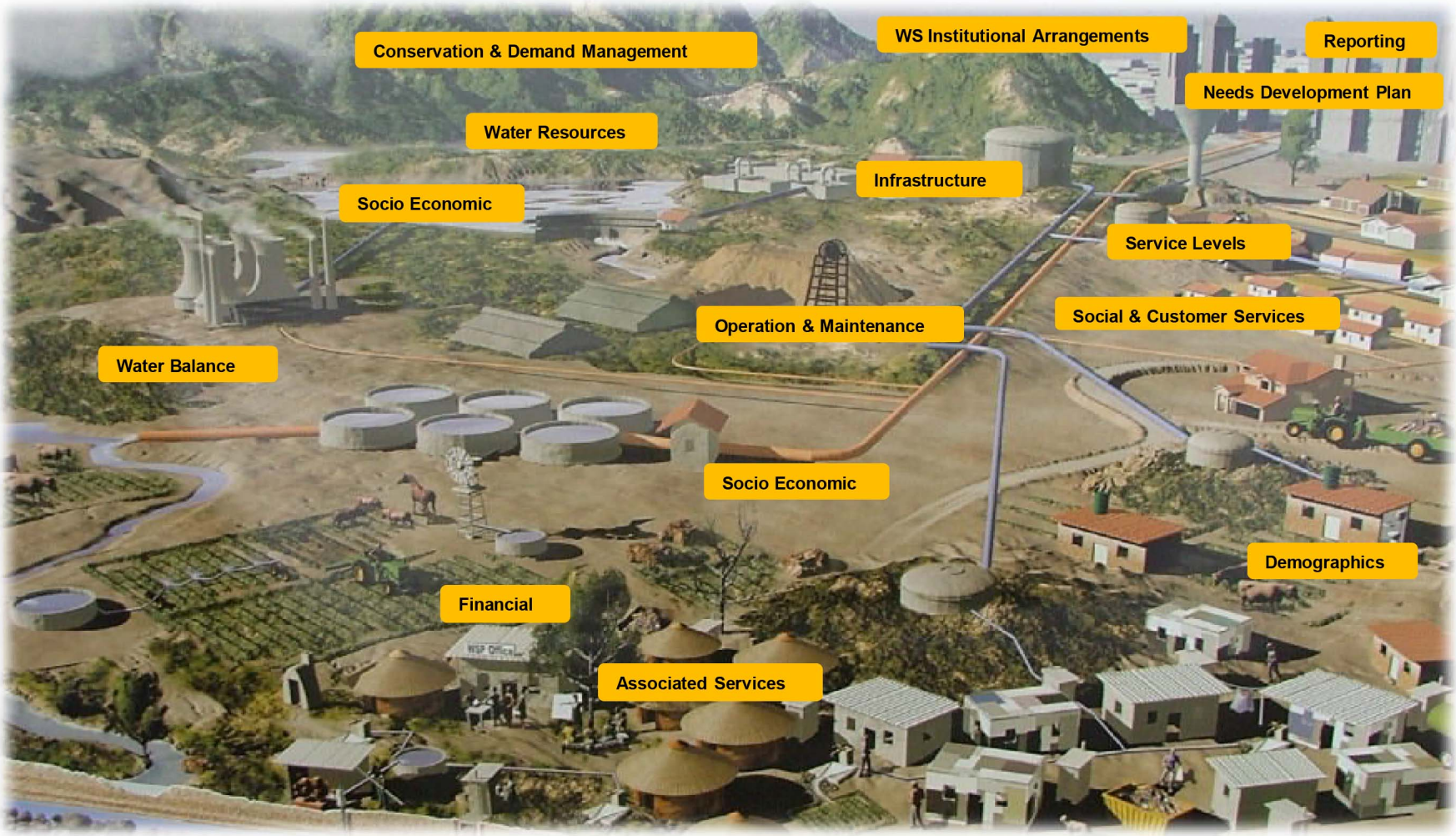
Water Services Development Plan



Water Services Development Plan

WSDP Compiled and submitted for approval

Municipal WSDP Coordinator: Name: _____ Signature: _____ Date: _____

WSDP Recommended for approval

Municipal Manager:

Recommended: Name: _____ Signature: _____ Date: _____

Not Recommended: Name: _____ Signature: _____ Date: _____

Final Council approval:

Capacity: _____

Approved: Name: _____ Signature: _____ Date: _____

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
Acting Municipal Manager	Aldrick	Hendricks	023 541 1320	023 541 1312		aldrick@pamun.gov.za	N	N
WSDP Custodian	Ashley	America	0235411036	0235411035	0798691342	ashley@pamun.gov.za	Y	Y
Chief Financial Officer	Peter Willem	Erasmus	023 541 1036	023 541 1321		pw@pamun.gov.za	Y	Y
Manager: Water & Sanitation Services	Ashley	America	0235411036	0235411035	0798691342	ashley@pamun.gov.za	Y	Y

Water Services Development Plan

Professional Service Provider (PSP)

Company Africoast Consulting Engineers

Name of PSP WSDP Project Manager Thomas Jachens

Tel: 041 505 8000 **Cell:** 083 630 2613 **Fax:** 041 585 3437 **Email:** thomas@africoast.com

Inputs

Name of PSP WSDP Information Systems Operator Nopasika Mhlana

Tel: 041 505 8000 **Cell:** 083 401 4558 **Fax:** 041 585 3437 **Email:** nopasika@africoast.com

Components	Chapter	Name	Designation	Role	Contact Address, and Number
All	All	Nopasika Mhlana	Project Manager	Project Manager	34 Mangold StreetNewton ParkPort Elizabeth6045

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	Yes	Planning and Budgeting	Prince Albert
Finance	Yes	Budgeting	Prince Albert
Water Master Plan	Yes	Future Planning, projects and budgeting	Prince Albert
Sewer Master Plan	Yes	Future Planning, Projects and Budgeting	Prince Albert
SDF	Yes	Future Planning	Prince Albert
Unaccounted for Water Strategy	Partial	Water demand and water conservation	Prince Albert
LED	Yes	Housing requirements	Prince Albert
PMU	No	Project implementation and progress	Prince Albert
Institutional	Yes	Human resources	Prince Albert

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	MWIG	Other
Topic 1 - Settlement Demographics & Public Amenities																												
Topic 2 - Service Level Profile																												
1		LG: Eradication of bucket system in Transnet area	LG: Eradication of bucket system in Transnet area	Operation		Sanitation	Internal Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,500	0	0	0	0	0	0	2,500
Topic 3 - Water Services Asset Management																												
2		PA: Upgrading of South-end sewer network	PA: Upgrading of South-end sewer network	Local Scheme Solution		Sanitation	Sanitation Bulk	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	12,500	0	0	0	0	0	0	500
3		LG: Upgrading of elevated tanks in Newton Park	LG: Upgrading of elevated tanks in Newton Park	Upgrade Infrastructure		Water	Internal Bulk	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	1,500	0	500	0	0	0	0	0
Topic 4 - Water Services Operations & Maintenance (O&M)																												
Topic 5.1 - Conservation & Demand Management - Water Resource																												
Topic 5.2 - Conservation & Demand Management - Water Balance																												

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
4		PA: Smart Water Meters	PA: Smart Water Meters	Resource Development		Water	Internal Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	3,000	0	0	0	0	0	0	1,000
Topic 6 - Water Resource																													
5		PA: Borehole Development	PA: Borehole Development	Infrastructure Extension		Water	Internal Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	7,844	0	0	0	0	0	0	5,569

	Funding Source (R'000)						
	Own	MIG	RBIG	ACIP	DR	MWIG	Other
Total Funding:	0	500	0	0	0	0	9,569

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																												
1		PA: Upgrading of WTW (security fencing; pump station; treatment process)	PA: Upgrading of WTW (security fencing; pump station; treatment process)	Maintenance		Water	Internal Bulk	N	Y	N	N	N	N	N	Y	N	N	N	N	N	N	6,500	0	500	0	0	0	0	0
2		PA: Replacement of old AC Pipes	PA: Replacement of old AC Pipes	Resource Development		Water	Internal Bulk	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	500
3		PA: Upgrading of WWTW (intermediate processes; pump station; aerators, etc)	PA: Upgrading of WWTW (intermediate processes; pump station; aerators, etc)	Operation		Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	4,500	0	500	0	0	0	0	0
4		PA: Upgrading of South-end sewer network	PA: Upgrading of South-end sewer network	Local Scheme Solution		Sanitation	Sanitation Bulk	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	12,500	0	0	0	0	0	0	3,000
5		LG: Upgrading of elevated tanks in Newton Park	LG: Upgrading of elevated tanks in Newton Park	Upgrade Infrastructure		Water	Internal Bulk	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	1,500	0	1,000	0	0	0	0	0

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		KS: Upgrading of WTW (treatment process; relocation)	KS: Upgrading of WTW (treatment process; relocation)	Operation		Water	Internal Bulk	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	4,000	0	1,000	0	0	0	0	0
Topic 4 - Water Services Operations & Maintenance (O&M)																													
Topic 5.1 - Conservation & Demand Management - Water Resource																													
Topic 5.2 - Conservation & Demand Management - Water Balance																													
7		PA: Smart Water Meters	PA: Smart Water Meters	Resource Development		Water	Internal Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	3,000	0	0	0	0	0	0	1,000
Topic 6 - Water Resource																													
8		KS: Equipping of existing boreholes	KS: Equipping of existing boreholes	Maintenance		Water	Internal Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1,200	0	0	0	0	0	0	400
9		PA: Borehole Development	PA: Borehole Development	Infrastructure Extension		Water	Internal Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	7,844	0	0	0	0	0	0	2,275
10		PA: Equipping of new production boreholes and relocation of supply pipeline	PA: Equipping of new production boreholes and relocation of supply pipeline	Refurbish Infrastructure		Water	Internal Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,500	0	0	0	0	0	0	1,000

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

	Funding Source (R'000)						
	Own	MIG	RBIG	ACIP	DR	MWIG	Other
Total Funding:	0	3,000	0	0	0	0	8,175

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																											
1		PA: Upgrading of WTW (security fencing; pump station; treatment process)	PA: Upgrading of WTW (security fencing; pump station; treatment process)	Maintenance		Water	Internal Bulk	N	Y	N	N	N	N	N	Y	N	N	N	N	N	N	6,500	0	2,000	0	0	0	0	0
2		PA: New irrigation pipeline from WWTW to sport facilities and storage	PA: New irrigation pipeline from WWTW to sport facilities and storage	Operation		Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,500	0	500	0	0	0	0	0
3		PA: New raw water pipeline from Dorps River to WTW	PA: New raw water pipeline from Dorps River to WTW	Refurbish Infrastructure		Water	Internal Bulk	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	11,000	0	0	0	0	0	0	1,000
4		PA: Replacement of old AC Pipes	PA: Replacement of old AC Pipes	Resource Development		Water	Internal Bulk	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	500

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
5		PA: Upgrading of WWTW (intermediate processes; pump station; aerators, etc)	PA: Upgrading of WWTW (intermediate processes; pump station; aerators, etc)	Operation		Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	4,500	0	2,000	0	0	0	0	0
6		KS: Upgrading of transfer sewer pump station	KS: Upgrading of transfer sewer pump station	Operation		Sanitation	Sanitation Bulk	N	N	Y	N	N	N	Y	N	N	N	N	N	N	N	3,500	0	500	0	0	0	0	0
7		LG: New water pipeline from WTW to Newton Park	LG: New water pipeline from WTW to Newton Park	Operation		Water	Internal Bulk	Y	N	N	Y	N	N	N	N	N	N	N	N	N	N	2,000	0	500	0	0	0	0	0
8		PA: Upgrading of South-end sewer network	PA: Upgrading of South-end sewer network	Local Scheme Solution		Sanitation	Sanitation Bulk	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	12,500	0	0	0	0	0	0	3,000
9		KS: Upgrading of WTW (treatment process; relocation)	KS: Upgrading of WTW (treatment process; relocation)	Operation		Water	Internal Bulk	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	4,000	0	3,000	0	0	0	0	0
Topic 4 - Water Services Operations & Maintenance (O&M)																												
Topic 5.1 - Conservation & Demand Management - Water Resource																												
Topic 5.2 - Conservation & Demand Management - Water Balance																												
10		PA: Smart Water Meters	PA: Smart Water Meters	Resource Developme nt		Water	Internal Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	3,000	0	0	0	0	0	0	1,000

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
Topic 6 - Water Resource																												
11		KS: Equipping of existing boreholes	KS: Equipping of existing boreholes	Maintenance		Water	Internal Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1,200	0	0	0	0	0	0	400
12		LG: Equipping of existing boreholes	LG: Equipping of existing boreholes	Refurbish Infrastructure		Water	Internal Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1,200	0	0	0	0	0	0	400
13		PA: Equipping of new production boreholes and relocation of supply pipeline	PA: Equipping of new production boreholes and relocation of supply pipeline	Refurbish Infrastructure		Water	Internal Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,500	0	0	0	0	0	0	1,500

	Funding Source (R'000)						
	Own	MIG	RBIG	ACIP	DR	MWIG	Other
Total Funding:	0	8,500	0	0	0	0	7,800

Water Services Development Plan

Chapter 2:

Topic 1: Settlement Demographics & Public Amenities

Settlement Summary		
Section	**Value**	**Assessment Score**
1.1 Total Population	14671	80
1.2 Total Number of Households	3607	80
1.3 Average Household Size	4.31	80
1.4 Total Number of Settlements	8	80

Summary by Settlement Group			
Settlement Type	**Settlements**	**Population**	**Households**
Rural	2	3672	1185
Urban	6	10999	2422

Water Services Development Plan

Amenities Summary		
Description	**Number per type**	**Assessment Score**
Educational facilities	5	100
Health Facilities	4	100

Assessment Score

Settlement Type		Number of settlements	Population per settlement type	Households per settlement type	Average Households size per settlement type	
Rural	Farming	1	3542	1144	3.1	75
Rural	Working Towns and Service Centres - Mines, Prisons etc.	1	130	41	3.17	75
Urban	Urban - Formal Town	5	10946	2411	4.68	75
Urban	Urban - Informal Settlements (Squatter Camp)	1	53	11	4.82	75
					Total	75.0%

Topic 1 Master 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

Water Services Development Plan

1.4 Amenities Summary	Yes	Yes

Strategic Interpretation

Detail situation assessments per Topic element

1.1 Settlements Summary

Interpret Situation Assessment:	The current population is 14 671, the total number of households is 3607, with an average household size of approximately 4.31 people per household.

1.2 Summary by Settlement Group

Interpret Situation Assessment:	There are 8 settlements, 2 rural and 6 urban settlements.

1.3 Assessment Score by Settlement Type

Interpret Situation Assessment:	There are 2 rural settlements, 5 urban formal and 1 urban informal settlement.

1.4 Amenities Summary

Interpret Situation Assessment:	There are a total of 9 public amenities including 4 health facilities (3 Clinics, 1Hospital) and 5 education facilities (2 Secondary and 3 Primary). The amenities summary does not include other public amenities i.e. Police Stations, Municipal / Provincial / National Entities, Libraries, Community Halls etc. do not form part of the WSDP output data.

Water Services Development Plan

Business Element Report Items	Compliancy 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	80	Yes	100	Data is as per the Independent Development Plan (IDP) and confirmation by Municipality.	100	No	0	No	0	No	0	No	0	No	0	200	28.57
1.2 Summary by Settlement Group	0	Yes	100	Update the Census of the Community Survey to reconfirm Settlement Groups data.	100	No	0	No	0	No	0	No	0	No	0	200	28.57
1.3 Assessment Score by Settlement Type	75	Yes	100	Update the Census of the Community Survey to reconfirm Settlement type data.	100	No	0	No	0	No	0	No	0	No	0	200	28.57
1.4 Amenities Summary	100	Yes	100	Update of Amenities Basic Water and Sanitation Interventions.	100	No	0	No	0	No	0	No	0	No	0	200	28.57
																Demand Overall Scoring Average	28.57

WSDP FY2023: Strategies and Objectives ***Prince Albert***

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

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)	0	90
Direct settlement backlog water population. Total population of settlement with a water need (irrelevant the type of need)	0	90
Direct settlement backlog sanitation house holds. Total house hold of settlement with a sanitation need (irrelevant the type of need)	125	90
Direct settlement backlog sanitation population. Total population of settlement with a sanitation need (irrelevant the type of need)	475	90

Water Profile		
	Totals	**Assessment Score**
Water Services Infrastructure Supply Level Profile		
Piped water inside the dwelling/house-Housholds	2820	90
Piped water inside yard-Households	93	90
Piped water distance <200m - Households	0	90
Piped water distance <201m - Households	0	90
Borehole in the yard - Households	0	90
Rain-water tank in yard - Households	0	90
Water vendor-carrier/tanker - Households	0	90
Stagnant water - dam/pool - Households	0	90
Flowing water/spring/ stream/river - Households	0	90
Water Other - Households	694	90
Water Reliability Profile		
Water Supply System - Single Type	0	90
Water Supply System - Scheme based	7	90

Water Services Development Plan

Water Profile		
	Totals	**Assessment Score**
Total Number of Households having Reliable Service. (Interpret Direct Backlog field above)	3607	90
Total Number of Households NOT having Reliable Service. (Interpret Direct Backlog field above)	0	90
System Total Number of Households NOT having Reliable Service due to: Functionality (O&M and Management)	0	90
Total Number of Households NOT having Reliable Service due to: Resource	0	90
Total Number of Households NOT having Reliable Service due to: Infrastructure	0	90
Total Number of Households NOT having Reliable Service due to: Resource - Conservation & Demand Management	0	90
Total Number of Households NOT having Reliable Service due to: Resource - New Source	0	90
Total Number of Households NOT having Reliable Service due to: Infrastructure – UPGRADE/REFURBISHMENT	0	90
Total Number of Households NOT having Reliable Service due to: Infrastructure – EXTENSION	0	90
Total Number of Households NOT having Reliable Service due to: Infrastructure – NEW SCHEME	0	90
Total Number of Households NOT having Reliable Service due to: REPLACE OLD	0	90

Sanitation Profile		
	Totals	**Assessment Score**
Sanitation Service Infrastructure Supply Level Profile		
None - Households	0	90
Flush toilet (connected to sewerage system) - Households	2406	90
Flush toilet (with septic tank) - Households	452	90
Chemical Toilet - Households	0	80
Pit toilet with ventilation (VIP) - Households	0	90
Pit without ventilation - Households	0	90
Bucket toilet - Households	0	90
Sanitation Reliability Profile		
Household requiring VIP Refurbishment	0	90
Household requiring Existing Scheme Refurbishment	0	90
Household not having reliable service due to Functionality	0	90

Water Services Development Plan

Sanitation Profile		
	Totals	**Assessment Score**
Household not having reliable service due to Resource - Water Security	0	90
Infrastructure to be upgraded: Pit to VIP (HH)	0	90
Infrastructure to be upgraded: Buckets to waterborne (HH)	0	90
Infrastructure requirement: None to to waterborne. (HH)	0	90
Infrastructure to be upgraded: Buckets to VIP (HH)	0	90
Infrastructure to be upgraded: None to VIP (HH)	0	90
Infrastructure to be upgraded: Pit to waterborne (HH)	0	90
Infrastructure to be upgraded: VIPs to waterborne (HH)	0	90

	Waterstatus
Consumer types	Adequate
Educational facilities	5
Health Facilities	4
Grand Total	9

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						
Primary School	3	3	0	0	0.00	90
Secondary School	1	1	0	0	0.00	90
Tertiary	0	0	0	0	0.00	90
Combined	1	1	0	0	0.00	90
Special Needs	0	0	0	0	0.00	90
Other	0	0	0	0	0.00	90
Total	**5**	**5**	**0**	**0**	**0.00**	
2.1.2 Health Plan						
Hospitals	1	1	0	0	0.00	90
Health Centers	0	0	0	0	0.00	90
Clinics	3	3	0	0	0.00	90
Other	0	0	0	0	0.00	90
Total	**4**	**4**	**0**	**0**	**0.00**	
2.2 Sanitation Services						
2.2.1 Education Plan						
Primary School	3	3	0	0	0.00	90
Secondary School	1	1	0	0	0.00	90
Tertiary	0	0	0	0	0.00	90
Combined	1	1	0	0	0.00	90
Special Needs	0	0	0	0	0.00	90
Other	0	0	0	0	0.00	90

Water Services Development Plan

Total	**5**	**5**	**0**	**0**	**0.00**	
2.2.2 Health Plan						
Hospitals	1	1	0	0	0.00	90
Health Centers	0	0	0	0	0.00	90
Clinics	3	3	0	0	0.00	90
Other	0	0	0	0	0.00	90
Total	**4**	**4**	**0**	**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

Strategic Interpretation

Detail situation assessments per Topic element

Water Services Development Plan

Direct Backlog Water

Interpret Situation Assessment:	All the 3607 households have adequate water supply.

Water Services Infrastructure Supply Level Profile

Interpret Situation Assessment:	Approximately 2820 of all households have piped water inside dwellings/house, 93 have piped water inside yards.

Sanitation Service Infrastructure Supply Level Profile

Interpret Situation Assessment:	Approximately 2406 of all households have flush toilets connected to the sewerage system and 452 have conservancy / septic tanks.

Water Services: Education

Interpret Situation Assessment:	All 5 education facilities have adequate water services.

Sanitation Services: Education

Interpret Situation Assessment:	All 5 education facilities have adequate sanitation services.

Health and Educational Facilities

Water Services Development Plan

Interpret Situation Assessment:	All public health and educational facilities have adequate water and sanitation facilities.

Direct Backlog Sanitation

Interpret Situation Assessment:	There are 452 households in Prince Albert on conservancy / septic tanks, to be converted to piped waterborne system.

Water Reliability Profile

Interpret Situation Assessment:	All the 3607 households have reliable water supply.

Sanitation Reliability Profile

Interpret Situation Assessment:	The total number of 2406 households are connected to sewer system and 452 households in Prince Albert have conservancy tanks.

Water Services: Health

Interpret Situation Assessment:	All 4 health facilities have basic water supply.

Sanitation Services: Health

Water Services Development Plan

Interpret Situation Assessment:	All 4 health facilities have basic sanitation services.

Business Element Report Items	Compliancy 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	90	Yes	100	Maintain water supply on all households.	100	No	0		0		0		0		0	200	28.57
Water Services Infrastructure Supply Level Profile	90	Yes	100	Maintain provision of basic water services to all households.	100	No	0		0		0		0		0	200	28.57
Sanitation Service Infrastructure Supply Level Profile	89.44	Yes	100	Connect 452 conservancy tanks to sewer system.	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
Water Services: Education	90	Yes	100	Maintain provision of basic water services to all the schools	100	No	0		0		0		0		0	200	28.57
Sanitation Services: Education	90	Yes	100	Maintain provision of waterborne sanitation to all the schools.	100	No	0		0		0		0		0	200	28.57
Health and Educational Facilities	0	Yes	100	Maintain basic water and sanitation to all 4 health and 5 education facilities.	100	No	0		0		0		0		0	200	28.57
Direct Backlog Sanitation	0	Yes	100	Address backlog sanitation of 452 households.	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
Water Reliability Profile	0	Yes	100	Maintain the provision of reliable water supply	100	No	0		0		0		0		0	200	28.57
Sanitation Reliability Profile	0	Yes	100	Address backlog sanitation to 452 conservancy tanks households to waterborne sanitation.	100	Yes	100	Partial	50	Yes	100	Yes	100	Yes	100	650	92.86
Water Services: Health	0	Yes	100	Maintain provision of basic water services to all health facilities.	100	No	0		0		0		0		0	200	28.57
Sanitation Services: Health	0	Yes	100	Maintain provision of basic sanitation services to all 4 health facilities.	100	No	0		0		0		0		0	200	28.57
																Demand Overall Scoring Average	47.4

WSDP FY2023: Strategies and Objectives ***Prince Albert***

Nr	Objective	Key Performance	Baseline (2022	Linked Project	WSDP FY2023	WSDP FY2024	WSDP FY2025	WSDP FY2026	WSDP FY2027

Water Services Development Plan

Nr	Objective / Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP FY2023 Target	WSDP FY2024 Target	WSDP FY2025 Target	WSDP FY2026 Target	WSDP FY2027 Target
Service Levels Profile									
1	Provision of basic sanitation to all households	Number of households without basic sanitation, 94buckets.	1		1				

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	90
3.1.2 Is there a disaster management plan	True	90
3.1.3 Is there a plan in place to manage untreated effluent	True	90

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	34	1	3	3	3	7.9	0.02	14	3	90
3.2.1.1 Previous incidents including Security Problems (Regular)		0	0	0	0			0	0	90
3.2.1.2 Previous incidents including Security Problems (Periodic)		0	0	0	0			0	0	90
3.2.1.3 Previous incidents including Security Problems (Sporadic)		1	3	3	3			14	3	90
3.2.1.4 Previous incidents including Security Problems (None)		0	0	0	0			0	0	90
3.2.2.1 Safety inspection performed (Requlat)		1	3	3	3			14	3	80
3.2.2.2 Safety inspection performed (Periodic)		0	0	0	0			0	0	80
3.2.2.3 Safety inspection performed (Sporadic)		0	0	0	0			0	0	80
3.2.2.4 Safety inspection performed (None)		0	0	0	0			0	0	80
3.2.5 Average Operating hours per day (X hrs)			24						24	90
3.3.1.1 General physical condition: Dysfunctional	3	0	0	0	0	0	0	0	0	90

Water Services Development Plan

3.3.1.2 General physical condition: Operational	28	1	3	3	3	0	0	14	3	90
3.3.1.3 General physical condition: Prime Condition	2	0	0	0	0	0	0	0	0	90
3.3.1.4 General physical condition: Vandalised	1	0	0	0	0	0	0	0	0	90
3.3.2 Number of breakages / failures per year	0	0	0	0	0	0	0	0	0	90
3.3.3 Total refurbishment needs %	9%	10%	10%	15%	15%	15%	15%	5%	10%	90
3.3.4 Total refurbishment needs cost (RM)	1.04	0.15	0.95	0.56	0.15	0.17	0.13	2.07	1.85	90
3.3.4.1 Refurbishment cost for 5 year	1.406	0.64	1.22	0.72	0.213	0.21	0.16	2.25	2.25	90
3.3.4.2 Refurbishment cost for 10 year	2.114	0.82	1.57	0.93	0.267	0.29	0.2	2.94	3.05	90
3.3.4.3 Refurbishment cost for 15 year	2.509	1.06	2.01	0.98	0.36	0.36	0.23	3.73	3.9	90
3.3.5 Total replacement needs %	6%	10%	10%	15%	15%	15%	15%	5%	10%	80
3.3.6 Total replacement needs cost (RM)	1.05	0.25	0.95	0.56	0.15	0.09	0.05	1.81	0.93	80
3.3.6.1 Replacement cost for 5 year	1.271	0.32	1.22	0.72	0.2	0.122	0.08	2.25	1.18	80

Water Services Development Plan

3.3.6.2 Replacement cost for 10 year	1.805	0.41	1.57	0.93	0.265	0.132	0.11	2.94	1.52	80
3.3.6.3 Replacement cost for 15 year	2.478	0.53	2.01	1.2	0.36	0.172	0.14	3.73	1.96	80
3.3.7 Total New development cost required	0	0	0	0	0	0	0	0	0	80
3.3.7.1 New development cost for 5 year	0	0	0	0	0	0	0	0	0	80
3.3.7.2 New development cost for 10 year	0	0	0	0	0	0	0	0	0	80
3.3.7.3 New development cost for 15 year	0	0	0	0	0	0	0	0	0	80
3.3.8 % Of Components already reached useful life	0%	0%	0%	0%	0%	0%	0%	0%	0%	80
3.3.9 % Whereoff the WSA Self is the Current Owner	100%	100%	100%	100%	100%	100%	100%	100%	100%	90
3.3.10 % Whereoff the WSA Self is Current Operator	100%	100%	100%	100%	100%	100%	100%	100%	100%	90
3.4.1 % Expected total lifespan: Short (1-3 yrs)	0	0	0	0	0	0	0	0	0	90
3.4.2 % Expected total lifespan: Medium (3 - 10 yrs)	0	0	0	0	0	0	0	0	0	90
3.4.3 % Expected total lifespan: Long (10 - 20 yrs)	100	100	100	100	100	100	100	100	100	90

Water Services Development Plan

Sanitation Schemes		
Sanitation Schemes	**Green Drop**	**Assessment Score**
Klaarstroom	False	90
Leeu Gamka	False	90
Prince Albert	False	90

Water Services Development Plan

Water Schemes		
Water Schemes	**Blue Drop**	**Assessment Score**
Klaarstroom	False	90
Leeu Gamka	False	90
Prince Albert Road	False	90
Prince Albert Water Supply System	False	90
WSA Level		

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:	There are 34 boreholes, 1 abstraction point, 3 Water Treatment Works , 3 Water Pump Stations, 2 Sewer Pump Stations, 7.9 km of Bulk Water pipelines, 23.68 km of Sewer Bulk Pipelines, 15 Reservoirs and 3 Wastewater Treatment Works.

3.2 Operation

Interpret Situation Assessment:	All assets are in operational condition. The operations of the WSA managed through a master plan however due to insufficient budgets not all inspections and maintenance operations can occur to ensure the WSA operates optimally.

3.3 Functionality Observation

Interpret Situation Assessment:	All Assets are Functional, with approximately 10% of all the components of the WSA's assets requiring refurbishment and / or replacement.

3.4 Asset Assessment Spectrum

Interpret Situation Assessment:	All infrastructure is operational, approximately 10% require replacement or refurbishment and all the existing infrastructure has an expected lifespan of 10 to 20 years.

3.5 Water and Sanitation schemes

Water Services Development Plan

Interpret Situation Assessment:	There are 4 existing water schemes and 3 sanitation schemes.

Business Element Report Items	Compliancy 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	90	Yes	100	Update and Maintain Asset register / database to confirm Asset Values, refurbishment and replacement needs.	100	No	0	No	0	No	0	No	0	No	0	200	28.57
3.2 Operation	90	Yes	100	Maintain operational condition of infrastructure by means of refurbishing and / or replacing components of assets.	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
3.3 Functionality Observation	83.64	Yes	100	Maintain all infrastructure in functional condition by attending to all refurbishment and / or replacement needs.	100	Yes	100	Partial	50	Yes	100	Yes	100	Yes	100	650	92.86
3.4 Asset Assessment Spectrum	90	Yes	100	Maintain assets by attending to all refurbishment and / or replacement needs.	100	Yes	100	Partial	50	Yes	100	Yes	100	Yes	100	650	92.86
3.5 Water and Sanitation schemes	78.75	Yes	100	Maintain existing and Development of new water and sanitation schemes to meet the future water and sanitation requirements.	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
																Demand Overall Scoring Average	82.86

WSDP FY2023: Strategies and Objectives ***Prince Albert***

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

Water Services Development Plan

Nr	Objective / Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP FY2023 Target	WSDP FY2024 Target	WSDP FY2025 Target	WSDP FY2026 Target	WSDP FY2027 Target
13	Ensure continuity of bulk water supply.	Install new pressure balancing storage tank.	1	, PA: Pressure Balancing Storage Tank for the Low Pressure Area					
14	Ensure continuity of bulk water supply.	Upgrading of Prince Albert water treatment works.	1			1	1	1	1
15	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Installation of new irrigation pipeline from Prince Albert waste water treatment works to sport facilities and storage.	1				1	1	
16	Ensure continuity supply of bulk water to all Prince Albert households.	Replace raw water pipeline from Dorps river to the Water Treatment Works.	1				1	1	1
17	Ensure continuity of bulk water supply to all households.	Replacement of old AC pipes in Prince Albert.	1		1	1	1	1	
18	Ensure continuous, safe disposal of treated effluent to the environment, from all wastewater treatment works.	Upgrading of Prince Albert Waste Water Treatment Work.	1			1	1	1	
19	Ensure continuous, safe disposal of treated effluent to the environment, from all wastewater treatment works.	Upgrading of sewer pump station in Bitterwater.	1					1	1
20	Ensure continuous, safe disposal of treated effluent to the environment, from all wastewater treatment works.	Upgrading of transfer sewer pump station in Klaarstroom.	1					1	1

Water Services Development Plan

Nr	Objective / Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP FY2023 Target	WSDP FY2024 Target	WSDP FY2025 Target	WSDP FY2026 Target	WSDP FY2027 Target
21	Ensure continuity of bulk water supply to all Newton Park households.	Replace new water pipeline from Leeu Gamka Water Treatment Works to Newton Park.	1				1	1	
22	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for	Upgrading of south end sewer reticulation.	1		1	1	1	1	1
23	Ensure continuous supply of water to all Newton Park households.	Upgrading of elevated tanks in Newton Park.	1		1	1			
24	Ensure continuity of water treatment for all households.	Upgrading of Klaarstroom water treatment works	1			1	1		
25	Ensure continuity of water treatment in Leeu Gamka households.	Upgrading of water treatment works in Leeu Gamka.	1					1	
26	Ensure continuous, safe disposal of treated effluent to the environment, from all wastewater treatment works.	Refurbishment of Wastewater Treatment Works with High Needs of Refurbishment Requirements i.e Leeu Gamka	1						
27	Ensure continuous, safe disposal of treated effluent to the environment, from all wastewater treatment works.	Refurbishment of pumping mains in Welgemoed	1						
28	Ensure continuous, safe disposal of treated effluent to the environment, from all wastewater treatment works.	Upgrading of Prince Albert waste water treatment plant	1						

Water Services Development Plan

Nr	Objective / Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP FY2023 Target	WSDP FY2024 Target	WSDP FY2025 Target	WSDP FY2026 Target	WSDP FY2027 Target
29	Ensure continuity of safe disposal of wastewater conveyance from all households, and prevent pollution of environment.	Installation of new sewer pumpstations in Welgemoed-North and Newton Park.	1						
30	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Installation of new 1.3 km of sewer pipeline in Prince Albert South.	1						
31	Ensure continuity of bulk water supply and reduce storage facility with no water losses.	Refurbishment of 14 No of Reservoirs in Prince Albert.	1	, Refurbishment of all reservoirs in Prince Albert					
32	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Installation of 1km of sewer rising main in Klaarstroom.	1						
33	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Installation of new gravity network in Leeu Gamka.	1						
34	Ensure continuity of water conveyance from all households,	Install new 21l/s booster pump station	1	, New 21l/s @ 30m Booster Pump Station					
35	Ensure continuity of bulk water supply to all households.	Installation of 230m of water pipe for the new developments.	1	, 230 m of 110 mm dia pipe for new developments.					

Water Services Development Plan

Nr	Objective / Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP FY2023 Target	WSDP FY2024 Target	WSDP FY2025 Target	WSDP FY2026 Target	WSDP FY2027 Target
36	Ensure continuity of bulk water supply and reduce storage facility with no water losses.	Construction of 1Ml reservoir in Prince Albert for future developments.	1	, Construction of new 1Ml Reservoir					
37	Ensure continuity of bulk water supply and reduce storage facility with no water losses.	Construction of new 1 Ml reservoir in Leeu Gamka for new developments.	1	, Construction of new 1Ml Reservoir					
38	Ensure continuous safety of bulk water supply.	Refurbishment of concrete on the 3 water treatment works	1	, Concrete refurbishment of all treatment works					

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	80

Phase	Compliance	StatusQuo	Impact	Assesement Score
4.2 Resources				
4.2.1 Existing Groundwater Infrastructure				
Operation	Staff	Below Minimum requirement	Medium/High	80
Maintenance	Staff	Below Minimum requirement	Medium/High	80
Operation	External resources	Minimum basic requirement	Low	80
Maintenance	External resources	Minimum basic requirement	Low	80
Operation	Spare Parts	Minimum basic requirement	Low	80
Maintenance	Spare Parts	Minimum basic requirement	Low	80
Operation	Tools & Equipment	Minimum basic requirement	Low	80
Maintenance	Tools & Equipment	Minimum basic requirement	Low	80
Operation	Budget	Minimum basic requirement	Medium/High	80
Maintenance	Budget	Minimum basic requirement	Medium/High	80
4.2 Resources				
4.2.2 Existing Surface Water Infrastructure				
Operation	Staff	Minimum basic requirement	Medium/High	80

Maintenance	Staff	Minimum basic requirement	Medium/High	80
Operation	External resources	Minimum basic requirement	Low	80
Maintenance	External resources	Minimum basic requirement	Low	80
Operation	Spare Parts	Minimum basic requirement	Low	80
Maintenance	Spare Parts	Minimum basic requirement	Low	80
Operation	Tools & Equipment	Minimum basic requirement	Low	80
Maintenance	Tools & Equipment	Minimum basic requirement	Low	80
Operation	Budget	Minimum basic requirement	Medium/High	80
Maintenance	Budget	Minimum basic requirement	Medium/High	80
4.2 Resources				
4.2.3 Existing Waste Water Treatment Works Infrastructure				
Operation	Staff	Below Minimum requirement	Medium/High	80
Maintenance	Staff	Below Minimum requirement	Medium/High	80
Operation	External resources	Below Minimum requirement	Low	80
Maintenance	External resources	Below Minimum requirement	Low	80
Operation	Spare Parts	Minimum basic requirement	Low	80
Maintenance	Spare Parts	Minimum basic requirement	Low	80
Operation	Tools & Equipment	Minimum basic requirement	Low	80
Maintenance	Tools & Equipment	Minimum basic requirement	Low	80
Operation	Budget	Minimum basic requirement	Low	80
Maintenance	Budget	Minimum basic requirement	Low	80
4.2 Resources				
4.2.4 Existing Water Treatment Works Infrastructure				
Operation	Staff	Minimum basic requirement	Medium/High	80
Maintenance	Staff	Minimum basic requirement	Medium/High	80
Operation	External resources	Below Minimum requirement	Low	80
Maintenance	External resources	Below Minimum requirement	Low	80
Operation	Spare Parts	Below Minimum requirement	Low	80
Maintenance	Spare Parts	Below Minimum requirement	Low	80
Operation	Tools & Equipment	Minimum basic requirement	Medium/High	80
Maintenance	Tools & Equipment	Minimum basic requirement	Medium/High	80

Operation	Budget	Minimum basic requirement	Critical	80
Maintenance	Budget	Minimum basic requirement	Critical	80
4.2 Resources				
4.2.5 Existing Pump Station Infrastructure				
Operation	Staff	Minimum basic requirement	Medium/High	80
Maintenance	Staff	Minimum basic requirement	Medium/High	80
Operation	External resources	Minimum basic requirement	Medium/High	80
Maintenance	External resources	Minimum basic requirement	Medium/High	80
Operation	Spare Parts	Minimum basic requirement	Medium/High	80
Maintenance	Spare Parts	Minimum basic requirement	Medium/High	80
Operation	Tools & Equipment	Minimum basic requirement	Medium/High	80
Maintenance	Tools & Equipment	Minimum basic requirement	Medium/High	80
Operation	Budget	Minimum basic requirement	Critical	80
Maintenance	Budget	Minimum basic requirement	Critical	80
4.2 Resources				
4.2.6 Existing Bulk Pipeline Infrastructure				
Operation	Staff	Minimum basic requirement	Medium/High	80
Maintenance	Staff	Minimum basic requirement	Medium/High	80
Operation	External resources	Below Minimum requirement	Low	80
Maintenance	External resources	Below Minimum requirement	Low	80
Operation	Spare Parts	Minimum basic requirement	Medium/High	80
Maintenance	Spare Parts	Minimum basic requirement	Medium/High	80
Operation	Tools & Equipment	Minimum basic requirement	Medium/High	80
Maintenance	Tools & Equipment	Minimum basic requirement	Medium/High	80
Operation	Budget	Minimum basic requirement	Medium/High	80
Maintenance	Budget	Minimum basic requirement	Medium/High	80
4.2 Resources				
4.2.7 Existing Tower & Reservoir Infrastructure				
Operation	Staff	Minimum basic requirement	Medium/High	80
Maintenance	Staff	Minimum basic requirement	Medium/High	80
Operation	External resources	Below Minimum requirement	Low	80

Maintenance	External resources	Below Minimum requirement	Low	80
Operation	Spare Parts	Minimum basic requirement	Medium/High	80
Maintenance	Spare Parts	Minimum basic requirement	Medium/High	80
Operation	Tools & Equipment	Minimum basic requirement	Medium/High	80
Maintenance	Tools & Equipment	Minimum basic requirement	Medium/High	80
Operation	Budget	Minimum basic requirement	Medium/High	80
Maintenance	Budget	Minimum basic requirement	Medium/High	80
4.2 Resources				
4.2.8 Existing Reticulation Infrastructure				
Operation	Staff	Minimum basic requirement	Medium/High	80
Maintenance	Staff	Minimum basic requirement	Medium/High	80
Operation	External resources	Minimum basic requirement	Low	80
Maintenance	External resources	Minimum basic requirement	Low	80
Operation	Spare Parts	Minimum basic requirement	Medium/High	80
Maintenance	Spare Parts	Minimum basic requirement	Medium/High	80
Operation	Tools & Equipment	Minimum basic requirement	Medium/High	80
Maintenance	Tools & Equipment	Minimum basic requirement	Medium/High	80
Operation	Budget	Minimum basic requirement	Medium/High	80
Maintenance	Budget	Minimum basic requirement	Medium/High	80
4.3 Information				
4.3.1 Existing Groundwater Infrastructure				
Operation	Manuals Available	Minimum basic requirement	Medium/High	80
Maintenance	Manuals Available	Minimum basic requirement	Medium/High	80
Operation	Asset Register	Minimum basic requirement	Medium/High	80
Maintenance	Asset Register	Minimum basic requirement	Medium/High	80
Operation	As-Built info.	Minimum basic requirement	Medium/High	80
Maintenance	As-Built info.	Minimum basic requirement	Medium/High	80
Operation	Tools & Equipment	Minimum basic requirement	Medium/High	80
Maintenance	Tools & Equipment	Minimum basic requirement	Medium/High	80
Operation	Contingency & Safety Plan	Minimum basic requirement	Medium/High	80
Maintenance	Contingency & Safety Plan	Minimum basic requirement	Medium/High	80

4.3 Information				
4.3.2 Existing Surface Water Infrastructure				
Operation	Manuals Available	Below Minimum requirement	Medium/High	80
Maintenance	Manuals Available	Below Minimum requirement	Medium/High	80
Operation	Asset Register	Below Minimum requirement	Medium/High	80
Maintenance	Asset Register	Below Minimum requirement	Medium/High	80
Operation	As-Built info.	Below Minimum requirement	Medium/High	80
Maintenance	As-Built info.	Below Minimum requirement	Medium/High	80
Operation	Tools & Equipment	Minimum basic requirement	Medium/High	80
Maintenance	Tools & Equipment	Minimum basic requirement	Medium/High	80
Operation	Contingency & Safety Plan	Below Minimum requirement	Medium/High	80
Maintenance	Contingency & Safety Plan	Below Minimum requirement	Medium/High	80
4.3 Information				
4.3.3 Existing Water Treatement Works Infrastructure				
Operation	Manuals Available	Minimum basic requirement	Medium/High	80
Maintenance	Manuals Available	Minimum basic requirement	Medium/High	80
Operation	Asset Register	Minimum basic requirement	Medium/High	80
Maintenance	Asset Register	Minimum basic requirement	Medium/High	80
Operation	As-Built info.	Minimum basic requirement	Medium/High	80
Maintenance	As-Built info.	Minimum basic requirement	Medium/High	80
Operation	Tools & Equipment	Minimum basic requirement	Medium/High	80
Maintenance	Tools & Equipment	Minimum basic requirement	Medium/High	80
Operation	Contingency & Safety Plan	Minimum basic requirement	Medium/High	80
Maintenance	Contingency & Safety Plan	Minimum basic requirement	Medium/High	80
4.3 Information				
4.3.4 Existing Waste Water Treatment Works Infrastructure				
Operation	Manuals Available	Minimum basic requirement	Medium/High	80
Maintenance	Manuals Available	Minimum basic requirement	Medium/High	80
Operation	Asset Register	Minimum basic requirement	Medium/High	80
Maintenance	Asset Register	Minimum basic requirement	Medium/High	80
Operation	As-Built info.	Minimum basic requirement	Medium/High	80

Maintenance	As-Built info.	Minimum basic requirement	Medium/High	80
Operation	Tools & Equipment	Minimum basic requirement	Medium/High	80
Maintenance	Tools & Equipment	Minimum basic requirement	Medium/High	80
Operation	Contingency & Safety Plan	Minimum basic requirement	Medium/High	80
Maintenance	Contingency & Safety Plan	Minimum basic requirement	Medium/High	80
4.3 Information				
4.3.5 Existing Pump Station Infrastructure				
Operation	Manuals Available	Minimum basic requirement	Medium/High	80
Maintenance	Manuals Available	Minimum basic requirement	Medium/High	80
Operation	Asset Register	Minimum basic requirement	Medium/High	80
Maintenance	Asset Register	Minimum basic requirement	Medium/High	80
Operation	As-Built info.	Minimum basic requirement	Medium/High	80
Maintenance	As-Built info.	Minimum basic requirement	Medium/High	80
Operation	Tools & Equipment	Minimum basic requirement	Medium/High	80
Maintenance	Tools & Equipment	Minimum basic requirement	Medium/High	80
Operation	Contingency & Safety Plan	Minimum basic requirement	Medium/High	80
Maintenance	Contingency & Safety Plan	Minimum basic requirement	Medium/High	80
4.3 Information				
4.3.6 Existing Bulk Pipeline Infrastructure				
Operation	Manuals Available	Minimum basic requirement	Medium/High	80
Maintenance	Manuals Available	Minimum basic requirement	Medium/High	80
Operation	Asset Register	Minimum basic requirement	Medium/High	80
Maintenance	Asset Register	Minimum basic requirement	Medium/High	80
Operation	As-Built info.	Minimum basic requirement	Medium/High	80
Maintenance	As-Built info.	Minimum basic requirement	Medium/High	80
Operation	Tools & Equipment	Minimum basic requirement	Medium/High	80
Maintenance	Tools & Equipment	Minimum basic requirement	Medium/High	80
Operation	Contingency & Safety Plan	Minimum basic requirement	Medium/High	80
Maintenance	Contingency & Safety Plan	Minimum basic requirement	Medium/High	80
4.3 Information				
4.3.7 Existing Tower & Reservoir Infrastructure				

Operation	Manuals Available	Minimum basic requirement	Medium/High	80
Maintenance	Manuals Available	Minimum basic requirement	Medium/High	80
Operation	Asset Register	Minimum basic requirement	Medium/High	80
Maintenance	Asset Register	Minimum basic requirement	Medium/High	80
Operation	As-Built info.	Minimum basic requirement	Medium/High	80
Maintenance	As-Built info.	Minimum basic requirement	Medium/High	80
Operation	Tools & Equipment	Minimum basic requirement	Medium/High	80
Maintenance	Tools & Equipment	Minimum basic requirement	Medium/High	80
Operation	Contingency & Safety Plan	Minimum basic requirement	Medium/High	80
Maintenance	Contingency & Safety Plan	Minimum basic requirement	Medium/High	80
4.3 Information				
4.3.8 Existing Reticulation Infrastructure				
Operation	Manuals Available	Minimum basic requirement	Medium/High	80
Maintenance	Manuals Available	Minimum basic requirement	Medium/High	80
Operation	Asset Register	Minimum basic requirement	Medium/High	80
Maintenance	Asset Register	Minimum basic requirement	Medium/High	80
Operation	As-Built info.	Minimum basic requirement	Medium/High	80
Maintenance	As-Built info.	Minimum basic requirement	Medium/High	80
Operation	Tools & Equipment	Minimum basic requirement	Medium/High	80
Maintenance	Tools & Equipment	Minimum basic requirement	Medium/High	80
Operation	Contingency & Safety Plan	Minimum basic requirement	Medium/High	80
Maintenance	Contingency & Safety Plan	Minimum basic requirement	Medium/High	80
4.4 Activity Control & Management				
4.4.1 Existing Groundwater Infrastructure				
Operation	Procedures	Minimum basic requirement	Medium/High	80
Maintenance	Procedures	Minimum basic requirement	Medium/High	80
Operation	Record keeping in place	Minimum basic requirement	Medium/High	80
Maintenance	Record keeping in place	Minimum basic requirement	Medium/High	80
Operation	Quality Control procedures established	Minimum basic requirement	Medium/High	80
Maintenance	Quality Control procedures established	Minimum basic requirement	Medium/High	80
Operation	Risk Management	Minimum basic requirement	Medium/High	80

Maintenance	Risk Management	Minimum basic requirement	Medium/High	80
Operation	Reporting (data analysis & report generation est.)	Minimum basic requirement	Medium/High	80
Maintenance	Reporting (data analysis & report generation est.)	Minimum basic requirement	Medium/High	80
4.4 Activity Control & Management				
4.4.2 Existing Surface water infrastructure				
Operation	Procedures	Minimum basic requirement	Medium/High	80
Maintenance	Procedures	Minimum basic requirement	Medium/High	80
Operation	Record keeping in place	Minimum basic requirement	Medium/High	80
Maintenance	Record keeping in place	Minimum basic requirement	Medium/High	80
Operation	Quality Control procedures established	Minimum basic requirement	Medium/High	80
Maintenance	Quality Control procedures established	Minimum basic requirement	Medium/High	80
Operation	Risk Management	Minimum basic requirement	Medium/High	80
Maintenance	Risk Management	Minimum basic requirement	Medium/High	80
Operation	Reporting (data analysis & report generation est.)	Minimum basic requirement	Medium/High	80
Maintenance	Reporting (data analysis & report generation est.)	Minimum basic requirement	Medium/High	80
4.4 Activity Control & Management				
4.4.3 Existing Water Treatment Works infrastructure				
Operation	Procedures	Minimum basic requirement	Medium/High	80
Maintenance	Procedures	Minimum basic requirement	Medium/High	80
Operation	Record keeping in place	Minimum basic requirement	Medium/High	80
Maintenance	Record keeping in place	Minimum basic requirement	Medium/High	80
Operation	Quality Control procedures established	Minimum basic requirement	Medium/High	80
Maintenance	Quality Control procedures established	Minimum basic requirement	Medium/High	80
Operation	Risk Management	Minimum basic requirement	Medium/High	80
Maintenance	Risk Management	Minimum basic requirement	Medium/High	80
Operation	Reporting (data analysis & report generation est.)	Minimum basic requirement	Medium/High	80
Maintenance	Reporting (data analysis & report generation est.)	Minimum basic requirement	Medium/High	80
4.4 Activity Control & Management				
4.4.4 Existing Waste Water Treatment Works infrastructure				
Operation	Procedures	Minimum basic requirement	Medium/High	80
Maintenance	Procedures	Minimum basic requirement	Medium/High	80

Operation	Record keeping in place	Minimum basic requirement	Medium/High	80
Maintenance	Record keeping in place	Minimum basic requirement	Medium/High	80
Operation	Quality Control procedures established	Minimum basic requirement	Medium/High	80
Maintenance	Quality Control procedures established	Minimum basic requirement	Medium/High	80
Operation	Risk Management	Minimum basic requirement	Medium/High	80
Maintenance	Risk Management	Minimum basic requirement	Medium/High	80
Operation	Reporting (data analysis & report generation est.)	Minimum basic requirement	Medium/High	80
Maintenance	Reporting (data analysis & report generation est.)	Minimum basic requirement	Medium/High	80
4.4 Activity Control & Management				
4.4.5 Existing Pump Station infrastructure				
Operation	Procedures	Minimum basic requirement	Medium/High	80
Maintenance	Procedures	Minimum basic requirement	Medium/High	80
Operation	Record keeping in place	Minimum basic requirement	Medium/High	80
Maintenance	Record keeping in place	Minimum basic requirement	Medium/High	80
Operation	Quality Control procedures established	Minimum basic requirement	Medium/High	80
Maintenance	Quality Control procedures established	Minimum basic requirement	Medium/High	80
Operation	Risk Management	Minimum basic requirement	Medium/High	80
Maintenance	Risk Management	Minimum basic requirement	Medium/High	80
Operation	Reporting (data analysis & report generation est.)	Minimum basic requirement	Medium/High	80
Maintenance	Reporting (data analysis & report generation est.)	Minimum basic requirement	Medium/High	80
4.4 Activity Control & Management				
4.4.6 Existing Bulk Pipeline infrastructure				
Operation	Procedures	Minimum basic requirement	Medium/High	80
Maintenance	Procedures	Minimum basic requirement	Medium/High	80
Operation	Record keeping in place	Minimum basic requirement	Medium/High	80
Maintenance	Record keeping in place	Minimum basic requirement	Medium/High	80
Operation	Quality Control procedures established	Minimum basic requirement	Medium/High	80
Maintenance	Quality Control procedures established	Minimum basic requirement	Medium/High	80
Operation	Risk Management	Minimum basic requirement	Medium/High	80
Maintenance	Risk Management	Minimum basic requirement	Medium/High	80
Operation	Reporting (data analysis & report generation est.)	Minimum basic requirement	Medium/High	80

Maintenance	Reporting (data analysis & report generation est.)	Minimum basic requirement	Medium/High	80
4.4 Activity Control & Management				
4.4.7 Existing Tower & Reservoir infrastructure				
Operation	Procedures	Minimum basic requirement	Medium/High	80
Maintenance	Procedures	Minimum basic requirement	Medium/High	80
Operation	Record keeping in place	Minimum basic requirement	Medium/High	80
Maintenance	Record keeping in place	Minimum basic requirement	Medium/High	80
Operation	Quality Control procedures established	Minimum basic requirement	Medium/High	80
Maintenance	Quality Control procedures established	Minimum basic requirement	Medium/High	80
Operation	Risk Management	Minimum basic requirement	Medium/High	80
Maintenance	Risk Management	Minimum basic requirement	Medium/High	80
Operation	Reporting (data analysis & report generation est.)	Minimum basic requirement	Medium/High	80
Maintenance	Reporting (data analysis & report generation est.)	Minimum basic requirement	Medium/High	80
4.4 Activity Control & Management				
4.4.8 Existing Reticulation infrastructure				
Operation	Procedures	Minimum basic requirement	Medium/High	80
Maintenance	Procedures	Minimum basic requirement	Medium/High	80
Operation	Record keeping in place	Minimum basic requirement	Medium/High	80
Maintenance	Record keeping in place	Minimum basic requirement	Medium/High	80
Operation	Quality Control procedures established	Minimum basic requirement	Medium/High	80
Maintenance	Quality Control procedures established	Minimum basic requirement	Medium/High	80
Operation	Risk Management	Minimum basic requirement	Medium/High	80
Maintenance	Risk Management	Minimum basic requirement	Medium/High	80
Operation	Reporting (data analysis & report generation est.)	Minimum basic requirement	Medium/High	80
Maintenance	Reporting (data analysis & report generation est.)	Minimum basic requirement	Medium/High	80

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 are existing Operation and Maintenance Plan for various asset components managed by the municipality. i.e. Waste Water Treatment Works, Water Treatment Works.

4.1.1 Is There an Operation and Maintenance Plan?

Interpret Situation Assessment:	There are Operational and Maintenance Plans which are compiled and updated by the Technical Department, Water Treatment Works, Wastewater Treatment.

4.2 Resources

Interpret Situation Assessment:	In terms of staffing, water and sanitation resourcing, there are a total XX posts, of which XX are filled and XX posts are vacant, due to the high vacancies, this indicates inadequate resourcing / staffing from a water and sanitation perspective.

Water Services Development Plan

4.3 Information

Interpret Situation Assessment:	There are adequate information access in terms of manuals available, Asset Register, As-built information.

4.4 Activity Control & Management

Interpret Situation Assessment:	There are adequate Activity & Control management: procedures, Record keeping, Quality Control procedures, Risk Management and Reporting.

Business Element Report Items	Compliancy 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	80	Yes	100	Update and maintain operation and maintenance plan	100	No	0	No	0	No	0	No	0	No	0	200	28.57
4.1.1 Is There an Operation and Maintenance Plan?	80	Yes	100	Prepare, Update and maintain operation and maintenance plan.	100	No	0	No	0	No	0	No	0	No	0	200	28.57
4.2 Resources	80	Yes	100	Maintain & Improve capacity of staff, external resources, Spare Parts, Tools & equipment and budgets.	100	No	0	No	0	No	0	No	0	No	0	200	28.57
4.3 Information	80	Yes	100	Maintain & Update Access to information including Manuals Available, Asset Registers, As Built Information.	100	No	0	No	0	No	0	No	0	No	0	200	28.57
4.4 Activity Control & Management	0	Yes	100	Maintain & Improve effectiveness of procedures, record keeping, quality control procedures, Risk management and reporting.	100	No	0	No	0	No	0	No	0	No	0	200	28.57
										Demand Overall Scoring Average							28.57

Water Services Development Plan

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

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	1	90
5.1.2 Day flow metering	1	90
5.1.3 Reticulation leaks	1	90
5.1.4 Illegal connections	1	90
5.1.5 Un-metered connections	1	90
5.2 Leak and meter repair programmes. Consumer units targeted by:		

5.2.1 Leak repair assistance programme	1	90
5.2.2 Retro-fitting of water inefficient toilets	1	90
5.2.3 Meter repair programme	1	90
5.3 Consumer/end-use demand management: Public Information & Education Programmes		
5.3.1 Schools targeted by education programmes	1	90
5.3.2 Consumers targeted by public information programmes	1	90

Demand Info Question 8		
Question	**Number of Settlements**	**Assessment Score**
Conjunctive use of surface - and groundwater		
890	6	90
892	2	90
893	8	90

894	8	90

Demand Info Question 9		
Question	**Yes/No**	**Assessment Score**
5.5 Working for Water		
Is there a Working for Water Programme in place:	0	90

Demand Info Question 10	
Project Name	**Assessment Score**
Provide List of Projects	

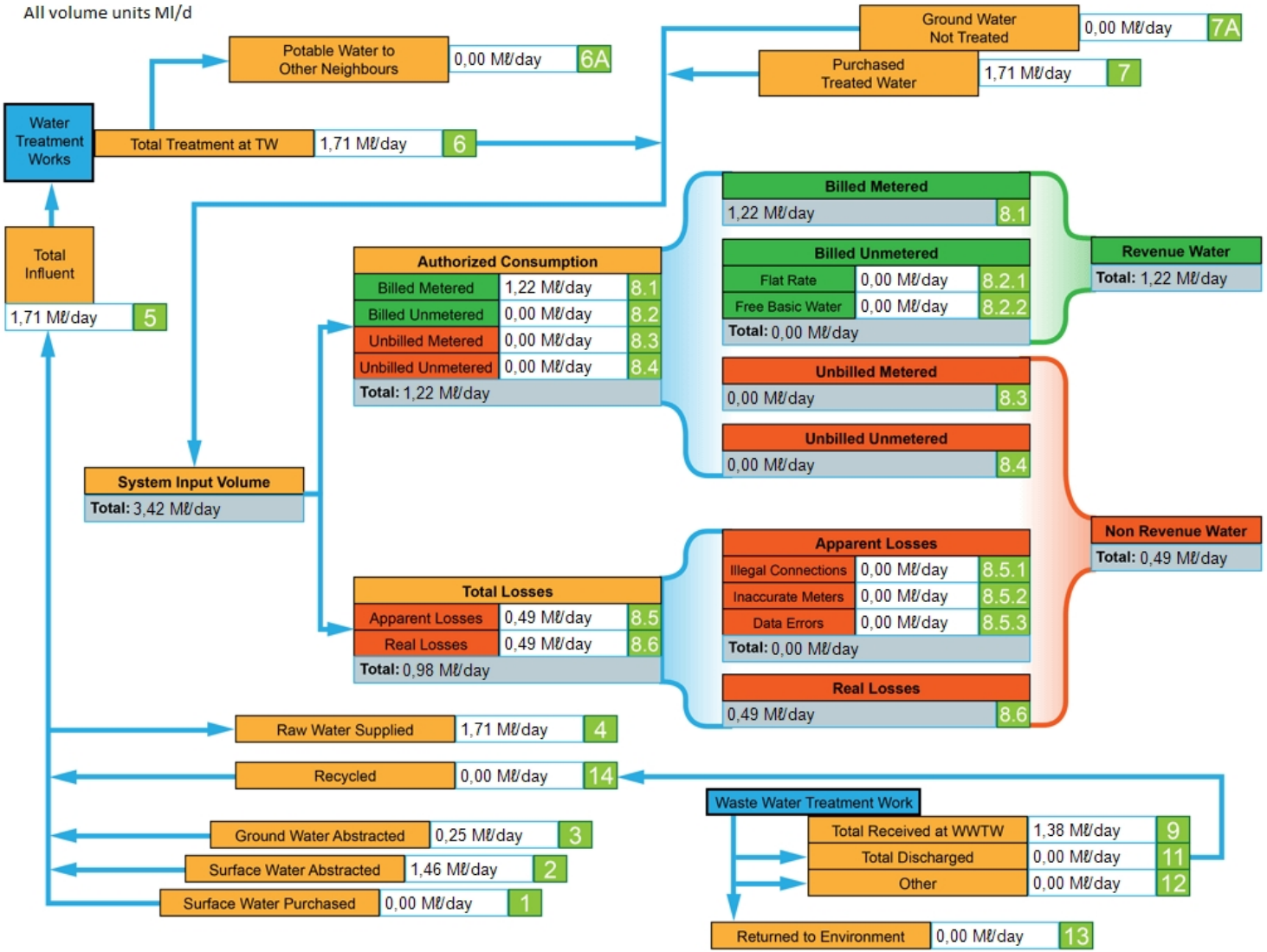
Water Services Development Plan

	90

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	No
5.3 Consumer/end-use demand management: Public Information & Education Programmes	Yes	No
5.4: Conjunctive use of surface - and groundwater	Yes	No
5.5 Working for Water	Yes	No

Topic 5.2: Water Balance

Water Services Development Plan



Topic 5.2: Water Balance

Water Services Development Plan

Questions	Assessment Score
5.2.1 Amount of surface water purchased.	90
5.2.2 Amount of surface water abstracted.	90
5.2.3 Amount of ground water abstracted.	90
5.2.4 Amount of raw water supplied.	90
5.2.5 Total influent of water to water treatment plants.	90
5.2.6 Total water treated at water treatment plants.	90
5.2.6A Potable water sent to neighbours.	90
5.2.7 Total amount of treated water purchased.	90
5.2.7A Amount of untreated water pumped directly into reticulation system.	90
5.2.8.1 Amount of billed and metered water consumed.	90
5.2.8.2 Amount of billed, but not metered, water consumed.	90
5.2.8.3 Amount of unbilled metered water consumed.	90
5.2.8.4 Amount of unbilled and unmetered water consumed.	90
5.2.8.5 Apparent loss of water.	90
5.2.8.6 Real loss of water.	90
5.2.8.2.1 Water is billed for based on a flat rate tariff (i.e. not based on a meter reading).	90
5.2.8.2.2 Free basic water used through unbilled unmetered stand pipes or yard connections.	90
5.2.8.5.1 Water used through illegal connections.	90
5.2.8.5.2 Water used but not billed for because of inaccurate meters.	90
5.2.8.5.3 Water used but not billed for because of data transfer errors, low estimated readings or any administrative errors.	90
5.2.9 Total amount of water received at waste water treatment works.	90
5.2.11 Total amoount of water discharged from waste water treatment works.	90
5.2.12 Other	90
5.2.13 Amount of water returned to the environment.	90
5.2.14 Amount of recycled water supplied.	90

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:	Implementation of Waterloss Programme and monitoring NRW levels.

5.2 Leak and meter repair programmes.

Interpret Situation Assessment:	Audit and assess the condition of all existing water meters; repair / replace faulty water meters; Identify and install new metering points and maintain leak repair programme to minimize NRW.

5.3 Consumer/end-use demand management: Public Information & Education Programmes

Water Services Development Plan

Interpret Situation Assessment:	Update communication plan with respect to water restrictions, rollout of a number of awareness interventions for current water shortage, continue with public information and education programme. Undertake awareness and education to schools on a continuous basis.

5.4: Conjunctive use of surface - and groundwater

Interpret Situation Assessment:	Continued investigation, planning and development of new groundwater supply sources efficiently.

5.5 Working for Water

Interpret Situation Assessment:	Ongoing Development of working for Water programme

5.2 Water Balance

Interpret Situation Assessment:	Maintain WC/WDM Initiatives to reduce potable water losses in the system, and increase recycling of treated wastewater to further reduce the dependency of treated raw water for non-drinking purposes.

Business Element Report Items	Compliancy 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	90	Yes	100	Implementation of Waterloss Programme and Monitoring of NRW levels.	100	No	0	No	0	No	0	No	0	No	0	200	28.57
5.2 Leak and meter repair programmes.	90	Yes	100	Audit and assess the condition of all existing water meters; repair / replace faulty water meters; Identify and install new metering points and maintain leak repair programme to minimize NRW.	100	No	0	No	0	No	0	No	0	No	0	200	28.57

Water Services Development Plan

5.3 Consumer/end-use demand management: Public Information & Education Programmes	90	Yes	100	Update communication plan with respect to water restrictions, rollout of a number of awareness interventions for current water shortage, continue with public information and education programme. Undertake awareness and education to schools on a continuous basis.	100	No	0	No	0	No	0	No	0	No	0	200	28.57
5.4: Conjunctive use of surface - and groundwater	90	Yes	100	Continued investigation, planning and development of new groundwater supply sources efficiently.	100	No	0	No	0	No	0	No	0	No	0	200	28.57
5.5 Working for Water	0	Yes	100	Ongoing Development of working for Water programme	100	No	0	No	0	No	0	No	0	No	0	200	28.57
5.2 Water Balance	0	Yes	100	Maintain WC/WDM Initiatives to reduce potable water losses in the system, and increase recycling of treated wastewater to further reduce the dependency of treated raw water for non-drinking purposes.	100	No	0	No	0	No	0	No	0	No	0	200	28.57
															Demand Overall Scoring Average		28.57

WSDP FY2023: Strategies and Objectives ***Prince Albert***

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

WSDP FY2023: Strategies and Objectives ***Prince Albert***

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

Water Services Development Plan

Nr	Objective / Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP FY2023 Target	WSDP FY2024 Target	WSDP FY2025 Target	WSDP FY2026 Target	WSDP FY2027 Target
12	Demand Management, though Monitoring of Water Usage.	Meter Replacement Programme, to ensure accurate monitor of water usage, as a percentage of total meters in water supply system.	1	, PA: Smart Water Meters	1	1	1		

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	34	0	34	34	0.3218	2	4	70
Surface Water Abstract	1	0.471	1	1	0.471			90
External Sources (Bulk Purchase)								90
Water returned to source								90
Conjunctive Use							2	90

Additional Source Available	* Number of sources	Potential Volume	* Licensed abstraction (Mm3/A)	Assessment Score
Ground Water				90

Water Services Development Plan

Surface Water				90
External Sources (Bulk Purchase)				90

Question	In Place	Assessment Score
6.2 Monitoring		
Is there a monitoring plan in place?	Yes	90

Question	General Assessment	Status Quo	Assessment Score
6.2 Monitoring			
6.2.1 % of water abstracted monitored: Surface water	100	No	90
6.2.2 % of water abstracted monitored: Ground water	100	No	90
6.2.4 Surface water levels (1: daily, 2: weekly, 3: monthly, 4: annually, 5: never)	1	No	90
6.2.5 Ground water levels (1: daily, 2: weekly, 3: monthly, 4: annually, 5: never)	2	No	90

Water Services Development Plan

6.2.6 Water quality for formal schemes? (1: daily, 2: weekly, 3: monthly, 4: annually, 5: never)	3	No	90
6.2.7 Water quality for rudimentary schemes? (1: daily, 2: weekly, 3: monthly, 4: annually, 5: never)	5	No	90
6.2.8 Borehole abstraction? (1: daily, 2: weekly, 3: monthly, 4: annually, 5: never)	1	No	90

Question	In Place	Assessment Score
6.3 Water Quality		
Is there a Water Safety Plan in Place?	No	90

Question	General Assessment	Status Quo	Assessment Score
6.3 Water Quality			
6.3.1 Reporting on quality of water taken from source: urban & rural	100	No	90
6.3.2 Quality of water returned to the resource: urban	0	No	90
6.3.3 Quality of water returned to the resource: rural	0	No	90

6.3.4 Is there a Pollution contingency measures plan in place?	100	No	90
6.3.5 Quality of water taken from source: urban - % monitored by WSA self?	100	No	90
6.3.6 Quality of water taken from source: rural - % monitored by WSA self?	0	No	90
6.3.7 Quality of water returned to the source: urban - % monitored by WSA self?	0	No	90
6.3.8 Quality of water returned to the source: rural - % monitored by WSA self?	0	No	90
6.3.9 Are these results available in electronic format? (Yes/no)	100	No	90
6.3.10 % Time (days) within SANS 241 standards per year	90	No	90

Question	B	AP	WTW	WP	SP	WL	SL	R	WWTW	Assessment Score
[section]										
6.4.1.1 The abstraction IS registered with DWS	34	1								90
6.4.1.2 The abstraction IS NOT registered with DWS	0	0								90

Water Services Development Plan

6.4.2.1 The abstraction IS recorded	34	1								90
6.4.2.2 The abstraction IS NOT recorded	0	0								90

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	Yes
6.2 Monitoring	Yes	Yes
6.3 Water Quality	Yes	Yes
6.4 Operation	Yes	Yes
6.1.2 Additional Sources Available	Yes	Yes

Strategic Interpretation

Detail situation assessments per Topic element

6.1.1 Current Water Sources

Interpret Situation Assessment:	The current water resources are constrained, as the municipality has only 1 surface water sources supplying only Prince Albert town and all the other towns (Leeu Gamka and Klaarstroom) use groundwater sources. PALM is currently planning additional groundwater sources.

6.2 Monitoring

Interpret Situation Assessment:	Ensure sustainable water use, regulation of water use and improved monitoring; and Continued monitoring and reporting on NRW levels.

6.3 Water Quality

Interpret Situation Assessment:	Update & Maintain of the Water Quality Monitoring Processes with DWS.

6.4 Operation

Interpret Situation Assessment:	Maintain Operational procedures, to achieve functional water and sanitation system for all households.

6.1.2 Additional Sources Available

Interpret Situation Assessment:	Continued investigation and exploration of groundwater sources; and increase recycling of wastewater to increase water resource sustainability.

Business Element Report Items	Compliancy 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	87.5	Yes	100	Maintain and rehabilitate infrastructure when required by conducting safety inspections that are required.	100	No	0	No	0	No	0	No	0	No	0	200	28.57
6.2 Monitoring	90	Yes	100	Ensure sustainable water use, regulation of water use and improved monitoring; and Continued monitoring and reporting on NRW levels.	100	No	0	No	0	No	0	No	0	No	0	200	28.57

Water Services Development Plan

6.3 Water Quality	90	Yes	100	Update & Maintain of the Water Quality Monitoring Processes with DWS.	100	No	0	No	0	No	0	No	0	No	0	200	28.57
6.4 Operation	90	Yes	100	Maintain Operational procedures, to achieve functional water and sanitation system for all households.	100	No	0	No	0	No	0	No	0	No	0	200	28.57
6.1.2 Additional Sources Available	0	Yes	100	Continued investigation and exploration of groundwater sources; and increase recycling of wastewater to increase water resource sustainability.	100	No	0	No	0	No	0	No	0	No	0	200	28.57
												Demand Overall Scoring Average					28.57

WSDP FY2023: Strategies and Objectives ***Prince Albert***

Nr	Objective / Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP FY2023 Target	WSDP FY2024 Target	WSDP FY2025 Target	WSDP FY2026 Target	WSDP FY2027 Target
Water Resources									
2	Security of Water Supply from Groundwater Sources.	Develop potential Groundwater Water Supply from potential groundwater sources.	1			1	1	1	
3	Security of Water Supply from Groundwater Sources.	Develop potential Groundwater Water Supply.	1			1	1	1	
4	Security of Water Supply from Groundwater Sources	Develop potential Groundwater Water Supply from potential groundwater sources.	1	, PA: Borehole Development	1	1			

Water Services Development Plan

Nr	Objective / Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP FY2023 Target	WSDP FY2024 Target	WSDP FY2025 Target	WSDP FY2026 Target	WSDP FY2027 Target
5	Security of Water Supply from Groundwater Sources.	Develop potential Groundwater Water Supply from potential groundwater sources.	1	, Test and Equip SRK1 - (1.5 l/s)					
6	Security of Water Supply from Groundwater Sources.	Develop potential Groundwater Water Supply from potential groundwater sources.	1	, Secure existing infrastructure from flood damage @ borehole P1, P2 and SRK 3					
7	Security of Water Supply from Groundwater Sources.	Develop potential Groundwater Water Supply from potential groundwater sources.	1	, Replace SRK3 with new borehole_NEW-BH 2 (2.5l/s)					
8	Security of Water Supply from Groundwater Sources.	Develop potential Groundwater Water Supply from potential groundwater sources.	1	, Replace P1/P2 with new borehole_NEW-BH 1 (2.5l/s)					
9	Security of Water Supply from Groundwater Sources.	Develop potential Groundwater Water Supply from potential groundwater sources.	1	, Drill and Equip New_BH 3 (8l/s)					
10	Security of Water Supply from Groundwater Sources.	Develop potential Groundwater Water Supply from potential groundwater sources.	1	, Drill 6 new and equip 4 new boreholes in Future Wellfield - (15l/s)					

Water Services Development Plan

Nr	Objective / Strategy	Key Performance Indicator	Baseline (2022 status quo)	Linked Project	WSDP FY2023 Target	WSDP FY2024 Target	WSDP FY2025 Target	WSDP FY2026 Target	WSDP FY2027 Target
11	Security of Water Supply from Groundwater Sources.	Develop potential Groundwater Water Supply from potential groundwater sources.	1						

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	3.24	3.31	3.30	
	Sanitation service O&M [and repair] as a % Asset value [PPE]	7.02	7.56	8.32	
	Water service O&M [and repair] Cost as % of budget value	3.24	3.31	3.30	
	Water service O&M [and repair] Cost as % of Asset value [PPE]	5.09	5.24	5.66	
	Untreated waste water units released				
	Cost to purify water	5.99	5.99	5.99	
	Cost to deliver water to consumer	5518830.00	5931647.00	6280286.00	
	Cost to treat waste water	4358891.00	4613409.00	4899450.00	
	Cost to deliver waste water to treatment facility				
	Blue drop cost				
	Blue drop number WTW				
	Green drop cost				
	Green drop WWTW number of plants				

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								
	Billed Metered Consumption	5.99	446954	6.44	480476	6.92	516512		
	Billed Un Metered Consumption								
	Un Billed Metered Consumption								
	Un Billed Un Metered Consumption								
	Apparent (commercial) losses								
	Real (physical) losses	1045881.64		1124322.76		1208646.97			
	Water used [lost] during the process of Operation, Repair and Maintenance								

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	1477875.00		1609715.00	1753419.00	
	Vehicles / transport					
	Chemicals	120000.00		120000.00	120000.00	
	Materials	175000.00		175000.00	175000.00	
	Equipment	20000.00		20000.00	20000.00	
	Tools	25000.00		25000.00	25000.00	
	Operation					
	Administration					
	Maintenance (corrective; adaptive; preventative)	3700955.00		3979682.00	4182164.00	
	Billing	14238462.00		14856158.00	15496394.00	
	Revenue collection	0.00		0.00	0.00	
	Management					

Water Services Development Plan

MTEF Expenditure Million				
MTEF	2023	2024	2025	2026
Property - WTW				
Dams - WTW				
Springs - WTW				
Weirs - WTW				
Boreholes - WTW				
Reservoirs - WTW				
Water Treatment Works (WTW) Civil works	4358891	4613409	4899450	
Water Treatment Works (WTW) Mechanical works				
Water Treatment Works (WTW) Electrical works				
Pump Station (PS) Civil works				
Pump Station (PS) Mechanical works				
Pump Station (PS) Electrical works				
Internal [water] reticulation - WTW				
Bulk [water] reticulation - WTW				
Meters Bulk - WTW				
Meters Household - WTW				
Property - WWTW				
Waste Water Treatment Works (WWTW) Civil works				
Waste Water Treatment Works (WWTW) Mechanical works				
Waste Water Treatment Works (WWTW) Electrical works				
Pump Station (PS) Civil works - WWTW				
Pump Station (PS) Mechanical works - WWTW				
Pump Station (PS) Electrical works - WWTW				
Internal sanitation reticulation				
Bulk sanitation reticulation - WWTW				
Meters Bulk - WWTW				
Ponds - WWTW				
				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														
Property , Plant and Equipment - Water Treatment System	Property - WTW														
	Dams - WTW														
	Springs - WTW														
	Weirs - WTW														
	Boreholes - WTW														
	Reservoirs - WTW														
	WTW Civil works			28201612.13											
	WTW Mechanical works														
	WTW Electrical works														
	Pump Station (PS) Civil works														
	Pump Station (PS) Mechanical works			1244268.14											
	Pump Station (PS) Electrical works			132685.25											
	Internal [water] reticulation - WTW														
	Bulk [water] reticulation - WTW														
	Meters Bulk - WTW														
	Meters Household - WTW														
Property , Plant and Equipment - Waste Water Treatment System	Property														
	WWTW Civil works														
	WWTW Mechanical works														
	WWTW Electrical works														
	Pump Station (PS) Civil works - WWTW														
	Pump Station (PS) Mechanical works - WWTW														
	Pump Station (PS) Electrical works - WWTW														
	Internal sanitation reticulation														
	Bulk sanitation reticulation			16576547.67											
	Meters Bulk WWTW														
	Ponds - WWTW														

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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.]	Partneship Funds
Votes									
Agency services									
Agriculture + rural water services									
Agriculture + rural sanitation service									
FBS Sanitation	2257733.00								
FBS Water	1321506.00								
Urban HLS Water									
Sanitation Urban HLS									
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 tarrifs 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	2020-10-14						
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

Water Services Development Plan

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 exisiting water resources, diversyfing 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 technoligies (e.g. membrane based) and wastewater treatment/recovery technologies (e.g. reuse) implemented at your muniicpality 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 technoligies 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

Water Services Development Plan

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)		

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)	Ashley America 0235411036 ashley@pamun.gov.za						

Water Services Development Plan

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)								

Water Services Development Plan

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)

Water Services Development Plan

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)	

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			

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		

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								

Water Services Development Plan

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%)	

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			

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	Definite	100
b.	Resource Development Plan for a 5, 10 and 15 year scenario	Definite	100
c.	Infrastructure Development Plan for a 5, 10 and 15 year scenario	Definite	100
d.	Functionality Needs Prediction for a 5, 10 and 15 year scenario	Definite	100

Overall Future Perspective Score	100.00%

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

Water Services Development Plan

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	0.12	0.13	0.17	0.09	0.21	0.29	0.36	0.17
Sanitation Infrastructure Pipelines	Sewer internal Reticulation	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.13
	Sewer Bulk pipeline	0.08	0.11	0.14	0.00	0.16	0.20	0.23	0.00
Instructure Works	WTW	1.22	1.57	2.01	0.95	1.22	1.57	2.01	0.95
	WWTW	1.18	1.52	1.96	0.93	2.25	3.05	3.90	1.85
	Water Pump stations	0.72	0.93	1.20	0.56	0.72	0.93	0.98	0.56
	Sanitation Pump stations	0.20	0.27	0.36	0.15	0.21	0.27	0.36	0.15
Infrastructure	Reservoirs	2.25	2.94	3.73	1.81	2.25	2.94	3.73	2.07

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

Water Services Development Plan

Chapter 5: WSDP Scoring

Total Score	STATUS
87.09