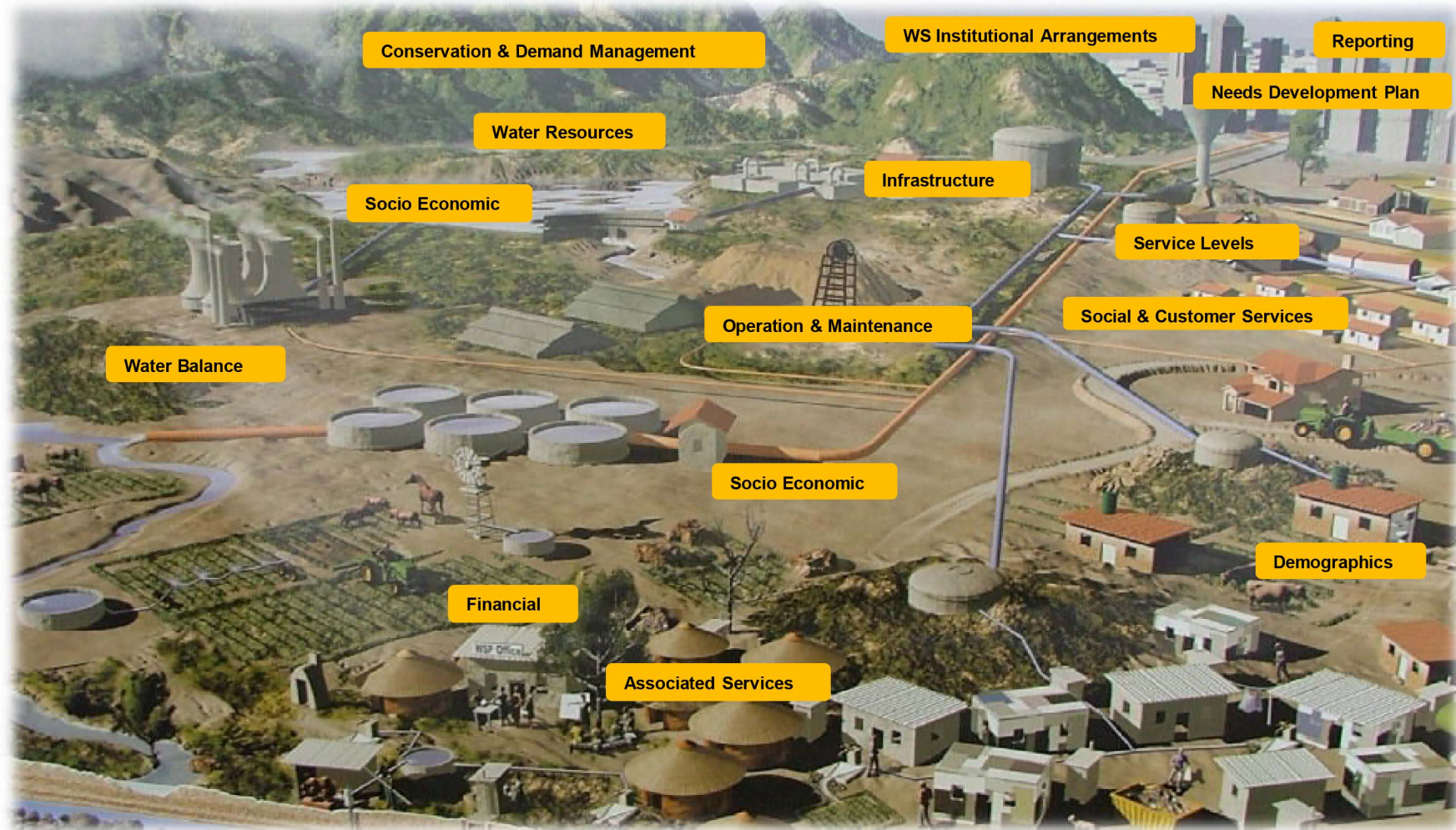


Water Services Development Plan



Water Services Development Plan

WSDP Compiled and submitted for approval

Municipal WSDP Coordinator:	Name:	Signature:	Date:

WSDP Recommended for approval

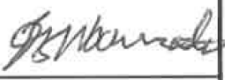
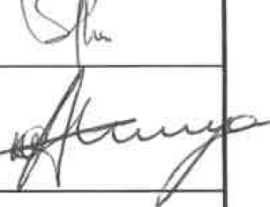
Municipal Manager:			
Recommended:	Name: <u>G M. Sineke</u>	Signature: <u></u>	Date: <u>03/07/2025</u>
Not Recommended:	Name:	Signature:	Date:

Final Council approval:

Capacity: <u>SPEAKER</u>			
Approved:	Name: <u>MSD MAINGA</u>	Signature: <u></u>	Date: <u>03/07/2025</u>
Not Approved:	Name:	Signature:	Date:

Water Services Development Plan

Role Players Contact Details

Position	Name	Surname	Tel	Fax	Cell	E-mail	Interaction Acknowledgement Yes/No	Interaction Acknowledgement Signature
Municipal Manager	Mr. Gamakulu	Sineke	039-834-8707	039-834-1750	076-794-7046	sinekeg@harrygwalam.gov.za	Y	
Mayor	Mr. Zamokwakhe David	Nxumalo	039-834-8736	039-834-1661	083-464-3726	nxumaloz@harrygwalam.gov.za	Y	
Director: Water & Sanitation	Mr. Lindumusa	Gwala	039-834-5560	039-834-2485	060-993-0357	gqibad@harrygwalam.gov.za	Y	
IDP Manager	Mr. Zweli	Mtolo	039-834-8700	039-834-1750	082-809-6323	mtoloz@harrygwalam.gov.za	Y	
GIS Technician	Mr. Thulasizwe	Maphumulo	039-834-8749	039-834-1750	076-074-5472	maphumulot@harrygwalam.gov.za	Y	
Chief Financial Officer	Mr. Khulani	Mzimela	039-834-8701	039-834-1750	083-281-4880	mzimelak@harrygwalam.gov.za	Y	
Executive Director: Social Services & Development Planning	Ms. Thobeka	Mahlaba	039-834-8700	039-834-1750	083-380-5058	mahlabat@harrygwalam.gov.za	N	
Director: Engineering & Infrastructural Services	Mr. Nkululeko	Biyase	039-834-8704	039-834-2259	083-320-4549	biyasen@harrygwalam.gov.za	Y	
WSDP Contact	Mr. S'khanyiso	Ngcobo	039-834-5563	039-834-2485	083-256-9746	ngcobosk@harrygwalam.gov.za	Y	
Manager: Water & Sanitation Services	Mrs. Mamakhooa	Ntamanem	039-834-5574	039-834-2485	066-133-5966	ntamanem@harrygwalam.gov.za	Y	
Director: Water & Sanitation	Mrs. Mamakhooa	Ntamanem	039-834-5574	039-834-2485	066-133-5966	ntamanem@harrygwalam.gov.za		
WSA Manager	Mrs. Basetsana	Khathali- Msomi	039-834-5568	039-834-2485	072-974-4813	khathalib@harrygwalam.gov.za	Y	

Water Services Development Plan

Professional Service Provider (PSP)

Company ECA Consulting Engineers
Name of PSP WSDP Project Manager Louis Fourie
Tel: 034 983 2825 **Cell:** 083 633 4967 **Fax:** **Email:** Louis@ecaconsult.co.za

Inputs

Name of PSP WSDP Information Systems Operator Willem Richter
Tel: 034 983 2825 **Cell:** 071 6068 330 **Fax:** **Email:** willem@zulmap.co.za

Components	Chapter	Name	Designation	Role	Contact Address, and Number
All	All	Willem Richter	GIS Specialist	Project Manager	161 Hoog Street,Vryheid,3100

Water Services Development Plan

Sector Integration

Did this plan consult with other Sector Plans and incorporated their needs

Sector Plan	Sector Interaction	Area	WSA
IDP	Partial	Vision, Socio-economic	Harry Gwala
Water Master Plan	Partial	Planned Regional Schemes	Harry Gwala
Unaccounted for Water Strategy	Partial	WCWDM strategies	Harry Gwala
SDF	Partial	Demographics, nodes	Harry Gwala
Water Master Plan	Partial	5-year Reliability Water Master Plan	Harry Gwala
Institutional	Partial	Indigent Policy	Harry Gwala
Institutional	Yes	Public Amenities Support Plan	Harry Gwala
Institutional	Partial	DWS Blue-, Green-, No Drop Assessments	Harry Gwala
Unaccounted for Water Strategy	Partial	GRoundwater and Surface Water Resource Assessments	Harry Gwala

Water Services Development Plan

Chapter1: Implementation Activity Chart of current MTEF Projects

Financial Year 2023																											
Nr	Project Number	Project Name	Description	Project Type	Project Solution	Main Category	Sub Category	Component(Yes/No)												Project Cost (R'000)	Funding Source (R'000)						
								Bulk Pipeline	Reticulation Line	Pumpstation	WTW	Reservoir	Source Development	Power Installation	Feasibility	Operations	Maintenance	WCDM	WWTW		Water Bourne Sanitation	VIP Sanitation	Own	MIG	RBIG	ACIP	DR
Topic 1 - Settlement Demographics & Public Amenities																											
Topic 2 - Service Level Profile																											
Topic 3 - Water Services Asset Management																											
Topic 4 - Water Services Operations & Maintenance (O&M)																											
Topic 5.1 - Conservation & Demand Management - Water Resource																											
Topic 5.2 - Conservation & Demand Management - Water Balance																											
Topic 6 - Water Resource																											

Water Services Development Plan

Nr	Project Number	Project Name	Description	Project Type	Project Solution	Main Category	Sub Category	Component(Yes/No)													Project Cost (R'000)	Funding Source (R'000)						
								Bulk Pipeline	Reticulation Line	Pumpstation	WTW	Reservoir	Source Development	Power Installation	Feasibility	Operations	Maintenance	WCDM	WWTW	Water Bourne Sanitation		VIP Sanitation	Own	MIG	RBIG	ACIP	DR	MWIG

	Funding Source (R'000)						
	Own	MIG	RBIG	ACIP	DR	MWIG	Other
Total Funding:	0	0	0	0	0	0	0

See Project List Insert

Water Services Development Plan

Financial Year 2024

Nr	Project Number	Project Name	Description	Project Type	Project Solution	Main Category	Sub Category	Component(Yes/No)														Project Cost (R'000)	Funding Source (R'000)						
								Bulk Pipeline	Reticulation Line	Pumpstation	WTW	Reservoir	Source Development	Power Installation	Feasibility	Operations	Maintenance	WCDM	WWTW	Water Bourne Sanitation	VIP Sanitation		Own	MIG	RBIG	ACIP	DR	MWIG	Other
Topic 1 - Settlement Demographics & Public Amenities																													
Topic 2 - Service Level Profile																													
Topic 3 - Water Services Asset Management																													
Topic 4 - Water Services Operations & Maintenance (O&M)																													
Topic 5.1 - Conservation & Demand Management - Water Resource																													
Topic 5.2 - Conservation & Demand Management - Water Balance																													
Topic 6 - Water Resource																													

See Project List Insert

Water Services Development Plan

Nr	Project Number	Project Name	Description	Project Type	Project Solution	Main Category	Sub Category	Component(Yes/No)												Project Cost (R'000)	Funding Source (R'000)						
								Bulk Pipeline	Reticulation Line	Pumpstation	WTW	Reservoir	Source Development	Power Installation	Feasibility	Operations	Maintenance	WCDM	WWTW		Water Bourne Sanitation	VIP Sanitation	Own	MIG	RBIG	ACIP	DR

	Funding Source (R'000)						
	Own	MIG	RBIG	ACIP	DR	MWIG	Other
Total Funding:	0	0	0	0	0	0	0

See Project List Insert

Water Services Development Plan

Financial Year 2025

Nr	Project Number	Project Name	Description	Project Type	Project Solution	Main Category	Sub Category	Component(Yes/No)														Project Cost (R'000)	Funding Source (R'000)						
								Bulk Pipeline	Reticulation Line	Pumpstation	WTW	Reservoir	Source Development	Power Installation	Feasibility	Operations	Maintenance	WCDM	WWTW	Water Bourne Sanitation	VIP Sanitation		Own	MIG	RBIG	ACIP	DR	MWIG	Other
Topic 1 - Settlement Demographics & Public Amenities																													
Topic 2 - Service Level Profile																													
Topic 3 - Water Services Asset Management																													
Topic 4 - Water Services Operations & Maintenance (O&M)																													
Topic 5.1 - Conservation & Demand Management - Water Resource																													
Topic 5.2 - Conservation & Demand Management - Water Balance																													
Topic 6 - Water Resource																													

See Project List Insert

Water Services Development Plan

Nr	Project Number	Project Name	Description	Project Type	Project Solution	Main Category	Sub Category	Component(Yes/No)													Project Cost (R'000)	Funding Source (R'000)						
								Bulk Pipeline	Reticulation Line	Pumpstation	WTW	Reservoir	Source Development	Power Installation	Feasibility	Operations	Maintenance	WCDM	WWTW	Water Bourne Sanitation		VIP Sanitation	Own	MIG	RBIG	ACIP	DR	MWIG

	Funding Source (R'000)						
	Own	MIG	RBIG	ACIP	DR	MWIG	Other
Total Funding:	0	0	0	0	0	0	0

See Project List Insert

Water Services Development Plan

No Funding Allocation

Nr	Project Number	Project Name	Description	Project Type	Project Solution	Main Category	Sub Category	Component(Yes/No)																Project Cost (R'000)	Funding Source (R'000)						
								Bulk Pipeline	Reticulation Line	Pumpstation	WTW	Reservoir	Source Development	Power Installation	Feasibility	Operations	Maintenance	WCDM	WWTW	Water Bourne Sanitation	VIP Sanitation	Own	MIG		RBIG	ACIP	DR	MWIG	Other		
1	KNHAR30	Eradication of water services backlog in KwaSani Municipality	KwaSani			Water	Internal Bulk	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	0	0	0	0	0	0	0			
2	KNHAR39	uMzimkhulu LM Sanitation: Construction of 2150 VIP Toilets	uMzimkhulu			Sanitation	Internal Sanitation	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	0	0	0	0	0	0	0			
3	KNHAR37	Ndwawana water project source augmentation	Ndwawana			Water	Source Development	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	0	0	0	0	0	0	0			
4	KNHAR36	Capital infrastructure refurbishment / upgrading in Greater Kokstad LM.	Greater Kokstad LM			Water	Internal Bulk	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	0	0	0	0	0	0	0			
5	KNHAR35	Capital infrastructure refurbishment / upgrading in Dr. Nkosazana Dlamini-Zuma LM.	Dr. Nkosazana Dlamini-Zuma LM			Water	Internal Bulk	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	0	0	0	0	0	0	0			

See Project List Insert

Water Services Development Plan

Nr	Project Number	Project Name	Description	Project Type	Project Solution	Main Category	Sub Category	Component(Yes/No)																Project Cost (R'000)	Funding Source (R'000)						
								Bulk Pipeline	Reticulation Line	Pumpstation	WTW	Reservoir	Source Development	Power Installation	Feasibility	Operations	Maintenance	WCDM	WWTW	Water Bourne	Sanitation	VIP Sanitation	Own		MIG	RBIG	ACIP	DR	MWIG	Other	
6	KNHAR40 A-	Greater Kokstad LM and Dr. Nkosazana Dlamini-Zuma LM Sanitation: Construction of 2150 VIP Toilets	Greater Kokstad LM and Dr. Nkosazana Dlamini-Zuma LM			Sanitation	Internal Sanitation	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	0		0	0	0	0	0	0	0
7	KNHAR40-	Greater Kokstad LM and Dr. Nkosazana Dlamini-Zuma LM Sanitation: Construction of 2150 VIP Toilets	Greater Kokstad LM and Dr. Nkosazana Dlamini-Zuma LM			Sanitation	Internal Sanitation	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	0		0	0	0	0	0	0	0
8	10/2016-09-KZN (WSWIG)	Water Supply for identified villages under Umzimkhulu jurisdiction	Umzimkhulu			Water	Reticulation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	Y	0		0	0	0	0	0	0	0
9	KNHAR31-	Nokweja-Mashumi Water Supply scheme Phase 2	Nokweja-Mashumi,			Water	Internal Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	0		0	0	0	0	0	0	0
10	KNHAR32-	Capital infrastructure refurbishment / upgrade in uMzimkhulu LM.	uMzimkhulu			Water	Internal Bulk	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	0		0	0	0	0	0	0	0

See Project List Insert

Municipality	Wards	Project Name	Funding	Service Type	Type of Project	Web-Based WSDP Topic	Budget		
							2025-26	2026-27	2027-28
HGDM All LMs	All	Operations and Maintenance Allocation	MIG	Water	O&M	Topic 4	37 827 883	10 000 000	12 000 000
	All	Infrastructure Asset Management Allocation	MIG	Management	Asset Management	Topic 3	12 216 512	24 433 024	0
	All	Water Conservation and Water Demand Management (WCWDM)	WSIG	Water	WCWDM	Topic 5.1	434 782	0	0
Municipality	Wards	Project Name	Funding	Service Type	Type of Project	Web-Based WSDP Topic	Budget		
							2025-26	2026-27	2027-28
Dr Nkosazana Dlamini Zuma	2 & 3	Underberg- Himville Sewer Upgrade	MIG	Sanitation	Upgrade	Topic 3	10 695 834	17 218 941	0
	2 & 3	Underberg- Himville Sewer Upgrade	MIG	Sanitation	Upgrade	Topic 3	7 295 753	5 333 851	45 000 000
	5	Sub Regional Scheme: Khukhulela: Portion 3, Construction of Rising Main (Ward 05)	MIG	Water	New Infrastructure	Topic 2	25 249 957	30 000 000	0
	7	Gala Donnybrook Water Supply	MIG	Water	New Infrastructure	Topic 2	12 856 457	0	0
	10	Greater Bulwer Bulk Water Scheme	RBIG	Water	New Infrastructure	Topic 2	0	0	0
	11	Mkhohlwa-Mdayane Water Supply	WSIG	Water	New Infrastructure	Topic 2	11 475 583	2 969 438	0
	5,6,8 and 14	Creighton Water Supply Scheme Phase 2	MIG	Water	New Infrastructure	Topic 2	57 762 208	40 000 000	30 000 000
Municipality	Wards	Project Name	Funding	Service Type	Type of Project	Web-Based WSDP Topic	Budget		
							2025-26	2026-27	2027-28
Greater Kokstad	1,3, 4, 5, 7, 8, 9 & 10	Raising of the Kempsdale Dam Wall	MIG	Water	Upgrade	Topic 3	39 317 301	50 000 000	0
	6	Mamiesa Outfall Sewer	WSIG	Sanitation	New Infrastructure	Topic 2	434 782	734 255	1 590 250
	8	Mahhagu Sanitation	MIG	Sanitation	New Infrastructure	Topic 2	5 375 585	8 664 067	0
	8	Bhongweni Water Supply	WSIG	Water	New Infrastructure	Topic 2	11 317 578	3 517 000	0
	8	Refurbishment & Upgrade of Bhongweni Phase 2	WSIG	Water	Refurbishment	Topic 4	4 690 045	20 894 449	19 861 933
	10	Shayamoya Water Supply	WSIG	Water	New Infrastructure	Topic 2	17 825 045	3 245 693	0
	10	Refurbishment & Upgrade of Shayamoya Phase 2	WSIG	Water	Refurbishment	Topic 4	5 445 994	20 355 894	21 589 666

Municipality	Wards	Project Name	Funding	Service Type	Type of Project	Web-Based WSDP Topic	Budget		
							2025-26	2026-27	2027-28
Municipality	Wards	Project Name	Funding	Service Type	Type of Project	Web-Based WSDP Topic	Budget		
							2025-26	2026-27	2027-28
Ubuhlebezwe	4	Emazizini Water Supply	WSIG	Water	New Infrastructure	Topic 2	2 500 000	0	0
	6 & 8	Refurbishment Bhayi-Gudlucingo Schemes	WSIG	Water	Refurbishment	Topic 4	0	0	0
	12	Nokweja/Mashumi Community Water Supply	WSIG	Water	New Infrastructure	Topic 2	0	0	0
Municipality	Wards	Project Name	Funding	Service Type	Type of Project	Web-Based WSDP Topic	Budget		
							2025-26	2026-27	2027-28
Umzimkhulu	1	Mhlangeni Water Intervention	WSIG	Water	Upgrade	Topic 3	0	0	869 564
	2	Corinth Nyanisweni Water Supply	WSIG	Water	New Infrastructure	Topic 2	7 400 000	5 430 390	13 538 598
	3	Hostela-Mncweba Water Supply	WSIG	Water	New Infrastructure	Topic 2	220 000	0	0
	5	Nngwagwane Water Intervention	WSIG	Water	Upgrade	Topic 3	434 782	896 436	3 555 840
	6	Dulati - Marhewini Water Supply	WSIG	Water	New Infrastructure	Topic 2	289 656	23 000 000	17 454 500
	7	Mfulamhle Water Supply	WSIG	Water	New Infrastructure	Topic 2	434 782	925 450	2 105 620
	7	Nazareth Water Supply	WSIG	Water	New Infrastructure	Topic 2	3 681 588	5 540 545	2 668 450
	7	Mfulamhle/Cabane Water Supply	WSIG	Water	New Infrastructure	Topic 2	0	0	0
	8	Njunga/Balbel Water Supply	WSIG	Water	New Infrastructure	Topic 2	7 677 339	3 902 300	9 865 233
	11	KwaMay-Theekloof Water Supply Scheme Phase 3	MIG	Water	New Infrastructure	Topic 2	1 209 868	0	0
	12	Machunwini Water Supply	WSIG	Water	New Infrastructure	Topic 2	8 779 089	2 337 662	0
	15 & 20	Greater Summerfield Water Supply Scheme Phase 2 (Ward 15)	MIG	Water	New Infrastructure	Topic 2	4 400 000	0	0
	16 & 19	Mbizweni Main Sewer Collector Upgrade in Umzimkhulu Town (Ward 16)	MIG	Sanitation	Upgrade	Topic 3	918 890	0	0
	19 & 21	Ward 19 & 21 Umzimkhulu Intervention	WSIG	Water	Upgrade	Topic 3	3 915 477	6 250 488	11 900 346
	22	Greater Mngqumeni Water Supply Scheme Phase 5 and 6 (AFA) MIS 467168	MIG	Water	New Infrastructure	Topic 2	2 010 988	0	0
	22	Greater Mngqumeni Water Supply Scheme Phase 6.1	MIG	Water	New Infrastructure	Topic 2	12 308 513	24 617 027	0

Water Services Development Plan

Chapter 2:

Topic 1: Settlement Demographics & Public Amenities

Settlement Summary		
Section	Value	Assessment Score
1.1 Total Population	782164	100
1.2 Total Number of Households	156915	100
1.3 Average Household Size	4.9	100
1.4 Total Number of Settlements	480	100

Summary by Settlement Group			
Settlement Type	Settlements	Population	Households
Rural	423	599371	115246
Urban	57	147860	33649

Water Services Development Plan

Amenities Summary		
Description	Number per type	Assessment Score
Educational facilities	424	90
Health Facilities	64	99

Assessment Score						
Settlement Type		Number of settlements	Population per settlement type	Households per settlement type	Average Households size per settlement type	
Rural	Farming	27	48936	11193	4.34	100
Rural	Rural - Small Village <= 5000	157	92338	22035	4.15	100
Rural	Rural Scattered Dense	62	98848	23195	4.23	100
Rural	Rural Scattered Low Density	39	30386	6850	4.25	100
Rural	Rural Scattered Very Low Density	35	23070	5313	4.25	100
Urban	Urban - Formal Town	40	24076	5586	4.4	100
Urban	Urban - Former Township	3	2904	696	4.16	100
Urban	Urban - Informal Settlements (Squatter Camp)	10	5686	1286	4.62	100
Urban	Working Towns and Service Centres - Mines, Prisons etc.	2	3826	915	4.28	100
Total						100.0%

Topic 1 Master Plan

Water Services Development Plan

Section	Is there a master plan to address this problem?	Does this plan address the plan address this problem 100%?
1.1 Settlements Summary	Yes	Yes
1.2 Summary by Settlement Group	Yes	Yes
1.3 Assessment Score by Settlement Type	Yes	Yes
1.4 Amenities Summary	Yes	Yes

Strategic Interpretation

Detail situation assessments per Topic element

1.1 Settlements Summary

Interpret Situation Assessment:	Households were updated from 2023 Google Earth high resolution imagery. Settlements boundaries, level of services and names have been updated with the assistance of each ward councillor.
---------------------------------	--

1.2 Summary by Settlement Group

Interpret Situation Assessment:	Settlement types and associated classifications were updated during the settlement verification of 2025
---------------------------------	---

1.3 Assessment Score by Settlement Type

Interpret Situation Assessment:	Settlement Types have been updated during the settlement verification in 2025
---------------------------------	---

1.4 Amenities Summary

Water Services Development Plan

Interpret Situation Assessment:	Public amenities were sourced from DOE and DOH. However not all service levels could be sourced from the schools data set. Further info is required to complete this.
---------------------------------	---

Business Element Report Items	Compliance Score	Intervention Required	%	Solution description as identified by Master Plan	%	Is there an Existing project addressing this problem?	%	Does this current listed project address the problem totally?	%	Project Approved by Council as part of WSDP Database?	%	Approved by council, in project database and part of 5 yr IDP cycle projects	%	Project listed in 3 yr MTEF - cycle	%	Total Points	Current Demand Overall Scoring %
1.1 Settlements Summary	100	No	100		0	No	0	No	0	No	0	No	0	No	0	0	100
1.2 Summary by Settlement Group	0	No	100		0	No	0	No	0	No	0	No	0	No	0	0	100
1.3 Assessment Score by Settlement Type	100	No	100		0	No	0	No	0	No	0	No	0	No	0	0	100
1.4 Amenities Summary	94.5	Yes	100	Liaise with DOE to obtain remaining schools data	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
Demand Overall Scoring Average																100	

WSDP FY2023: Strategies and Objectives

Harry Gwala

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
Settlement Demographics & Public Amenities									

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
1	Settlement (urban and rural) survey assessing households and population	All settlements should be investigated and the number of households and population numbers should be determined. GPS locations should also be taken	The number of households has been investigated and is determined through a household count based on aerial photos. The population number needs to be determined. However, when available, the Census 2022 population data can be used.		Present to council need for settlement assessment to provide funding and resources	Complete settlement survey	Update WSDP with new settlement figures	Household count and settlement verification and updating completed in 2024/2025	Update progress made on service levels
2	Public amenities should be investigated with cooperation of the health and education departments	All public amenities (health and education) should be investigated and the number of facilities and their type should be determined. GPS locations should also be taken	Currently the information is based on information contained in the existing GDB and from information provided by the surveyor general. The WSA didn't provide any data.		Present to council need for public amenity assessment to provide funding and resources	Complete public amenity survey	Update WSDP with new public amenity figures	Public Amenities Report completed, but some schools have no details, which need to be obtained from DOE	Incorporate all details into WSDP
3	Service level data accuracy. Ensure service level data accuracy and adequacy / align geo-databases	Improved service level data throughout district	Service level data is based on Census data and is not believed to be always accurate.		Update and improve data	Update and improve data	Update and improve data	Update and improve data	Update and improve data

Water Services Development Plan

Topic 2: Service Levels Profile

Direct Backlog (Water & Sanitation)		
	Totals	Assessment Score
Direct settlement backlog water house holds. Total house hold of settlement with a water need (irrelevant the type of need)	44066	99
Direct settlement backlog water population. Total population of settlement with a water need (irrelevant the type of need)	187526	99
Direct settlement backlog sanitation house holds. Total house hold of settlement with a sanitation need (irrelevant the type of need)	41809	99
Direct settlement backlog sanitation population. Total population of settlement with a sanitation need (irrelevant the type of need)	177821	99

Water Profile		
	Totals	Assessment Score
Water Services Infrastructure Supply Level Profile		
Piped water inside the dwelling/house-Households	8873	99
Piped water inside yard-Households	10591	99
Piped water distance <200m - Households	13536	99
Piped water distance <201m - Households	9243	99
Borehole in the yard - Households	0	99
Rain-water tank in yard - Households	0	99
Water vendor-carrier/tanker - Households	0	99
Stagnant water - dam/pool - Households	0	99
Flowing water/spring/ stream/river - Households	0	99
Water Other - Households	0	99
Water Reliability Profile		
Water Supply System - Single Type	243	99
Water Supply System - Scheme based	240	100

Water Services Development Plan

Water Profile		
	Totals	Assessment Score
Total Number of Households having Reliable Service. (Interpret Direct Backlog field above)	33005	99
Total Number of Households NOT having Reliable Service. (Interpret Direct Backlog field above)	44066	95
System Total Number of Households NOT having Reliable Service due to: Functionality (O&M and Management)	0	95
Total Number of Households NOT having Reliable Service due to: Resource	3966	95
Total Number of Households NOT having Reliable Service due to: Infrastructure	26283	95
Total Number of Households NOT having Reliable Service due to: Resource - Conservation & Demand Management	0	95
Total Number of Households NOT having Reliable Service due to: Resource - New Source	3966	95
Total Number of Households NOT having Reliable Service due to: Infrastructure – UPGRADE/REFURBISHMENT	0	95
Total Number of Households NOT having Reliable Service due to: Infrastructure – EXTENSION	0	95
Total Number of Households NOT having Reliable Service due to: Infrastructure – NEW SCHEME	0	95
Total Number of Households NOT having Reliable Service due to: REPLACE OLD	0	95

Sanitation Profile		
	Totals	Assessment Score
Sanitation Service Infrastructure Supply Level Profile		
None - Households	4534	99
Flush toilet (connected to sewerage system) - Households	7176	99
Flush toilet (with septic tank) - Households	3277	99
Chemical Toilet - Households	3066	99
Pit toilet with ventilation (VIP) - Households	21740	99
Pit without ventilation - Households	31751	99
Bucket toilet - Households	895	90
Sanitation Reliability Profile		
Household requiring VIP Refurbishment	0	80
Household requiring Existing Scheme Refurbishment	0	80
Household not having reliable service due to Functionality	0	80

Water Services Development Plan

Sanitation Profile		
	Totals	Assessment Score
Household not having reliable service due to Resource - Water Security	3966	95
Infrastructure to be upgraded: Pit to VIP (HH)	0	80
Infrastructure to be upgraded: Buckets to waterborne (HH)	0	80
Infrastructure requirement: None to to waterborne. (HH)	0	80
Infrastructure to be upgraded: Buckets to VIP (HH)	895	95
Infrastructure to be upgraded: None to VIP (HH)	4534	95
Infrastructure to be upgraded: Pit to waterborne (HH)	0	80
Infrastructure to be upgraded: VIPs to waterborne (HH)	24803	95

	Waterstatus			
Consumer types		Adequate	Inadequate	Grand Total
Educational facilities	257	136	31	424
Health Facilities	64			64
Grand Total	321	136	31	488

Water Services Development Plan

2.1 Water Services						
Associated Services Facility	Number of facilities	Facilities with Adequate services	Facilities with No services	Facilities with Inadequate services	Total Potential Cost (basic level) (RM)	Assessment Score
2.1.1 Education Plan						
Pre-Primary School	0	0	0	0	0.00	90
Primary School	254	84	0	12	19.90	90
Secondary School	91	23	0	8	10.75	90
Tertiary	0	0	0	0	0.00	90
Combined	79	29	0	11	18.89	90
Special Needs	0	0	0	0	0.00	90
ABET	0	0	0	0	0.00	90
Other	0	0	0	0	0.00	90
Total	424	136	0	31	49.54	
2.1.2 Health Plan						
Hospitals	0	0	0	0	0.00	99
Health Centers	0	0	0	0	0.00	99
Clinics	0	0	0	0	0.00	99
Other	64	0	0	0	7.66	99
Total	64	0	0	0	7.66	
2.2 Sanitation Services						
2.2.1 Education Plan						
Pre-Primary School	0	0	0	0	0.00	90
Primary School	254	97	0	5	6.00	90
Secondary School	91	32	0	2	4.80	90
Tertiary	0	0	0	0	0.00	90

Water Services Development Plan

Combined	79	45	0	1	1.20	90
Special Needs	0	0	0	0	0.00	90
ABET	0	0	0	0	0.00	90
Other	0	0	0	0	0.00	90
Total	424	174	0	8	12.00	
2.2.2 Health Plan						
Hospitals	0	0	0	0	0.00	99
Health Centers	0	0	0	0	0.00	99
Clinics	0	0	0	0	0.00	99
Other	64	48	14	0	0.00	99
Total	64	48	14	0	0.00	

Topic 2 Master Plan		
Section	Is there a master plan to address this problem?	Does this plan address the plan address this problem 100%?
Direct Backlog Water	Yes	Yes
Water Services Infrastructure Supply Level Profile	Yes	Yes
Sanitation Service Infrastructure Supply Level Profile	Yes	Yes
Water Services: Education	Yes	Yes
Sanitation Services: Education	Yes	Yes
Health and Educational Facilities	Yes	Yes
Direct Backlog Sanitation	Yes	Yes
Water Reliability Profile	Yes	Yes
Sanitation Reliability Profile	Yes	Yes
Water Services: Health	Yes	Yes
Sanitation Services: Health	Yes	Yes

Water Services Development Plan

Strategic Interpretation

Detail situation assessments per Topic element

Direct Backlog Water

Interpret Situation Assessment:	Projects are in place to improve water services of backlog area but funding is an issue and lack of regional bulk water supply schemes. Too many small rudimentary schemes to backlog situation. Areas that are below RDP level water supply needs to be supplied via new schemes or regional schemes
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Water Services Infrastructure Supply Level Profile

Interpret Situation Assessment:	Discussions were had with infrastructure regarding water service provision as Census and DWA service levels were incorrect. The service levels still need more investigation for a more accurate representation. Using the current service levels, more than half of the households are above RDP level water supply, however, 18% of the households are served via water tankers and 7% via springs and rivers with no proper schemes. There is thus a large portion (25%) of the WSA that is below RDP level water supply which need to be serviced.
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Sanitation Service Infrastructure Supply Level Profile

Interpret Situation Assessment:	Discussions were had with infrastructure regarding water service provision as Census and DWA service levels were incorrect. The service levels still need more investigation for a more accurate representation. Using the current service levels, more than half of the households are above RDP level sanitation supply, however, 35% of the households are served via PIT toilets. There is thus a large portion (35%) of the WSA that is below RDP level sanitation supply which need to be serviced.
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Water Services: Education

Interpret Situation Assessment:	The service levels of the health and education facilities were based on the service levels identified from the operational meeting with each LM and the UAP data. A detailed study into each of the facilities is however required for a proper assessment of the service levels. Majority of the facilities have inadequate water provision and needs to be addressed.
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Sanitation Services: Education

Water Services Development Plan

Interpret Situation Assessment:	The service levels of the health and education facilities were based on the service levels identified from the operational meeting with each LM and the UAP data. A detailed study into each of the facilities is however required for a proper assessment of the service levels. Some of the facilities have inadequate sanitation provision and needs to be addressed.
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Health and Educational Facilities

Interpret Situation Assessment:	The service levels of the health and education facilities were based on the service levels identified from the operational meeting with each LM and the UAP data. A detailed study into each of the facilities is however required for a proper assessment of the service levels. Some of the facilities have inadequate sanitation provision and needs to be addressed.
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Direct Backlog Sanitation

Interpret Situation Assessment:	There is no proper VIP or sanitation service level asset register to assess backlog situation. There are several new rural expansions without proper planning and assessment regarding basic service provision. There are projects in place each year reducing backlogs. Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.
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Water Reliability Profile

Interpret Situation Assessment:	Discussions were had with infrastructure regarding water service provision as Census and DWA service levels were incorrect. The service levels still need more investigation for a more accurate representation. Using the current service levels and reliability profile, the majority of the backlog areas require either infrastructure or where there is a scheme in place a more reliable resource.
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Sanitation Reliability Profile

Interpret Situation Assessment:	Discussions were had with infrastructure regarding water service provision as Census and DWA service levels were incorrect. The service levels still need more investigation for a more accurate representation. Using the current service levels and reliability profile, the majority of the backlog areas require the existing PIT toilets to be upgraded to VIPs. Some of the VIP areas are also planned to be upgraded to waterbourne
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Water Services: Health

Water Services Development Plan

Interpret Situation Assessment:	The service levels of the health and education facilities were based on the service levels identified from the operational meeting with each LM and the UAP data. A detailed study into each of the facilities is however required for a proper assessment of the service levels. Some of the facilities have inadequate water provision and needs to be addressed.
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Sanitation Services: Health

Interpret Situation Assessment:	The service levels of the health and education facilities were based on the service levels identified from the operational meeting with each LM and the UAP data. A detailed study into each of the facilities is however required for a proper assessment of the service levels.
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Business Element Report Items	Compliance Score	Intervention Required	%	Solution description as identified by Master Plan	%	Is there an Existing project addressing this problem?	%	Does this current listed project address the problem totally?	%	Project Approved by Council as part of WSDP Database?	%	Approved by council, in project database and part of 5 yr IDP cycle projects	%	Project listed in 3 yr MTEF - cycle	%	Total Points	Current Demand Overall Scoring %
Direct Backlog Water	99	Yes	100	Masterplan to assess backlog areas needs to be completed and regional supply needs to be developed and implemented. Areas that are below RDP level water supply needs to be supplied via new schemes or regional schemes	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
Water Services Infrastructure Supply Level Profile	97.3	Yes	100	Areas that are below RDP level water supply needs to be supplied via new schemes or regional schemes	100	Yes	100	Partial	50	Yes	100	Yes	100	Yes	100	650	92.86
Sanitation Service Infrastructure Supply Level Profile	90.22	Yes	100	Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.	100	Yes	100	Partial	50	Yes	100	Yes	100	Yes	100	650	92.86
Water Services: Education	93.54	Yes	100	The service levels of each of the facilities need to be investigated and assessed. Facilities with backlogs need to be properly serviced.	100	Yes	100	Partial	50	No	0		0		0	350	50
Sanitation Services: Education	93.54	Yes	100	The service levels of each of the facilities need to be investigated and assessed. Facilities with backlogs need to be properly serviced.	100	Yes	100	Partial	50	No	0		0		0	350	50
Health and Educational Facilities	0	Yes	100	The service levels of each of the facilities need to be investigated and assessed. Facilities with backlogs need to be properly serviced.	100	Yes	100	Partial	50	No	0		0		0	350	50

Water Services Development Plan

Direct Backlog Sanitation	0	Yes	100	Proper investigation needs to be completed regarding sanitation provision and backlog reduction. Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
Water Reliability Profile	0	Yes	100	Areas that are below RDP level water supply needs to be supplied via new schemes or regional schemes	100	Yes	100	Partial	50	Yes	100	Yes	100	Yes	100	650	92.86
Sanitation Reliability Profile	0	Yes	100	Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.	100	Yes	100	Partial	50	Yes	100	Yes	100	Yes	100	650	92.86
Water Services: Health	0	Yes	100	The service levels of each of the facilities need to be investigated and assessed. Facilities with backlogs need to be properly serviced.	100	Yes	100	Partial	50	No	0		0		0	350	50
Sanitation Services: Health	0	Yes	100	The service levels of each of the facilities need to be investigated and assessed. Facilities with backlogs need to be properly serviced.	100	Yes	100	Partial	50	No	0		0		0	350	50
Demand Overall Scoring Average																	74.68

WSDP FY2023: Strategies and Objectives

Harry Gwala

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
Service Levels Profile									

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
1	Settlement survey assessing service levels - both water and sewer	Settlement survey needs to be completed assessing the service levels of each of the settlements in Harry Gwala (rural and urban)- both water and sewer. The survey will aid in identifying the backlog areas in terms of service provision in Harry Gwala.	Discussions were had with infrastructure regarding water and sewer service provision as Census and DWA service levels were incorrect. The service levels still need more investigation for a more accurate representation.		Presenting to council need for settlement assessment to provide funding and resources	Complete settlement survey	Settlements were updated with ward survey. Continue to update WSDP with progress	Continue to update WSDP with progress	Continue to update WSDP with progress
3	Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.	Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.	Using the current service levels, more than half of the households are above RDP level sanitation supply, however, 35% of the households are served via PIT toilets. There is thus a large portion (35%) of the WSA that is below RDP level sanitation supply which need to be serviced.		Presenting to council need for improving areas below RDP level of sewer provision to provide funding and resources	Upgrade below RDP level of sewer services areas	Upgrade below RDP level of sewer services areas - update WSDP	Upgrade below RDP level of sewer services areas - update WSDP	Upgrade below RDP level of sewer services areas - update WSDP

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
3	Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.	Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.	Using the current service levels, more than half of the households are above RDP level sanitation supply, however, 35% of the households are served via PIT toilets. There is thus a large portion (35%) of the WSA that is below RDP level sanitation supply which need to be serviced.		Presenting to council need for improving areas below RDP level of sewer provision to provide funding and resources	Upgrade below RDP level of sewer services areas	Upgrade below RDP level of sewer services areas - update WSDP	Upgrade below RDP level of sewer services areas - update WSDP	Upgrade below RDP level of sewer services areas - update WSDP
3	Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.	Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.	Using the current service levels, more than half of the households are above RDP level sanitation supply, however, 35% of the households are served via PIT toilets. There is thus a large portion (35%) of the WSA that is below RDP level sanitation supply which need to be serviced.		Presenting to council need for improving areas below RDP level of sewer provision to provide funding and resources	Upgrade below RDP level of sewer services areas	Upgrade below RDP level of sewer services areas - update WSDP	Upgrade below RDP level of sewer services areas - update WSDP	Upgrade below RDP level of sewer services areas - update WSDP

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
3	Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.	Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.	Using the current service levels, more than half of the households are above RDP level sanitation supply, however, 35% of the households are served via PIT toilets. There is thus a large portion (35%) of the WSA that is below RDP level sanitation supply which need to be serviced.		Presenting to council need for improving areas below RDP level of sewer provision to provide funding and resources	Upgrade below RDP level of sewer services areas	Upgrade below RDP level of sewer services areas - update WSDP	Upgrade below RDP level of sewer services areas - update WSDP	Upgrade below RDP level of sewer services areas - update WSDP
3	Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.	Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.	Using the current service levels, more than half of the households are above RDP level sanitation supply, however, 35% of the households are served via PIT toilets. There is thus a large portion (35%) of the WSA that is below RDP level sanitation supply which need to be serviced.		Presenting to council need for improving areas below RDP level of sewer provision to provide funding and resources	Upgrade below RDP level of sewer services areas	Upgrade below RDP level of sewer services areas - update WSDP	Upgrade below RDP level of sewer services areas - update WSDP	Upgrade below RDP level of sewer services areas - update WSDP

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
3	Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.	Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.	Using the current service levels, more than half of the households are above RDP level sanitation supply, however, 35% of the households are served via PIT toilets. There is thus a large portion (35%) of the WSA that is below RDP level sanitation supply which need to be serviced.		Presenting to council need for improving areas below RDP level of sewer provision to provide funding and resources	Upgrade below RDP level of sewer services areas	Upgrade below RDP level of sewer services areas - update WSDP	Upgrade below RDP level of sewer services areas - update WSDP	Upgrade below RDP level of sewer services areas - update WSDP
3	Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.	Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.	Using the current service levels, more than half of the households are above RDP level sanitation supply, however, 35% of the households are served via PIT toilets. There is thus a large portion (35%) of the WSA that is below RDP level sanitation supply which need to be serviced.		Presenting to council need for improving areas below RDP level of sewer provision to provide funding and resources	Upgrade below RDP level of sewer services areas	Upgrade below RDP level of sewer services areas - update WSDP	Upgrade below RDP level of sewer services areas - update WSDP	Upgrade below RDP level of sewer services areas - update WSDP

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
3	Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.	Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.	Using the current service levels, more than half of the households are above RDP level sanitation supply, however, 35% of the households are served via PIT toilets. There is thus a large portion (35%) of the WSA that is below RDP level sanitation supply which need to be serviced.		Presenting to council need for improving areas below RDP level of sewer provision to provide funding and resources	Upgrade below RDP level of sewer services areas	Upgrade below RDP level of sewer services areas - update WSDP	Upgrade below RDP level of sewer services areas - update WSDP	Upgrade below RDP level of sewer services areas - update WSDP
3	Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.	Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.	Using the current service levels, more than half of the households are above RDP level sanitation supply, however, 35% of the households are served via PIT toilets. There is thus a large portion (35%) of the WSA that is below RDP level sanitation supply which need to be serviced.		Presenting to council need for improving areas below RDP level of sewer provision to provide funding and resources	Upgrade below RDP level of sewer services areas	Upgrade below RDP level of sewer services areas - update WSDP	Upgrade below RDP level of sewer services areas - update WSDP	Upgrade below RDP level of sewer services areas - update WSDP

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
3	Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.	Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.	Using the current service levels, more than half of the households are above RDP level sanitation supply, however, 35% of the households are served via PIT toilets. There is thus a large portion (35%) of the WSA that is below RDP level sanitation supply which need to be serviced.		Presenting to council need for improving areas below RDP level of sewer provision to provide funding and resources	Upgrade below RDP level of sewer services areas	Upgrade below RDP level of sewer services areas - update WSDP	Upgrade below RDP level of sewer services areas - update WSDP	Upgrade below RDP level of sewer services areas - update WSDP
3	Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.	Areas that are below RDP level sanitation supply (VIP) needs to be serviced with either VIPs or waterbourne sanitation.	Using the current service levels, more than half of the households are above RDP level sanitation supply, however, 35% of the households are served via PIT toilets. There is thus a large portion (35%) of the WSA that is below RDP level sanitation supply which need to be serviced.		Presenting to council need for improving areas below RDP level of sewer provision to provide funding and resources	Upgrade below RDP level of sewer services areas	Upgrade below RDP level of sewer services areas - update WSDP	Upgrade below RDP level of sewer services areas - update WSDP	Upgrade below RDP level of sewer services areas - update WSDP

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
4	Assessment of service levels of Health and education facilities for planning and design	An assessment of the service levels of the Health and education facilities in Harry Gwala is required for planning and design and ensuring the facilities have adequate services	The service levels of the health and education facilities were based on the service levels identified from the operational meeting with each LM and the UAP data. A detailed study into each of the facilities is however required for a proper assessment of the service levels.		Get health and education facility information from respective departments	Update service levels and WSDP	Public Amenities Support Plan completed. Some schools still outstanding.	Update outstanding amenities details.	Update outstanding amenities details.
5	Facilities with backlogs need to be properly serviced.	Facilities with backlogs need to be properly serviced.	Some of the facilities have inadequate water and sewer provision according to the current service levels and needs to be addressed.		Present to council need for providing proper services to health and educational facilities to provide funding and resources	Reduce backlogs at facilities and update WSDP	Reduce backlogs at facilities and update WSDP	Reduce backlogs at facilities and update WSDP	Reduce backlogs at facilities and update WSDP
5	Facilities with backlogs need to be properly serviced.	Facilities with backlogs need to be properly serviced.	Some of the facilities have inadequate water and sewer provision according to the current service levels and needs to be addressed.		Present to council need for providing proper services to health and educational facilities to provide funding and resources	Reduce backlogs at facilities and update WSDP	Reduce backlogs at facilities and update WSDP	Reduce backlogs at facilities and update WSDP	Reduce backlogs at facilities and update WSDP

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
6	A water and sanitation masterplan needs to be completed for the WSA on a bulk and reticulation scale for the existing and future demand scenario	A water and sanitation masterplan needs to be completed for the WSA on a bulk and reticulation scale for the existing and future demand scenario	Currently there is no proper masterplan that assesses the infrastructure (sewer and water) and looks at the existing and future demands of the WSA. A masterplan is imperative in adequate planning infrastructure		Present to council need for a proper water and sewer masterplan to provide funding and resources	Review Masterplan	Masterplan in progress	Complete masterplan and reduce backlogs	Reduce backlogs
7	The existing sources should be investigated and future sources identified	The existing sources should be investigated and future sources identified	Currently the biggest issue with the existing schemes are source reliability. There is a need for more sustainable sources.		Present to council need for the investigation of the existing and future sources to provide funding and resources	Compile Masterplan to Investigate existing and future sources	Compile Masterplan to Investigate existing and future sources	Develop new sources to improve scheme supply and update WSDP	Develop new sources to improve scheme supply and update WSDP
8	Policy Development (Service Level, Indigent, FBW, Tariff Collection)	Policy developed, adopted and implemented	Policies exist but not always implemented		Develop new policies and present to council for approval	Implement new and existing policies. Develop new policies and present to council for approval	Implement new and existing policies. Develop new policies and present to council for approval	Implement new and existing policies. Develop new policies and present to council for approval	Implement new and existing policies. Develop new policies and present to council for approval
9	Water Services Development Planning (WSDP)	Improved quality of WSDP and WSDP Score	WSDP Score has improved but WSDP needs more refinement. Settlement reconciliation exercise needs completion, linking settlement maps directly to service levels.		Update and refine WSDP. Present to Council for approval.	Update and refine WSDP. Present to Council for approval.	Update and refine WSDP. Present to Council for approval.	Update and refine WSDP. Present to Council for approval.	Update and refine WSDP. Present to Council for approval.

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
10	Service Level Backlog Quantification and Eradication	Improve accuracy of service level backlog data in order to plan for backlog eradication	Backlogs are estimated in WSDP; but accuracy of data needs improving.		Improve accuracy of backlog data in WSDP and IDP	Improve accuracy of backlog data in WSDP and IDP	Improve accuracy of backlog data in WSDP and IDP	Improve accuracy of backlog data in WSDP and IDP	Improve accuracy of backlog data in WSDP and IDP

Water Services Development Plan

Topic 3: Water Services Asset Management

Yes No Grid		
Question	Yes	Assessment Score

3.1 General Information		
3.1.1 Is there an Asset Management plan	True	100
3.1.2 Is there a disaster management plan	True	100
3.1.3 Is there a plan in place to manage untreated effluent		50

Questions										
Question	B	AP	WTW	WP	SP	WL	SL	R	WWTW	Assessment

Water Services Development Plan

										Score
[section]										
3.1.1 Total number of components / km of pipeline / units	1988	249	28	95	4	897.11	0	751	12	80
3.2.1.1 Previous incidents including Security Problems (Regular)		0	0	0	0			0	0	95
3.2.1.2 Previous incidents including Security Problems (Periodic)		0	23	1	0			0	1	95
3.2.1.3 Previous incidents including Security Problems (Sporadic)		184	0	62	4			703	11	95
3.2.1.4 Previous incidents including Security Problems (None)		0	0	0	0			0	0	95
3.2.2.1 Safety inspection performed (Regular)		0	0	0	0			0	0	95
3.2.2.2 Safety inspection performed (Periodic)		0	0	0	0			0	0	95
3.2.2.3 Safety inspection performed (Sporadic)		184	0	63	4			700	0	95
3.2.2.4 Safety inspection performed (None)		0	0	0	0			0	0	95
3.2.5 Average Operating hours per day (X hrs)			10.75						10.75	95
3.3.1.1 General physical condition: Dysfunctional	0	0	0	0	0	0	0	0	0	50

Water Services Development Plan

3.3.1.2 General physical condition: Operational	0	184	0	63	0	0	0	702	0	90
3.3.1.3 General physical condition: Prime Condition	0	0	0	0	0	0	0	0	0	50
3.3.1.4 General physical condition: Vandalised	0	0	0	0	0	0	0	0	0	50
3.3.2 Number of breakages / failures per year	0	0	0	0	0	0	0	0	0	50
3.3.3 Total refurbishment needs %	0%	0%	0%	0%	0%	0%	0	0%	0%	50
3.3.4 Total refurbishment needs cost (RM)	0.00	0.00	0.00	0.20	0.00	0.00	0	0.00	0.00	50
3.3.4.1 Refurbishment cost for 5 year	0	0	0	0	0	0	0	0	0	50
3.3.4.2 Refurbishment cost for 10 year	0	0	0	0	0	0	0	0	0	50
3.3.4.3 Refurbishment cost for 15 year	0	0	0	0	0	0	0	0	0	50
3.3.5 Total replacement needs %	0%	0%	0%	0%	0%	0%	0	0%	0%	50
3.3.6 Total replacement needs cost (RM)	0.00	0.00	0.00	0.08	0.00	0.00	0	6.00	0.00	50
3.3.6.1 Replacement cost for 5 year	0	0	0	0	0	0	0	0	0	50

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3.3.6.2 Replacement cost for 10 year	0	0	0	0	0	0	0	0	0	50
3.3.6.3 Replacement cost for 15 year	0	0	0	0	0	0	0	0	0	50
3.3.7 Total New development cost required	0	0	0	0	0	0	0	0	0	50
3.3.7.1 New development cost for 5 year	0	0	0	0	0	0	0	0	0	50
3.3.7.2 New development cost for 10 year	0	0	0	0	0	0	0	0	0	50
3.3.7.3 New development cost for 15 year	0	0	0	0	0	0	0	0	0	50
3.3.8 % Of Components already reached useful life	0%	0%	0%	66%	0%	0%	0%	0%	0%	50
3.3.9 % Whereoff the WSA Self is the Current Owner	100%	100%	96%	67%	100%	100%	100%	100%	100%	100
3.3.10 % Whereoff the WSA Self is Current Operator	100%	100%	96%	67%	100%	100%	100%	100%	100%	100
3.4.1 % Expected total lifespan: Short (1-3 yrs)	0	0	0	0	0	0.48	0	0	0	70
3.4.2 % Expected total lifespan: Medium (3 - 10 yrs)	0	0	0	0	0	5.26	0	0	0	70
3.4.3 % Expected total lifespan: Long (10 - 20 yrs)	0	0	0	0	0	5.26	0	0	0	70

Water Services Development Plan

Sanitation Schemes		
Sanitation Schemes	Green Drop	Assessment Score
BULWER	True	58
FRANKLIN	True	57
HIMEVILLE	True	60
IBISI	True	58
IXOPO	False	85
KOKSTAD	True	63
POLELA / HLANGANANI	True	56
RIETVLEI	False	70
RIVERSIDE	True	54
ST APOLLINARIS	True	53

Water Services Development Plan

UMZIMKHULU OLD	True	61
UNDERBERG NEW	True	67
UNDERBERG OLD	True	57

Water Schemes		
Water Schemes	Blue Drop	Assessment Score
ANTIOCH	False	80
BASHAWENI	No	80
BOMBO	False	80
BOMVINI	False	80
BORNDRAND	False	80
BULWER	True	70

Water Services Development Plan

CENTOCOW / ST. APOLLINARIS / MAKHOLWENI	True	57
CHIBINI / HOPEWELL	Yes	29
CLYDESDALE	False	80
CORINTH	False	80
CREIGHTON	Yes	57
DELAMUZI	False	80
DIPHINI	False	80
DONNYBROOK	False	80
DRIEFONTEIN	False	80
DUMABEZWE / BULWER BULK	False	80
DUMISA WATER	False	80
EASTLANDS	No	80

Water Services Development Plan

EBHAYI - ERITH TRUST	False	80
EDGETON	False	80
EHLANHLENNI	False	70
EMAGQAGQENI	False	80
EMANGENI	False	80
EMMAUS	False	60
ESANGWENI	False	80
ESIQANDULWENI / SPRINGVALE	Yes	54
FOUNTAIN / MATHATHANE	False	80
FRANKLIN	True	58
GAYBROOK	False	80
GIJIMA	False	80

Water Services Development Plan

GREATER KOKSTAD	True	84
GUDLINTABA	False	80
GUGULELA	No	80
GUGWINI	False	80
HIGHFLATS	No	80
HIGHLANDS / WASCHBANK	True	49
HLAFUNA	False	80
HLANGANANI / POLELA	True	69
HLOKOZI	No	80
IBISI / MFUNDWENI	No	72
INDAWANA	No	80
IXOPO REGIONAL BULK	Yes	86

Water Services Development Plan

IXOPO/MARIATHAL	False	80
JABULA	False	80
JOLIVET	False	80
KILMON	No	80
KLIPSPRUIT	No	80
KOKSHILL RA 1	False	80
KOKSHILL RB 2	No	80
KOKSTAD	True	84
KRAANSDRAAI	No	80
KWABHALA	No	80
LUCINGWENI	False	80
LUKHASINI	No	80

Water Services Development Plan

LUSIZINI / MVUBUKAZI	False	80
MABEDLANA	False	80
MACABAZINI	False	80
MACHUNWINI	True	23
MAHHEHLE	No	80
MAHHWAQA	No	80
MAKHOBHA	No	80
MAKHOLWENI	No	80
MALENGE	No	80
MANGWANENI	Yes	37
MANQARHOLWENI	No	80
MARAIKOP	False	80

Water Services Development Plan

MARHEWINI	False	80
MAZABEKWENI / NOKWEJA	True	62
MBUZWENI	No	80
MDAYANE	No	80
MDENI	No	80
MGODI SKEY	False	80
MHLABATSHANE	No	80
MNKANGALA	False	80
MNQUMENI	True	35
MNYWANENI	False	80
MPHITHINI	False	80
MPOLA	False	80

Water Services Development Plan

MQATSHENI / MAGUZWANA-STEPMORE	Yes	54
MQATSHENI / MAGUZWANA-STEPMORE EXT	No	80
MTHINTWA	False	80
MYEMBE	No	80
NARAZETH	No	80
NCAMBELE	False	80
NDAWANA	No	80
NDZIMANKULU	No	80
NDZOMBANE	False	80
NEW (EMMAUS/COMMONVILLE/HOPEVALE?)	No	80
NEW (LUKHASINI/HOPEWELL,CARRISBROOKE?)	No	80
NEW (MKHUNYA)	No	80

Water Services Development Plan

NEW (MQUMARENI/MOTYENI/MAHOBE???)	No	80
NEW (NDZOMBANE or MASAMBANE?)	No	80
NEW (NOEK FARM or MFULAMHLE?)	No	80
NEW (VIERKANT/PUNGASHE/MHLABASHANE??)	No	80
NGWANQA	No	80
NJUNGA / RHALODI	Yes	35
NKELABANTWANA	False	80
NKUMBA	No	80
NKWEZELA	False	80
NOEK FARM	No	80
NOMANDLOVU	No	80
NOMARHANJANA	False	80

Water Services Development Plan

NONGIDI	No	80
NOZIYINGILA	No	80
NQABELWENI	No	80
NQOKOZWENI	False	80
NQUMARHENI	False	80
NTABANE	No	80
NTAKAMA	False	80
NTEKANENI	False	80
NTSIKENI	False	80
NXAPHANXAPHENI	False	80
NYANISWENI	False	80
NYANISWENI	False	80

Water Services Development Plan

OHLABENI	False	80
OKHETHENI	No	80
PAKKIES	No	80
PITELA	No	80
QULASHE	False	80
RASFONTEIN	False	80
RHAWUKA	No	80
RIESDALE	No	80
RIETVLEI	Yes	48
RIVERSIDE	Yes	49
ROCKY MOUNT	No	80
SANDANEZWE	No	80

Water Services Development Plan

SENTI WATER	False	80
SEVENFONTEIN	False	80
SIHLONHLWENI	False	80
SKHESHENI	False	80
SMALL MAHOBE	False	80
SPITZKOP	No	80
ST BARNABAS	No	80
ST PAUL	False	80
STRANGERS REST	No	80
TARSVALLEY	False	80
THUTHUKANI	No	80
TSAWULE	No	80

Water Services Development Plan

UMZIMKHULU	Yes	57
UNDERBERG	True	54
VIERKANT	No	80
VUKUZENZELE	No	80
WATERFALL WATER	No	80
WSA Level		
WYNESBERG	No	80
ZIMBONGOLWENI	No	80

Topic 3 Master Plan		
Section	Is there a master plan to address this problem?	Does this plan address the plan address this problem 100%?
3.1 General Information	Yes	Yes
3.2 Operation	Yes	Yes
3.3 Functionality Observation	Yes	Yes
3.4 Asset Assessment Spectrum	Yes	Yes
3.5 Water and Sanitation schemes	Yes	Yes

Water Services Development Plan

Strategic Interpretation

Detail situation assessments per Topic element

3.1 General Information

Interpret Situation Assessment:	The WSA has a asset and disaster management plan in place. It does however not have a plan in place to manage untreated effluent. The asset register also needs to be updated to include all the missing schemes and infrastructure.
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3.2 Operation

Interpret Situation Assessment:	The asset register does not include information regarding security incidents and safety inspections performed. The information was discussed with LMs and assumptions were made. Proper assessment of security incidents and safety inspection are required.
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3.3 Functionality Observation

Interpret Situation Assessment:	Very little to no information was available in the asset register regarding replacement value of the infrastructure. There was also no information available regarding the refurbishment or new development costs. There was also no information regarding the physical condition of the infrastructure and information was provided and assumed based on meetings with operational managers of each LM.
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3.4 Asset Assessment Spectrum

Interpret Situation Assessment:	No information was available regarding the expected lifespan of the infrastructure. Very Little to no information was also available regarding the infrastructures age to determine expected lifespans of the infrastructure.
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3.5 Water and Sanitation schemes

Water Services Development Plan

Interpret Situation Assessment:	There are several rudimentary schemes in HGDM. There should however be more regional schemes implemented as the maintenance and sustainability of the rudimentary schemes are difficult and several of the schemes are not operating as they should. Some of the treatment works also do not have green and blue drop reports and should be addressed.
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Business Element Report Items	Compliance Score	Intervention Required	%	Solution description as identified by Master Plan	%	Is there an Existing project addressing this problem?	%	Does this current listed project address the problem totally?	%	Project Approved by Council as part of WSDP Database?	%	Approved by council, in project database and part of 5 yr IDP cycle projects	%	Project listed in 3 yr MTEF - cycle	%	Total Points	Current Demand Overall Scoring %
3.1 General Information	82.5	Yes	100	The WSA should improve the asset management plan and develop a plan to manage untreated effluent.	100	Yes	100	Yes	100	Yes	100	No	0	No	0	500	71.43
3.2 Operation	95	Yes	100	The WSA to do proper assessment of security incidents and safety inspections performed	100	Yes	100	Partial	50	No	0	No	0	No	0	350	50
3.3 Functionality Observation	56.36	Yes	100	Proper replacement, refurbishment and new development costs needs to be determined for all the water and sanitation infrastructure in Harry Gwala. There is also a need to determine the general physical condition of the infrastructure.	100	Yes	100	Yes	100	Yes	100	No	0	No	0	500	71.43
3.4 Asset Assessment Spectrum	70	Yes	100	The expected lifespan on the infrastructure should be determined based on the age and the condition of the infrastructure.	100	Yes	100	Yes	100	Yes	100	No	0	No	0	500	71.43
3.5 Water and Sanitation schemes	74.42	Yes	100	Investigate and implement more regional water and sanitation schemes. blue and green drop reports should be done for outstanding treatment works	100	Yes	100	Partial	50	Yes	100	Yes	100	Yes	100	650	92.86
Demand Overall Scoring Average																	71.43

WSDP FY2023: Strategies and Objectives

Harry Gwala

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
Water Services Asset Management									

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
1	The WSA should improve the asset management plan and develop a plan to manage untreated effluent	The WSA should update and improve the asset management plan and develop a plan to manage untreated effluent	The WSA has a asset and disaster management plan in place. It does however not have a plan in place to manage untreated effluent. The asset register also needs to be updated to include all the missing schemes and infrastructure.		Present to council need to improve the asset management plan and develop a plan to manage untreated effluent to provide funding and resources	Improve the asset management plan and develop a plan to manage untreated effluent and update WSDP	Implement the improved asset management plan and plan to manage untreated effluent and update WSDP	Implement the improved asset management plan and plan to manage untreated effluent and update WSDP	Implement the improved asset management plan and plan to manage untreated effluent and update WSDP
2	The WSA to do proper assessment of security incidents and safety inspections performed	The WSA to do proper assessment of security incidents and safety inspections performed	"The asset register does not include information regarding security incidents and safety inspections performed. The information was discussed with LMs and assumptions were made. Proper assessment of security incidents and safety inspection are required."		Present to council need to do proper assessment of security incidents and safety inspections performed to provide funding and resources	Conduct a proper assessment of security incidents and safety inspections performed and update WSDP	Conduct a proper assessment of security incidents and safety inspections performed and update WSDP	Conduct a proper assessment of security incidents and safety inspections performed and update WSDP	Conduct a proper assessment of security incidents and safety inspections performed and update WSDP

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
3	Proper replacement, refurbishment and new development costs needs to be determined for all the water and sanitation infrastructure in Harry Gwala.	Proper replacement, refurbishment and new development costs needs to be determined for all the water and sanitation infrastructure in Harry Gwala. This can be achieved with a sewer and water masterplan	Very little to no information was available in the asset register regarding replacement value of the infrastructure. There was also no information available regarding the refurbishment or new development costs. There was also no information regarding the physical condition of the infrastructure and information was provided and assumed based on meetings with operational managers of each LM.		Present to council need to determine replacement, refurbishment and new development costs for all the water and sanitation infrastructure to provide funding and resources	Determine replacement, refurbishment and new development costs for all the water and sanitation infrastructure and update WSDP	Determine replacement, refurbishment and new development costs for all the water and sanitation infrastructure and update WSDP	Determine replacement, refurbishment and new development costs for all the water and sanitation infrastructure and update WSDP	Determine replacement, refurbishment and new development costs for all the water and sanitation infrastructure and update WSDP
4	The expected lifespan on the infrastructure should be determined based on the age and the condition of the infrastructure.	The expected lifespan on the infrastructure should be determined based on the age and the condition of the infrastructure. A proper assessment of the infrastructure and their ages are required	"No information was available regarding the expected lifespan of the infrastructure. Very Little to no information was also available regarding the infrastructures age to determine expected lifespans of the infrastructure."		Present to council need to determine expected lifespan of the infrastructure to provide funding and resources	Determine expected infrastructure lifespan and update WSDP	Determine expected infrastructure lifespan and update WSDP	Determine expected infrastructure lifespan and update WSDP	Determine expected infrastructure lifespan and update WSDP

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
5	Investigate and implement more regional water and sanitation schemes.	Investigate and implement more regional water and sanitation schemes. This can be addressed with the water and sewer masterplans	There are several rudimentary schemes in HGDM. There should however be more regional schemes implemented as the maintenance and sustainability of the rudimentary schemes are difficult and several of the schemes are not operating as they should.		Presenting to council need to investigate and implement more regional water and sanitation schemes to provide funding and resources	Compile Masterplan	Masterplan in progress, Investigate and implement more regional water and sanitation schemes and update WSDP	Start projects from Masterplan	Continue with projects from Masterplan
6	Blue and green drop reports should be done for outstanding treatment works and the existing works should be refurbished or upgraded as the score are very low	Blue and green drop reports should be done for outstanding treatment works and the existing works should be refurbished or upgraded as the score are very low	Some of the treatment works also do not have green and blue drop reports and the ones that do have are not in good working order and should be addressed.		Presenting to council need for assessing the infrastructure condition to provide funding and resources	Complete asset register assessment	Update WSDP	Update WSDP	Update WSDP
7	Update of asset register to include physical condition of all the assets.	Update of asset register to include physical condition of all the assets.	Currently the asset register does not include the physical condition of all the infrastructure		Present to council need to ascertain the physical condition of the infrastructure to provide funding and resources	Assess and determine the physical condition of the infrastructure and update asset register and WSDP	Assess and determine the physical condition of the infrastructure and update asset register and WSDP	Assess and determine the physical condition of the infrastructure and update asset register and WSDP	Assess and determine the physical condition of the infrastructure and update asset register and WSDP
9	GIS Database population and upkeep	Updated accuracy of municipal GIS database	GIS database exists but data accuracy is questioned.		GIS data quality improved	GIS data quality improved	GIS data quality improved	GIS data quality improved	GIS data quality improved

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
8	Improved Municipal Design Standards for Infrastructure	Improved Design standards produced, promulgated and put into use.	Some design guidelines exist but these are not formalised		Design Standards reviewed and new design standards drafted for comment	Design standards ratified by Council	Design standards implemented by Municipality on new and existing projects	Design standards implemented by Municipality on new and existing projects	Design standards implemented by Municipality on new and existing projects
9	Asset Management Policy Development (Procurement, Asset Depreciation and Replacement)	Policies updated, developed and implemented	Some policies in place; but not always implemented		Policies reviewed and new policies drafted for comment	Policies adopted	Policies implemented and constantly reviewed	Policies implemented and constantly reviewed	Policies implemented and constantly reviewed
9	Disaster and Risk Management	Improved Risk Management Capacity and Protocols	Some risk management procedures in place; but not always applied.		New risk management procedures drafted for comment	New risk management procedures adopted	New risk management procedures implemented and reviewed	New risk management procedures implemented and reviewed	New risk management procedures implemented and reviewed
10	Address and reduce illegal connections and vandalism	Reduction in levels of vandalism and illegal connections to water and electricity supplies.	Vandalism and illegal connections are currently a serious problem, resulting in high levels of non revenue water.		Develop strategy and plan to address illegal connections and vandalism	Implement strategy and plan to address illegal connections and vandalism	Implement strategy and plan to address illegal connections and vandalism. Review progress and suggest any required changes.	Implement strategy and plan to address illegal connections and vandalism. Review progress and suggest any required changes.	Implement strategy and plan to address illegal connections and vandalism. Review progress and suggest any required changes.
10	Address and reduce illegal connections and vandalism	Reduction in levels of vandalism and illegal connections to water and electricity supplies.	Vandalism and illegal connections are currently a serious problem, resulting in high levels of non revenue water.		Develop strategy and plan to address illegal connections and vandalism	Implement strategy and plan to address illegal connections and vandalism	Implement strategy and plan to address illegal connections and vandalism. Review progress and suggest any required changes.	Implement strategy and plan to address illegal connections and vandalism. Review progress and suggest any required changes.	Implement strategy and plan to address illegal connections and vandalism. Review progress and suggest any required changes.

Water Services Development Plan

Topic 4: Water Services O&M

In Place	Assesement Score			
4.1 Operation & Maintenance Plan				
Is There a Operation and Maintenance Plan?				
True	70			
Phase	Compliance	StatusQuo	Impact	Assesement Score
4.2 Resources				
4.2.1 Existing Groundwater Infrastructure				
Operation	Staff	Below Minimum requirement	Low	75
Maintenance	Staff	Minimum basic requirement	Medium/High	100
Operation	External resources	Below Minimum requirement	Low	75
Maintenance	External resources	Above minimum requirement	Medium/High	100
Operation	Spare Parts	Below Minimum requirement	Medium/High	75
Maintenance	Spare Parts	Below Minimum requirement	Medium/High	75
Operation	Tools & Equipment	Above minimum requirement	Low	100
Maintenance	Tools & Equipment	Minimum basic requirement	Low	100
Operation	Budget	Below Minimum requirement	Medium/High	75
Maintenance	Budget	Below Minimum requirement	Medium/High	75
4.2 Resources				
4.2.2 Existing Surface Water Infrastructure				
Operation	Staff	Minimum basic requirement	Low	100

Water Services Development Plan

Maintenance	Staff	Minimum basic requirement	Low	100
Operation	External resources	Above minimum requirement	Low	100
Maintenance	External resources	Above minimum requirement	Low	100
Operation	Spare Parts	Below Minimum requirement	Low	75
Maintenance	Spare Parts	Below Minimum requirement	Low	75
Operation	Tools & Equipment	Minimum basic requirement	Low	100
Maintenance	Tools & Equipment	Minimum basic requirement	Low	100
Operation	Budget	Below Minimum requirement	Medium/High	75
Maintenance	Budget	Below Minimum requirement	Medium/High	75
4.2 Resources				
4.2.3 Existing Waste Water Treatment Works Infrastructure				
Operation	Staff	Below Minimum requirement	Critical	65
Maintenance	Staff	Below Minimum requirement	Critical	65
Operation	External resources	Above minimum requirement	Low	100
Maintenance	External resources	Above minimum requirement	Low	100
Operation	Spare Parts	Below Minimum requirement	Critical	65
Maintenance	Spare Parts	Below Minimum requirement	Critical	65
Operation	Tools & Equipment	Minimum basic requirement	Low	100
Maintenance	Tools & Equipment	Minimum basic requirement	Low	100
Operation	Budget	Below Minimum requirement	Critical	65
Maintenance	Budget	Below Minimum requirement	Critical	65
4.2 Resources				
4.2.4 Existing Water Treatment Works Infrastructure				
Operation	Staff	Below Minimum requirement	Critical	65
Maintenance	Staff	Below Minimum requirement	Critical	65
Operation	External resources	Above minimum requirement	Low	100
Maintenance	External resources	Above minimum requirement	Low	100
Operation	Spare Parts	Below Minimum requirement	Critical	65
Maintenance	Spare Parts	Below Minimum requirement	Critical	65
Operation	Tools & Equipment	Minimum basic requirement	Low	100
Maintenance	Tools & Equipment	Minimum basic requirement	Low	100

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Operation	Budget	Below Minimum requirement	Critical	65
Maintenance	Budget	Below Minimum requirement	Critical	65
4.2 Resources				
4.2.5 Existing Pump Station Infrastructure				
Operation	Staff	Below Minimum requirement	Medium/High	75
Maintenance	Staff	Below Minimum requirement	Medium/High	75
Operation	External resources	Above minimum requirement	Low	100
Maintenance	External resources	Above minimum requirement	Low	100
Operation	Spare Parts	Below Minimum requirement	Medium/High	75
Maintenance	Spare Parts	Below Minimum requirement	Medium/High	75
Operation	Tools & Equipment	Below Minimum requirement	Low	75
Maintenance	Tools & Equipment	Below Minimum requirement	Low	75
Operation	Budget	Below Minimum requirement	Critical	65
Maintenance	Budget	Below Minimum requirement	Critical	65
4.2 Resources				
4.2.6 Existing Bulk Pipeline Infrastructure				
Operation	Staff	Below Minimum requirement	Medium/High	75
Maintenance	Staff	Below Minimum requirement	Medium/High	75
Operation	External resources	Above minimum requirement	Low	100
Maintenance	External resources	Above minimum requirement	Low	100
Operation	Spare Parts	Below Minimum requirement	Medium/High	75
Maintenance	Spare Parts	Below Minimum requirement	Medium/High	75
Operation	Tools & Equipment	Below Minimum requirement	Low	75
Maintenance	Tools & Equipment	Below Minimum requirement	Low	75
Operation	Budget	Below Minimum requirement	Critical	65
Maintenance	Budget	Below Minimum requirement	Critical	65
4.2 Resources				
4.2.7 Existing Tower & Reservoir Infrastructure				
Operation	Staff	Below Minimum requirement	Medium/High	75
Maintenance	Staff	Below Minimum requirement	Medium/High	75
Operation	External resources	Above minimum requirement	Low	100

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Maintenance	External resources	Above minimum requirement	Low	100
Operation	Spare Parts	Below Minimum requirement	Medium/High	75
Maintenance	Spare Parts	Below Minimum requirement	Medium/High	75
Operation	Tools & Equipment	Below Minimum requirement	Low	75
Maintenance	Tools & Equipment	Below Minimum requirement	Low	75
Operation	Budget	Below Minimum requirement	Critical	65
Maintenance	Budget	Below Minimum requirement	Critical	65
4.2 Resources				
4.2.8 Existing Reticulation Infrastructure				
Operation	Staff	Below Minimum requirement	Medium/High	75
Maintenance	Staff	Below Minimum requirement	Medium/High	75
Operation	External resources	Above minimum requirement	Low	100
Maintenance	External resources	Above minimum requirement	Low	100
Operation	Spare Parts	Above minimum requirement	Low	100
Maintenance	Spare Parts	Above minimum requirement	Low	100
Operation	Tools & Equipment	Below Minimum requirement	Low	75
Maintenance	Tools & Equipment	Below Minimum requirement	Low	75
Operation	Budget	Below Minimum requirement	Critical	65
Maintenance	Budget	Below Minimum requirement	Critical	65
4.3 Information				
4.3.1 Existing Groundwater Infrastructure				
Operation	Manuals Available	Below Minimum requirement	Medium/High	75
Maintenance	Manuals Available	Below Minimum requirement	Medium/High	75
Operation	Asset Register	Minimum basic requirement	Medium/High	100
Maintenance	Asset Register	Minimum basic requirement	Medium/High	100
Operation	As-Built info.	Minimum basic requirement	Medium/High	100
Maintenance	As-Built info.	Minimum basic requirement	Medium/High	100
Operation	Tools & Equipment	Minimum basic requirement	Low	100
Maintenance	Tools & Equipment	Minimum basic requirement	Low	100
Operation	Contingency & Safety Plan	Below Minimum requirement	Medium/High	75
Maintenance	Contingency & Safety Plan	Below Minimum requirement	Medium/High	75

Water Services Development Plan

4.3 Information				
4.3.2 Existing Surface Water Infrastructure				
Operation	Manuals Available	Below Minimum requirement	Medium/High	75
Maintenance	Manuals Available	Below Minimum requirement	Medium/High	75
Operation	Asset Register	Minimum basic requirement	Medium/High	100
Maintenance	Asset Register	Minimum basic requirement	Medium/High	100
Operation	As-Built info.	Minimum basic requirement	Critical	100
Maintenance	As-Built info.	Minimum basic requirement	Critical	100
Operation	Tools & Equipment	Minimum basic requirement	Low	100
Maintenance	Tools & Equipment	Minimum basic requirement	Low	100
Operation	Contingency & Safety Plan	Below Minimum requirement	Medium/High	75
Maintenance	Contingency & Safety Plan	Below Minimum requirement	Medium/High	75
4.3 Information				
4.3.3 Existing Water Treatment Works Infrastructure				
Operation	Manuals Available	Minimum basic requirement	Low	100
Maintenance	Manuals Available	Minimum basic requirement	Low	100
Operation	Asset Register	Above minimum requirement	Low	100
Maintenance	Asset Register	Above minimum requirement	Low	100
Operation	As-Built info.	Minimum basic requirement	Critical	100
Maintenance	As-Built info.	Minimum basic requirement	Critical	100
Operation	Tools & Equipment	Minimum basic requirement	Low	100
Maintenance	Tools & Equipment	Minimum basic requirement	Low	100
Operation	Contingency & Safety Plan	Above minimum requirement	Low	100
Maintenance	Contingency & Safety Plan	Above minimum requirement	Low	100
4.3 Information				
4.3.4 Existing Waste Water Treatment Works Infrastructure				
Operation	Manuals Available	Minimum basic requirement	Low	100
Maintenance	Manuals Available	Minimum basic requirement	Low	100
Operation	Asset Register	Above minimum requirement	Low	100
Maintenance	Asset Register	Above minimum requirement	Low	100
Operation	As-Built info.	Minimum basic requirement	Critical	100

Water Services Development Plan

Maintenance	As-Built info.	Minimum basic requirement	Critical	100
Operation	Tools & Equipment	Minimum basic requirement	Low	100
Maintenance	Tools & Equipment	Minimum basic requirement	Low	100
Operation	Contingency & Safety Plan	Above minimum requirement	Low	100
Maintenance	Contingency & Safety Plan	Above minimum requirement	Low	100
4.3 Information				
4.3.5 Existing Pump Station Infrastructure				
Operation	Manuals Available	Below Minimum requirement	Medium/High	75
Maintenance	Manuals Available	Below Minimum requirement	Medium/High	75
Operation	Asset Register	Above minimum requirement	Medium/High	100
Maintenance	Asset Register	Above minimum requirement	Medium/High	100
Operation	As-Built info.	Minimum basic requirement	Critical	100
Maintenance	As-Built info.	Minimum basic requirement	Critical	100
Operation	Tools & Equipment	Minimum basic requirement	Low	100
Maintenance	Tools & Equipment	Minimum basic requirement	Low	100
Operation	Contingency & Safety Plan	Below Minimum requirement	Medium/High	75
Maintenance	Contingency & Safety Plan	Below Minimum requirement	Medium/High	75
4.3 Information				
4.3.6 Existing Bulk Pipeline Infrastructure				
Operation	Manuals Available	Below Minimum requirement	Medium/High	75
Maintenance	Manuals Available	Below Minimum requirement	Medium/High	75
Operation	Asset Register	Above minimum requirement	Low	100
Maintenance	Asset Register	Above minimum requirement	Low	100
Operation	As-Built info.	Minimum basic requirement	Critical	100
Maintenance	As-Built info.	Minimum basic requirement	Critical	100
Operation	Tools & Equipment	Minimum basic requirement	Low	100
Maintenance	Tools & Equipment	Minimum basic requirement	Low	100
Operation	Contingency & Safety Plan	Below Minimum requirement	Medium/High	75
Maintenance	Contingency & Safety Plan	Below Minimum requirement	Medium/High	75
4.3 Information				
4.3.7 Existing Tower & Reservoir Infrastructure				

Water Services Development Plan

Operation	Manuals Available	Below Minimum requirement	Medium/High	75
Maintenance	Manuals Available	Below Minimum requirement	Medium/High	75
Operation	Asset Register	Above minimum requirement	Low	100
Maintenance	Asset Register	Above minimum requirement	Low	100
Operation	As-Built info.	Minimum basic requirement	Critical	100
Maintenance	As-Built info.	Minimum basic requirement	Critical	100
Operation	Tools & Equipment	Minimum basic requirement	Low	100
Maintenance	Tools & Equipment	Minimum basic requirement	Low	100
Operation	Contingency & Safety Plan	Below Minimum requirement	Medium/High	75
Maintenance	Contingency & Safety Plan	Below Minimum requirement	Medium/High	75
4.3 Information				
4.3.8 Existing Reticulation Infrastructure				
Operation	Manuals Available	Below Minimum requirement	Medium/High	75
Maintenance	Manuals Available	Below Minimum requirement	Medium/High	75
Operation	Asset Register	Above minimum requirement	Low	100
Maintenance	Asset Register	Above minimum requirement	Low	100
Operation	As-Built info.	Minimum basic requirement	Medium/High	100
Maintenance	As-Built info.	Minimum basic requirement	Medium/High	100
Operation	Tools & Equipment	Minimum basic requirement	Low	100
Maintenance	Tools & Equipment	Minimum basic requirement	Low	100
Operation	Contingency & Safety Plan	Below Minimum requirement	Medium/High	75
Maintenance	Contingency & Safety Plan	Below Minimum requirement	Medium/High	75
4.4 Activity Control & Management				
4.4.1 Existing Groundwater Infrastructure				
Operation	Procedures	Below Minimum requirement	Medium/High	75
Maintenance	Procedures	Below Minimum requirement	Medium/High	75
Operation	Record keeping in place	Below Minimum requirement	Medium/High	75
Maintenance	Record keeping in place	Below Minimum requirement	Medium/High	75
Operation	Quality Control procedures established	Below Minimum requirement	Critical	65
Maintenance	Quality Control procedures established	Below Minimum requirement	Critical	65
Operation	Risk Management	Below Minimum requirement	Critical	65

Water Services Development Plan

Maintenance	Risk Management	Below Minimum requirement	Critical	65
Operation	Reporting (data analysis & report generation est.)	Below Minimum requirement	Medium/High	75
Maintenance	Reporting (data analysis & report generation est.)	Below Minimum requirement	Medium/High	75
4.4 Activity Control & Management				
4.4.2 Existing Surface water infrastructure				
Operation	Procedures	Below Minimum requirement	Medium/High	75
Maintenance	Procedures	Below Minimum requirement	Medium/High	75
Operation	Record keeping in place	Below Minimum requirement	Medium/High	75
Maintenance	Record keeping in place	Below Minimum requirement	Medium/High	75
Operation	Quality Control procedures established	Below Minimum requirement	Critical	65
Maintenance	Quality Control procedures established	Below Minimum requirement	Critical	65
Operation	Risk Management	Below Minimum requirement	Critical	65
Maintenance	Risk Management	Below Minimum requirement	Critical	65
Operation	Reporting (data analysis & report generation est.)	Below Minimum requirement	Medium/High	75
Maintenance	Reporting (data analysis & report generation est.)	Below Minimum requirement	Medium/High	75
4.4 Activity Control & Management				
4.4.3 Existing Water Treatment Works infrastructure				
Operation	Procedures	Minimum basic requirement	Medium/High	100
Maintenance	Procedures	Minimum basic requirement	Medium/High	100
Operation	Record keeping in place	Minimum basic requirement	Low	100
Maintenance	Record keeping in place	Minimum basic requirement	Low	100
Operation	Quality Control procedures established	Minimum basic requirement	Low	100
Maintenance	Quality Control procedures established	Minimum basic requirement	Low	100
Operation	Risk Management	Minimum basic requirement	Low	100
Maintenance	Risk Management	Minimum basic requirement	Low	100
Operation	Reporting (data analysis & report generation est.)	Minimum basic requirement	Low	100
Maintenance	Reporting (data analysis & report generation est.)	Minimum basic requirement	Low	100
4.4 Activity Control & Management				
4.4.4 Existing Waste Water Treatment Works infrastructure				
Operation	Procedures	Minimum basic requirement	Medium/High	100
Maintenance	Procedures	Minimum basic requirement	Medium/High	100

Water Services Development Plan

Operation	Record keeping in place	Minimum basic requirement	Low	100
Maintenance	Record keeping in place	Minimum basic requirement	Low	100
Operation	Quality Control procedures established	Minimum basic requirement	Low	100
Maintenance	Quality Control procedures established	Minimum basic requirement	Low	100
Operation	Risk Management	Minimum basic requirement	Low	100
Maintenance	Risk Management	Minimum basic requirement	Low	100
Operation	Reporting (data analysis & report generation est.)	Minimum basic requirement	Low	100
Maintenance	Reporting (data analysis & report generation est.)	Minimum basic requirement	Low	100
4.4 Activity Control & Management				
4.4.5 Existing Pump Station infrastructure				
Operation	Procedures	Below Minimum requirement	Medium/High	75
Maintenance	Procedures	Below Minimum requirement	Medium/High	75
Operation	Record keeping in place	Below Minimum requirement	Medium/High	75
Maintenance	Record keeping in place	Below Minimum requirement	Medium/High	75
Operation	Quality Control procedures established	Below Minimum requirement	Critical	65
Maintenance	Quality Control procedures established	Below Minimum requirement	Critical	65
Operation	Risk Management	Below Minimum requirement	Medium/High	75
Maintenance	Risk Management	Below Minimum requirement	Medium/High	75
Operation	Reporting (data analysis & report generation est.)	Below Minimum requirement	Medium/High	75
Maintenance	Reporting (data analysis & report generation est.)	Below Minimum requirement	Medium/High	75
4.4 Activity Control & Management				
4.4.6 Existing Bulk Pipeline infrastructure				
Operation	Procedures	Below Minimum requirement	Medium/High	75
Maintenance	Procedures	Below Minimum requirement	Medium/High	75
Operation	Record keeping in place	Below Minimum requirement	Medium/High	75
Maintenance	Record keeping in place	Below Minimum requirement	Medium/High	75
Operation	Quality Control procedures established	Below Minimum requirement	Critical	65
Maintenance	Quality Control procedures established	Below Minimum requirement	Critical	65
Operation	Risk Management	Below Minimum requirement	Medium/High	75
Maintenance	Risk Management	Below Minimum requirement	Medium/High	75
Operation	Reporting (data analysis & report generation est.)	Below Minimum requirement	Medium/High	75

Water Services Development Plan

Maintenance	Reporting (data analysis & report generation est.)	Below Minimum requirement	Medium/High	75
4.4 Activity Control & Management				
4.4.7 Existing Tower & Reservoir infrastructure				
Operation	Procedures	Below Minimum requirement	Medium/High	75
Maintenance	Procedures	Below Minimum requirement	Medium/High	75
Operation	Record keeping in place	Below Minimum requirement	Medium/High	75
Maintenance	Record keeping in place	Below Minimum requirement	Medium/High	75
Operation	Quality Control procedures established	Below Minimum requirement	Critical	65
Maintenance	Quality Control procedures established	Below Minimum requirement	Critical	65
Operation	Risk Management	Below Minimum requirement	Medium/High	75
Maintenance	Risk Management	Below Minimum requirement	Medium/High	75
Operation	Reporting (data analysis & report generation est.)	Below Minimum requirement	Medium/High	75
Maintenance	Reporting (data analysis & report generation est.)	Below Minimum requirement	Medium/High	75
4.4 Activity Control & Management				
4.4.8 Existing Reticulation infrastructure				
Operation	Procedures	Below Minimum requirement	Medium/High	75
Maintenance	Procedures	Below Minimum requirement	Medium/High	75
Operation	Record keeping in place	Below Minimum requirement	Medium/High	75
Maintenance	Record keeping in place	Below Minimum requirement	Medium/High	75
Operation	Quality Control procedures established	Below Minimum requirement	Critical	65
Maintenance	Quality Control procedures established	Below Minimum requirement	Critical	65
Operation	Risk Management	Below Minimum requirement	Medium/High	75
Maintenance	Risk Management	Below Minimum requirement	Medium/High	75
Operation	Reporting (data analysis & report generation est.)	Below Minimum requirement	Medium/High	75
Maintenance	Reporting (data analysis & report generation est.)	Below Minimum requirement	Medium/High	75

Water Services Development Plan

Topic 4 Master Plan		
Section	Is there a master plan to address this problem?	Does this plan address the plan address this problem 100%?
4.1 Operation & Maintenance Plan	Yes	Yes
4.1.1 Is There an Operation and Maintenance Plan?	Yes	Yes
4.2 Resources	Yes	Yes
4.3 Information	Yes	Yes
4.4 Activity Control & Management	Yes	Yes

Strategic Interpretation

Detail situation assessments per Topic element

4.1 Operation & Maintenance Plan

Interpret Situation Assessment:	There is currently an operation and maintenance plan in place. The plan should however be improved and implemented. The plan is currently not implemented as it should, mainly due to budget constraints.
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4.1.1 Is There an Operation and Maintenance Plan?

Interpret Situation Assessment:	There is currently an operation and maintenance plan in place. The plan should however be improved and implemented. The plan is currently not implemented as it should, mainly due to budget constraints.
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4.2 Resources

Interpret Situation Assessment:	The main concern in terms of resources to the WSA in terms of all its infrastructure is budget. The WSA doesn't have enough budget to operate and maintain its infrastructure. After budget the WSA has issues regarding the amount of staff and spare parts, which is again linked to budget.
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Water Services Development Plan

4.3 Information

Interpret Situation Assessment:	According to the WSA there are very little to no AS-built information available regarding the infrastructure. The relevant as-builts should be collected from the consultants and surveys should be completed where necessary. There is an asset register in place but should also be updated. Several of the schemes infrastructure is not included in the current asset register. There is sufficient information available regarding the tools and equipment and there are manuals and safety plans
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4.4 Activity Control & Management

Interpret Situation Assessment:	The WSA shows very little compliance to the activity control and management of its infrastructure. The major area of concern is the quality control procedures which are non-existent.
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Business Element Report Items	Compliance Score	Intervention Required	%	Solution description as identified by Master Plan	%	Is there an Existing project addressing this problem?	%	Does this current listed project address the problem totally?	%	Project Approved by Council as part of WSDP Database?	%	Approved by council, in project database and part of 5 yr IDP cycle projects	%	Project listed in 3 yr MTEF - cycle	%	Total Points	Current Demand Overall Scoring %
4.1 Operation & Maintenance Plan	70	Yes	100	The WSA to develop and implement an improved Operation and Maintenance Plan	100	Yes	100	Partial	50	No	0	No	0	No	0	350	50
4.1.1 Is There an Operation and Maintenance Plan?	81.25	Yes	100	The WSA to develop and implement an improved Operation and Maintenance Plan	100	Yes	100	Partial	50	No	0	No	0	No	0	350	50
4.2 Resources	92.5	Yes	100	Develop and implement an operation and maintenance plan for the effective operation and maintenance of assets. Improved budgets should be allocated to improve O&M.	100	Yes	100	Partial	50	No	0	No	0	No	0	350	50
4.3 Information	79.25	Yes	100	Develop and implement an operation and maintenance plan for the effective operation and maintenance of assets. Collect all as built from consultants regarding infrastructure and survey where required. The asset register needs to be updated and all the missing infrastructure should be included.	100	Yes	100	Partial	50	No	0	No	0	No	0	350	50
4.4 Activity Control & Management	0	Yes	100	Develop systems and processes for effective activity control and management (activity control and management)	100	Yes	100	Partial	50	No	0	No	0	No	0	350	50

Demand Overall Scoring Average

50

Water Services Development Plan

WSDP FY2023: Strategies and Objectives

Harry Gwala

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
Water Services O&M									
1	Develop and implement an improved operation and maintenance plan for the effective operation and maintenance of assets. Improved budgets should be allocated to improve O&M.	Develop and implement an improved operation and maintenance plan for the effective operation and maintenance of assets. Improved budgets should be allocated to improve O&M.	"There is currently am operation and maintenance plan in place. The plan should however be improved and implemented. The plan is currently not implemented as it should, mainly due to budget constraints."		Present to council need to develop and implement an improved operation and maintenance plan to provide funding and resources	Develop and implement an improved operation and maintenance plan	Update WSDP	Update WSDP	Update WSDP
2	Proper physical survey needs to be conducted and as-built drawings need to be created as very little information is available regarding physical information which limits the capacity of operational staff	Proper physical survey needs to be conducted and as-built drawings need to be created as very little information is available regarding physical information which limits the capacity of operational staff	According to the WSA there is very little to no AS-built information available regarding the sewer and water infrastructure. The relevant as-builts should be collected from the consultants and physical surveys should be completed where necessary.		Present to council need to survey infrastructure and collect as-builts to provide funding and resources	Survey infrastructure and collect as-builts and update WSDP	Survey infrastructure and collect as-builts and update WSDP	Survey infrastructure and collect as-builts and update WSDP	Survey infrastructure and collect as-builts and update WSDP

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
3	The asset register needs to be updated and all the infrastructure of existing schemes should be included.	The asset register needs to be updated and all the infrastructure of existing schemes should be included.	There is an asset register in place but should also be updated. several of the schemes infrastructure is not included in the current asset register.		Present to council need to update asset register to provide funding and resources	Update asset register and update WSDP	Update asset register and update WSDP	Update asset register and update WSDP	Update asset register and update WSDP
4	Develop systems and processes for effective activity control and management - especially in terms of risk and quality	Develop systems and processes for effective activity control and management - especially in terms of risk and quality	The WSA shows very little compliance to the activity control and management of its infrastructure. The major area of concern is the quality control procedures which are non existent.		Present to council need to develop systems and processes for effective activity control and management to provide funding and resources	Develop systems and processes for effective activity control and management	Update WSDP	Update WSDP	Update WSDP
5	Budget to be improved regarding operation and maintenance as currently not enough budget	Budget to be improved regarding operation and maintenance as currently not enough budget	The main concern in terms of resources to the WSA in terms of all its infrastructure is budget. The WSA doesnt have enough budget to operate and maintain its infrastructure.		Present to council need for improved O&M budget to provide funding and resources	Improve O&M with increased budget and update WSDP	Improve O&M with increased budget and update WSDP	Improve O&M with increased budget and update WSDP	Improve O&M with increased budget and update WSDP
6	More staff and spare parts need to be allocated to WWTW and WTW plants and pumpstations for optimal operation	More staff and spare parts need to be allocated to WWTW and WTW plants and pumpstations for optimal operation	After budget the WSA has issues regarding the amount if staff and spare parts, which is again linked to budget.		Present to council need for more staff and spare parts to provide funding and resources	Acquire more staff and spare parts and update WSDP	Acquire more staff and spare parts and update WSDP	Acquire more staff and spare parts and update WSDP	Acquire more staff and spare parts and update WSDP

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
7	Improved training and capacity building for municipal staff	No of staff trained, qualifications and performance of staff improves	Some limited, occasional training takes place		Increased no of training courses	Increased no of training courses	Increased no of training courses	Increased no of training courses	Increased no of training courses
8	Proactive scheduled maintenance takes place on a regular basis	More scheduled, proactive maintenance and fewer infrastructure breakdowns	Limited regular maintenance takes place - mainly just reactive repairs and 'firefighting'.		Develop and implement schedule of proactive, scheduled maintenance	Expand implementation of schedule of proactive, scheduled maintenance	Expand implementation of schedule of proactive, scheduled maintenance	Expand implementation of schedule of proactive, scheduled maintenance	Expand implementation of schedule of proactive, scheduled maintenance

Water Services Development Plan

Topic 5: Conservation & Demand Management

Topic 5.1: Water Resource Management

Demand Info

Question

Resource Available

Assessment Score

5.1 Reducing unaccounted water and water inefficiencies

5.1.1 Night flow metering

Partial

50

5.1.2 Day flow metering

Partial

50

5.1.3 Reticulation leaks

Partial

60

5.1.4 Illegal connections

Partial

50

5.1.5 Un-metered connections

Yes

75

5.2 Leak and meter repair programmes. Consumer units targeted by:

Water Services Development Plan

5.2.1 Leak repair assistance programme	Yes	60
5.2.2 Retro-fitting of water inefficient toilets	No	0
5.2.3 Meter repair programme	Yes	60
5.3 Consumer/end-use demand management: Public Information & Education Programmes		
5.3.1 Schools targeted by education programmes	Yes	100
5.3.2 Consumers targeted by public information programmes	Yes	75

Demand Info Question 8		
Question	Number of Settlements	Assessment Score
Conjunctive use of surface - and groundwater		
Artificial Recharge	6	100
Ground Water	328	100
Rain Water Harvesting	1	100

Water Services Development Plan

Surface Water	70	100
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Demand Info Question 9		
Question	Yes/No	Assessment Score

5.5 Working for Water		
Is there a Working for Water Programme in place:	No	0

Demand Info Question 10	
Project Name	Assessment Score

Provide List of Projects	
Alien vegetation removal project	100

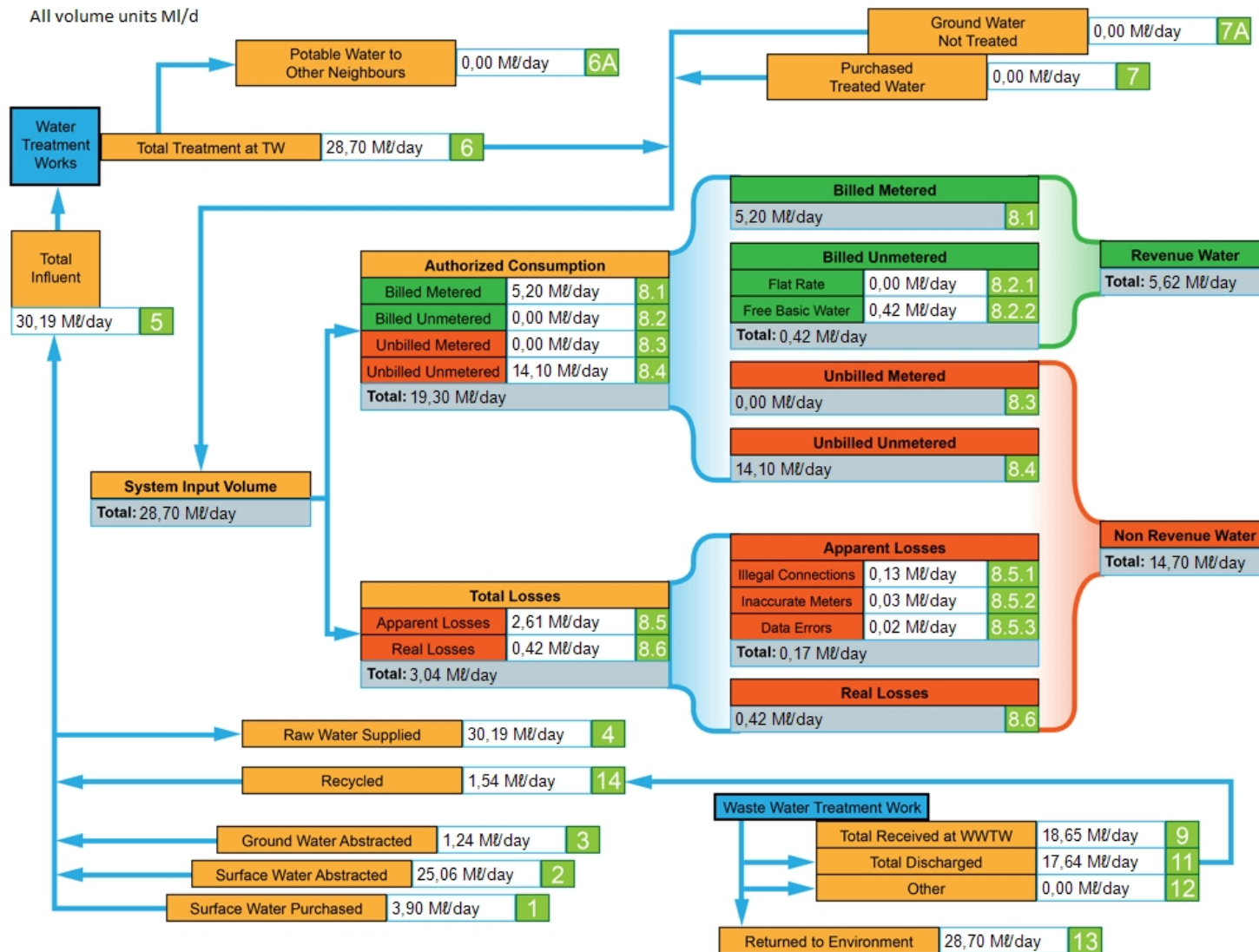
Water Services Development Plan

Alien Vegetation Removal Project	100

Topic 5.1 Master Plan		
Section	Is there a master plan to address this problem?	Does this plan address the plan address this problem 100%?
5.1 Reducing unaccounted water and water inefficiencies	Yes	No
5.2 Leak and meter repair programmes.	Yes	Yes
5.3 Consumer/end-use demand management: Public Information & Education Programmes	Yes	Yes
5.4: Conjunctive use of surface - and groundwater	Yes	Yes
5.5 Working for Water	Yes	Yes

Topic 5.2: Water Balance

Water Services Development Plan



Water Services Development Plan

Questions	Assessment Score
5.2.1 Amount of surface water purchased.	100
5.2.2 Amount of surface water abstracted.	100
5.2.3 Amount of ground water abstracted.	100
5.2.4 Amount of raw water supplied.	100
5.2.5 Total influent of water to water treatment plants.	100
5.2.6 Total water treated at water treatment plants.	100
5.2.6A Potable water sent to neighbours.	100
5.2.7 Total amount of treated water purchased.	100
5.2.7A Amount of untreated water pumped directly into reticulation system.	100
5.2.8.1 Amount of billed and metered water consumed.	100
5.2.8.2 Amount of billed, but not metered, water consumed.	100
5.2.8.3 Amount of unbilled metered water consumed.	100
5.2.8.4 Amount of unbilled and unmetered water consumed.	100
5.2.8.5 Apparent loss of water.	100
5.2.8.6 Real loss of water.	100
5.2.8.2.1 Water is billed for based on a flat rate tariff (i.e. not based on a meter reading).	100
5.2.8.2.2 Free basic water used through unbilled unmetered stand pipes or yard connections.	100
5.2.8.5.1 Water used through illegal connections.	100
5.2.8.5.2 Water used but not billed for because of inaccurate meters.	100
5.2.8.5.3 Water used but not billed for because of data transfer errors, low estimated readings or any administrative errors.	100
5.2.9 Total amount of water received at waste water treatment works.	100
5.2.11 Total amount of water discharged from waste water treatment works.	100
5.2.12 Other	100
5.2.13 Amount of water returned to the environment.	100
5.2.14 Amount of recycled water supplied.	100

Water Services Development Plan

Topic 5.2 Master Plan

Topic 5.2 Master Plan		
Section	Is there a master plan that addresses this problem?	Does this plan address this problem 100% ?
5.2 Water Balance	Yes	Yes

Strategic Interpretation

Detail situation assessments per Topic element

5.1 Reducing unaccounted water and water inefficiencies

Interpret Situation Assessment:	The WSA stated that there is only partial metering taking place in the WSA, mainly in urban areas where there are proper house or yard connection. The rural schemes have no metering, which is a big issue especially in terms of the water balance. There are programmes to improve leaks and un-metered connections, but are not sufficient.
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5.2 Leak and meter repair programmes.

Interpret Situation Assessment:	The WSA stated that there are currently active leak and meter repair programmes in place. There is however a need for retrofitting inefficient toilets. There are also several illegal connection (yard connection from communal standpipe) which increases leaking.
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5.3 Consumer/end-use demand management: Public Information & Education Programmes

Water Services Development Plan

Interpret Situation Assessment:	There are currently programmes in place for educating schools and communities regarding end use/consumer demand management. The WSA states that these are adequate but more awareness and education is necessary.
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5.4: Conjunctive use of surface - and groundwater

Interpret Situation Assessment:	No information was available regarding artificial recharge and only information on one scheme was available regarding rainwater harvesting. There is thus a need to investigate artificial recharge and rainwater harvesting in the WSA.
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5.5 Working for Water

Interpret Situation Assessment:	Currently there are no programs in place to remove alien vegetation or to reduce alien vegetation. Alien vegetation are categoristic of high water use and should thus be removed. There has been programs in the past but none are currently in place.
---------------------------------	---

5.2 Water Balance

Interpret Situation Assessment:	The monthly water balances for the local municipalities and district municipality were provided for the 2021/2022 financial year. The data was used to determine the NRW and other water balance components. However, the data did not include information on the volume of ground water and surface water. Upon analysing the water balance spreadsheet, it was apparent that the method of compiling the water balance needs improvement. The water balance also needs to be compiled at a scheme level.
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Business Element Report Items	Compliance Score	Intervention Required	%	Solution description as identified by Master Plan	%	Is there an Existing project addressing this problem?	%	Does this current listed project address the problem totally?	%	Project Approved by Council as part of WSDP Database?	%	Approved by council, in project database and part of 5 yr IDP cycle projects	%	Project listed in 3 yr MTEF - cycle	%	Total Points	Current Demand Overall Scoring %
5.1 Reducing unaccounted water and water inefficiencies	58	Yes	100	WC&DM Programmes and interventions (Reducing unaccounted water and water inefficiencies) to be implemented to ensure compliance by the WSA.	100	Yes	100	Partial	50	Yes	100	Yes	100	Yes	100	650	92.86

Water Services Development Plan

5.2 Leak and meter repair programmes.	100	Yes	100	WC&DM Programmes and interventions (Leak and meter repair programmes.) to be implemented to ensure compliance by the WSA.	100	Yes	100	Partial	50	Yes	100	Yes	100	Yes	100	650	92.86
5.3 Consumer/end-use demand management: Public Information & Education Programmes	0	Yes	100	WC&DM Programmes and interventions (more public awareness and education programmes) to be implemented to ensure compliance by the WSA.	100	Yes	100	Partial	50	Yes	100	Yes	100	Yes	100	650	92.86
5.4: Conjunctive use of surface - and groundwater	100	Yes	100	WC&DM Programmes and interventions to be implemented (artificial recharge and rainwater harvesting investigation and monitoring) to ensure compliance by the WSA.	100	Yes	100	Partial	50	Yes	100	Yes	100	Yes	100	650	92.86
5.5 Working for Water	0	Yes	100	WC&DM Programmes and interventions (alien vegetation removing programs) to be implemented to ensure compliance by the WSA.	100	Yes	100	Partial	50	Yes	100	No	0	No	0	450	64.29
5.2 Water Balance	0	Yes	100	Implement strategies as contained in NRW report compiled by JOAT. Especially regarding metering of sources and consumers (metering of standpipes etc.)	100	Yes	100	Partial	50	Yes	100	Yes	100	Yes	100	650	92.86
Demand Overall Scoring Average																	88.1

WSDP FY2023: Strategies and Objectives

Harry Gwala

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
Water Resource Management									
1	WC&DM Programmes and interventions to be implemented to ensure compliance by the WSA.	WC&DM Programmes and interventions to be implemented to ensure compliance by the WSA and to reduce water wastage, and levels of non revenue water	Some WCDM measures being implemented - but more measures are required as water wastage is high.		Present to council need for proper WC&DM programmes and interventions to provide funding and resources	Develop and implement WC&DM Programmes and interventions and update WSDP	Develop and implement WC&DM Programmes and interventions and update WSDP	Develop and implement WC&DM Programmes and interventions and update WSDP	Develop and implement WC&DM Programmes and interventions and update WSDP

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
1	WC&DM Programmes and interventions to be implemented to ensure compliance by the WSA.	WC&DM Programmes and interventions to be implemented to ensure compliance by the WSA and to reduce water wastage, and levels of non revenue water	Some WCDM measures being implemented - but more measures are required as water wastage is high.		Present to council need for proper WC&DM programmes and interventions to provide funding and resources	Develop and implement WC&DM Programmes and interventions and update WSDP	Develop and implement WC&DM Programmes and interventions and update WSDP	Develop and implement WC&DM Programmes and interventions and update WSDP	Develop and implement WC&DM Programmes and interventions and update WSDP
2	Reduction of unaccounted water and water inefficiencies	Reducing unaccounted water and water inefficiencies	Limited measures being currently implemented to effectively reduce water losses and levels of unaccounted for water.		Present to council need for proper WC&DM programmes and interventions to provide funding and resources	Present to council need for proper WC&DM programmes and interventions to provide funding and resources	Present to council need for proper WC&DM programmes and interventions to provide funding and resources	Present to council need for proper WC&DM programmes and interventions to provide funding and resources	Present to council need for proper WC&DM programmes and interventions to provide funding and resources
2	Reduction of unaccounted water and water inefficiencies	Reducing unaccounted water and water inefficiencies	Limited measures being currently implemented to effectively reduce water losses and levels of unaccounted for water.		Present to council need for proper WC&DM programmes and interventions to provide funding and resources	Present to council need for proper WC&DM programmes and interventions to provide funding and resources	Present to council need for proper WC&DM programmes and interventions to provide funding and resources	Present to council need for proper WC&DM programmes and interventions to provide funding and resources	Present to council need for proper WC&DM programmes and interventions to provide funding and resources

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
3	Implementing Leak and meter repair programmes	Reduced leaks and faulty meters	The WSA stated that there are currently active leak and meter repair programmes in place. There is however a need for retrofitting inefficient toilets. There are also several illegal connection (yard connection from communal standpipe) which increases leaking.		Present to council need for proper WC&DM programmes and interventions to provide funding and resources	Implement Leak and meter repair programmes	Implement Leak and meter repair programmes	Implement Leak and meter repair programmes	Implement Leak and meter repair programmes
4	Raising public awareness through education programmes	More public awareness and education programmes and improved public awareness of water, sanitation, health and hygiene issues	There are currently programmes in place for educating schools and communities regarding end use/consumer demand management. The WSA states that these are adequate but more awareness and education is necessary.		Present to council need for proper WC&DM programmes and interventions to provide funding and resources	Implement public awareness campaigns	Implement public awareness campaigns	Implement public awareness campaigns	Implement public awareness campaigns
5	Promoting artificial recharge and rainwater harvesting	Improved levels of artificial recharge and rainwater harvesting	Currently no programmes in place. Rainwater harvesting is left to individual consumers		Develop strategy, plan and apply for funding	Implement strategy for artificial recharge of groundwater resources and rainwater harvesting to conserve water resources	Implement strategy for artificial recharge of groundwater resources and rainwater harvesting to conserve water resources	Implement strategy for artificial recharge of groundwater resources and rainwater harvesting to conserve water resources	Implement strategy for artificial recharge of groundwater resources and rainwater harvesting to conserve water resources

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
6	Removal and eradication of Alien vegetation	Reduction of alien vegetation and protection & conservation of water catchments	Currently there are no programmes in place to remove alien vegetation or to reduce alien vegetation. The presence of alien vegetation results in high water use and should thus be removed. There have been programmes in the past; but none are currently in place.		Motivate and submit proposal for funding	Implement strategy to remove and eradicate alien vegetation	Implement strategy to remove and eradicate alien vegetation	Implement strategy to remove and eradicate alien vegetation	Implement strategy to remove and eradicate alien vegetation
7	Improved meter reading and consumption data collection	Regularity and accuracy of meter reading and data collection	Meters are read but not always consistently or accurately.		Improved meter reading of existing meters and installation / repair of meters.	Improved meter reading of existing meters and installation / repair of meters.	Improved meter reading of existing meters and installation / repair of meters.	Improved meter reading of existing meters and installation / repair of meters.	Improved meter reading of existing meters and installation / repair of meters.

WSDP FY2023: Strategies and Objectives

Harry Gwala

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
Water Balance									

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
1	Implement strategies as contained in NRW report compiled by JOAT. Especially regarding metering of sources and consumers (metering of standpipes etc.)	Implement strategies as contained in NRW report compiled by JOAT. Especially regarding metering of sources and consumers (metering of standpipes etc.)	Limited to no information was available regarding the water consumption/metering and water resources (purchased and ground and surface water sources - abstraction volumes). This made the accuracy of the water balance very low and several assumptions were made. The current NRW due to inadequate metering needs to be addressed.		Present to council need for proper metering to provide funding and resources	Improve metering of sources, reservoirs and consumers - Update WSDP	Improve metering of sources, reservoirs and consumers - Update WSDP	Improve metering of sources, reservoirs and consumers - Update WSDP	Improve metering of sources, reservoirs and consumers - Update WSDP

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
1	Implement strategies as contained in NRW report compiled by JOAT. Especially regarding metering of sources and consumers (metering of standpipes etc.)	Implement strategies as contained in NRW report compiled by JOAT. Especially regarding metering of sources and consumers (metering of standpipes etc.)	Limited to no information was available regarding the water consumption/metering and water resources (purchased and ground and surface water sources - abstraction volumes). This made the accuracy of the water balance very low and several assumptions were made. The current NRW due to inadequate metering needs to be addressed.		Present to council need for proper metering to provide funding and resources	Improve metering of sources, reservoirs and consumers - Update WSDP	Improve metering of sources, reservoirs and consumers - Update WSDP	Improve metering of sources, reservoirs and consumers - Update WSDP	Improve metering of sources, reservoirs and consumers - Update WSDP
2	The WSA to develop and implement the water monitoring plan.	Develop and implement the water monitoring plan.	The water monitoring plan is not in place with limited resources to manage these functions effectively.		Develop and implement the water monitoring plan.	Develop and implement the water monitoring plan.	Update WSDP	Update WSDP	Update WSDP
3	Comprehensive network of water meters	No of operational meters installed	Some households and areas are metered but not all		Increased no of effective meters	Increased no of effective meters	Increased no of effective meters	Increased no of effective meters	Increased no of effective meters

Water Services Development Plan

Topic 6: Water Resources

* Current Water Sources	* Number of sources	* Current abstraction (Mm3/A)	Components abstraction registered	Components abstraction recorded	* Licensed abstraction (Mm3/A)	* Community water supply		Assement Score
						Rural	Urban	
Boreholes	1988	0	1988	1988	0	306	22	80
Surface Water Abstract	249	0	249	249	0	39	31	100
External Sources (Bulk Purchase)	2	98			90			100
Water returned to source	17	2.73			2.73			100
Conjunctive Use								100

Additional Source Available	* Number of sources	Potential Volume	* Licensed abstraction (Mm3/A)	Assessment Score
Ground Water	113		4.57	100

Water Services Development Plan

Surface Water	17		9.1	100
External Sources (Bulk Purchase)	2			100

Question	In Place	Assessment Score
6.2 Monitoring		
Is there a monitoring plan in place?	Yes	100

Question	General Assessment	Status Quo	Assessment Score
6.2 Monitoring			
6.2.1 % of water abstracted monitored: Surface water	98	No	98
6.2.2 % of water abstracted monitored: Ground water	40	No	40
6.2.4 Surface water levels (1: daily, 2: weekly, 3: monthly, 4: annually, 5: never)	4	No	100
6.2.5 Ground water levels (1: daily, 2: weekly, 3: monthly, 4: annually, 5: never)	5	No	0

Water Services Development Plan

6.2.6 Water quality for formal schemes? (1: daily, 2: weekly, 3: monthly, 4: annually, 5: never)	2	No	100
6.2.7 Water quality for rudimentary schemes? (1: daily, 2: weekly, 3: monthly, 4: annually, 5: never)	5	No	0
6.2.8 Borehole abstraction? (1: daily, 2: weekly, 3: monthly, 4: annually, 5: never)	5	No	100

Question	In Place	Assessment Score
6.3 Water Quality		
Is there a Water Safety Plan in Place?	Yes	100

Question	General Assessment	Status Quo	Assessment Score
6.3 Water Quality			
6.3.1 Reporting on quality of water taken from source: urban & rural	50	No	50
6.3.2 Quality of water returned to the resource: urban	98	No	98
6.3.3 Quality of water returned to the resource: rural	0	No	0

Water Services Development Plan

6.3.4 Is there a Pollution contingency measures plan in place?	0	No	0
6.3.5 Quality of water taken from source: urban - % monitored by WSA self?	98	No	98
6.3.6 Quality of water taken from source: rural - % monitored by WSA self?	0	No	0
6.3.7 Quality of water returned to the source: urban - % monitored by WSA self?	98	No	98
6.3.8 Quality of water returned to the source: rural - % monitored by WSA self?	0	No	0
6.3.9 Are these results available in electronic format? (Yes/no)	98	No	98
6.3.10 % Time (days) within SANS 241 standards per year	40	No	40

Question	B	AP	WTW	WP	SP	WL	SL	R	WWTW	Assessment Score
[section]										
6.4.1.1 The abstraction IS registered with DWS	0	184								70
6.4.1.2 The abstraction IS NOT registered with DWS	1988	65								0

Water Services Development Plan

6.4.2.1 The abstraction IS recorded	0	0								30
6.4.2.2 The abstraction IS NOT recorded	1988	249								70

Topic 6 Master Plan		
Section	Is there a master plan to address this problem?	Does this plan address the plan address this problem 100%?
6.1.1 Current Water Sources	Yes	No
6.2 Monitoring	Yes	No
6.3 Water Quality	Yes	No
6.4 Operation	Yes	No
6.1.2 Additional Sources Available	Yes	No

Strategic Interpretation

Detail situation assessments per Topic element

6.1.1 Current Water Sources

Interpret Situation Assessment:	Limited information was provided on the sources and additional sources available and their volumes and abstraction volumes
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6.2 Monitoring

Water Services Development Plan

Interpret Situation Assessment:	Information was provided regarding monitoring of sources by the technical staff of the WSA. Monitoring occurs either never or very rarely. No monitoring is done regarding the groundwater sources and only some of the more formal schemes surface water abstraction is monitored. A need for proper monitoring of the schemes and sources are required. The monitoring of sources are also vital for the water balance.
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6.3 Water Quality

Interpret Situation Assessment:	The WSA provided information on the water quality. According to the WSA, UW mainly conducts the quality monitoring of the sources (abstraction) and the water that is returned. The WSA does not itself monitoring water quality. There are no staff dedicated to water quality and monitoring in the WSA. There is a need to improve quality monitoring in the WSA.
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6.4 Operation

Interpret Situation Assessment:	Most of the abstraction points (surface and ground) are registered with the DWS, but in general they are not recorded. Proper asset management and monitoring of the abstraction points are required.
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6.1.2 Additional Sources Available

Interpret Situation Assessment:	Limited information was provided on the sources and additional sources available and their volumes and abstraction volumes. The UAP completed looked at current and additional sources. There is, however, a need to complete a WSA master plan to identify possible additional sources and assess the current infrastructure in more detail.
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Business Element Report Items	Compliance Score	Intervention Required	%	Solution description as identified by Master Plan	%	Is there an Existing project addressing this problem?	%	Does this current listed project address the problem totally?	%	Project Approved by Council as part of WSDP Database?	%	Approved by council, in project database and part of 5 yr IDP cycle projects	%	Project listed in 3 yr MTEF - cycle	%	Total Points	Current Demand Overall Scoring %
6.1.1 Current Water Sources	97.5	Yes	100	The available sources should be analysed in terms of their available abstraction volumes and existing abstraction volumes.	100	Yes	100	Partial	50	Yes	100	Yes	100	Yes	100	650	92.86
6.2 Monitoring	67.25	Yes	100	A proper source monitoring program needs to be put in place	100	No	0	No	0	No	0	No	0	No	0	200	28.57

Water Services Development Plan

6.3 Water Quality	52.91	Yes	100	A proper water quality and water monitoring program needs to be put in place	100	No	0	No	0	No	0	No	0	No	0	200	28.57
6.4 Operation	42.5	Yes	100	Proper asset management and recording/monitoring of all sources are required	100	Yes	100	Partial	50	No	0	No	0	No	0	350	50
6.1.2 Additional Sources Available	0	Yes	100	Complete a WSA masterplan to assess additional sources	100	Yes	100	Partial	50	Yes	100	Yes	100	Yes	100	650	92.86
Demand Overall Scoring Average																58.57	

WSDP FY2023: Strategies and Objectives

Harry Gwala

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
Water Resources									
1	The available sources should be analysed in terms of their available abstraction volumes and existing abstraction volumes.	All abstraction sources should be logged and monitored to determine the available abstraction volumes and the existing abstraction volumes. Proper yield analysis of sources is also required	Limited information was provided on the sources and additional sources available and their volumes and abstraction volumes.		Present to council need for proper source analysis to provide funding and resources	Analyse available and existing abstraction volumes and update asset register to include volumes	Update WSDP	Update WSDP	Update WSDP

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
1	The available sources should be analysed in terms of their available abstraction volumes and existing abstraction volumes.	All abstraction sources should be logged and monitored to determine the available abstraction volumes and the existing abstraction volumes. Proper yield analysis of sources is also required	Limited information was provided on the sources and additional sources available and their volumes and abstraction volumes.		Present to council need for proper source analysis to provide funding and resources	Analyse available and existing abstraction volumes and update asset register to include volumes	Update WSDP	Update WSDP	Update WSDP
2	A proper source monitoring program needs to be put in place - monitoring and metering of both ground and surface abstraction is required	A proper source monitoring program needs to be put in place - monitoring and metering of both ground and surface abstraction is required	Information was provided regarding monitoring of sources by the technical staff of the WSA. Monitoring occurs either never or very rarely. No monitoring is done regarding the groundwater sources and only some of the more formal schemes surface water abstraction is monitored. A need for proper monitoring of the schemes and sources are required. The monitoring of sources are also vital for the water balance.		Present to council need for proper source monitoring to provide funding and resources	Implement and develop source monitoring	Update WSDP	Update WSDP	Update WSDP

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
3	A proper water quality and water monitoring program needs to be put in place - water and wastewater	A proper water quality and water monitoring program needs to be put in place - water and wastewater	The WSA provided information on the water quality. According to the WSA, UW mainly conducts the quality monitoring of the sources (abstraction) and the water that is returned. The WSA does not itself monitor water quality. There are no staff dedicated to water quality and monitoring in the WSA. There is a need to improve quality monitoring in the WSA.		Present to council need for proper water and wastewater quality monitoring program to provide funding and resources	Develop and implement water and wastewater quality monitoring program	Update WSDP	Update WSDP	Update WSDP
4	Register and record all abstractions with DWS - licensing all necessary abstractions	Register and record all abstractions with DWS - licensing all necessary abstractions	Most of the abstraction points (surface and ground) are registered with the DWS, but in general they are not recorded. Proper asset management and monitoring of the abstraction points are required.		Register and record all abstraction works with DWS	Update WSDP	Update WSDP	Update WSDP	Update WSDP
5	Climate Change Strategy	Strategy to deal with implications of climate change and to minimise municipal contribution to climate change	No strategy at present		Develop strategy	Implement Strategy	Implement Strategy. Review and amend strategy	Implement Strategy. Review and amend strategy	Implement Strategy. Review and amend strategy

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2023	FY2024	FY2025	FY2026	FY2027
					Target	Target	Target	Target	Target
6	Environmental Protection / Pollution mitigation	Environmental Protection / Pollution mitigation measures approved and implemented	Some environmental strategies but not always enforced.		Develop Environmental Protection / Pollution mitigation measures	Implement Environmental Protection / Pollution mitigation measures	Implement Environmental Protection / Pollution mitigation measures and review impact.	Implement Environmental Protection / Pollution mitigation measures and review impact.	Implement Environmental Protection / Pollution mitigation measures and review impact.

Water Services Development Plan

Topic 7: Finance

Expenditure Cost Standards & Ratios (Rand Million)

2023				2024		2025		2026	
Ratios and efficacy indicators	Sanitation service O&M [and repair] as a % of budget	18.00		18.00		18.00		18.00	
	Sanitation service O&M [and repair] as a % Asset value [PPE]	22.00		22.00		22.00		22.00	
	Water service O&M [and repair] Cost as % of budget value	42.00		42.00		42.00		42.00	
	Water service O&M [and repair] Cost as % of Asset value [PPE]	52.00		52.00		52.00		52.00	
	Untreated waste water units released								
	Cost to purify water	21.00		22.00		25.00		30.00	
	Cost to deliver water to consumer	15.00		17.00		19.00		21.00	
	Cost to treat waste water	5.00		6.00		6.50		7.00	
	Cost to deliver waste water to treatment facility	0.50		0.52		0.55		0.57	
	Blue drop cost	3.00		3.00		3.00		3.00	
	Blue drop number WTW	17.00		17.00		17.00		17.00	
	Green drop cost	2.00		2.00		2.00		2.00	
	Green drop WWTW number of plants	7.00		10.00		11.00		11.00	
	Water balance cost [Non Revenue Water]								
MTEF		2023		2024		2025		2026	
		R/c	Units	R/c	Units	R/c	Units	R/c	Units
Operation /Function / Process: Water Balance Cost / Revenue	Metered units bulk-raw water, or bulk potable water purchased and- or produced. Water that goes into a water supply system	48115516.00	5485000	67902432.02	7740639.1	120667543.70	13755676.59	120667543.70	13755676.59
	Billed Metered Consumption	68264210.54	1191380	16446832.64	1318912	17500000.00	14000000	18375000.00	15000000
	Billed Un Metered Consumption		1080620	4686014.01	375783	5000000.00	395000	5250000.00	414000
	Un Billed Metered Consumption	2150700.00	402000						
	Un Billed Un Metered Consumption	5012950.00	937000	33512581.90	6264034	101679161.00	11591068	15068278.00	11415362
	Apparent (commercial) losses	2123950.00	397000	612903.80	114561	1785879464.00	203584	268730.90	203584
	Real (physical) losses	7586300.00	1418000	1675629.10	313202	5083954.00	579553	753413.90	570768
	Water used [lost] during the process of Operation, Repair and Maintenance	315650.00	59000	1340503.28	250561	4067169.00	463643	602731.12	456614

Water Services Development Plan

Operational Resource Costs [Cost to operate & or deliver service]						
MTEF		2023		2024	2026	2027
Resource (Required/used for Service delivery activities - In Public Procurement there are generally three procurement categories: goods, works and services.)	Staff	61551431.00		60492746.86	68250000.00	
	Vehicles / transport	1084129.00		21000000.00	22500000.00	
	Chemicals	5000000.00		7500000.00	8229405.00	
	Materials			8000000.00	8741939.42	
	Equipment			2564000.00	2801791.59	
	Tools			18064000.00	19739299.22	
	Operation			36128000.00	39478598.44	
	Administration			5982799.14	6750000.00	
	Maintenance (corrective; adaptive; preventative)	83373000.00		62738799.14	61972977.47	
	Billing	55390300.00		76700821.66	83751115.17	
	Revenue collection	29910762.00		65623587.85	71655668.67	
	Management					

Water Services Development Plan

MTEF Expenditure Million				
MTEF	2023	2024	2025	2026
Property - WTW	0	0	0	0
Dams - WTW	0	60.8	44.3	64.3
Springs - WTW	0	0	0	0
Weirs - WTW	0	0	0	0
Boreholes - WTW	0	0	0	0
Reservoirs - WTW	0	0	0	0
Water Treatment Works (WTW) Civil works	0	0	0	0
Water Treatment Works (WTW) Mechanical works	0	0	0	0
Water Treatment Works (WTW) Electrical works	0	0	0	0
Pump Station (PS) Civil works	0	0	0	0
Pump Station (PS) Mechanical works	0	0	0	0
Pump Station (PS) Electrical works	0	0	0	0
Internal [water] reticulation - WTW	0	0	0	0
Bulk [water] reticulation - WTW	0	37.7	48.6	22.3
Meters Bulk - WTW	0	0	0	0
Meters Household - WTW	0	0	0	0
Property - WWTW	0	0	0	0
Waste Water Treatment Works (WWTW) Civil works	0	0	0	0
Waste Water Treatment Works (WWTW) Mechanical works	0	0	0	0
Waste Water Treatment Works (WWTW) Electrical works	0	0	0	7.99
Pump Station (PS) Civil works - WWTW	0	0	0	0
Pump Station (PS) Mechanical works - WWTW	0	0	0	0
Pump Station (PS) Electrical works - WWTW	0	0	0	0
Internal sanitation reticulation	0	14.45	12.44	33.96
Bulk sanitation reticulation - WWTW	0	3.5	10	29.8
Meters Bulk - WWTW	0	11.1	0	0
Ponds - WWTW	0	0	0	0
Total				
Notes:	1	Pump stations should be included separate itemised in asset registers due to the impact of type of station [e.g. diesel costs;Distance; Etc.]		
	2	NRW excludes FBS and is a MTEF cost to service		

Water Services Development Plan

CAPEX Million																
Assets per Class	Fund source name	Transfers recognised - operational	Local Government Equitable Share	Municipal Infrastructure Grant	Municipal Water Infrastructure Grant	Expanded Public Works Programme Integrated Grant (Municipality)	Urban Settlement Development Grant	Rural Households Infrastructure Grant	Backlogs in Water and Sanitation at Clinics and Schools Grant	Implementation of Water Services Projects [ACIP; Etc.]	Regional Bulk Infrastructure Grant	Water Services Operating and Transfer Subsidy Grant (Schedule 6)	Water Services Operating and Transfer Subsidy Grant (Schedule 7)	Municipal Drought Relief Grant	Accelerated Community Infrastructure Programme	
	Votes			0												
Property , Plant and Equipment - Water Treatment System	Property - WTW			0.00												
	Dams - WTW			39.32												
	Springs - WTW			0.00												
	Weirs - WTW			0.00												
	Boreholes - WTW			0.00	8.65											
	Reservoirs - WTW			15.36	8.65											
	WTW Civil works			0.00												
	WTW Mechanical works			0.00												
	WTW Electrical works			0.00												
	Pump Station (PS) Civil works			10.00	4.33											
	Pump Station (PS) Mechanical works			5.36	4.33											
	Pump Station (PS) Electrical works			7.68	4.33											
	Internal [water] reticulation - WTW			30.73	17.30											
	Bulk [water] reticulation - WTW			76.81	34.61											
	Meters Bulk - WTW			7.68	4.33											
	Meters Household - WTW			0.00												
Property , Plant and Equipment - Waste Water Treatment System	Property			1.53												
	WWTW Civil works			1.53												
	WWTW Mechanical works			1.53												
	WWTW Electrical works			1.53												
	Pump Station (PS) Civil works - WWTW			1.53												
	Pump Station (PS) Mechanical works - WWTW			1.53												
	Pump Station (PS) Electrical works - WWTW			1.53												
	Internal sanitation reticulation			19.52												
	Bulk sanitation reticulation			2.45	0.43											
	Meters Bulk WWTW			0.00												
	Ponds - WWTW			0.00												

Water Services Development Plan

Assets per Class	Fund source name	Transfers recognised - operational	Local Government Equitable Share	Municipal Infrastructure Grant	Municipal Water Infrastructure Grant	Expanded Public Works Programme Integrated Grant (Municipality)	Urban Settlement Development Grant	Rural Households Infrastructure Grant	Backlogs in Water and Sanitation at Clinics and Schools Grant	Implementation of Water Services Projects [ACIP, Etc.]	Regional Bulk Infrastructure Grant	Water Services Operating and Transfer Subsidy Grant (Schedule 6)	Water Services Operating and Transfer Subsidy Grant (Schedule 7)	Municipal Drought Relief Grant	Accelerated Community Infrastructure Programme
Total															

Water Services Development Plan

REVENUE Million									
Fund source name	Service charges - service	Water Services Operating and Transfer Subsidy Grant (Sch 6)	Water Services Operating and Transfer Subsidy Grant (Sch 7)	Transfers recognised - operational	Agency services	Interest earned - outstanding debtors	Equitable Share	Trading Entities [e.g. Rand Water; Pikitup; Etc.]	Partnership Funds
Votes									
Agency services									
Agriculture + rural water services									
Agriculture + rural sanitation service									
FBS Sanitation									
FBS Water									
Urban HLS Water	61179.41								
Sanitation Urban HLS	13474.14								
Industrial Water									
Industrial Waste Water									
NRW									
									Total
The assumption is that rural and urban costs are differentiated and that Assumption is made that potable water and industrial water tariffs differ									
NRW excludes FBS and is a MTEF cost to service									
Pump stations should be included separate itemised in asset registers due to the impact of type of station [e.g. diesel costs; Etc.]									

Topic 8: Water Services Institutional Arrangements and Customer Services

Context Information

Water Services Development Plan

Questions	Answers						
Date of completion	2022-09-27						
Municipality type (C1)	A - Metro	B1 - LM	B2 - LM	B3 - LM	B4 - LM	C2 - DM	
Water service provider type (C2)	Combination of internal and external	External (e.g. Water Board, service provider)	Internal (i.e. municipality)				
Wastewater service provider type (C3)	Combination of internal and external	External (e.g. Water Care Company, service provider)	Internal (i.e. municipality)				
Water system maintenance (C4)	Combination of internal and external	External (e.g. service provider)	Internal (i.e. municipality)				
Wastewater system maintenance (C5)	Combination of internal and external	External (e.g. service provider)	Internal (i.e. municipality)				
Bulk water provision (C6)	Combination of internal and external	Municipality (i.e. internal)	Other municipality (i.e. external)	Water Board (i.e. external)			
The key staff (i.e. managerial) turnover in your WSA (C7)	Don't know	High: >25% (i.e. problematic, frequently lose staff)	Low: <10% (i.e. not an issue, good staff retention)	Moderate: 10 - 25% (i.e. occasionally lose staff)			
Your WSA has developed and implemented a scarce skills policy (C8)	Don't know	In development	No, not developed	Yes, developed and implemented	Yes, developed and partially implemented		
Your WSA actively provides required drinking water related data to the Regulator (e.g. Blue Drop participation, data loading to IRIS) (C9)	Don't know	In place, with occasional non-optimal response	In process	No, disagree	Yes, strongly agree		
Regular drinking-water quality monitoring and management (including boreholes) is performed for ALL communities/towns/private providers in the WSA (C10)	<50% of WSA population	Almost all (i.e. >95% of WSA population)	Don't know	Most (i.e. >75% of WSA population)	None (i.e. 0% of WSA population)	Some (i.e. >50% of WSA population)	Yes, all (i.e. close to 100% of WSA population)
WTWs operational capacity as a function of total design capacity (NOTE: Combine for ALL WTWs within your WSA) (C11)	<90%	>100% - 105%	>105%	>95% - 100%	90% - 95%	Don't know	Not applicable
Your WSA actively provides required wastewater related data to the Regulator (e.g. Green Drop participation, data loading onto IRIS) (C12)	Don't know	In place, with occasional non-optimal response	In process	No, disagree	Yes, strongly agree		
Regular wastewater quality monitoring and management is performed for ALL wastewater systems in the WSA (C13)	<50%	Almost all (i.e. >95%)	Don't know	Most (i.e. >75%)	None (i.e. 0%)	Some (i.e. >50%)	Yes, all (i.e. close to 100%)
WWTWs operational flow capacity as a function of total design capacity (NOTE: Combine for ALL WWTWs within your WSA) (C14)	<90%	>100% - 105%	>105%	>95% - 100%	90% - 95%	Don't know	Not applicable

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WWTWs operational COD load as a function of total design load (NOTE: Combine for ALL WWTWs within your WSA) (C15)	<90%	>100% - 105%	>105%	>95% - 100%	90% - 95%	Don't know	Not applicable
Your WSA actively provides required water conservation and water demand management related data to the Regulator (e.g. No Drop participation) (C16)	Don't know	In place, with occasional non-optimal response	In process	No, disagree	Yes, strongly agree		
Your municipality has a water resilience policy in place, which includes optimisation of existing water resources, diversifying supply to increase water security, and optimisation of the "water mix" (C17)	Don't know	In process	No, disagree	Yes, strongly agree			
Your municipality has a policy and procedures in place to encourage rainwater harvesting (C18)	Don't know	In process	No, disagree	Yes, strongly agree			
Your municipality has desalination facilities for augmenting drinking-water supply (C19)	>10% of total supply	>25% of total supply	Don't know	In process (e.g. developing, feasibility studies)	No, none (i.e. 0%)	Not applicable	Small proportion/pilot scale (<10%)
Your municipality recovers and reuses treated wastewater either directly (e.g. for potable purposes) or indirectly (e.g. for irrigation, feed to industry, aquifer recharge) (C20)	>10% of total wastewater generated	>25% of total wastewater generated	Don't know	In process (e.g. developing, feasibility studies)	No, none (i.e. 0%)	Not applicable	Small proportion/pilot scale (<10%)
Your municipality recovers and reuses stormwater either directly (e.g. for potable purposes) or indirectly (e.g. recharging river for ecological functioning, nature based systems) (NOTE: This does not aim to measure inflow to dams at catchment level, but rather aims to define the extent of stormwater capture/reuse in the urban context). (C21)	Don't know	In process (e.g. developing, feasibility studies)	Just starting with implementation	Limited implementation	No, none (i.e. 0%)	Not applicable	Significant implementation
Advanced water treatment technologies (e.g. membrane based) and wastewater treatment/recovery technologies (e.g. reuse) implemented at your municipality are staffed by appropriately qualified personnel (C22)	<50%	Almost all (i.e. >95%)	Don't know	Most (i.e. >75%)	No advanced water or wastewater treatment technologies	None (i.e. 0%)	Not applicable
Your WSA actively promotes improved hygiene practices through campaigns in communities (e.g. hand washing education, safe and improved sanitation) (C23)	Don't know	In place, with occasional non-optimal response	No, disagree	Partially in place, but not ideal	Yes strongly agree (i.e. campaigns established and functioning)		
Indicate the proportion of the population serviced via on-site sanitation (e.g. using appropriate technologies as defined by the National Norms and Standards for Sanitation Services (Sep 2017)) (C24)	> 0% - 10%	>10% - 20%	>20% - 30%	>30% - 40%	>40% - 50%	>50%	Don't know

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Indicate the proportion of the population not serviced (i.e. backlog, and potentially implying open defecation) (C25)	> 0% - 10%	>10% - 20%	>20% - 30%	>30% - 40%	>40% - 50%	>50%	Don't know
Indicate the proportion of drinking-water sources at risk from on-site sanitation (e.g. VIPs could pollute groundwater source) (C26)	< 25% of sources by water volume are at risk	>25% of sources by water volume are at risk	>50% of sources by water volume are at risk	>75% of sources by water volume are at risk	>95% of sources by water volume are at risk	Don't know	No, no sources (0%) are at risk
Indicate the proportion of on-site sanitation systems (e.g. VIPs, septic tanks) that are appropriately sealed/enclosed and/or fully/partially lined with minimal environmental impact (e.g. no overflow/seepage) (C27)	<50%	All (i.e. close to 100%)	Almost all (i.e. >95%)	Don't know	Most (i.e. >75%)	None (i.e. 0%)	Not applicable
Indicate the estimated proportion of wastewater not delivered for treatment (to all WWTWs) (e.g. lost through old, leaking sewer pipes) (C28)	<1%	1% - <5%	10% - <20%	15% - <20%	20% or more	5% - <10%	Don't know
Indicate the estimated proportion of faecal sludge/supernatant emptied from all on-site sanitation systems (e.g. septic tanks, VIPs) that is not delivered for treatment (e.g. honeysucker does not deliver to the WWTW, but rather dumps into environment) (C29)	<1%	1% - <5%	10% - <20%	15% - <20%	20% or more	5% - <10%	Don't know
You have classified all of your treated sludge (from WWTWs and on-site sanitation systems (e.g. VIPs, septic tanks)) (C30)	<50% of sludges classified	Don't know	Not applicable	Sludges not yet classified (i.e. none, 0%)	Yes, all sludges classified (i.e. close to 100%)	Yes, almost all sludges classified (i.e. >95%)	Yes, most sludges classified (i.e. >75%)
You are disposing/reusing all of your all your sludge (from both WWTWs and on-site sanitation systems (e.g. VIPs, septic tanks)) in accordance with licence conditions/WRC guidelines (C31)	<50% sludges disposed/reused appropriately	Almost all sludges reused/disposed appropriately (i.e. >95%)	Don't know	Most sludges reused/disposed appropriately (i.e. >75%)	No, sludge not disposed/reused appropriately (i.e. 0%) (e.g. stockpiled, reused/disposed without classification)	Not applicable	Some sludges reused/disposed appropriately (i.e. >50%)
Your municipality is adhering to its mandated responsibility as WSA and proactively managing water and sanitation services on farms/rural areas within its area of jurisdiction (as per National Norms and Standards for Domestic Water and Sanitation Services (Sep 2017)) (C32)	Don't know	In place, with occasional non-optimal response	In process	No, disagree	Not applicable	Yes, strongly agree	
Council has functional Oversight Committees and Ward Committees, as appropriate (DM would be served via LM Ward Committees) (C33)	Don't know	In place, with occasional non-optimal response	No, disagree	Partially in place, but not ideal	Yes, strongly agree (i.e. Oversight and Ward Committees established and functioning)		

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Council has effective systems of internal control and functional governance structures (internal audit unit, audit committee, risk committee, IT governance) (C34)	Don't know	In place, with occasional non-optimal response	No, disagree	Partially in place, but not ideal	Yes, strongly agree (i.e. internal audit unit established and posts filled, governance structures in place, frequent meetings held and risk assessments conducted, audit plan developed and quarterly reports submitted to council)		
Forensic investigations are undertaken as and when necessary to ensure adherence to governance requirements (i.e. either internally initiated by the municipality or externally initiated by, for example, Public Protector, Auditor General) (C35)	Don't know	In place, with occasional non-optimal response	No, disagree	Partially in place, but not ideal	Yes, strongly agree		
Your municipality has policies, procedures and systems in place that negate the impact of vandalism / sabotage of municipal water and sanitation infrastructure on services delivery (C36)	Don't know	In place, with occasional non-optimal response	No, disagree	Partially in place, but not ideal	Yes, strongly agree		
Your municipality has ongoing and appropriate public participation, is transparent in its decision making, and is accountable to its constituency (fiscal and social). (C37)	Don't know	In place, with occasional non-optimal response	No, disagree	Partially in place, but not ideal	Yes, strongly agree		
Your municipality have a co-operation agreement in place (technical, financial, twinning, peer learning, etc) with an international municipality or other international institution? (C38)	Don't know	In process	No, disagree	Yes, strongly agree			
Your municipality receives international financial aid (grants/loans)? (C39)	Don't know	In process	No, disagree	Yes, strongly agree			
Those of your 18 MuSSA Business Aspects which reflect Extreme and/or Highly Vulnerable, are included within your WSAs Corporate Risk Register (C40)	Don't know	In place, with occasional non-optimal response	No, disagree	Partially in place, but not ideal	Yes, strongly agree		
Your MuSSA was completed with appropriate inputs from senior officials within Technical Services, Finance and Human Resources (as a minimum these 3 departments should participate). (C41)	Agree (i.e. Technical Services HOD and either Finance OR HR participated)	Don't know	Only Technical Services HOD	Other Technical Services	Yes, strongly agree (i.e. Technical Services HOD, Finance AND HR all participated)		
Names, designation and contact details (phone, email) of all MuSSA participants (e.g. Mr Thabo Smit; Technical Director; 0215436789; thabos@muni.gov.za) (C42)	Mr Bheki Nene; Acting Compliance Officer; 082 044 0121; neneb@harrygwalam.gov.za.						

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MuSSA Questionnaire								
Questions	Answers							
1. Water and Sanitation Services Planning								
Your appropriate water and sanitation services planning (e.g. WSDP) and associated master planning processes include and are aligned with appropriate Water and Sewage Master Plans, Spatial Development Framework (SDF), Water Safety Plans and Wastewater Risk Abatement Plans (W2RAPs), and are aligned to your IDP and associated SDBIP targets. (1.1)	Don't know	Plan development not yet initiated	Plans still in development	Yes, appropriate water services plans are developed and include all required plans and alignment (i.e. > 75%)	Yes, appropriate water services plans are developed and include all required plans and alignment (i.e. > 95%)	Yes, appropriate water services plans are developed and include all required plans and alignment (i.e. >50%)	Yes, appropriate water services plans are developed and include all required plans and alignment (i.e. close to 100%)	
You are implementing an up-to-date and adopted municipal water and sanitation services plan (e.g. WSDP.) (1.2)	Don't know	Municipal water and sanitation services plans adopted and implemented, but out-of-date (i.e. requires revision)	Municipal water and sanitation services plans adopted but not yet implemented	Municipal water and sanitation services plans neither adopted nor implemented	Municipal water and sanitation services plans not adopted but implemented	Yes, municipal water and sanitation services plans up-to-date, adopted and implemented		
Your current project list addresses existing needs/shortcomings identified through the WSDP and associated master planning process. (1.3)	<50% of projects	Almost all (i.e. >95% of projects)	Don't know	Most projects (i.e. >75%)	None (i.e. 0%)	Some projects (i.e. >50%)	Yes, all projects are identified via the planning process (i.e. close to 100%)	
Project progress is monitored, tracked and reported to municipal top management/council and the Regulator (through the annual water and sanitation services report) (1.4)	Don't know	No, disagree	Only to municipal top management/council	Only to Regulator	Yes, strongly agree (both to municipal top management/council and Regulator)			
Projects identified through your various planning processes have been implemented in the last 3 years. (1.5)	<50% implemented	Almost all implemented (i.e. >95%)	Don't know	Most implemented (i.e. >75%)	None implemented (i.e. 0%)	Some implemented (i.e. >50%)	Yes, all projects identified via planning have been implemented (i.e. close to 100%)	
2. Management Skill Level (Technical)								
Your council approved technical management organisational organogram meets your business requirements, and key posts are filled (e.g. Technical Director, Water Services Manager, Sanitation Services Manager). (2.1)	Don't know	No, does not meet business requirements	Yes, and all posts filled (i.e. close to 100%)	Yes, and almost all posts filled (i.e. >95%)	Yes, and most posts filled (i.e. >75%)	Yes, but <50% of posts filled	Yes, but only some posts filled (i.e. >50%)	

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You have sufficient technical management and technical support staff. (2.2)	<50% as per approved organogram	Agree somewhat (i.e. >50% as per approved organogram)	Don't know	Mostly agree (i.e. >75% as per approved organogram)	None (i.e. 0% as per approved organogram)	Yes, close to 100% as per approved organogram	Yes, strongly agree (i.e. >95% as per approved organogram)	
Technical management and technical support staff have the correct skills/qualifications and experience as per Job Description requirements (e.g. if Job Description requires PrEng, PrTech or CPM, the staff have these qualifications). (2.3)	<50%	Almost all (i.e. >95%)	Don't know	Most (i.e. >75%)	None (i.e. 0%)	Some (i.e. >50%)	Yes, all (i.e. close to 100%)	
Managers and technical support staff regularly attend appropriate water and sanitation services skills development/training to support professionalisation (2.4)	Annual skills development/ training	Bi-annual skills development/ training	Don't know	Less frequent skills development/ training (i.e. >1 year)	No skills development/ training	Quarterly (or more frequent) skills development/ training		
Key technical managers (e.g. Section 56 and other Senior Management) have signed and monitored Performance Agreements. (2.5)	<50%	Almost all (i.e. >95%)	Don't know	Most (i.e. >75%)	None (i.e. 0%)	Some (i.e. >50%)	Yes, all (i.e. close to 100%)	
3. Staff Skill Levels (Technical)								
WTWs are operated by staff with the required skills/qualifications and experience (as per Regulation 2834). (3.1)	<50%	Almost all (i.e. >95%)	Don't know	Most (i.e. >75%)	None (i.e. 0%)	Not applicable	Some (i.e. >50%)	Yes, all (i.e. close to 100%)
WWTWs are operated by staff with the required skills/qualifications and experience (as per Regulation 2834). (3.2)	<50%	Almost all (i.e. >95%)	Don't know	Most (i.e. >75%)	None (i.e. 0%)	Not applicable	Some (i.e. >50%)	Yes, all (i.e. close to 100%)
Water system plumbers, millwrights, mechanics and electricians have the required skills/qualifications and experience (including contractors/outsourced resources) (3.3)	<50%	Almost all (i.e. >95%)	Don't know	Most (i.e. >75%)	None (i.e. 0%)	Some (i.e. >50%)	Yes, all (i.e. close to 100%)	
Sewage system plumbers, millwrights, mechanics and electricians have the required skills/qualifications and experience (including contractors/outsourced resources) (3.4)	<50%	Almost all (i.e. >95%)	Don't know	Most (i.e. >75%)	None (i.e. 0%)	Some (i.e. >50%)	Yes, all (i.e. close to 100%)	
Staff regularly attend appropriate water and sanitation services skills development/training (including safety) (e.g. ESETA courses). (3.5)	Annual skills development/ training	Bi-annual skills development/ training	Don't know	Less frequent skills development/ training (i.e. >1 year)	No skills development/ training	Quarterly (or more frequent) skills development/ training		
4. Technical Staff Capacity (Numbers)								

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Your council approved technical staff organisational organogram meets your business requirements, and posts are filled (i.e. Superintendent of WTWs/WWTWs and below). (4.1)	Don't know	No, does not meet requirements	Strongly agree, and most posts filled (i.e. >95%) as per the approved organogram	Yes, and all posts filled (i.e. close to 100%) as per the approved organogram	Yes, and most posts filled (i.e. >75%) as per the approved organogram	Yes, but <50% of posts filled as per the approved organogram	Yes, but only some posts filled (i.e. >50%) as per the approved organogram	
WTWs are operated by the appropriate number of staff (as per Regulation 2834). (4.2)	<50% as per requirements	Agree somewhat (i.e. >50% as per requirements)	Don't know	Mostly agree (i.e. >75% as per requirements)	None (i.e. 0% as per requirements)	Not applicable	Strongly agree (i.e. >95% as per requirements)	Yes, close to 100% as per requirements
WWTWs are operated by the appropriate number of staff (as per Regulation 2834). (4.3)	<50% as per requirements	Agree somewhat (i.e. >50% as per requirements)	Don't know	Mostly agree (i.e. >75% as per requirements)	None (i.e. 0% as per requirements)	Not applicable	Strongly agree (i.e. >95% as per requirements)	Yes, close to 100% as per requirements
You have sufficient water and sewerage/sanitation network operations and repair staff/plumbers including contractors/outsourced resources (i.e. you have the appropriate number of staff). (4.4)	<50% as per functional requirements	Agree somewhat (i.e. >50% as per functional requirements)	Don't know	Mostly agree (i.e. >75% as per functional requirements)	None (i.e. 0% as per functional requirements)	Strongly agree (i.e. >95% as per functional requirements)	Yes, close to 100% as per functional requirements	
An active mentoring/shadowing programme is in place where experienced staff train your younger, inexperienced municipal staff. (4.5)	Don't know	In place, but not ideal	In place, with occasional non-optimal performance	No, disagree	Yes, strongly agree			
5. Water Resource Management (WRM)								
The recommendations and actions from the Reconciliation Strategies (Large Systems/All Towns) have been incorporated into your WSDP, master planning and IDP processes. (5.1)	Don't know	In process	No, disagree	Not applicable	Yes, strongly agree			
The metered quantity of water available from the resources is sufficient for your current WSA needs (at the stipulated level of abstraction and assurance of supply). (5.2)	>50% shortage	1 - 10% shortage	11-20% shortage	21-30% shortage	31-40% shortage	41-50% shortage	Don't know	No shortage (i.e. sufficient water)
The metered quantity of water available from the resources is sufficient for your future WSA needs (at the stipulated level of abstraction and assurance of supply, and considering possible climate change impacts) (i.e. no shortage in 10 years). (5.3)	>50% shortage	1 - 10% shortage	11-20% shortage	21-30% shortage	31-40% shortage	41-50% shortage	Don't know	No shortage (i.e. sufficient water)
The source water quality is regularly tested and is currently acceptable for its purpose. (5.4)	<50% of sources by water volume acceptable	Agree (i.e. >95% of sources by water volume are acceptable)	Agree somewhat (i.e. >50% of sources by water volume are acceptable)	Don't know	Mostly agree (i.e. >75% of sources by water volume are acceptable)	None (i.e. 0% of sources by water volume are acceptable)	Not applicable	Yes, strongly agree (i.e. all sources (close to 100%) by water volume are acceptable)

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The source water quality is regularly tested and the trend indicates a deteriorating quality. (5.5)	<25% of sources by water volume are deteriorating	>25% of sources by water volume are deteriorating	>50% of sources by water volume are deteriorating	>75% of sources by water volume are deteriorating	>95% of sources by water volume are deteriorating	Don't know	No, no sources (0%) are deteriorating	Not applicable
6. Water Conservation & Water Demand Management (WC/WDM)								
Your WSA has developed a council approved Water Conservation and Water Demand Strategy which includes a standard water balance (e.g. modified IWA). (6.1)	Don't know	None developed	Only water balance developed	Only WC/WDM Strategy developed	WC/WDM Strategy and water balance developed			
Please indicate your percentage Non-Revenue Water (NRW) as per the modified IWA water balance. (6.2)	50% or more	Don't know	Less than 15%	Less than 20%	Less than 25%	Less than 30%	Less than 40%	Less than 50%
System input volumes (bulk) to the WSA are accurately monitored using calibrated bulk meters (e.g. check metering). (6.3)	<50%	Almost all (i.e. >95%)	Don't know	Most (i.e. >75%)	None (i.e. 0%)	Some (i.e. >50%)	Yes, all (i.e. close to 100%)	
Please indicate what percentage of all connections are metered and billed (residential and non-residential (commercial, industrial, etc.)) on a monthly basis. (6.4)	<25%	<50%	>98%	50% - 75%	75% - 98%	Don't know	No metering	
Your WSA is implementing appropriate intervention programmes to reduce NRW (e.g. minimisation of night flows through pressure management, removal of unlawful connections, leak detection and repairs, consumer education/awareness). (6.5)	<50% implementation	Agree (i.e. >95% implementation)	Agree somewhat (i.e. >50% implementation)	Don't know	Mostly agree (i.e. >75% implementation)	No implementation (i.e. 0%)	Yes, strongly agree (i.e. close to 100% implementation)	
7. Drinking Water Safety & Regulatory Compliance								
Please indicate your microbiological drinking-water quality compliance for E.coli (or faecal coliforms) for the communities you are monitoring, for the last 12 months. (7.1)	< 95%	95% - <97%	97% - <99%	99% - 100%	Don't know			
ALL your supply schemes, WTWs, process controllers, monitoring programmes, sample points, laboratories, results, procedures, protocols, etc. are managed with a suitable Water Safety Planning framework. (7.2)	<50% covered	Agree somewhat (i.e. >50% covered)	Don't know	Mostly agree (i.e. >75% covered)	None covered (i.e. 0%)	Strongly agree (i.e. >95% covered)	Yes, strongly agree (i.e. close to 100% covered)	

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Council have been made aware of high risk / critical water safety plan related issues (including those identified via the Blue Drop Certification programme) that require budget and actioning, and these issues have been actioned (where applicable). (7.3)	<50% tabled	Agree somewhat (i.e. >50% tabled)	Don't know	Issues noted but none tabled (i.e. 0%)	Mostly agree (i.e. >75% tabled)	Not applicable (no issues requiring council resolution exist)	Strongly agree (i.e. >95% tabled)	Yes, strongly agree (i.e. all (close to 100%) tabled)
Sufficient funds have been made available to address all these identified water safety related issues. (7.4)	<50% of required funds	Agree somewhat (i.e. >50% of required funds)	Don't know	Issues noted but no funds (i.e. 0%)	Mostly agree (i.e. >75% of required funds)	Not applicable (no issues requiring funding exist)	Strongly agree (i.e. >95% of required funds)	Yes, strongly agree (i.e. close to 100% of required funds)
Required corrective actions/remedial measures to address all these identified water safety related issues have been successfully implemented. (7.5)	<50% implementation	Agree somewhat (i.e. >50% implementation)	Don't know	Issues noted but no implementation (i.e. 0%)	Mostly agree (i.e. >75% implementation)	Not applicable (no issues requiring corrective actions exist)	Strongly agree (i.e. >95% implementation)	Yes, strongly agree (i.e. close to 100% implementation)
8. Basic Sanitation								
You have formal housing areas that are not fully serviced with sanitation infrastructure (8.1)	Don't know	No, all formal areas are fully serviced (i.e. no bucket sanitation service)	Yes, but these are households that will be serviced within 2 years	Yes, still trying to meet formal backlog with 60 - 80% serviced	Yes, still trying to meet formal backlog with 80 - 90% serviced	Yes, still trying to meet formal backlog but >90% are serviced	Yes, still trying to meet formal backlog with <60% serviced (e.g. occurrence of bucket systems, existence of open defecation)	
You have informal housing or rural areas that are not fully serviced with sanitation infrastructure (8.2)	Don't know	No, all informal and rural areas are fully serviced	We have no informal areas and rural areas are serviced	Yes, but these are households that will be serviced within 2 years	Yes, still trying to meet informal or rural backlog with >90% serviced	Yes, still trying to meet informal or rural backlog with 60 - 80% serviced	Yes, still trying to meet informal or rural backlog but 80- 90% are serviced	Yes, still trying to meet informal or rural backlog with <60% serviced (e.g. occurrence of bucket systems, existence of open defecation)
You have a detailed plan and programme to provide safe sanitation to all households (including health and hygiene education and user awareness including Water, Sanitation and Health (WASH) aspects) (8.3)	<50% implementation	Agree somewhat (i.e. >50% implementation)	Don't know	Mostly agree (i.e. >75% implementation)	No implementation (i.e. 0%)	Not applicable	Strongly agree (i.e. >95% implementation)	Yes, strongly agree (i.e. close to 100% implementation)
Your sanitation budget is appropriate for required sanitation programmes (implementation and O&M) (8.4)	Disagree, significant shortfall (50-75% of required funds)	Don't know	Mostly agree (i.e. >95% of required funds)	No funds (i.e. 0%)	Not applicable	Serious underfunding (<50% of required funds)	Some shortfall (i.e. >75% of required funds)	Yes, strongly agree (i.e. close to 100% of required funds)

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You are servicing your basic sanitation facilities (e.g. pit latrines) as per safe sanitation requirements (healthy, environmentally safe, structurally sound, regularly maintained, following faecal sludge management best practices). (8.5)	Agree somewhat (i.e. >50% as per requirements)	Don't know	Mostly agree (i.e. >75% as per requirements)	No, we have serious shortfalls in the servicing of sanitation infrastructure (i.e. <20 %)	No, we only manage to service <50% of the sanitation infrastructure	Not applicable	Strongly agree (i.e. >95% as per requirements)	Yes, close to 100% as per requirements
9. Wastewater/Environmental Safety & Regulatory Compliance								
Please indicate your treated wastewater effluent compliance for COD for your (or your service provider's) WWTWs for the last 12 months. (9.1)	<80%	>95%	80% - <90%	90% - 95%	Don't know			
ALL your WWTWs, process controllers, monitoring programmes, sample points, laboratories, results, procedures, protocols, etc. are managed with a suitable waste water risk abatement framework. (9.2)	<50% covered	Agree (i.e. >95% covered)	Agree somewhat (i.e. >50% covered)	Don't know	Mostly agree (i.e. >75% covered)	None covered (i.e. 0%)	Yes, strongly agree (i.e. close to 100% covered)	
Council have been aware of all W2RAP related issues (e.g. pollution incidents, Green Drop deficiencies) that require budget and actioning, and these issues have been actioned (where applicable). (9.3)	<50% tabled	Agree (i.e. >95% covered)	Agree somewhat (i.e. >50% tabled)	Don't know	Issues noted but none tabled (i.e. 0%)	Mostly agree (i.e. >75% tabled)	Not applicable (no issues requiring council resolution exist)	Yes, strongly agree (i.e. all (close to 100%) tabled)
Sufficient funds have been made available to address all identified wastewater and environmental safety related issues. (9.4)	<50% of required funds	Agree (i.e. >95% covered)	Agree somewhat (i.e. >50% of required funds)	Don't know	Issues noted but no funds (i.e. 0%)	Mostly agree (i.e. >75% of required funds)	Not applicable (no issues requiring funding exist)	Yes, strongly agree (i.e. close to 100% of required funds)
Required corrective actions/remedial measures to address all identified wastewater and environmental safety related issues have been successfully implemented. (9.5)	<50% implementation	Agree (i.e. >95% covered)	Agree somewhat (i.e. >50% implementation)	Don't know	Issues noted but no implementation (i.e. 0%)	Mostly agree (i.e. >75% implementation)	Not applicable (no issues requiring corrective actions exist)	Yes, strongly agree (i.e. close to 100% implementation)
10. Infrastructure Asset Management (IAM)								
You have an appropriate and up-to-date water and sanitation services technical Asset Register (includes asset name, location, condition, extent, remaining useful life, performance and risk). NOTE: This does only not refer to GRAP17 asset register requirements. (10.1)	Don't know	No, disagree (i.e. no asset register)	Not ideal (e.g. outdated asset register)	Yes, agree (e.g. basic asset register - i.e. not all aspects included)	Yes, strongly agree (e.g. advanced asset register)			
You have developed an appropriate Infrastructure Asset Management (IAM) Plan for your WSA. (10.2)	Don't know	In place, with occasional non-optimal performance	No, disagree	Partially in place, but not ideal	Yes, strongly agree			

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You are implementing the IAM outcomes (10.3)	<50% implementation	Agree (i.e. >95% implementation)	Agree somewhat (i.e. >50% implementation)	Don't know	Mostly agree (i.e. >75% implementation)	No implementation (i.e. 0%)	Yes, strongly agree (i.e. close to 100% implementation)	
Budget allocated to implement IAM outcomes is sufficient and is being effectively spent. (10.4)	<50%	Agree (i.e. >95%)	Agree somewhat (i.e. >50%)	Don't know	Mostly agree (i.e. >75%)	No (i.e. 0%)	Yes, strongly agree (i.e. close to 100%)	
You conduct annual technical assessments of your water and wastewater related systems (including sources, WTWs, WWTWs, pump stations, network, etc.) and implement required follow-up actions. (10.5)	<50% systems	Almost all systems (i.e. >95%)	Don't know	Most systems (i.e. >75%)	No systems (i.e. 0%)	Not applicable	Some systems (i.e. >50%)	Yes, all systems (i.e. close to 100%)
11. Operation & Maintenance of Assets								
Appropriate maintenance facility(ies) that is(are) secure and stocked with essential equipment (e.g. spare parts), plant and tools is(are) available. (11.1)	Don't know	In place, with occasional non-optimal performance	No, disagree	Partially in place, but not ideal	Yes, strongly agree			
Appropriate water and sanitation services infrastructure/equipment planned/preventative maintenance schedules are developed. (11.2)	Don't know	In place, with occasional non-optimal performance	No, disagree	Partially in place, but not ideal	Yes, strongly agree			
Appropriate planned/preventative maintenance is performed at all WTWs and associated reservoirs, pump stations, distribution network. (11.3)	<50%	Almost all (i.e. >95%)	Don't know	Most (i.e. >75%)	None (i.e. 0%)	Some (i.e. >50%)	Yes, all (i.e. close to 100%)	
Appropriate planned/preventative maintenance is performed at all WWTWs and associated collection system, pump stations. (11.4)	<50%	Almost all (i.e. >95%)	Don't know	Most (i.e. >75%)	None (i.e. 0%)	Some (i.e. >50%)	Yes, all (i.e. close to 100%)	
Please indicate your infrastructure repairs and maintenance costs as a function of total operating expenditure (%). (11.5)	<5%	10% - <15%	15% - <20%	20% or more	5% - <10%	Don't know		
12. Financial Management								
Financial controls - Please state the audit opinion with regard to your last audit report on the financial statements. (12.1)	Adverse audit opinion	Clean audit outcome (i.e. unqualified with no findings)	Disclaimer of audit opinion	Don't know	Financially unqualified audit opinion (with findings)	Qualified audit opinion		
Cash flow status - Please state your Cash/Cost Coverage Ratio (excluding Unspent Conditional Grants) (12.2)	<30 days	>90 days	30 - 60 days	60 - 90 days	Don't know			
Your actual operating expenditure closely reflects your budgeted operating expenditure (i.e. Operating Expenditure Budget Implementation Indicator) (12.3)	<80%	80% - <85%	85% - <90%	90% - <95%	95% - 100%	Don't know		

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Your actual revenue closely reflects your budgeted operating revenue (i.e. Operating Revenue Budget Implementation Indicator) (12.4)	<80%	80% - <85%	85% - <90%	90% - <95%	95% - 100%	Don't know		
Liabilities (Creditors) - Money is owed by your municipality to major/critical service providers (e.g. ESKOM, Water Board, largest contractors, etc.) for more than 30 days from receipt of invoice (NOTE: Ignore disputed invoices) (12.5)	Don't know	More frequently than quarterly	Never	Once per quarter	Once per year	Twice per year		
13. Revenue Collection								
Please indicate the frequency of actual consumer meter readings. (13.1)	Actual meter reading at least every 2nd month	Actual meter reading on a monthly basis	Don't know	Meter reading at least on a quarterly basis	Meter reading less frequently than quarterly			
Net Surplus/Deficit - Please state your net surplus/deficit from water services activities for the last 12 months (NOTE: This question tests whether your WSA currently has fully cost reflective Water and Sanitation tariffs (which take into account cost of maintenance and renewal of purification plants and networks, and the cost of infrastructure). (13.2)	Breakeven (i.e. = 0%)	Don't know	Net deficit (i.e. <0%)	Surplus (i.e. >0%)				
Revenue collection - Please state the revenue collection rate in respect to Water & Sanitation Services (%) (13.3)	<50%	50% - <70%	70% - <80%	80% - <95%	95% or more	Don't know		
Revenue Growth - Please state your Water and Sanitation Services revenue growth for the last financial year(%). (13.4)	>CPI	Don't know	Equals CPI	less than CPI, but >0%	Negative growth (-ve)			
Grant dependency - Actual operating revenue less operational grants/subsidies (e.g. equitable share) sufficiently covers actual operating expenditure. (13.5)	<50%	Don't know	Most (i.e. >75%)	None (i.e. 0%)	Some (i.e. >50%)	Yes, all (i.e. close to 100%)		
14. Financial Asset Management								
Capital Expenditure (Municipal) - Please state your municipal Capital Expenditure as a percentage of Total Expenditure (i.e. Total Operating Expenditure + Capital Expenditure) (14.1)	<5%	10% - <15%	15% - <20%	20% or more	5% - <10%	Don't know		
Capital Expenditure (Water Services) - Please state your Capital Expenditure on Water and Sanitation Services as a percentage of Total Capital Expenditure (Capital Expenditure (Municipal)) (14.2)	<25%	25% - <50%	50% - <75%	75% or more	Don't know			

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Asset Renewal - Please state your Asset Renewal investment as percentage of Depreciation costs (14.3)	<50%	>50%	>75%	>90%	close to 100%	Don't know	None (i.e. 0%)	
Repairs and Maintenance - Please state your Repairs and Maintenance expenditure as a percentage of Property, Plant and Equipment, Investment Property (Carrying Value) (14.4)	<5%	10% or more	5% - <8%	8% - <10%	Don't know			
Grant funding of capital expenditure - Please state your reliance on grant funding (14.5)	<50%	>50%	>75%	>90%	Don't know			
15. Information Management (IT)								
You have a developed, approved and implemented IT Master Systems Plan (e.g. covering 3 - 5 years) that addresses your IT business requirements. (15.1)	Developed and approved, but not yet implemented	Developed but not yet approved or implemented	Don't know	In development	No, disagree	Yes, developed, approved and being implemented		
You have a developed, approved and implemented ICT Technology Master Plan that addresses your current and future IT infrastructure requirements. (15.2)	Developed and approved, but not yet implemented	Developed but not yet approved or implemented	Don't know	In development	No, disagree	Yes, developed, approved and being implemented		
You have IT systems that support your full range of water and sanitation services business requirements (e.g. billing, GIS, customer care, O&M, asset management). (15.3)	< 50% of required systems	Agree (i.e. >95% of required systems)	Agree somewhat (i.e. >50% of required systems)	Don't know	Mostly agree (i.e. >75% of required systems)	None (i.e. 0% of required systems)	Yes, strongly agree (i.e. close to 100% of required systems)	
ICT service continuity - Adequate IT security exists with off-site back-ups/archiving of operation critical applications, databases, data, etc. routinely performed in terms of an IT Disaster Recovery Plan. (15.4)	<50% in place	Agree (i.e. >95% in place)	Agree somewhat (i.e. >50% in place)	Don't know	Mostly agree (i.e. >75% in place)	Nothing in place (i.e. 0%)	Yes, strongly agree (i.e. All (close to 100%) in place)	
You have sufficient budget and staff to keep key IT systems stable and up-to-date as per IT policies and procedures. (15.5)	<50%	Agree (i.e. >95% in place)	Agree somewhat (i.e. >50%)	Don't know	Mostly agree (i.e. >75%)	No (i.e. 0%)	Yes, strongly agree (i.e. close to 100%)	
16. Organisational Performance Monitoring								

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Appropriate plans, policies and procedures to address Disaster Management/emergencies and other issues (safety, public participation, communication, etc.) are developed and implemented. NOTE: Although Disaster Management is a district function, LMs need to ensure they are aware of their associated roles and responsibilities and have developed a Disaster Management Framework. (16.1)	Developed, but not yet implemented	Don't know	In development	No, disagree	Yes, developed and implemented			
An organisational performance management system is developed and implemented (i.e. effectively measure, monitor and track water and sanitation services performance indicators). (16.2)	Developed, but not yet implemented	Don't know	In development	No, disagree	Yes, developed and implemented			
A municipal risk management framework is developed and implemented and includes monitoring and tracking of water and sanitation related risks. (16.3)	Developed, but not yet implemented	Don't know	In development	No, disagree	Yes, developed and implemented and includes water and sanitation related risks	Yes, developed and implemented but does not include water and sanitation related risks		
Effective administration support is available to technical staff to assist with processing work orders, providing order numbers, handling correspondence, etc. (16.4)	< 50% effective	Agree (i.e. >95% effective)	Agree somewhat (i.e. >50% effective)	Don't know	Mostly agree (i.e. >75% effective)	No, completely ineffective (i.e. 0%)	Yes, strongly agree (i.e. close to 100% effective)	
"Access to Basic Water and Sanitation Services" progress reports are frequently produced and presented to council for discussion, action and follow-up. (16.5)	At least annually	At least bi-annually	At least quarterly	Don't know	Less frequently (i.e. > 1 year)	No, never		
17. Water and Sanitation Service Quality								
Critical business databases and documents (e.g. as-built drawings, records, manuals, agreements, billing/revenue collection, project and scheme management data, etc.) are current, maintained and stored in secure locations (on-site and off-site, both paper and electronic). (17.1)	< 50% in place	Agree (i.e. >95% in place)	Agree somewhat (i.e. >50% in place)	Don't know	Mostly agree (i.e. >75% in place)	Nothing in place (i.e. 0%)	Yes, strongly agree (i.e. close to 100% in place)	
Customers have a functional, reliable and safe water supply system with sufficient quantity and flow, good quality, and minimal interruptions. (17.2)	< 50% of customers have a functional, reliable and safe service	At least 90% have a functional, reliable and safe service	Don't know	Most have a functional, reliable and safe service (i.e. >75%)	None have a functional, reliable and safe service (i.e. 0%)	Some have a functional, reliable and safe service (i.e. > 50%)	Yes, all have a functional, reliable and safe service (i.e. close to 100%)	

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All consumers served experience interruptions of less than 48 hours (at any given time) and a cumulative interruption time during the year of less than 15 days. (17.3)	>90% of households	<50% of households	>50% of households	>75% of households	Don't know	None (i.e. 0%)	Yes, all (i.e. close to 100%)	
Households in your WSA do not experience water pressure problems (i.e. meet requirements as per National Norms and Standards for Domestic Water (Sep 2017) (not to be confused with interruption to supply). (17.4)	>90% of households do not experience pressure problems	<50% of households do not experience pressure problems	>50% of households do not experience pressure problems	>75% of households do not experience pressure problems	All households (i.e. 100%) experience pressure problems	Don't know	Yes, no households experience pressure problems (i.e. close to 100% do not experience pressure problems)	
Customers have a functional, reliable, dignified and safe sanitation system with minimal blockages resulting in overflows that impact on the environment, including effective collection and treatment of faecal sludge. (17.5)	< 50% of customers have a functional, reliable, dignified and safe service	Almost all have a functional, reliable, dignified and safe service (i.e. >90%)	Don't know	Most have a functional, reliable, dignified and safe service (i.e. >75%)	None have a functional, reliable, dignified and safe service (i.e. 0%)	Some have a functional, reliable, dignified and safe service (i.e. >50%)	Yes, all customers have a functional, reliable, dignified and safe service with no impact on the environment (i.e. close to 100%)	
18. Customer Care (CRM)								
A functional customer service system manned by appropriate customer services representatives and using a complaints register, is in place to address complaints and appropriately inform customers of service interruptions, contamination of water, boil water alert, etc. (18.1)	Don't know	In place, with occasional non-optimal performance	No, disagree	Partially in place, but not ideal	Yes, strongly agree			
Regular municipal wide customer satisfaction surveys are conducted to determine customer satisfaction levels and inform the Customer Care Management Plan. (18.2)	Annual customer satisfaction surveys	Biennial (i.e. every 2nd year) customer satisfaction surveys	Don't know	Less frequent customer satisfaction surveys (i.e. >2 years)	No customer satisfaction surveys			
Please indicate what percentage of the reported water related complaints/callouts are acknowledged, including consumer response, within 24 hours. (18.3)	<50%	All (i.e. close to 100%)	Almost all (i.e. >95%)	Don't know	Most (i.e. >75%)	None (i.e. 0%)	Some (i.e. >50%)	
Please indicate what percentage of the reported wastewater/sanitation related complaints/callouts are acknowledged, including consumer response, within 24 hours. (18.4)	<50%	All (i.e. close to 100%)	Almost all (i.e. >95%)	Don't know	Most (i.e. >75%)	None (i.e. 0%)	Some (i.e. >50%)	

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A comprehensive customer awareness programme (informing customers of water and wastewater system O&M activities impacting on supply/customers, water quality, resource protection/pollution, reporting incidents/security concerns, etc.) is in place and implemented. (18.5)	Don't know	In place, with occasional non-optimal performance	No, disagree (i.e. no awareness programme)	Partially in place, but not ideal	Yes, strongly agree			
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Water Services Development Plan

Chapter 3:**Water Master Plan Perspective**

List of projects per Water Services Business Element (Topics) based on Demand Modeling

Question		Answer	Score
1. Is there a Water Master Plan that addresses Future Demands in regards to the following:			
a.	Existing needs that will take more than 5 years to resolve	Yes	25
b.	Resource Development Plan for a 5, 10 and 15 year scenario	Yes	25
c.	Infrastructure Development Plan for a 5, 10 and 15 year scenario	Yes	25
d.	Functionality Needs Prediction for a 5, 10 and 15 year scenario	Yes	25
2. Did council approve any projects that should have started this current year that address the following:			
a.	Existing needs that will take more than 5 years to resolve	Yes	25
b.	Resource Development Plan for a 5, 10 and 15 year scenario	Yes	25
c.	Infrastructure Development Plan for a 5, 10 and 15 year scenario	Yes	25
d.	Functionality Needs Prediction for a 5, 10 and 15 year scenario	Yes	25
3. Are these future projects included in the next 5 year IDP programme for the following:			
a.	Existing needs that will take more than 5 years to resolve	Yes	25
b.	Resource Development Plan for a 5, 10 and 15 year scenario	Yes	25
c.	Infrastructure Development Plan for a 5, 10 and 15 year scenario	Yes	25
d.	Functionality Needs Prediction for a 5, 10 and 15 year scenario	Yes	25
4. Taking in to consideration the current financial and institutional capacity of the WSA, score the probability scenario of the timeous implementation of these projects i			
a.	Existing needs that will take more than 5 years to resolve	Probable	75
b.	Resource Development Plan for a 5, 10 and 15 year scenario	Probable	75
c.	Infrastructure Development Plan for a 5, 10 and 15 year scenario	Probable	75
d.	Functionality Needs Prediction for a 5, 10 and 15 year scenario	Probable	75

Overall Future Perspective Score	93.75%
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Water Services Development Plan

Chapter 4: Investment Framework

Investment Framework costs per Infrastructure Component

Infrastructure Type	Infrastructure Component	Replacement Cost				Refurbishment Cost			
		5 yr	10 yr	15 yr	Existing Value	5 yr	10 yr	15 yr	Existing Value

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Water Infrastructure Pipelines	Water Internal Reticulation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Water Bulk pipeline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sanitation Infrastructure Pipelines	Sewer internal Reticulation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Sewer Bulk pipeline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure Works	WTW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	WWTW	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Water Pump stations	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.20
	Sanitation Pump stations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Infrastructure	Reservoirs	0.00	0.00	0.00	6.00	0.00	0.00	0.00	0.00

Investment Framework costs per Future Infrastructure Component

Infrastructure Type	Infrastructure Component	New Development Cost			
		5 yr	10 yr	15 yr	Existing Value
Water Infrastructure Pipelines	Water Internal Reticulation	0.00	0.00	0.00	0.00
	Water Bulk pipeline	0.00	0.00	0.00	0.00

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Sanitation Infrastructure Pipelines	Sewer internal Reticulation	0.00	0.00	0.00	0.00
	Sewer Bulk pipeline	0.00	0.00	0.00	0.00
Instructure Works	WTW	0.00	0.00	0.00	0.00
	WWTW	0.00	0.00	0.00	0.00
	Water Pump stations	0.00	0.00	0.00	0.00
	Sanitation Pump stations	0.00	0.00	0.00	0.00
Infrastructure	Reservoirs	0.00	0.00	0.00	0.00

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Chapter 5: WSDP Scoring

Total Score	STATUS
81.15	

