



WSDP compiled and submitted for Council approval.

Water Services Development Plan

Role Players Contact Details

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Inputs

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Components	Chapter	Name	Designation	Role	Contact Address, and Number
All	All	Mr Thomas Jachens	Technical Director	Project Manager	Cnr Rose & Havelock Street, Central, Port Elizabeth, 6000

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Components	Chapter	Name	Designation	Role	Contact Address, and Number
All	All	Mr Keith Simon	Sub-Consultant	Project Manager	1 Malta Rd, Glendinningvale, Port Elizabeth, 6001

Sector Integration

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

Sector Plan	Sector Interaction	Area	WSA
IDP	Yes		Nelson Mandela Bay Metropolitan Municipality
Water Master Plan	Yes		Nelson Mandela Bay Metropolitan Municipality
Sewer Master Plan	Yes		Nelson Mandela Bay Metropolitan Municipality
Unaccounted for Water Strategy	Yes		Nelson Mandela Bay Metropolitan Municipality
Maintenance Backlog Study	Yes		Nelson Mandela Bay Metropolitan Municipality
Maintenance Backlog Study	Yes		Nelson Mandela Bay Metropolitan Municipality

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Chapter1: Implementation Activity Chart of current MTEF Projects

Financial Year 2019																																	
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																																	
1	20200000	Provision of Sanitation Services to Public Amenities	Provision of Sanitation Services for Amanzi Primary School, Sindawonye Primary School and Rocklands Intermediate School	Infrastructure Extension	New Infrastructure	Sanitation	Internal Sanitation	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	5,000	0	0	0	0	0	0	5,000
2	20200000	Provision of Water Services to Public Amenities	Provision of Water Services for Amanzi Primary School, Sindawonye Primary School and Rocklands Intermediate School	Infrastructure Extension	New Infrastructure	Water	Basic Supply	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5,000	0	0	0	0	0	0	5,000
Topic 2 - Service Level Profile																																	
3	20060083	Rudimentary Service: Water	Distribution Pipe Lines - New, Augmentation & Upgrade	Local Scheme Solution	New Infrastructure	Water	Reticulation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	1,000	
4	20050248	Bucket Eradication Programme: Uitenhage Upper Central	Reducing the number of buckets in Uitenhage Upper Central	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	4	0	0	0	0	0	0	1		
5	20050248	Bucket Eradication Programme: Walmer G South	Reducing the number of buckets in Walmer G South	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	3,626	0	0	0	0	0	0	906			

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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	20050248	Bucket Eradication Programme: New Kwadwesi A	Reducing the number of buckets in New Kwadwesi A	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	191	0	0	0	0	0	0	48
7	20050248	Bucket Eradication Programme: Kwadwesi	Reducing the number of buckets in Kwadwesi	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	528	0	0	0	0	0	0	132
8	20050248	Bucket Eradication Programme: Arcadia	Reducing the number of buckets in Arcadia	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	1,595	0	0	0	0	0	0	399
9	20050248	Bucket Eradication Programme: New Brighton 1	Eradicating all bucket toilets in New Brighton 1	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	2,872	0	0	0	0	0	0	718
10	20050248	Bucket Eradication Programme: Motherwell 11	Eradicating all bucket toilets in Motherwell 11	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	11	0	0	0	0	0	0	3
11	20050248	Bucket Eradication Programme: Greater Tjoks	Eradicating all bucket toilets in Greater Tjoks	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	532	0	0	0	0	0	0	133
12	20050248	Bucket Eradication Programme: Langa Phase 2	Eradicating all bucket toilets in Langa Phase 2	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	8	0	0	0	0	0	0	2
13	20050248	Bucket Eradication Programme: McNaughton	Reducing the number of buckets in McNaughton	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	956	0	0	0	0	0	0	239
14	20050248	Bucket Eradication Programme: Despatch SP	Reducing the number of buckets in Despatch SP	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	880	0	0	0	0	0	0	220
15	20050248	Bucket Eradication Programme: Govan Mbeki	Reducing the number of buckets in Govan Mbeki	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	761	0	0	0	0	0	0	190

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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	
16	20050248	Bucket Eradication Programme: Salt Pan	Eradicating all bucket toilets in Salt Pan	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	2,513	0	0	0	0	0	0	628
17	20050248	Bucket Eradication Programme: Soweto-on-sea	Eradicating all bucket toilets in Soweto-on-sea	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	486	0	0	0	0	0	0	121
18	20050248	Bucket Eradication Programme: Motherwell 10	Eradicating all bucket toilets in Motherwell 10	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	195	0	0	0	0	0	0	49
19	20050248	Bucket Eradication Programme: Langa Phase 4	Reducing the number of buckets in Langa Phase 4	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	8	0	0	0	0	0	0	2
20	20050248	Bucket Eradication Programme: Booyens Park	Reducing the number of buckets in Booyens Park	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	1,591	0	0	0	0	0	0	398
21	20050248	Bucket Eradication Programme: Mandelaville	Eradicating all bucket toilets in Mandelaville	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	Y	N	N	N	N	N	N	N	N	N	N	N	Y	N	103	0	0	0	0	0	0	26
22	20050248	Bucket Eradication Programme: Greensfields	Eradicating all bucket toilets in Greensfields	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	11	0	0	0	0	0	0	3
23	20050248	Bucket Eradication Programme: Middlestreet	Eradicating all buckets in Middlestreet	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	222	0	0	0	0	0	0	55
24	20050248	Bucket Eradication Programme: Langa Phase 5	Reducing the number of buckets in Langa Phase 5	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	Y	N	N	N	N	N	N	N	N	N	N	N	Y	N	19	0	0	0	0	0	0	5
25	20050248	Bucket Eradication Programme: Walmer (X; O and J)	Reducing the number of buckets in Walmer (X; O and J)	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	23	0	0	0	0	0	0	6

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								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		
26	20050248	Bucket Eradication Programme: Gqebera	Reducing the number of buckets in Gqebera	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	3,836	0	0	0	0	0	0	959
27	20050248	Bucket Eradication Programme: New Brighton 2	Eradicating all bucket toilets in New Brighton 2	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	470	0	0	0	0	0	0	118
28	20050248	Bucket Eradication Programme: Kwazakhele 1	Eradicating all bucket toilets in Kwazakhele 1	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	2,344	0	0	0	0	0	0	586
29	20050248	Bucket Eradication Programme: Zwide 3	Eradicating all buckets in Zwide 3	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	252	0	0	0	0	0	0	63
30	20050248	Bucket Eradication Programme: Kwazakhele 2	Eradicating all buckets in Kwazakhele 2	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	543	0	0	0	0	0	0	136
31	20050248	Bucket Eradication Programme: Motherwell 8	Eradicating all bucket toilets in Motherwell 8	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	191	0	0	0	0	0	0	48
32	20050248	Bucket Eradication Programme: KwaNobuhle 9	Eradicating all bucket toilets in KwaNobuhle 9	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	15	0	0	0	0	0	0	4
33	20050248	Bucket Eradication Programme: Kamehs	Eradicating all bucket toilets in Kamehs	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	107	0	0	0	0	0	0	27
34	20050248	Bucket Eradication Programme: Triyville	Eradicating all bucket toilets in Triyville	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	19	0	0	0	0	0	0	5

Topic 3 - Water Services Asset Management

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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			
35	20060107	Coega WWTW	Construction of Coega WWTW and upgrade of Motherwell outfall sewer	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	23,995	0	0	0	0	0	0	1,700
36	20200000	Bushy Park Groundwater Scheme	Exploration of a potential Groundwater Source	Quality Monitoring	Water Security	Water	Source Development	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	110,000	0	0	0	0	0	0	40,000
37	20050097	Nooitgedagt Low Level Scheme	Augmentation of 90Ml/d Low Level Scheme	Infrastructure Extension	New Infrastructure	Water	Internal Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1,204,721	0	0	0	0	0	0	35,100
38	20060106	Motherwell North Bulk Sewerage	Construction of the bulk collector sewer	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	400,000	0	0	0	0	0	0	1,000
39	20060178	Rehabilitation of Sewerage Pump Stations	Sewerage Pump Stations - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Sanitation	Sanitation Bulk	N	N	Y	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	28,000	0	0	0	0	0	0	10,000
40	20050106	Upgrading of Seaview Pump Station	Civil, Mechanical and Electrical upgrades	Upgrade Infrastructure	Functionality	Water	Internal Bulk	N	N	Y	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	15,532	0	0	0	0	0	0	47,000
41	19990130	Telemetry - Pump Stations	Waste Water Treatment Works - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5,000	0	0	0	0	0	0	1,000
42	20080093	Water Services: Rehabilitation of Pump Stations	Distribution Pipe Lines - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Internal Bulk	N	N	Y	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	17,000	0	0	0	0	0	0	5,000

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								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		
43	20050097	Nooitgedagt Low Level Scheme	Augmentation of 90M/d Low Level Scheme	Infrastructure Extension	New Infrastructure	Water	Internal Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1,204,721	0	0	0	0	0	0	35,100
44	20030167	Rocklands PHB Housing project WWTW	Sewerage Pump Stations - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	N	N	Y	N	N	N	Y	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	500
45	20060178	Rehabilitation of Sewerage Pump Stations	Sewerage Pump Stations - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Sanitation	Sanitation Bulk	N	N	Y	N	N	N	Y	N	N	N	N	N	N	N	N	N	28,000	0	0	0	0	0	0	10,000
46	20050106	Upgrading of Seaview Pump Station	Civil, Mechanical and Electrical upgrades	Upgrade Infrastructure	Functionality	Water	Internal Bulk	N	N	Y	N	N	N	Y	N	N	N	N	N	N	N	N	N	15,532	0	0	0	0	0	0	47,000
47	19990130	Telemetry - Pump Stations	Waste Water Treatment Works - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5,000	0	0	0	0	0	0	1,000
48	20070157	Telemetry Systems Upgrade	Management Systems	Upgrade Infrastructure	Functionality	Water	Internal Bulk	N	N	N	N	N	N	N	Y	Y	N	N	N	N	N	N	N	7,000	0	0	0	0	0	0	2,000
49	20080093	Water Services: Rehabilitation of Pump Stations	Distribution Pipe Lines - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Internal Bulk	N	N	Y	N	N	N	Y	N	N	N	N	N	N	N	N	N	17,000	0	0	0	0	0	0	5,000
50	20042883	Older Dams Pipelines Augmentation	Supply Pipe Lines - Rehabilitation & Refurbishment	Infrastructure Extension	New Infrastructure	Water	Internal Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5,000	0	0	0	0	0	0	3,000

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								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			
51	19930320	General Improvements to System	Distribution Pipe Lines - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Reticulation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	44,000	0	0	0	0	0	0	13,000
52	20050097	Nooitgedagt Low Level Scheme	Augmentation of 90Ml/d Low Level Scheme	Infrastructure Extension	New Infrastructure	Water	Internal Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1,204,721	0	0	0	0	0	0	35,100	
53	20030630	Upgrade and Rehabilitation of Water Pipelines	Supply Pipe Lines - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Internal Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	200,000	0	0	0	0	0	0	30,000	
54	20080087	Rehabilitation of Pipe Bridges	Distribution Pipe Lines - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Reticulation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5,000	0	0	0	0	0	0	1,000	
55	19930112	Sewer Replacement and Relining	Reticulation Sewers - Rehabilitation & Refurbishment	Replace Aged Infrastructure	Functionality	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	29,000	0	0	0	0	0	0	9,000	
56	19980348	Paapenkuis Main Sewers Augmentation	Bulk Sewers - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	300	0	0	0	0	0	0	100	
57	20030034	Augmentation of Markman Main Sewer	Phase 3 for installation of bulk sewer and refurbishment of grit chamber	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	49,858	0	0	0	0	0	0	30,000	
58	19940098	Improvements to Sewerage System	Reticulation Sewers - New, Augmentation & Upgrade	Asset Management	Functionality	Sanitation	Internal Sanitation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	33,200	0	0	0	0	0	0	10,000	

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								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			
59	20080138	Kwanobuhle: Upgrade of sewer reticulation	Reticulation Sewers - New, Augmentation & Upgrade	Upgrade Infrastructure	Functionality	Sanitation	Internal Sanitation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1,000	0	0	0	0	0	0	500
60	20060103	Jagtvlaakte Bulk Sewerage	Bulk Sewers - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	4,500	0	0	0	0	0	0	500	
61	20030672	Rehabilitation of Sewer Pipes	Reticulation Sewers - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	3,000	0	0	0	0	0	0	1,000	
62	20030030	Lorraine Bulk Sewerage Augmentation	Bulk Sewers - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	20,500	0	0	0	0	0	0	500	
63	20182418	Augment Collector Sewer for Walmer Heights - WIP	Bulk Sewers - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	37,900	0	0	0	0	0	0	20,100	
64	20182411	Driftsands Collector Sewer - Augmentation - WIP	Bulk Sewers - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	69,500	0	0	0	0	0	0	24,500	
65	20070143	Augmentation of Kwazakhele Collector Sewer	Bulk Sewer Augmentation	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	68,300	0	0	0	0	0	0	1,000	
66	20050105	Sewer Protection works for collector sewers	Bulk Sewers - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	3,000	0	0	0	0	0	0	500	
67	20050064	Augment Collector Sewer for Walmer Heights and Mt Pleasant	Bulk Sewers - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,500	0	0	0	0	0	0	1,000	

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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		
68	19960525	Chatty Valley Collector Sewer Stage 1	Bulk Sewers - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	500	0	0	0	0	0	0	500
69	20110066	Joe Slovo, Mandelaville and Allenridge West Bulk Collector Sewers	Construction of bulk sewers in Joe Slovo, Mandelaville and Allenridge West	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	30,000	0	0	0	0	0	0	12,000	
70	20060177	Augmentation of Driftsands Collector Sewer	Bulk Sewer Augmentation	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	66,000	0	0	0	0	0	0	5,735	
71	20030601	Uitenhage RE Reservoir	Construction of a 1Ml reclaimed effluent reservoir: Uitenhage	Local Scheme Solution	New Infrastructure	Water	Internal Bulk	N	N	N	N	Y	N	N	N	Y	Y	N	N	N	N	N	3,000	0	0	0	0	0	0	1,000	
72	19990185	Reservoir Rehabilitation	Reservoirs - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Internal Bulk	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	40,000	0	0	0	0	0	0	24,663	
73	19990184	Reservoir Fencing	Reservoirs - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Internal Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	4,000	0	0	0	0	0	0	1,000	
74	20050250	Upgrading of Driftsands WWTW	Phase 3 for the Maintenance and Upgrades at the WWTW	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	N	1,600,000	0	0	0	0	0	0	1,750	
75	20060075	Upgrading of Cape Receife WWTW	Upgrades to and rehabilitation of key infrastructure components at the WWTW	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	Y	N	N	N	N	490,000	0	0	0	0	0	0	4,000	

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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	MMWIG	Other			
76	20080136	TEI: Sampling Stations	Reticulation Sewers - New, Augmentation & Upgrade	Infrastructure Extension	Functionality	Sanitation	Internal Sanitation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1,400	0	0	0	0	0	0	400
77	20070156	Upgrading of Fishwater Flats WWTW	Refurbishment works at the WWTW	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	N	1,701,000	0	0	0	0	0	0	3,175	
78	20070144	Upgrading of KwaNobuhle WWTW	Upgrades to and rehabilitation of key infrastructure components at the WWTW	Refurbish Infrastructure	Functionality	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	N	52,000	0	0	0	0	0	0	10,000		
79	20050088	Improve access roads to WWTW	Waste Water Treatment Works - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	N	3,500	0	0	0	0	0	0	1,000		
80	20182409	Fishwater Flats WWTW	Sludge Stabilisation	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	Y	N	N	N	37,000	0	0	0	0	0	0	37,000			
Topic 4 - Water Services Operations & Maintenance (O&M)																																
81	20200000	Operational Call Centre	Handling of infrastructure defects complaints for water and sanitation	Maintenance	Water Security	Water	Planning	Y	Y	N	N	N	N	N	N	N	N	Y	Y	Y	N	Y	N	21,600	0	0	0	0	0	0	7,200	
Topic 5.1 - Conservation & Demand Management - Water Resource																																
82	20060083	Rudimentary Service: Water	Distribution Pipe Lines - New, Augmentation & Upgrade	Local Scheme Solution	New Infrastructure	Water	Reticulation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	1,000	

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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			
83	20060083	Rudimentary Service: Water	Distribution Pipe Lines - New, Augmentation & Upgrade	Local Scheme Solution	New Infrastructure	Water	Reticulation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	1,000
84	20060083	Rudimentary Service: Water	Distribution Pipe Lines - New, Augmentation & Upgrade	Local Scheme Solution	New Infrastructure	Water	Reticulation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	1,000
85	20060083	Rudimentary Service: Water	Distribution Pipe Lines - New, Augmentation & Upgrade	Local Scheme Solution	New Infrastructure	Water	Reticulation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	1,000
86	20030601	Uitenhage RE Reservoir	Construction of a 1MI reclaimed effluent reservoir: Uitenhage	Local Scheme Solution	New Infrastructure	Water	Internal Bulk	N	N	N	N	Y	N	N	N	Y	Y	N	N	N	N	N	N	3,000	0	0	0	0	0	0	1,000	
87	19990185	Reservoir Rehabilitation	Reservoirs - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Internal Bulk	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	40,000	0	0	0	0	0	0	24,663	
88	19990184	Reservoir Fencing	Reservoirs - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Internal Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	4,000	0	0	0	0	0	0	1,000	
89	20060083	Rudimentary Service: Water	Distribution Pipe Lines - New, Augmentation & Upgrade	Local Scheme Solution	New Infrastructure	Water	Reticulation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	1,000	
Topic 5.2 - Conservation & Demand Management - Water Balance																																
90	20190237	Bulk Water Metering and Control	New Machinery and Equipment	Non-Revenue Water Program	Water Security	Water	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	2,000	

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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			
91	20190237	Bulk Water Metering and Control	New Machinery and Equipment	Non-Revenue Water Program	Water Security	Water	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	2,000
92	20162356	Advanced Meter Infrastructure	New Machinery and Equipment	Abstraction Monitoring	Water Security	Water	Internal Bulk	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	N	N	4,500	0	0	0	0	0	0	20,000	
93	20190237	Bulk Water Metering and Control	New Machinery and Equipment	Non-Revenue Water Program	Water Security	Water	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	2,000	
94	20190237	Bulk Water Metering and Control	New Machinery and Equipment	Non-Revenue Water Program	Water Security	Water	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	2,000	
95	20190239	Installation of Zone Water Meters	Installation of Zone Water Meters	Replace Aged Infrastructure	Functionality	Water	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	4,000	0	0	0	0	0	0	3,250	
96	20000052	Purchase of Water Meters for NMBM	Supply and install water meters to households within the NMBM	Replace Aged Infrastructure	Functionality	Water	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	45,000	0	0	0	0	0	0	25,000	
Topic 6 - Water Resource																																
97	20070161	Groundwater: Drought Intervention	Management Systems	Quality Monitoring	Water Security	Water	Source Development	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	92,080	0	0	0	0	0	0	28,000	
98	20182414	Drilling of Boreholes	Groundwater: Drought Intervention	Quality Monitoring	Water Security	Water	Source Development	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	10,000	0	0	0	0	0	0	10,000	

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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		
99	20050097	Nooitgedagt/Coega Low Level System	Programme: Dams - Drought Relief Projects	Regional Scheme Solution	New Infrastructure	Water	Regional Bulk	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	12,100	0	0	0	0	0	0	2,100
100	19930320	General Improvements to System	Distribution Pipe Lines - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Reticulation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	44,000	0	0	0	0	0	0	13,000	

Funding Source (R'000)							
	Own	MIG	RBIG	ACIP	DR	MWIG	Other
Total Funding:	0	0	0	0	0	0	506,002

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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	20060083	Rudimentary Service: Water	Distribution Pipe Lines - New, Augmentation & Upgrade	Local Scheme Solution	New Infrastructure	Water	Reticulation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	1,000
2	20200000	Provision of Waterborne Sanitation Services to all households	Provision of Waterborne Sanitation Services to all households	Single Settlement Solution	New Infrastructure	Sanitation	Internal Sanitation	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	45,745	0	0	0	0	0	0	22,873		
3	20050248	Bucket Eradication Programme: Motherwell 10	Eradicating all bucket toilets in Motherwell 10	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	195	0	0	0	0	0	0	49			
4	20050248	Bucket Eradication Programme: Langa Phase 4	Reducing the number of buckets in Langa Phase 4	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	8	0	0	0	0	0	0	2				
5	20050248	Bucket Eradication Programme: Booyens Park	Reducing the number of buckets in Booyens Park	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	1,591	0	0	0	0	0	0	398				
6	20050248	Bucket Eradication Programme: Mandelaville	Eradicating all bucket toilets in Mandelaville	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	Y	N	N	N	N	N	N	N	N	N	N	N	Y	N	103	0	0	0	0	0	0	26				
7	20050248	Bucket Eradication Programme: Greensfields	Eradicating all bucket toilets in Greensfields	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	11	0	0	0	0	0	0	3				

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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		
8	20050248	Bucket Eradication Programme: Middlestreet	Eradicating all buckets in Middlestreet	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	222	0	0	0	0	0	0	55
9	20050248	Bucket Eradication Programme: Langa Phase 5	Reducing the number of buckets in Langa Phase 5	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	19	0	0	0	0	0	0	5
10	20050248	Bucket Eradication Programme: Walmer (X; O and J)	Reducing the number of buckets in Walmer (X; O and J)	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	23	0	0	0	0	0	0	6
11	20050248	Bucket Eradication Programme: Gqebera	Reducing the number of buckets in Gqebera	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	3,836	0	0	0	0	0	0	959
12	20050248	Bucket Eradication Programme: New Brighton 2	Eradicating all bucket toilets in New Brighton 2	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	470	0	0	0	0	0	0	118
13	20050248	Bucket Eradication Programme: Kwazakhele 1	Eradicating all bucket toilets in Kwazakhele 1	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	2,344	0	0	0	0	0	0	586
14	20050248	Bucket Eradication Programme: Zwide 3	Eradicating all buckets in Zwide 3	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	252	0	0	0	0	0	0	63
15	20050248	Bucket Eradication Programme: Kwazakhele 2	Eradicating all buckets in Kwazakhele 2	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	543	0	0	0	0	0	0	136
16	20050248	Bucket Eradication Programme: Motherwell 8	Eradicating all bucket toilets in Motherwell 8	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	191	0	0	0	0	0	0	48
17	20050248	Bucket Eradication Programme: KwaNobuhle 9	Eradicating all bucket toilets in KwaNobuhle 9	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	15	0	0	0	0	0	0	4

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								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		
18	20050248	Bucket Eradication Programme: Kamehs	Eradicating all bucket toilets in Kamehs	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	107	0	0	0	0	0	0	27
19	20050248	Bucket Eradication Programme: Triyville	Eradicating all bucket toilets in Triyville	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	19	0	0	0	0	0	0	5
20	20200000	Provision of Basic Water Services to households	Provision of Basic Water Services to households	Single Settlement Solution	New Infrastructure	Water	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	10,000	0	0	0	0	0	0	5,000
21	20050247	Rudimentary Services: Sanitation	Bucket Eradication Programme	Local Scheme Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	500	0	0	0	0	0	0	500	
22	20050248	Bucket Eradication Programme: Uitenhage Upper Central	Reducing the number of buckets in Uitenhage Upper Central	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	4	0	0	0	0	0	0	1	
23	20050248	Bucket Eradication Programme: Walmer G South	Reducing the number of buckets in Walmer G South	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	3,626	0	0	0	0	0	0	906	
24	20050248	Bucket Eradication Programme: New Kwadwesi A	Reducing the number of buckets in New Kwadwesi A	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	191	0	0	0	0	0	0	48	
25	20050248	Bucket Eradication Programme: Kwadwesi	Reducing the number of buckets in Kwadwesi	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	528	0	0	0	0	0	0	132	
26	20050248	Bucket Eradication Programme: Arcadia	Reducing the number of buckets in Arcadia	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	1,595	0	0	0	0	0	0	399	
27	20050248	Bucket Eradication Programme: New Brighton 1	Eradicating all bucket toilets in New Brighton 1	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	2,872	0	0	0	0	0	0	718	

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								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		
28	20050248	Bucket Eradication Programme: Motherwell 11	Eradicating all bucket toilets in Motherwell 11	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	11	0	0	0	0	0	0	3
29	20050248	Bucket Eradication Programme: Greater Tjoks	Eradicating all bucket toilets in Greater Tjoks	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	532	0	0	0	0	0	0	133
30	20050248	Bucket Eradication Programme: Langa Phase 2	Eradicating all bucket toilets in Langa Phase 2	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	8	0	0	0	0	0	0	2
31	20050248	Bucket Eradication Programme: McNaughton	Reducing the number of buckets in McNaughton	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	956	0	0	0	0	0	0	239
32	20050248	Bucket Eradication Programme: Despatch SP	Reducing the number of buckets in Despatch SP	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	880	0	0	0	0	0	0	220
33	20050248	Bucket Eradication Programme: Govan Mbeki	Reducing the number of buckets in Govan Mbeki	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	761	0	0	0	0	0	0	190
34	20050248	Bucket Eradication Programme: Salt Pan	Eradicating all bucket toilets in Salt Pan	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	2,513	0	0	0	0	0	0	628
35	20050248	Bucket Eradication Programme: Soweto-on-sea	Eradicating all bucket toilets in Soweto-on-sea	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	486	0	0	0	0	0	0	121
Topic 3 - Water Services Asset Management																															
36	20080093	Water Services: Rehabilitation of Pump Stations	Distribution Pipe Lines - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Internal Bulk	N	N	Y	N	N	N	Y	N	N	N	N	N	N	N	N	17,000	0	0	0	0	0	0	6,000	

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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			
37	20030630	Upgrade and Rehabilitation of Water Pipelines	Supply Pipe Lines - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Internal Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	200,000	0	0	0	0	0	0	80,000
38	20080087	Rehabilitation of Pipe Bridges	Distribution Pipe Lines - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Reticulation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5,000	0	0	0	0	0	0	2,000
39	19950866	Cathodic Protection of Steel Pipelines	Distribution Pipe Lines - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Reticulation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1,000	0	0	0	0	0	0	1,000	
40	19930320	General Improvements to System	Distribution Pipe Lines - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Reticulation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	44,000	0	0	0	0	0	0	16,000	
41	20050106	Seaview Bulk Water	Construction of 110mm - 250mm diameter gravity reticulations mains	Infrastructure Extension	New Infrastructure	Water	Reticulation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	29,181	0	0	0	0	0	0	1,500	
42	20060103	Jagtvlaakte Bulk Sewerage	Bulk Sewers - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	4,500	0	0	0	0	0	0	1,000	
43	20182425	Augmentation of Lorraine Bulk Sewer	Construction of a new bulk sewer pipeline	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	250,000	0	0	0	0	0	0	500	
44	20050250	Upgrading of Driftsands WWTW	Phase 3 for the Maintenance and Upgrades at the WWTW	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	N	N	1,600,000	0	0	0	0	0	0	1,000	

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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		
45	20060075	Upgrading of Cape Receife WWTW	Upgrades to and rehabilitation of key infrastructure components at the WWTW	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	490,000	0	0	0	0	0	0	28,000
46	20060107	Coega WWTW	Construction of Coega WWTW and upgrade of Motherwell outfall sewer	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	23,995	0	0	0	0	0	0	2,000
47	20030167	Rocklands PHB Housing project WWTW	Sewerage Pump Stations - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	N	N	Y	N	N	N	Y	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	500
48	20050088	Improve access roads to WWTW	Waste Water Treatment Works - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	N	N	3,500	0	0	0	0	0	0	1,000
49	20070144	Upgrading of KwaNobuhle WWTW	Upgrades to and rehabilitation of key infrastructure components at the WWTW	Refurbish Infrastructure	Functionality	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	N	N	52,000	0	0	0	0	0	0	12,000
50	20030672	Rehabilitation of Sewer Pipes	Reticulation Sewers - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	3,000	0	0	0	0	0	0	1,000
51	20070156	Upgrading of Fishwater Flats WWTW	Refurbishment works at the WWTW	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	N	N	1,701,000	0	0	0	0	0	0	3,000
52	20070153	Upgrading of Brickfield WWTW	Upgrading of infrastructure at the WWTW	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	N	N	15,688	0	0	0	0	0	0	500

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								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	
53	20070147	Upgrading of Kelvin Jones WWTW	Upgrade of capacity, new inlet works, treatment method and sludge handling facility	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	450,000	0	0	0	0	0	0	10,000
54	20030182	Upgrading of Despatch WWTW	Upgrading of infrastructure at the WWTW for reclamation	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	16,783	0	0	0	0	0	0	1,000	
55	20190250	Jagtlakte Bulk Sewerage	Installation of bulk sewerage infrastructure for proposed Jagtlakte Development	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	3,000	0	0	0	0	0	0	1,000	
56	20110067	Airport Valley Bulk Sewer	Bulk Sewers - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	1,000	0	0	0	0	0	0	500	
57	20030407	Seaview Bulk Sewer	Bulk sewerage infrastructure for Seaview informal settlement	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	1,600	0	0	0	0	0	0	600	
58	20030034	Augmentation of Markman Main Sewer	Phase 3 for installation of bulk sewer and refurbishment of grit chamber	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	49,858	0	0	0	0	0	0	1,000	
59	20110054	Augmentation of Motherwell Main Sewer	Upgrades to the Motherwell Main Sewer	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	750	0	0	0	0	0	0	500	
60	20182418	Augment Collector Sewer for Walmer Heights - WIP	Bulk Sewers - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	37,900	0	0	0	0	0	0	17,300	

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								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		
61	20182411	Driftsands Collector Sewer - Augmentation - WIP	Bulk Sewers - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	69,500	0	0	0	0	0	0	35,000
62	20070143	Augmentation of Kwazakhele Collector Sewer	Bulk Sewer Augmentation	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	68,300	0	0	0	0	0	0	20,000
63	20050105	Sewer Protection works for collector sewers	Bulk Sewers - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	3,000	0	0	0	0	0	0	1,000
64	20050064	Augment Collector Sewer for Walmer Heights and Mt Pleasant	Bulk Sewers - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,500	0	0	0	0	0	0	1,000
65	20110066	Joe Slovo, Mandelaville and Allenridge West Bulk Collector Sewers	Construction of bulk sewers in Joe Slovo, Mandelaville and Allenridge West	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	30,000	0	0	0	0	0	0	10,000
66	20060177	Augmentation of Driftsands Collector Sewer	Bulk Sewer Augmentation	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	66,000	0	0	0	0	0	0	40,500
67	19930112	Sewer Replacement and Relining	Reticulation Sewers - Rehabilitation & Refurbishment	Replace Aged Infrastructure	Functionality	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	29,000	0	0	0	0	0	0	10,000
68	19990130	Telemetry - Pump Stations	Waste Water Treatment Works - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5,000	0	0	0	0	0	0	2,000

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								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		
69	20060178	Rehabilitation of Sewerage Pump Stations	Sewerage Pump Stations - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Sanitation	Sanitation Bulk	N	N	Y	N	N	N	Y	N	N	N	N	N	N	N	N	N	28,000	0	0	0	0	0	0	8,000
70	20060178	Rehabilitation of Sewerage Pump Stations	Sewerage Pump Stations - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Sanitation	Sanitation Bulk	N	N	Y	N	N	N	Y	N	N	N	N	N	N	N	N	N	28,000	0	0	0	0	0	0	8,000
71	20060106	Motherwell North Bulk Sewerage	Construction of the bulk collector sewer	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	400,000	0	0	0	0	0	0	19,000
72	19990130	Telemetry - Pump Stations	Waste Water Treatment Works - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5,000	0	0	0	0	0	0	2,000
73	19940098	Improvements to Sewerage System	Reticulation Sewers - New, Augmentation & Upgrade	Asset Management	Functionality	Sanitation	Internal Sanitation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	33,200	0	0	0	0	0	0	10,000
74	20080136	TEI: Sampling Stations	Reticulation Sewers - New, Augmentation & Upgrade	Infrastructure Extension	Functionality	Sanitation	Internal Sanitation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1,400	0	0	0	0	0	0	400
75	20070161	Coegakop Water Treatment Works	Construction of 20Ml Biofiltration Groundwater Works	Infrastructure Extension	Functionality	Water	Source Development	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	220,000	0	0	0	0	0	0	40,000
76	20200000	Springs Groundwater Scheme	Exploration of a potential Groundwater Source	Quality Monitoring	Water Security	Water	Source Development	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	5,500	0	0	0	0	0	0	1,750

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								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		
77	20200000	Fairview Groundwater Scheme	Exploration of a potential Groundwater Source	Quality Monitoring	Water Security	Water	Source Development	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	7,700	0	0	0	0	0	0	2,500
78	20200000	St Georges Park Groundwater Scheme	Exploration of a potential Groundwater Source	Quality Monitoring	Water Security	Water	Source Development	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	33,000	0	0	0	0	0	0	11,000
79	20200000	Malabar Groundwater Scheme	Exploration of a potential Groundwater Source	Quality Monitoring	Water Security	Water	Source Development	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	15,400	0	0	0	0	0	0	5,400
80	20200000	Glendinning Groundwater Scheme	Exploration of a potential Groundwater Source	Quality Monitoring	Water Security	Water	Source Development	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	17,600	0	0	0	0	0	0	6,000
81	20200000	Fort Nottingham Groundwater Scheme	Exploration of a potential Groundwater Source	Quality Monitoring	Water Security	Water	Source Development	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	7,700	0	0	0	0	0	0	2,500
82	20200000	Churchill Groundwater Scheme	Exploration of a potential Groundwater Source	Quality Monitoring	Water Security	Water	Source Development	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	33,000	0	0	0	0	0	0	11,000
83	20200000	Bushy Park Groundwater Scheme	Exploration of a potential Groundwater Source	Quality Monitoring	Water Security	Water	Source Development	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	110,000	0	0	0	0	0	0	40,000
84	20200000	Coegakop Groundwater Scheme	Exploration of a potential Groundwater Source	Quality Monitoring	Water Security	Water	Source Development	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	220,000	0	0	0	0	0	0	75,000

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								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		
85	20080091	Helenvale Urban Renewal Programme	Distribution Pipe Lines - Rehabilitation & Refurbishment	Local Scheme Solution	New Infrastructure	Water	Basic Supply	N	N	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	100	0	0	0	0	0	0	100
86	20100034	Balmoral Reservoir and Bulk Pipeline	Reservoirs - New, Augmentation & Upgrade	Local Scheme Solution	New Infrastructure	Water	Internal Bulk	Y	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	1,000	
87	20030601	Uitenhage RE Reservoir	Construction of a 1Ml reclaimed effluent reservoir: Uitenhage	Local Scheme Solution	New Infrastructure	Water	Internal Bulk	N	N	N	N	Y	N	N	N	Y	Y	N	N	N	N	3,000	0	0	0	0	0	0	1,000		
88	20060081	Coega Reclaimed Effluent Scheme	Supply Pipe Lines - New, Augmentation & Upgrade	Regional Scheme Solution	New Infrastructure	Water	Internal Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	3,500	0	0	0	0	0	0	1,000		
89	20060081	Coega Reclaimed Effluent Scheme	Supply Pipe Lines - New, Augmentation & Upgrade	Regional Scheme Solution	New Infrastructure	Water	Internal Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	3,500	0	0	0	0	0	0	1,000		
90	20080090	Govan Mbeki Midblock Mains	Supply Pipe Lines - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Water	Internal Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	100	0	0	0	0	0	0	100		
91	20050097	Nooitgedagt Low Level Scheme	Augmentation of 90Ml/d Low Level Scheme	Infrastructure Extension	New Infrastructure	Water	Internal Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	1,204,721	0	0	0	0	0	0	15,000		
92	20030511	Seaview Bulk Water	Supply Pipe Lines - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Water	Internal Bulk	Y	N	N	N	N	N	N	Y	Y	N	N	N	N	23,000	0	0	0	0	0	0	9,000			
93	20080048	Jagtlvakte Bulk Water Supply Pipeline	Installation of bulk water infrastructure for proposed Jagtlvakte Development	Infrastructure Extension	New Infrastructure	Water	Internal Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	3,218	0	0	0	0	0	0	1,000			

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								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				
94	20050097	Nooitgedagt Low Level Scheme	Augmentation of 90Ml/d Low Level Scheme	Infrastructure Extension	New Infrastructure	Water	Internal Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1,204,721	0	0	0	0	0	0	15,000
95	20030295	Amanzi Reservoir and Pipeline	Construction of 20Ml reservoir	Infrastructure Extension	Functionality	Water	Internal Bulk	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	90,000	0	0	0	0	0	0	2,000
96	20042883	Older Dams Pipelines Augmentation	Supply Pipe Lines - Rehabilitation & Refurbishment	Infrastructure Extension	New Infrastructure	Water	Internal Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5,000	0	0	0	0	0	0	2,000
97	20120085	Kwanobuhle Reservoir Link Watermain	Reservoirs - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Internal Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1,000	0	0	0	0	0	0	500
98	19990185	Reservoir Rehabilitation	Reservoirs - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Internal Bulk	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	40,000	0	0	0	0	0	0	12,000
99	19990184	Reservoir Fencing	Reservoirs - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Internal Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	4,000	0	0	0	0	0	0	1,000
100	20080094	Rehabilitation of Dams	Rehabilitation of Dams	Refurbish Infrastructure	Functionality	Water	Internal Bulk	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	6,000	0	0	0	0	0	0	2,000
101	20050097	Nooitgedagt Low Level Scheme	Augmentation of 90Ml/d Low Level Scheme	Infrastructure Extension	New Infrastructure	Water	Internal Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1,204,721	0	0	0	0	0	0	15,000
102	20080093	Water Services: Rehabilitation of Pump Stations	Distribution Pipe Lines - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Internal Bulk	N	N	Y	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	17,000	0	0	0	0	0	0	6,000
103	20080144	Upgrading of Kwanobuhle water reticulation	Supply Pipe Lines - New, Augmentation & Upgrade	Upgrade Infrastructure	Functionality	Water	Internal Bulk	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1,000	0	0	0	0	0	0	500

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								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			
104	20080144	Upgrading of Kwanobuhle water reticulation	Supply Pipe Lines - New, Augmentation & Upgrade	Upgrade Infrastructure	Functionality	Water	Internal Bulk	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1,000	0	0	0	0	0	0	500
105	20070157	Telemetry Systems Upgrade	Management Systems	Upgrade Infrastructure	Functionality	Water	Internal Bulk	N	N	N	N	N	N	N	N	Y	Y	N	N	N	N	N	N	7,000	0	0	0	0	0	0	2,000	
106	20050106	Upgrading of Seaview Pump Station	Civil, Mechanical and Electrical upgrades	Upgrade Infrastructure	Functionality	Water	Internal Bulk	N	N	Y	N	N	N	Y	N	N	N	N	N	N	N	N	N	15,532	0	0	0	0	0	0	25,000	
107	20050106	Upgrading of Seaview Pump Station	Civil, Mechanical and Electrical upgrades	Upgrade Infrastructure	Functionality	Water	Internal Bulk	N	N	Y	N	N	N	Y	N	N	N	N	N	N	N	N	N	15,532	0	0	0	0	0	0	25,000	
Topic 4 - Water Services Operations & Maintenance (O&M)																																
108	20200000	Recruitment of additional staff and upskilling of existing staff	Recruitment of additional staff and upskilling of existing staff	Operation	Functionality	Water	Planning	N	N	N	N	N	N	N	N	Y	Y	N	N	N	N	N	N	8,989	0	0	0	0	0	0	2,148	
109	20200000	Develop Operational & Maintenance System	Further development of the EMIS (EDAMS)	Operation	Functionality	Water	Planning	N	N	N	N	N	N	N	N	Y	Y	N	N	N	N	N	N	4,600	0	0	0	0	0	0	2,300	
110	20200000	Operational Call Centre	Handling of infrastructure defects complaints for water and sanitation	Maintenance	Water Security	Water	Planning	Y	Y	N	N	N	N	N	N	Y	Y	N	Y	N	Y	N	21,600	0	0	0	0	0	0	7,200		
Topic 5.1 - Conservation & Demand Management - Water Resource																																
111	20100034	Balmoral Reservoir and Bulk Pipeline	Reservoirs - New, Augmentation & Upgrade	Local Scheme Solution	New Infrastructure	Water	Internal Bulk	Y	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	1,000	

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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
112	20030601	Uitenhage RE Reservoir	Construction of a 1Ml reclaimed effluent reservoir: Uitenhage	Local Scheme Solution	New Infrastructure	Water	Internal Bulk	N	N	N	N	Y	N	N	N	Y	Y	N	N	N	N	3,000	0	0	0	0	0	0	1,000
113	20030295	Amanzi Reservoir and Pipeline	Construction of 20Ml reservoir	Infrastructure Extension	Functionality	Water	Internal Bulk	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	90,000	0	0	0	0	0	0	2,000
114	19990185	Reservoir Rehabilitation	Reservoirs - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Internal Bulk	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	40,000	0	0	0	0	0	0	12,000
115	19990184	Reservoir Fencing	Reservoirs - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Internal Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	4,000	0	0	0	0	0	0	1,000
116	20060083	Rudimentary Service: Water	Distribution Pipe Lines - New, Augmentation & Upgrade	Local Scheme Solution	New Infrastructure	Water	Reticulation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	1,000
117	20060083	Rudimentary Service: Water	Distribution Pipe Lines - New, Augmentation & Upgrade	Local Scheme Solution	New Infrastructure	Water	Reticulation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	1,000
118	20060083	Rudimentary Service: Water	Distribution Pipe Lines - New, Augmentation & Upgrade	Local Scheme Solution	New Infrastructure	Water	Reticulation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	1,000
119	20060083	Rudimentary Service: Water	Distribution Pipe Lines - New, Augmentation & Upgrade	Local Scheme Solution	New Infrastructure	Water	Reticulation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	1,000

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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	MMWIG	Other		
120	20060083	Rudimentary Service: Water	Distribution Pipe Lines - New, Augmentation & Upgrade	Local Scheme Solution	New Infrastructure	Water	Reticulation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	1,000
Topic 5.2 - Conservation & Demand Management - Water Balance																															
121	20162356	Advanced Meter Infrastructure	New Machinery and Equipment	Abstraction Monitoring	Water Security	Water	Internal Bulk	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	N	4,500	0	0	0	0	0	0	4,500
122	20190239	Installation of Zone Water Meters	Installation of Zone Water Meters	Replace Aged Infrastructure	Functionality	Water	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	4,000	0	0	0	0	0	0	4,000
123	20000052	Purchase of Water Meters for NMBM	Supply and install water meters to households within the NMBM	Replace Aged Infrastructure	Functionality	Water	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	45,000	0	0	0	0	0	0	45,000
124	20190237	Bulk Water Metering and Control	New Machinery and Equipment	Non-Revenue Water Program	Water Security	Water	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	2,000
125	20190237	Bulk Water Metering and Control	New Machinery and Equipment	Non-Revenue Water Program	Water Security	Water	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	2,000
126	20190237	Bulk Water Metering and Control	New Machinery and Equipment	Non-Revenue Water Program	Water Security	Water	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	2,000
127	20190237	Bulk Water Metering and Control	New Machinery and Equipment	Non-Revenue Water Program	Water Security	Water	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	2,000

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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																																	
128	20050097	Nooitgedagt/Coega Low Level System	Programme: Dams - Drought Relief Projects	Regional Scheme Solution	New Infrastructure	Water	Regional Bulk	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	12,100	0	0	0	0	0	0	5,000
129	19930320	General Improvements to System	Distribution Pipe Lines - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Reticulation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	44,000	0	0	0	0	0	0	16,000	
130	20070161	Groundwater: Drought Intervention	Management Systems	Quality Monitoring	Water Security	Water	Source Development	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	92,080	0	0	0	0	0	0	32,570		
131	20070161	Coegakop Water Treatment Works	Construction of 20Ml Biofiltration Groundwater Works	Infrastructure Extension	Functionality	Water	Source Development	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	220,000	0	0	0	0	0	0	40,000		

Funding Source (R'000)							
	Own	MIG	RBIG	ACIP	DR	MWIG	Other
Total Funding:	0	0	0	0	0	0	756,469

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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		
8	20050248	Bucket Eradication Programme: Langa Phase 5	Reducing the number of buckets in Langa Phase 5	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	19	0	0	0	0	0	0	5
9	20050248	Bucket Eradication Programme: Walmer (X; O and J)	Reducing the number of buckets in Walmer (X; O and J)	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	23	0	0	0	0	0	0	6
10	20050248	Bucket Eradication Programme: Gqebera	Reducing the number of buckets in Gqebera	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	3,836	0	0	0	0	0	0	959
11	20050248	Bucket Eradication Programme: New Brighton 2	Eradicating all bucket toilets in New Brighton 2	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	470	0	0	0	0	0	0	118
12	20050248	Bucket Eradication Programme: Kwazakhele 1	Eradicating all bucket toilets in Kwazakhele 1	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	2,344	0	0	0	0	0	0	586
13	20050248	Bucket Eradication Programme: Zwide 3	Eradicating all buckets in Zwide 3	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	252	0	0	0	0	0	0	63
14	20050248	Bucket Eradication Programme: Kwazakhele 2	Eradicating all buckets in Kwazakhele 2	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	543	0	0	0	0	0	0	136
15	20050248	Bucket Eradication Programme: Motherwell 8	Eradicating all bucket toilets in Motherwell 8	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	191	0	0	0	0	0	0	48
16	20050248	Bucket Eradication Programme: KwaNobuhle 9	Eradicating all bucket toilets in KwaNobuhle 9	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	15	0	0	0	0	0	0	4
17	20050248	Bucket Eradication Programme: Kamehs	Eradicating all bucket toilets in Kamehs	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	107	0	0	0	0	0	0	27

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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		
18	20050248	Bucket Eradication Programme: Triyville	Eradicating all bucket toilets in Triyville	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	19	0	0	0	0	0	0	5
19	20200000	Provision of Basic Water Services to households	Provision of Basic Water Services to households	Single Settlement Solution	New Infrastructure	Water	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	10,000	0	0	0	0	0	0	2,500
20	20050248	Bucket Eradication Programme: Uitenhage Upper Central	Reducing the number of buckets in Uitenhage Upper Central	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	4	0	0	0	0	0	0	1	
21	20050248	Bucket Eradication Programme: Walmer G South	Reducing the number of buckets in Walmer G South	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	3,626	0	0	0	0	0	0	906	
22	20050248	Bucket Eradication Programme: New Kwadwesi A	Reducing the number of buckets in New Kwadwesi A	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	191	0	0	0	0	0	0	48	
23	20050248	Bucket Eradication Programme: Kwadwesi	Reducing the number of buckets in Kwadwesi	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	528	0	0	0	0	0	0	132	
24	20050248	Bucket Eradication Programme: Arcadia	Reducing the number of buckets in Arcadia	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	1,595	0	0	0	0	0	0	399	
25	20050248	Bucket Eradication Programme: New Brighton 1	Eradicating all bucket toilets in New Brighton 1	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	2,872	0	0	0	0	0	0	718	
26	20050248	Bucket Eradication Programme: Motherwell 11	Eradicating all bucket toilets in Motherwell 11	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	11	0	0	0	0	0	0	3	
27	20050248	Bucket Eradication Programme: Greater Tjoks	Eradicating all bucket toilets in Greater Tjoks	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	532	0	0	0	0	0	0	133	

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								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		
28	20050248	Bucket Eradication Programme: Langa Phase 2	Eradicating all bucket toilets in Langa Phase 2	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	8	0	0	0	0	0	0	2
29	20050248	Bucket Eradication Programme: McNaughton	Reducing the number of buckets in McNaughton	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	956	0	0	0	0	0	0	239
30	20050248	Bucket Eradication Programme: Despatch SP	Reducing the number of buckets in Despatch SP	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	880	0	0	0	0	0	0	220
31	20050248	Bucket Eradication Programme: Govan Mbeki	Reducing the number of buckets in Govan Mbeki	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	761	0	0	0	0	0	0	190
32	20050248	Bucket Eradication Programme: Salt Pan	Eradicating all bucket toilets in Salt Pan	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	2,513	0	0	0	0	0	0	628
33	20050248	Bucket Eradication Programme: Soweto-on-sea	Eradicating all bucket toilets in Soweto-on-sea	Single Settlement Solution	New Infrastructure	Sanitation	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	486	0	0	0	0	0	0	121
Topic 3 - Water Services Asset Management																															
34	20080144	Upgrading of Kwanobuhle water reticulation	Supply Pipe Lines - New, Augmentation & Upgrade	Upgrade Infrastructure	Functionality	Water	Internal Bulk	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1,000	0	0	0	0	0	0	500
35	20080087	Rehabilitation of Pipe Bridges	Distribution Pipe Lines - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Reticulation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	5,000	0	0	0	0	0	0	2,000	
36	19930320	General Improvements to System	Distribution Pipe Lines - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Reticulation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	44,000	0	0	0	0	0	0	15,000	

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								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		
37	20050106	Seaview Bulk Water	Construction of 110mm - 250mm diameter gravity reticulations mains	Infrastructure Extension	New Infrastructure	Water	Reticulation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	29,181	0	0	0	0	0	0	7,000
38	20060103	Jagtvlaakte Bulk Sewerage	Bulk Sewers - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	4,500	0	0	0	0	0	0	3,000
39	20182425	Augmentation of Lorraine Bulk Sewer	Construction of a new bulk sewer pipeline	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	250,000	0	0	0	0	0	0	500
40	20050250	Upgrading of Driftsands WWTW	Phase 3 for the Maintenance and Upgrades at the WWTW	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	N	1,600,000	0	0	0	0	0	0	1,000	
41	20060075	Upgrading of Cape Receife WWTW	Upgrades to and rehabilitation of key infrastructure components at the WWTW	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	N	490,000	0	0	0	0	0	0	36,000	
42	20060106	Motherwell North Bulk Sewerage	Construction of the bulk collector sewer	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	400,000	0	0	0	0	0	0	50,000	
43	20030167	Rocklands PHB Housing project WWTW	Sewerage Pump Stations - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	N	N	Y	N	N	N	Y	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	1,000	
44	20182540	Fitzpatrick Pump Station	Sewerage Pump Stations - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	N	N	Y	N	N	N	Y	N	N	N	N	N	N	N	N	500	0	0	0	0	0	0	500	

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								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	
45	20070156	Upgrading of Fishwater Flats WWTW	Refurbishment works at the WWTW	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	1,701,000	0	0	0	0	0	0	2,000
46	20070153	Upgrading of Brickfield WWTW	Upgrading of infrastructure at the WWTW	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	15,688	0	0	0	0	0	0	500
47	20070147	Upgrading of Kelvin Jones WWTW	Upgrade of capacity, new inlet works, treatment method and sludge handling facility	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	450,000	0	0	0	0	0	0	60,000	
48	20030182	Upgrading of Despatch WWTW	Upgrading of infrastructure at the WWTW for reclamation	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	16,783	0	0	0	0	0	0	500	
49	20030407	Seaview Bulk Sewer	Bulk sewerage infrastructure for Seaview informal settlement	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	1,600	0	0	0	0	0	0	500	
50	20030034	Augmentation of Markman Main Sewer	Phase 3 for installation of bulk sewer and refurbishment of grit chamber	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	49,858	0	0	0	0	0	0	500	
51	20190250	Jagtvlakte Bulk Sewerage	Installation of bulk sewerage infrastructure for proposed Jagtvlakte Development	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	3,000	0	0	0	0	0	0	1,000	
52	19980348	Paapenkuils Main Sewers Augmentation	Bulk Sewers - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	300	0	0	0	0	0	0	200	

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								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			
53	20110067	Airport Valley Bulk Sewer	Bulk Sewers - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1,000	0	0	0	0	0	0	500
54	20030030	Lorraine Bulk Sewerage Augmentation	Bulk Sewers - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	20,500	0	0	0	0	0	0	20,000
55	20182418	Augment Collector Sewer for Walmer Heights - WIP	Bulk Sewers - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	37,900	0	0	0	0	0	0	500	
56	20182411	Driftsands Collector Sewer - Augmentation - WIP	Bulk Sewers - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	69,500	0	0	0	0	0	0	10,000	
57	20030405	Witteklip Bulk Sewerage	Provision of bulk sewerage infrastructure to Witteklip	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	3,357	0	0	0	0	0	0	500	
58	20070143	Augmentation of Kwazakhele Collector Sewer	Bulk Sewer Augmentation	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	68,300	0	0	0	0	0	0	10,000	
59	20050105	Sewer Protection works for collector sewers	Bulk Sewers - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	3,000	0	0	0	0	0	0	1,500	
60	20050064	Augment Collector Sewer for Walmer Heights and Mt Pleasant	Bulk Sewers - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,500	0	0	0	0	0	0	500	
61	20182428	Swartkops Low Level Colector Sewer Upgrade	Bulk Sewers - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	50,000	0	0	0	0	0	0	50,000	

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			
62	20110066	Joe Slovo, Mandelaville and Allenridge West Bulk Collector Sewers	Construction of bulk sewers in Joe Slovo, Mandelaville and Allenridge West	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	30,000	0	0	0	0	0	0	10,000
63	20060177	Augmentation of Driftsands Collector Sewer	Bulk Sewer Augmentation	Infrastructure Extension	New Infrastructure	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	66,000	0	0	0	0	0	0	26,500
64	19930112	Sewer Replacement and Relining	Reticulation Sewers - Rehabilitation & Refurbishment	Replace Aged Infrastructure	Functionality	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	29,000	0	0	0	0	0	0	10,000
65	20060178	Rehabilitation of Sewerage Pump Stations	Sewerage Pump Stations - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Sanitation	Sanitation Bulk	N	N	Y	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	28,000	0	0	0	0	0	0	10,000
66	20060178	Rehabilitation of Sewerage Pump Stations	Sewerage Pump Stations - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Sanitation	Sanitation Bulk	N	N	Y	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	28,000	0	0	0	0	0	0	10,000
67	19990130	Telemetry - Pump Stations	Waste Water Treatment Works - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5,000	0	0	0	0	0	0	2,000
68	19990130	Telemetry - Pump Stations	Waste Water Treatment Works - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	5,000	0	0	0	0	0	0	2,000
69	20050088	Improve access roads to WWTW	Waste Water Treatment Works - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	Y	N	N	N	N	N	N	3,500	0	0	0	0	0	0	1,500

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		
70	20070144	Upgrading of KwaNobuhle WWTW	Upgrades to and rehabilitation of key infrastructure components at the WWTW	Refurbish Infrastructure	Functionality	Sanitation	Sanitation Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	N	52,000	0	0	0	0	0	0	1,000
71	20030672	Rehabilitation of Sewer Pipes	Reticulation Sewers - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Sanitation	Sanitation Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	3,000	0	0	0	0	0	0	1,000
72	20080138	Kwanobuhle: Upgrade of sewer reticulation	Reticulation Sewers - New, Augmentation & Upgrade	Upgrade Infrastructure	Functionality	Sanitation	Internal Sanitation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1,000	0	0	0	0	0	0	500
73	19940098	Improvements to Sewerage System	Reticulation Sewers - New, Augmentation & Upgrade	Asset Management	Functionality	Sanitation	Internal Sanitation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	33,200	0	0	0	0	0	0	13,200
74	20080136	TEI: Sampling Stations	Reticulation Sewers - New, Augmentation & Upgrade	Infrastructure Extension	Functionality	Sanitation	Internal Sanitation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1,400	0	0	0	0	0	0	600
75	20070161	Coegakop Water Treatment Works	Construction of 20Ml Biofiltration Groundwater Works	Infrastructure Extension	Functionality	Water	Source Development	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	220,000	0	0	0	0	0	0	40,000
76	20200000	Springs Groundwater Scheme	Exploration of a potential Groundwater Source	Quality Monitoring	Water Security	Water	Source Development	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	5,500	0	0	0	0	0	0	1,750
77	20200000	Fairview Groundwater Scheme	Exploration of a potential Groundwater Source	Quality Monitoring	Water Security	Water	Source Development	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	7,700	0	0	0	0	0	0	2,500

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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		
78	20200000	St Georges Park Groundwater Scheme	Exploration of a potential Groundwater Source	Quality Monitoring	Water Security	Water	Source Development	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	33,000	0	0	0	0	0	0	11,000
79	20200000	Malabar Groundwater Scheme	Exploration of a potential Groundwater Source	Quality Monitoring	Water Security	Water	Source Development	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	15,400	0	0	0	0	0	0	5,000
80	20200000	Glendinning Groundwater Scheme	Exploration of a potential Groundwater Source	Quality Monitoring	Water Security	Water	Source Development	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	17,600	0	0	0	0	0	0	6,000
81	20200000	Fort Nottingham Groundwater Scheme	Exploration of a potential Groundwater Source	Quality Monitoring	Water Security	Water	Source Development	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	7,700	0	0	0	0	0	0	2,500
82	20200000	Churchill Groundwater Scheme	Exploration of a potential Groundwater Source	Quality Monitoring	Water Security	Water	Source Development	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	33,000	0	0	0	0	0	0	11,000
83	20200000	Bushy Park Groundwater Scheme	Exploration of a potential Groundwater Source	Quality Monitoring	Water Security	Water	Source Development	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	110,000	0	0	0	0	0	0	30,000
84	20200000	Coegakop Groundwater Scheme	Exploration of a potential Groundwater Source	Quality Monitoring	Water Security	Water	Source Development	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	220,000	0	0	0	0	0	0	70,000
85	20060081	Coega Reclaimed Effluent Scheme	Construction of a new return effluent pipeline at Coega	Local Scheme Solution	New Infrastructure	Sanitation	Source Development	Y	N	N	N	N	N	N	N	N	N	Y	N	N	N	N	1,000	0	0	0	0	0	0	1,000	

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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		
86	20100034	Balmoral Reservoir and Bulk Pipeline	Reservoirs - New, Augmentation & Upgrade	Local Scheme Solution	New Infrastructure	Water	Internal Bulk	Y	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	1,000
87	20030601	Uitenhage RE Reservoir	Construction of a 1MI reclaimed effluent reservoir: Uitenhage	Local Scheme Solution	New Infrastructure	Water	Internal Bulk	N	N	N	N	Y	N	N	N	Y	Y	N	N	N	N	N	3,000	0	0	0	0	0	0	1,000	
88	20060081	Coega Reclaimed Effluent Scheme	Supply Pipe Lines - New, Augmentation & Upgrade	Regional Scheme Solution	New Infrastructure	Water	Internal Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	3,500	0	0	0	0	0	0	1,500	
89	20060081	Coega Reclaimed Effluent Scheme	Supply Pipe Lines - New, Augmentation & Upgrade	Regional Scheme Solution	New Infrastructure	Water	Internal Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	3,500	0	0	0	0	0	0	1,500	
90	20080048	Jagtvlakte Bulk Water Supply Pipeline	Installation of bulk water infrastructure for proposed Jagtvlakte Development	Infrastructure Extension	New Infrastructure	Water	Internal Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	3,218	0	0	0	0	0	0	1,000	
91	20050097	Nooitgedagt Low Level Scheme	Augmentation of 90MI/d Low Level Scheme	Infrastructure Extension	New Infrastructure	Water	Internal Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1,204,721	0	0	0	0	0	0	15,000	
92	20030511	Seaview Bulk Water	Supply Pipe Lines - New, Augmentation & Upgrade	Infrastructure Extension	New Infrastructure	Water	Internal Bulk	Y	N	N	N	N	N	N	Y	Y	N	N	N	N	N	N	23,000	0	0	0	0	0	0	7,000	
93	20050097	Nooitgedagt Low Level Scheme	Augmentation of 90MI/d Low Level Scheme	Infrastructure Extension	New Infrastructure	Water	Internal Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1,204,721	0	0	0	0	0	0	15,000	
94	20050097	Nooitgedagt Low Level Scheme	Augmentation of 90MI/d Low Level Scheme	Infrastructure Extension	New Infrastructure	Water	Internal Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1,204,721	0	0	0	0	0	0	15,000	

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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			
95	20030295	Amanzi Reservoir and Pipeline	Construction of 20Ml reservoir	Infrastructure Extension	Functionality	Water	Internal Bulk	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	90,000	0	0	0	0	0	0	25,000
96	20120085	Kwanobuhle Reservoir Link Watermain	Reservoirs - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Internal Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1,000	0	0	0	0	0	0	500
97	19990185	Reservoir Rehabilitation	Reservoirs - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Internal Bulk	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	40,000	0	0	0	0	0	0	12,000
98	19990184	Reservoir Fencing	Reservoirs - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Internal Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	4,000	0	0	0	0	0	0	2,000
99	20080094	Rehabilitation of Dams	Rehabilitation of Dams	Refurbish Infrastructure	Functionality	Water	Internal Bulk	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	6,000	0	0	0	0	0	0	2,000
100	20080093	Water Services: Rehabilitation of Pump Stations	Distribution Pipe Lines - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Internal Bulk	N	N	Y	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	17,000	0	0	0	0	0	0	6,000
101	20080093	Water Services: Rehabilitation of Pump Stations	Distribution Pipe Lines - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Internal Bulk	N	N	Y	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	17,000	0	0	0	0	0	0	6,000
102	20030630	Upgrade and Rehabilitation of Water Pipelines	Supply Pipe Lines - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Internal Bulk	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	200,000	0	0	0	0	0	0	90,000
103	20080144	Upgrading of Kwanobuhle water reticulation	Supply Pipe Lines - New, Augmentation & Upgrade	Upgrade Infrastructure	Functionality	Water	Internal Bulk	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	1,000	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		
104	20070157	Telemetry Systems Upgrade	Management Systems	Upgrade Infrastructure	Functionality	Water	Internal Bulk	N	N	N	N	N	N	N	N	N	Y	Y	N	N	N	N	7,000	0	0	0	0	0	0	3,000	
105	20050106	Upgrading of Seaview Pump Station	Civil, Mechanical and Electrical upgrades	Upgrade Infrastructure	Functionality	Water	Internal Bulk	N	N	Y	N	N	N	Y	N	N	N	N	N	N	N	15,532	0	0	0	0	0	0	1,000		
106	20050106	Upgrading of Seaview Pump Station	Civil, Mechanical and Electrical upgrades	Upgrade Infrastructure	Functionality	Water	Internal Bulk	N	N	Y	N	N	N	Y	N	N	N	N	N	N	N	15,532	0	0	0	0	0	0	1,000		
Topic 4 - Water Services Operations & Maintenance (O&M)																															
107	20200000	Recruitment of additional staff and upskilling of existing staff	Recruitment of additional staff and upskilling of existing staff	Operation	Functionality	Water	Planning	N	N	N	N	N	N	N	N	Y	Y	N	N	N	N	8,989	0	0	0	0	0	0	2,355		
108	20200000	Develop Operational & Maintenance System	Further development of the EMIS (EDAMS)	Operation	Functionality	Water	Planning	N	N	N	N	N	N	N	Y	Y	N	N	N	N	4,600	0	0	0	0	0	0	1,150			
109	20200000	Operational Call Centre	Handling of infrastructure defects complaints for water and sanitation	Maintenance	Water Security	Water	Planning	Y	Y	N	N	N	N	N	Y	Y	Y	N	Y	N	21,600	0	0	0	0	0	0	7,200			
Topic 5.1 - Conservation & Demand Management - Water Resource																															
110	20100034	Balmoral Reservoir and Bulk Pipeline	Reservoirs - New, Augmentation & Upgrade	Local Scheme Solution	New Infrastructure	Water	Internal Bulk	Y	N	N	N	Y	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	1,000			

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								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
111	20030601	Uitenhage RE Reservoir	Construction of a 1Ml reclaimed effluent reservoir: Uitenhage	Local Scheme Solution	New Infrastructure	Water	Internal Bulk	N	N	N	N	Y	N	N	N	Y	Y	N	N	N	N	3,000	0	0	0	0	0	0	1,000
112	20030295	Amanzi Reservoir and Pipeline	Construction of 20Ml reservoir	Infrastructure Extension	Functionality	Water	Internal Bulk	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	90,000	0	0	0	0	0	0	25,000
113	19990185	Reservoir Rehabilitation	Reservoirs - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Internal Bulk	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	40,000	0	0	0	0	0	0	12,000
114	19990184	Reservoir Fencing	Reservoirs - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Internal Bulk	N	N	N	N	N	N	N	N	N	N	N	N	N	N	4,000	0	0	0	0	0	0	2,000
Topic 5.2 - Conservation & Demand Management - Water Balance																													
115	20162356	Advanced Meter Infrastructure	New Machinery and Equipment	Abstraction Monitoring	Water Security	Water	Internal Bulk	N	N	N	N	N	N	N	N	N	N	Y	N	N	N	4,500	0	0	0	0	0	0	4,500
116	20190239	Installation of Zone Water Meters	Installation of Zone Water Meters	Replace Aged Infrastructure	Functionality	Water	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	4,000	0	0	0	0	0	0	4,000
117	20000052	Purchase of Water Meters for NMBM	Supply and install water meters to households within the NMBM	Replace Aged Infrastructure	Functionality	Water	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	45,000	0	0	0	0	0	0	45,000
118	20190237	Bulk Water Metering and Control	New Machinery and Equipment	Non-Revenue Water Program	Water Security	Water	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	2,000

Water Services Development Plan

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								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			
119	20190237	Bulk Water Metering and Control	New Machinery and Equipment	Non-Revenue Water Program	Water Security	Water	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	2,000
120	20190237	Bulk Water Metering and Control	New Machinery and Equipment	Non-Revenue Water Program	Water Security	Water	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	2,000
121	20190237	Bulk Water Metering and Control	New Machinery and Equipment	Non-Revenue Water Program	Water Security	Water	Basic Supply	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	2,000	0	0	0	0	0	0	2,000	
Topic 6 - Water Resource																																
122	20050097	Nooitgedagt/Coega Low Level System	Programme: Dams - Drought Relief Projects	Regional Scheme Solution	New Infrastructure	Water	Regional Bulk	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	12,100	0	0	0	0	0	0	5,000
123	19930320	General Improvements to System	Distribution Pipe Lines - Rehabilitation & Refurbishment	Refurbish Infrastructure	Functionality	Water	Reticulation	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	N	N	44,000	0	0	0	0	0	0	15,000	
124	20070161	Groundwater: Drought Intervention	Management Systems	Quality Monitoring	Water Security	Water	Source Development	N	N	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	92,080	0	0	0	0	0	0	31,510	
125	20070161	Coegakop Water Treatment Works	Construction of 20M Biofiltration Groundwater Works	Infrastructure Extension	Functionality	Water	Source Development	N	N	N	Y	N	N	N	N	N	N	N	N	N	N	N	N	220,000	0	0	0	0	0	0	40,000	

Chapter 2:

Topic 1: Settlement Demographics & Public Amenities

Settlement Summary		
Section	Value	Assessment Score
1.1 Total Population	1263051	75
1.2 Total Number of Households	355381	75
1.3 Average Household Size	3.6	75
1.4 Total Number of Settlements	250	90

Summary by Settlement Group			
Settlement Type	Settlements	Population	Households
Urban	250	1263051	355381

Amenities Summary		
Description	Number per type	Assessment Score
Educational facilities	367	90
Health Facilities	73	90

Assessment Score						
Settlement Type		Number of settlements	Population per settlement type	Households per settlement type	Average Households size per settlement type	
Urban	Metropolitan Area	250	1263051	355381	5.5	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	No	No
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 1,263,051, the total number of households is 355,381, with an average household size of approximately 3.6 people per household. The population is in line with the Integrated Development Plan 2017/18 – 2021/22 (Third Edition). Settlements are defined as defined in the Census 2011: Small Area Layer. The Small Area layer is the second smallest area available under the Census 2011 data. All population figures were expanded using the growth rate determined by the census (1.36%). Rural and Urban areas are defined as per the Census 2011 data. Although the the 2016 Community Survey has more updated data, is not suitable for the WSDP due to only a small sample being surveyed. The Average Household Size figure is due to the outliers such as the the Nelson Mandela University residents in the Summerstrand and adjacent areas. The Total Number of Settlements data is not the same as that of the NMBM (Settlements are allotted by 60 Wards instead of 250 Settlements).
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Water Services Development Plan

1.2 Summary by Settlement Group

Interpret Situation Assessment:	There are 250 settlements, all located within the Municipal boundary. Of the 250 households, 12 settlements are located outside of the urban fringe, while the remaining 238 settlements are located within the urban fringe. Furthermore, there are 132 informal settlements with 34174 households, but do not form part of the overall Settlements data.
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1.3 Assessment Score by Settlement Type

Interpret Situation Assessment:	An Assessment Score of 75 was given due to the fact that the data received is from a reliable source. Settlements are as defined in the Census 2011: Small Area Layer. The Small Area layer is the second smallest area available under the Census 2011 data, the next level up is the "Sub-Place" and the level down is the Enumeration Area (EA). The Sub-Place coincides to ward boundaries, while the EA is the area covered by one enumerator.
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1.4 Amenities Summary

Interpret Situation Assessment:	There are a total of 438 public amenities including 73 health facilities (15 Hospitals, 8 Health Centres, 47 Clinics and 3 Special / Others) and 367 education facilities (226 Primary, 92 Secondary, 26 Combined, 14 Tertiary and 9 Special). It must be noted that all other public amenities i.e. Police Stations, Prison, Municipal / Provincial / National Entities, Libraries, Community Halls etc. do not form part of the WSDP output data.
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Business Element Report Items	Compliance Score	Intervention Required	%	Solution description as identified by Master Plan	%	Is there an Existing project addressing this problem?	%	Does this current listed project address the problem totally?	%	Project Approved by Council as part of WSDP Database?	%	Approved by council, in project database and part of 5 yr IDP cycle projects	%	Project listed in 3 yr MTEF - cycle	%	Total Points	Current Demand Overall Scoring %
1.1 Settlements Summary	78.75	Yes	100	Update the Census of the Community Survey to reconfirm Population and Household Data.	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	90	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	

Water Services Development Plan

WSDP FY2019: Strategies and Objectives

Nelson Mandela Bay Metropolitan Municipality

Nr	Objective Strategy	Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
Settlement Demographics & Public Amenities									
1	Provide basic Water and Sanitation to all Public Amenities.	Number of Public Amenities i.e. schools, without basic Water and Sanitation.	3	20200000, Provision of Sanitation Services to Public Amenities	3	3	0		
1	Provide basic Water and Sanitation to all Public Amenities.	Number of Public Amenities i.e. schools, without basic Water and Sanitation.	3	20200000, Provision of Water Services to Public Amenities	3	3	0		

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)	1953	90
Direct settlement backlog water population. Total population of settlement with a water need (irrelevant the type of need)	7695	90
Direct settlement backlog sanitation house holds. Total house hold of settlement with a sanitation need (irrelevant the type of need)	9149	90
Direct settlement backlog sanitation population. Total population of settlement with a sanitation need (irrelevant the type of need)	33924	90

Water Profile		
	Totals	Assessment Score
Water Services Infrastructure Supply Level Profile		
Piped water inside the dwelling/house-Households	264760	90
Piped water inside yard-Households	52748	90
Piped water distance <200m - Households	34781	90
Piped water distance <201m - Households	681	75
Borehole in the yard - Households	870	75
Rain-water tank in yard - Households	336	75
Water vendor-carrier/tanker - Households	630	60
Stagnant water - dam/pool - Households	165	60
Flowing water/spring/ stream/river - Households	60	60
Water Other - Households	477	60
Water Reliability Profile		
Water Supply System - Single Type	0	100
Water Supply System - Scheme based	250	75
Total Number of Households having Reliable Service. (Interpret Direct Backlog field above)	353445	75

Water Services Development Plan

Water Profile		
	Totals	Assessment Score
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	1953	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	1953	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	340179	90
Flush toilet (with septic tank) - Households	6518	90
Chemical Toilet - Households	36	75
Pit toilet with ventilation (VIP) - Households	264	75
Pit without ventilation - Households	543	75
Bucket toilet - Households	6010	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
Household not having reliable service due to Resource - Water Security	0	90
Infrastructure to be upgraded: Pit to VIP (HH)	543	75

Sanitation Profile		
	Totals	Assessment Score
Infrastructure to be upgraded: Buckets to waterborne (HH)	7844	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

Consumer types	Waterstatus		Grand Total
	Adequate	Inadequate	
Educational facilities	364	3	367
Health Facilities	73	0	73
Grand Total	437	3	440

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	226	224	0	2	3.00	100
Secondary School	92	92	0	0	0.00	100
Tertiary	14	14	0	0	0.00	100
Combined	26	25	0	1	1.50	100
Special Needs	9	9	0	0	0.00	100
Other	0	0	0	0	0.00	100
Total	367	364	0	3	4.50	
2.1.2 Health Plan						
Hospitals	15	15	0	0	0.00	100
Health Centers	0	0	0	0	0.00	100
Clinics	47	47	0	0	0.00	100
Other	11	11	0	0	0.00	100
Total	73	73	0	0	0.00	
2.2 Sanitation Services						
2.2.1 Education Plan						
Primary School	226	224	0	2	3.00	100
Secondary School	92	92	0	0	0.00	100
Tertiary	14	14	0	0	0.00	100
Combined	26	25	0	1	1.50	100
Special Needs	9	9	0	0	0.00	100
Other	0	0	0	0	0.00	100
Total	367	364	0	3	4.50	

Water Services Development Plan

2.2.2 Health Plan						
Hospitals	15	15	0	0	0.00	100
Health Centers	0	0	0	0	0.00	100
Clinics	47	47	0	0	0.00	100
Other	11	11	0	0	0.00	100
Total	73	73	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

Direct Backlog Water

Water Services Development Plan

Interpret Situation Assessment:	Of the 355381 households, 3219 households with an estimated population of 12682 have a water need.
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Water Services Infrastructure Supply Level Profile

Interpret Situation Assessment:	Approximately 74.5% (264760) of all households have piped water inside dwellings/house, 14.8% (52748) have piped water inside yards, 9.8% (34781) have piped water less than 200m from dwelling, 0.2% (681) have have piped water more than 200m from dwelling, 0.2% (870) have boreholes in the yard, 0.1% (336) have rainwater tanks in the yard, 0.2% (630) rely on water vendors i.e. water tanker, 0.05% (165) have access to dams and pools, 0.01% (60) have access to springs, streams and rivers, and 1% (477) rely on other water sources.
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Sanitation Service Infrastructure Supply Level Profile

Interpret Situation Assessment:	Approximately 96% (340179) of all households have flush toilets connected to the sewerage system, 1.8% (6518) have flush toilets with septic/conservancy tanks, 1.7% (6010) have bucket toilets, 0.01% (36) have have chemical toilets, and 0.4% (807) have pit toilets with/without ventilation.
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Water Services: Education

Interpret Situation Assessment:	All educational facilities have adequate water services, except for 3 educational facilities, namely Amanzi Primary School, Sindawonye Primary School and Rocklands Intermediate School.
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Sanitation Services: Education

Interpret Situation Assessment:	All educational facilities have adequate sanitation facilities, except for 3 schools namely Amanzi Primary School, Sindawonye Primary School and Rocklands Intermediate School.
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Health and Educational Facilities

Water Services Development Plan

Interpret Situation Assessment:	All public health- and educational facilities have adequate water and sanitation facilities, except the four schools namely Amanzi Primary School, Sindawonye Primary School and Rocklands Intermediate School.
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Direct Backlog Sanitation

Interpret Situation Assessment:	There is a backlog total of 7615 formal households consisting of 6010 buckets, 762 that have no sanitation, 36 chemical toilets, and 807 pit toilets. This excludes the 34174 households required for 132 informal settlements requiring chemical toilets.
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Water Reliability Profile

Interpret Situation Assessment:	Out of the total 355381 households, the number of households that do not have a reliable water supply is 3219.
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Sanitation Reliability Profile

Interpret Situation Assessment:	The total number of households that do not have basic sanitation is 7615 consisting of the eradication of 6010 buckets, 762 households have no sanitation, 36 households have chemical toilets and 807 households have pit toilets.
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Water Services: Health

Interpret Situation Assessment:	All health facilities have basic water supply.
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Sanitation Services: Health

Water Services Development Plan

Interpret Situation Assessment:	All health facilities have access to basic sanitation services.
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Business Element Report Items	Compliance Score	Intervention Required	%	Solution description as identified by Master Plan	%	Is there an Existing project addressing this problem?	%	Does this current listed project address the problem totally?	%	Project Approved by Council as part of WSDP Database?	%	Approved by council, in project database and part of 5 yr IDP cycle projects	%	Project listed in 3 yr MTEF - cycle	%	Total Points	Current Demand Overall Scoring %
Direct Backlog Water	90	Yes	100	Address backlog water of 3219 households.	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
Water Services Infrastructure Supply Level Profile	81.96	Yes	100	Provide basic water supply to 3219 households.	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
Sanitation Service Infrastructure Supply Level Profile	86.25	Yes	100	Provide waterborne sanitation to 7615 households.	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
Water Services: Education	100	Yes	100	Provide basic water to the three (3) schools.	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
Sanitation Services: Education	100	Yes	100	Provide basic sanitation to the three (3) schools.	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
Health and Educational Facilities	0	Yes	100	Maintain provision of basic water and sanitation to all 73 health- and 367 education facilities.	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
Direct Backlog Sanitation	0	Yes	100	Address backlog sanitation of 7615 households.	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
Water Reliability Profile	0	Yes	100	Address backlog water of 3219 households.	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
Sanitation Reliability Profile	0	Yes	100	Address backlog sanitation of 7615 households.	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
Water Services: Health	0	Yes	100	Maintain provision of basic water services to all 73 health facilities.	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
Sanitation Services: Health	0	Yes	100	Maintain provision of basic sanitation services to all 73 health facilities.	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
Demand Overall Scoring Average																100	

WSDP FY2019: Strategies and Objectives

Nelson Mandela Bay Metropolitan Municipality

Nr	Objective	Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
Service Levels Promise	Strategy								

Water Services Development Plan

Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
1	Provision of reliable water services to all households.	Number of households requiring reliable water supply.	3219	20200000, Provision of Basic Water Services to households	3219	3219	2000	1000	0
1	Provision of reliable water services to all households.	Number of households requiring reliable water supply.	3219	20060083, Rudimentary Service: Water	3219	3219	2000	1000	0
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20200000, Provision of Waterborne Sanitation Services to all households	7615	7615	5000	3000	1000
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Uitenhage Upper Central	7615	7615	5000	3000	1000
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Walmer G South	7615	7615	5000	3000	1000

Water Services Development Plan

Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: New Kwadwesi A	7615	7615	5000	3000	1000
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Kwadwesi	7615	7615	5000	3000	1000
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Arcadia	7615	7615	5000	3000	1000
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: New Brighton 1	7615	7615	5000	3000	1000

Water Services Development Plan

Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Motherwell 11	7615	7615	5000	3000	1000
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Greater Tjoks	7615	7615	5000	3000	1000
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Langa Phase 2	7615	7615	5000	3000	1000
3	Provision of basic sanitation to 132 informal settlements, 34174 households.	Number of households informal settlements requiring basic sanitation.	34174	20050247, Rudimentary Services: Sanitation	34174	26250	17500	8750	0
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: McNaughton	7615	7615	5000	3000	1000

Water Services Development Plan

Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Despatch SP	7615	7615	5000	3000	1000
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Govan Mbeki	7615	7615	5000	3000	1000
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Salt Pan	7615	7615	5000	3000	1000
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Soweto-on-sea	7615	7615	5000	3000	1000

Water Services Development Plan

Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Motherwell 10	7615	7615	5000	3000	1000
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Langa Phase 4	7615	7615	5000	3000	1000
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Booyensens Park	7615	7615	5000	3000	1000
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Mandelaville	7615	7615	5000	3000	1000

Water Services Development Plan

Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Greensfields	7615	7615	5000	3000	1000
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Middlestreet	7615	7615	5000	3000	1000
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Langa Phase 5	7615	7615	5000	3000	1000
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Walmer (X; O and J)	7615	7615	5000	3000	1000

Water Services Development Plan

Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Gqebera	7615	7615	5000	3000	1000
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: New Brighton 2	7615	7615	5000	3000	1000
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Kwazakhele 1	7615	7615	5000	3000	1000
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Zwide 3	7615	7615	5000	3000	1000

Water Services Development Plan

Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Kwazakhele 2	7615	7615	5000	3000	1000
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Motherwell 8	7615	7615	5000	3000	1000
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: KwaNobuhle 9	7615	7615	5000	3000	1000
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Kamehs	7615	7615	5000	3000	1000

Water Services Development Plan

Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
2	Provision of basic sanitation to all households.	Number of households without basic sanitation, including 6010 buckets, 762 no sanitation, 807 pit toilets, and 36 chemical toilets.	7615	20050248, Bucket Eradication Programme: Triyville	7615	7615	5000	3000	1000

Water Services Development Plan

Topic 3: Water Services Asset Management

Yes No Grid		
Question	Yes	Assessment Score

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

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

Water Services Development Plan

[section]										
3.1.1 Total number of components / km of pipeline / units	10	9	9	36	94	560	516	83	12	100
3.2.1.1 Previous incidents including Security Problems (Regular)	0	0	0	1	0	233	128	2	0	75
3.2.1.2 Previous incidents including Security Problems (Periodic)	0	0	0	12	0	11	245	57	0	75
3.2.1.3 Previous incidents including Security Problems (Sporadic)	1	9	3	7	0	40	103	11	7	90
3.2.1.4 Previous incidents including Security Problems (None)	0	0	5	15	92	276	40	3	0	75
3.2.2.1 Safety inspection performed (Regular)	1	9	8	35	92	0	0	0	7	75
3.2.2.2 Safety inspection performed (Periodic)	0	0	0	0	0	0	0	59	0	75
3.2.2.3 Safety inspection performed (Sporadic)	0	0	0	0	0	560	516	14	0	75
3.2.2.4 Safety inspection performed (None)	0	0	0	0	0	560	516	0	0	75
3.2.5 Average Operating hours per day (X hrs)	24	24	24	24	24	24	24	24	24	100
3.3.1.1 General physical condition: Dysfunctional	0	0	0	0	0	0	0	0	0	100
3.3.1.2 General physical condition: Operational	1	0	8	28	88	0	0	62	6	75

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3.3.1.3 General physical condition: Prime Condition	0	9	0	7	4	0	0	11	1	75
3.3.1.4 General physical condition: Vandalised	0	0	0	0	0	0	0	0	0	75
3.3.2 Number of breakages / failures per year	0	0	0	0	0	0	0	0	0	75
3.3.3 Total refurbishment needs %	3%	11%	44%	3%	1%	21%	54%	1%	7%	75
3.3.4 Total refurbishment needs cost (RM)	0.230	6.940	60.000	45.450	41.230	1,541.820	796.100	123.490	249.120	90
3.3.4.1 Refurbishment cost for 5 year	0.030	10.196	69.000	66.775	60.580	2266.480	1170.272	181.449	366.030	75
3.3.4.2 Refurbishment cost for 10 year	0.030	14.980	96.500	98.115	89.012	3331.725	1720.300	266.608	537.810	75
3.3.4.3 Refurbishment cost for 15 year	0.040	22.011	120.000	144.162	130.789	4897.636	2528.841	391.735	790.240	75
3.3.5 Total replacement needs %	0%	11%	44%	3%	1%	3%	15%	1%	0	100
3.3.6 Total replacement needs cost (RM)	0.080	2.330	1,032.000	51.230	116.240	3,119.14	136.740	2,072.950	0.000	75
3.3.6.1 Replacement cost for 5 year	0.100	2.682	1,063.000	75.274	170.795	4585.136	1970.493	3045.844	0.000	75
3.3.6.2 Replacement cost for 10 year	0.150	3.940	1,099.000	110.602	250.953	6740.1496	2896.625	4475.344	0.000	75
3.3.6.3 Replacement cost for 15 year	0.200	5.789	1,135.000	162.510	368.733	9908.0201	4258.038	6575.749	0.000	75

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3.3.7 Total New development cost required	634.430	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	75
3.3.7.1 New development cost for 5 year	600.970	0.000	220.000	8.820	1.900	26.340	627.070	156.590	2,033.480	75
3.3.7.2 New development cost for 10 year	883.000	0.000	230.000	13.000	2.060	0.000	0.000	230.080	2,987.850	75
3.3.7.3 New development cost for 15 year	1,297.430	0.000	240.000	19.030	2.220	0.000	0.000	340.460	4,390.120	75
3.3.8 % Of Components already reached useful life	0%	0%	0%	0%	0%	0%	15%	0%	0%	75
3.3.9 % Whereoff the WSA Self is the Current Owner	10%	67%	89%	97%	98%	100%	95%	88%	58%	75
3.3.10 % Whereoff the WSA Self is Current Operator	10%	67%	89%	97%	98%	100%	95%	88%	58%	75
3.4.1 % Expected total lifespan: Short (1-3 yrs)	0	0	0	0	0	24.32	90.12	0	0	75
3.4.2 % Expected total lifespan: Medium (3 - 10 yrs)	0	0	0	13.89	55.32	5.41	1.99	2.41	0	75
3.4.3 % Expected total lifespan: Long (10 - 20 yrs)	10	100	88.89	83.33	42.55	70.27	2.96	85.54	58.33	90

Sanitation Schemes

Sanitation Schemes	Green Drop	Assessment Score
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Chatty Sanitation Scheme	True	100
City Sanitation Scheme	True	100
Despatch Sanitation Scheme	True	100
Driftsands Sanitation Scheme	True	100
Jagtvlakte Sanitation Scheme	True	100
Kwanobuhle Sanitation Scheme	True	100
Lower Baakens Sanitation Scheme	True	100
Motherwell Sanitation Scheme	True	100
Paapenkuils Sanitation Scheme	True	100
Prop Bushy Park Sanitation Scheme	NULL	100
Prop Draaifontein Sanitation Scheme	NULL	100
Prop Greenbushes Sanitation Scheme	NULL	100

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Prop Motherwell North + Coega Sanitation Scheme	NULL	100
Rocklands Sanitation Scheme	True	100
Swartkops Sanitation Scheme	True	100
Uitenhage Sanitation Scheme	True	100
Upper Baakens Sanitation Scheme	True	100
Wells Estate Sanitation Scheme	True	100

Water Schemes		
Water Schemes	Blue Drop	Assessment Score

NMBM Water Supply System	True	100
WSA Level	NULL	100

Water Services Development Plan

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

Strategic Interpretation

Detail situation assessments per Topic element

3.1 General Information

Interpret Situation Assessment:	There is one (1) Borehole, nine (9) Abstraction Points, eight (8) Water Treatment Works, 35 Water Pump Stations, 92 Sewer Pump Stations, 560km of Bulk Water Pipelines, 516km of Sewer Bulk Pipelines, 73 Reservoirs, and eight (8) Wastewater Treatment Works.
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3.2 Operation

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

Interpret Situation Assessment:	All Assets are Functional, with approximate 52% of all components of the WSA's Assets requiring refurbishment and / or replacement.
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Water Services Development Plan

3.4 Asset Assessment Spectrum

Interpret Situation Assessment:	There is one (1) Borehole, nine (9) Abstraction Points, eight (8) Water Treatment Works, 35 Water Pump Stations, 92 Sewer Pump Stations, 560km of Bulk Water Pipelines, 516km of Sewer Bulk Pipelines, 73 Reservoirs, and eight (8) Wastewater Treatment Works. Furthermore, 251km of bulk water pipes require refurbishment and 0km require replacement. And 295km of bulk sewer pipes require refurbishment, with a further 71km requiring replacement.
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3.5 Water and Sanitation schemes

Interpret Situation Assessment:	There is one (1) existing water scheme, namely the Algoa Water Supply System, including 1 existing groundwater scheme. There are nine (9) future groundwater schemes and three (3) future desalination water schemes. There are existing fourteen (14) sanitation schemes, and five (5) future sanitation schemes.
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Business Element Report Items	Compliance Score	Intervention Required	%	Solution description as identified by Master Plan	%	Is there an Existing project addressing this problem?	%	Does this current listed project address the problem totally?	%	Project Approved by Council as part of WSDP Database?	%	Approved by council, in project database and part of 5 yr IDP cycle projects	%	Project listed in 3 yr MTEF - cycle	%	Total Points	Current Demand Overall Scoring %
3.1 General Information	100	Yes	100	Update and Maintain Asset register / database (EDAMS) 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	78.33	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	79.09	Yes	100	Maintain all infrastructure in functional condition by attending to all refurbishment- and / or replacement needs.	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
3.4 Asset Assessment Spectrum	75	Yes	100	Maintain all assets by attending to all refurbishment- and / or replacement needs.	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
3.5 Water and Sanitation schemes	95	Yes	100	Maintain existing and Development of new water- and sanitation schemes to meet the future water and sanitation requirements. (EDAMS Operational Projects)	100	No	0	No	0	No	0	No	0	No	0	200	28.57
Demand Overall Scoring Average																71.43	

Water Services Development Plan

Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
6	Security of Future Water Supply, by Re-use of Existing Treated Wastewater	Develop new and upgrade existing wastewater treatment re-use treated water capacity, from existing 7.6Ml/day - 30Ml/day	7.6	20060081, Coega Reclaimed Effluent Scheme	7.6	7.6	15	23	30
7	Security of Future Wastewater Treatment Capacity.	Develop new wastewater treatment capacity up to 196Ml/day, including Bushy Park, Greenbushes, Draaifontein, St Albans, Coega.	0	20060107, Coega WWTW	0	0	50	100	150
1	Security of Water Supply from Groundwater Sources.	Develop potential Groundwater Water Supply from 9 potential groundwater sources , up to 40Ml/day.	0	20200000, Springs Groundwater Scheme	0	0	10	20	40
1	Security of Water Supply from Groundwater Sources.	Develop potential Groundwater Water Supply from 9 potential groundwater sources , up to 40Ml/day.	0	20200000, Fairview Groundwater Scheme	0	0	10	20	40
1	Security of Water Supply from Groundwater Sources.	Develop potential Groundwater Water Supply from 9 potential groundwater sources , up to 40Ml/day.	0	20200000, St Georges Park Groundwater Scheme	0	0	10	20	40

Water Services Development Plan

Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
1	Security of Water Supply from Groundwater Sources.	Develop potential Groundwater Water Supply from 9 potential groundwater sources , up to 40Ml/day.	0	20200000, Malabar Groundwater Scheme	0	0	10	20	40
1	Security of Water Supply from Groundwater Sources.	Develop potential Groundwater Water Supply from 9 potential groundwater sources , up to 40Ml/day.	0	20200000, Glendinning Groundwater Scheme	0	0	10	20	40
1	Security of Water Supply from Groundwater Sources.	Develop potential Groundwater Water Supply from 9 potential groundwater sources , up to 40Ml/day.	0	20200000, Fort Nottingham Groundwater Scheme	0	0	10	20	40
1	Security of Water Supply from Groundwater Sources.	Develop potential Groundwater Water Supply from 9 potential groundwater sources , up to 40Ml/day.	0	20200000, Churchill Groundwater Scheme	0	0	10	20	40
1	Security of Water Supply from Groundwater Sources.	Develop potential Groundwater Water Supply from 9 potential groundwater sources , up to 40Ml/day.	0	20200000, Bushy Park Groundwater Scheme	0	0	10	20	40

Water Services Development Plan

Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
1	Security of Water Supply from Groundwater Sources.	Develop potential Groundwater Water Supply from 9 potential groundwater sources , up to 40Ml/day.	0	20200000, Coegakop Groundwater Scheme	0	0	10	20	40
5	Security of Future Treated Water.	Develop additional water treatment initiatives including potential desalination initiatives Schoenmakerskop , Coega IDZ, Lower Sundays River Return Flows, up to 170Ml/day	0	20050097, Nootgedagt Low Level Scheme	0	0	0	50	100
8	Future access to Basic Sanitation for all households.	Develop sanitation schemes, including Bushy Park, Draaifontein, Greenbushes and Motherwell North – Coega – 4 No Schemes.	0	20060106, Motherwell North Bulk Sewerage	0	0	1	2	3
9	Security Water Supply by Ensuring Water Pump Stations are operational.	Refurbishment of Pump Stations including Airport, Buffelsfontein, Motherwell, Matanzima, Reservoir 1 & 2, Rosedale, Seaview, Struandale, Summit & Van Riebeeck Hoogte – 10No out of total of 35No.	10	19990130, Telemetry - Pump Stations	10	10	5	5	0

Water Services Development Plan

Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
9	Security Water Supply by Ensuring Water Pump Stations are operational.	Refurbishment of Pump Stations including Airport, Buffelsfontein, Motherwell, Matanzima, Reservoir 1 & 2, Rosedale, Seaview, Struandale, Summit & Van Riebeeck Hoogte – 10No out of total of 35No.	10	20050106, Upgrading of Seaview Pump Station	10	10	5	5	0
9	Security Water Supply by Ensuring Water Pump Stations are operational.	Refurbishment of Pump Stations including Airport, Buffelsfontein, Motherwell, Matanzima, Reservoir 1 & 2, Rosedale, Seaview, Struandale, Summit & Van Riebeeck Hoogte – 10No out of total of 35No.	10	20060178, Rehabilitation of Sewerage Pump Stations	10	10	5	5	0
9	Security Water Supply by Ensuring Water Pump Stations are operational.	Refurbishment of Pump Stations including Airport, Buffelsfontein, Motherwell, Matanzima, Reservoir 1 & 2, Rosedale, Seaview, Struandale, Summit & Van Riebeeck Hoogte – 10No out of total of 35No.	10	20080093, Water Services: Rehabilitation of Pump Stations	10	10	5	5	0

Water Services Development Plan

Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
2	Security of Water Supply from Surface Water Sources.	Develop Surface Water Supply from potential sources namely desalination Schoenmakerskop , Coega IDZ, Lower Sundays River Return Flows, up to 170Ml/day.	0	20050097, Nooitgedagt Low Level Scheme	0	0	0	50	100
3	Security of Water Supply by developing new Surface Water Sources	Develop Surface Water Supply from potential surface water sources i.e larger dam below Kouga Dam, or upstream of Kouga at Guernakop, % complete.	0	20080094, Rehabilitation of Dams	0	0	0	5	10
4	Security of Treated Water Supply.	Treated Water Capacity, by completion of Coegakop WTW, 20Ml/day.	0	20070161, Coegakop Water Treatment Works	0	0	10	20	20
10	Ensure continuity of safe disposal of wastewater conveyance from all households, and prevent pollution of environment.	Refurbishment of Sewer Pump stations, 37No out of Total of 92 Pump stations.	37	19990130, Telemetry - Pump Stations	37	37	15	15	7
10	Ensure continuity of safe disposal of wastewater conveyance from all households, and prevent pollution of environment.	Refurbishment of Sewer Pump stations, 37No out of Total of 92 Pump stations.	37	20060178, Rehabilitation of Sewerage Pump Stations	37	37	15	15	7
10	Ensure continuity of safe disposal of wastewater conveyance from all households, and prevent pollution of environment.	Refurbishment of Sewer Pump stations, 37No out of Total of 92 Pump stations.	37	20182540, Fitzpatrick Pump Station	37	37	15	15	7

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Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
10	Ensure continuity of safe disposal of wastewater conveyance from all households, and prevent pollution of environment.	Refurbishment of Sewer Pump stations, 37No out of Total of 92 Pump stations.	37	20030167, Rocklands PHB Housing project WWTW	37	37	15	15	7
10	Ensure continuity of safe disposal of wastewater conveyance from all households, and prevent pollution of environment.	Refurbishment of Sewer Pump stations, 37No out of Total of 92 Pump stations.	37	20050106, Upgrading of Seaview Pump Station	37	37	15	15	7
10	Ensure continuity of safe disposal of wastewater conveyance from all households, and prevent pollution of environment.	Refurbishment of Sewer Pump stations, 37No out of Total of 92 Pump stations.	37	20070157, Telemetry Systems Upgrade	37	37	15	15	7
10	Ensure continuity of safe disposal of wastewater conveyance from all households, and prevent pollution of environment.	Refurbishment of Sewer Pump stations, 37No out of Total of 92 Pump stations.	37	20080093, Water Services: Rehabilitation of Pump Stations	37	37	15	15	7
11	Ensure continuity of bulk water supply to all households.	Refurbishment of 251km out of total of 560km bulk water pipelines, at a rate of 50km/annum.	251	20030511, Seaview Bulk Water	251	251	200	150	100
11	Ensure continuity of bulk water supply to all households.	Refurbishment of 251km out of total of 560km bulk water pipelines, at a rate of 50km/annum.	251	20050106, Seaview Bulk Water	251	251	200	150	100
11	Ensure continuity of bulk water supply to all households.	Refurbishment of 251km out of total of 560km bulk water pipelines, at a rate of 50km/annum.	251	20060081, Coega Reclaimed Effluent Scheme	251	251	200	150	100

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Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
11	Ensure continuity of bulk water supply to all households.	Refurbishment of 251km out of total of 560km bulk water pipelines, at a rate of 50km/annum.	251	20080090, Govan Mbeki Midblock Mains	251	251	200	150	100
11	Ensure continuity of bulk water supply to all households.	Refurbishment of 251km out of total of 560km bulk water pipelines, at a rate of 50km/annum.	251	20080144, Upgrading of Kwanobuhle water reticulation	251	251	200	150	100
11	Ensure continuity of bulk water supply to all households.	Refurbishment of 251km out of total of 560km bulk water pipelines, at a rate of 50km/annum.	251	20030630, Upgrade and Rehabilitation of Water Pipelines	251	251	200	150	100
11	Ensure continuity of bulk water supply to all households.	Refurbishment of 251km out of total of 560km bulk water pipelines, at a rate of 50km/annum.	251	20042883, Older Dams Pipelines Augmentation	251	251	200	150	100
11	Ensure continuity of bulk water supply to all households.	Refurbishment of 251km out of total of 560km bulk water pipelines, at a rate of 50km/annum.	251	19930320, General Improvements to System	251	251	200	150	100
11	Ensure continuity of bulk water supply to all households.	Refurbishment of 251km out of total of 560km bulk water pipelines, at a rate of 50km/annum.	251	20080087, Rehabilitation of Pipe Bridges	251	251	200	150	100

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Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
11	Ensure continuity of bulk water supply to all households.	Refurbishment of 251km out of total of 560km bulk water pipelines, at a rate of 50km/annum.	251	20080091, Helenvale Urban Renewal Programme	251	251	200	150	100
11	Ensure continuity of bulk water supply to all households.	Refurbishment of 251km out of total of 560km bulk water pipelines, at a rate of 50km/annum.	251	19950866, Cathodic Protection of Steel Pipelines	251	251	200	150	100
11	Ensure continuity of bulk water supply to all households.	Refurbishment of 251km out of total of 560km bulk water pipelines, at a rate of 50km/annum.	251	20030512, St Albans Bulk Water	251	251	200	150	100
11	Ensure continuity of bulk water supply to all households.	Refurbishment of 251km out of total of 560km bulk water pipelines, at a rate of 50km/annum.	251	20050097, Nooitgedagt Low Level Scheme	251	251	200	150	100
11	Ensure continuity of bulk water supply to all households.	Refurbishment of 251km out of total of 560km bulk water pipelines, at a rate of 50km/annum.	251	20080048, Jagtvlakte Bulk Water Supply Pipeline	251	251	200	150	100
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	20060177, Augmentation of Driftsands Collector Sewer	366	366	300	250	200

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Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	20070143, Augmentation of Kwazakhele Collector Sewer	366	366	300	250	200
13	Ensure continuity of bulk water supply and reduce storage facility with no water losses.	Refurbishment of 14No out of total of 73 Reservoirs, at 5No Reservoirs/annum.	14	19990184, Reservoir Fencing	14	14	10	5	0
13	Ensure continuity of bulk water supply and reduce storage facility with no water losses.	Refurbishment of 14No out of total of 73 Reservoirs, at 5No Reservoirs/annum.	14	19990185, Reservoir Rehabilitation	14	14	10	5	0
13	Ensure continuity of bulk water supply and reduce storage facility with no water losses.	Refurbishment of 14No out of total of 73 Reservoirs, at 5No Reservoirs/annum.	14	20030295, Amanzi Reservoir and Pipeline	14	14	10	5	0
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	20030034, Augmentation of Markman Main Sewer	366	366	300	250	200
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	19930112, Sewer Replacement and Relining	366	366	300	250	200
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	20030672, Rehabilitation of Sewer Pipes	366	366	300	250	200

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Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	20110054, Augmentation of Motherwell Main Sewer	366	366	300	250	200
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	19940098, Improvements to Sewerage System	366	366	300	250	200
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	20060081, Coega Reclaimed Effluent Scheme	366	366	300	250	200
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	20110066, Joe Slovo, Mandelaville and Allenridge West Bulk Collector Sewers	366	366	300	250	200
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	20030030, Lorraine Bulk Sewerage Augmentation	366	366	300	250	200
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	20182425, Augmentation of Lorraine Bulk Sewer	366	366	300	250	200

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Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	20030407, Seaview Bulk Sewer	366	366	300	250	200
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	20030405, Witteklip Bulk Sewerage	366	366	300	250	200
13	Ensure continuity of bulk water supply and reduce storage facility with no water losses.	Refurbishment of 14No out of total of 73 Reservoirs, at 5No Reservoirs/annum.	14	20030601, Uitenhage RE Reservoir	14	14	10	5	0
13	Ensure continuity of bulk water supply and reduce storage facility with no water losses.	Refurbishment of 14No out of total of 73 Reservoirs, at 5No Reservoirs/annum.	14	20100034, Balmoral Reservoir and Bulk Pipeline	14	14	10	5	0
13	Ensure continuity of bulk water supply and reduce storage facility with no water losses.	Refurbishment of 14No out of total of 73 Reservoirs, at 5No Reservoirs/annum.	14	20120085, Kwanobuhle Reservoir Link Watermain	14	14	10	5	0
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	20060103, Jagtvlakte Bulk Sewerage	366	366	300	250	200
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	20190250, Jagtvlakte Bulk Sewerage	366	366	300	250	200

Water Services Development Plan

Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	20110056, Upgrading Swartkops Low Level Collector Sewer	366	366	300	250	200
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	20182428, Swartkops Low Level Collector Sewer Upgrade	366	366	300	250	200
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	20080138, Kwanobuhle: Upgrade of sewer reticulation	366	366	300	250	200
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	20080144, Upgrading of Kwanobuhle water reticulation	366	366	300	250	200
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	19980348, Paapenkuils Main Sewers Augmentation	366	366	300	250	200
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	20050064, Augment Collector Sewer for Walmer Heights and Mt Pleasant	366	366	300	250	200

Water Services Development Plan

Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	20182418, Augment Collector Sewer for Walmer Heights - WIP	366	366	300	250	200
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	20050105, Sewer Protection works for collector sewers	366	366	300	250	200
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	19960525, Chatty Valley Collector Sewer Stage 1	366	366	300	250	200
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	20182411, Driftsands Collector Sewer - Augmentation - WIP	366	366	300	250	200
12	Ensure conveyance of wastewater from all households safely and no environmental impact, to wastewater works for treatment/disposal.	Refurbishment of 295km and Replacement of 71.42km (366km) 516km, at a rate of 50km/annum.	366	20110067, Airport Valley Bulk Sewer	366	366	300	250	200
14	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 Cape Receife, Fishwater Flats and Kelvin Jones, 3No out of total 8No.	3	20030182, Upgrading of Despatch WWTW	3	3	3	2	1

Water Services Development Plan

Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
14	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 Cape Receife, Fishwater Flats and Kelvin Jones, 3No out of total 8No.	3	20050088, Improve access roads to WWTW	3	3	3	2	1
14	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 Cape Receife, Fishwater Flats and Kelvin Jones, 3No out of total 8No.	3	20050250, Upgrading of Driftsands WWTW	3	3	3	2	1
14	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 Cape Receife, Fishwater Flats and Kelvin Jones, 3No out of total 8No.	3	20060075, Upgrading of Cape Receife WWTW	3	3	3	2	1

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Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
14	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 Cape Receife, Fishwater Flats and Kelvin Jones, 3No out of total 8No.	3	20070144, Upgrading of KwaNobuhle WWTW	3	3	3	2	1
14	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 Cape Receife, Fishwater Flats and Kelvin Jones, 3No out of total 8No.	3	20070147, Upgrading of Kelvin Jones WWTW	3	3	3	2	1
14	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 Cape Receife, Fishwater Flats and Kelvin Jones, 3No out of total 8No.	3	20070153, Upgrading of Brickfield WWTW	3	3	3	2	1

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Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
14	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 Cape Receife, Fishwater Flats and Kelvin Jones, 3No out of total 8No.	3	20070156, Upgrading of Fishwater Flats WWTW	3	3	3	2	1
14	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 Cape Receife, Fishwater Flats and Kelvin Jones, 3No out of total 8No.	3	20182409, Fishwater Flats WWTW	3	3	3	2	1
14	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 Cape Receife, Fishwater Flats and Kelvin Jones, 3No out of total 8No.	3	20080136, TEI: Sampling Stations	3	3	3	2	1

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?				
False	100			
Phase	Compliance	StatusQuo	Impact	Assesement Score
4.2 Resources				
4.2.1 Existing Groundwater Infrastructure				
Operation	Staff	Minimum basic requirement	Medium/High	45
Maintenance	Staff	Minimum basic requirement	Critical	45
Operation	External resources	Not Required	No Impact	45
Maintenance	External resources	Minimum basic requirement	Critical	45
Operation	Spare Parts	Minimum basic requirement	Medium/High	45
Maintenance	Spare Parts	Above minimum requirement	Low	45
Operation	Tools & Equipment	Minimum basic requirement	Medium/High	45
Maintenance	Tools & Equipment	Above minimum requirement	Low	45
Operation	Budget	Below Minimum requirement	Medium/High	45
Maintenance	Budget	Minimum basic requirement	Critical	45
4.2 Resources				
4.2.2 Existing Surface Water Infrastructure				
Operation	Staff	Above minimum requirement	Critical	45
Maintenance	Staff	Minimum basic requirement	Critical	45

Water Services Development Plan

Operation	External resources	Minimum basic requirement	Critical	45
Maintenance	External resources	Minimum basic requirement	Critical	45
Operation	Spare Parts	Minimum basic requirement	Critical	45
Maintenance	Spare Parts	Above minimum requirement	Low	45
Operation	Tools & Equipment	Minimum basic requirement	Critical	45
Maintenance	Tools & Equipment	Above minimum requirement	Low	45
Operation	Budget	Below Minimum requirement	Critical	45
Maintenance	Budget	Minimum basic requirement	Critical	45
4.2 Resources				
4.2.3 Existing Waste Water Treatment Works Infrastructure				
Operation	Staff	Below Minimum requirement	Critical	90
Maintenance	Staff	Below Minimum requirement	Critical	90
Operation	External resources	Below Minimum requirement	Low	75
Maintenance	External resources	Below Minimum requirement	Low	75
Operation	Spare Parts	Below Minimum requirement	Critical	90
Maintenance	Spare Parts	Below Minimum requirement	Critical	90
Operation	Tools & Equipment	Below Minimum requirement	Medium/High	90
Maintenance	Tools & Equipment	Below Minimum requirement	Medium/High	90
Operation	Budget	Below Minimum requirement	Critical	90
Maintenance	Budget	Below Minimum requirement	Critical	90
4.2 Resources				
4.2.4 Existing Water Treatment Works Infrastructure				
Operation	Staff	Below Minimum requirement	Critical	45
Maintenance	Staff	Minimum basic requirement	Critical	45
Operation	External resources	Minimum basic requirement	Critical	45
Maintenance	External resources	Minimum basic requirement	Critical	45
Operation	Spare Parts	Minimum basic requirement	Critical	45
Maintenance	Spare Parts	Above minimum requirement	Low	45
Operation	Tools & Equipment	Minimum basic requirement	Critical	45
Maintenance	Tools & Equipment	Above minimum requirement	Low	45
Operation	Budget	Below Minimum requirement	Critical	45
Maintenance	Budget	Minimum basic requirement	Critical	45

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4.2 Resources				
4.2.5 Existing Pump Station Infrastructure				
Operation	Staff	Below Minimum requirement	Critical	45
Maintenance	Staff	Minimum basic requirement	Critical	45
Operation	External resources	Minimum basic requirement	Critical	45
Maintenance	External resources	Above minimum requirement	Low	45
Operation	Spare Parts	Minimum basic requirement	Critical	45
Maintenance	Spare Parts	Above minimum requirement	Low	45
Operation	Tools & Equipment	Minimum basic requirement	Critical	45
Maintenance	Tools & Equipment	Above minimum requirement	Low	45
Operation	Budget	Below Minimum requirement	Critical	45
Maintenance	Budget	Minimum basic requirement	Critical	45
4.2 Resources				
4.2.6 Existing Bulk Pipeline Infrastructure				
Operation	Staff	Below Minimum requirement	Critical	45
Maintenance	Staff	Minimum basic requirement	Critical	45
Operation	External resources	Minimum basic requirement	Critical	45
Maintenance	External resources	Minimum basic requirement	Critical	45
Operation	Spare Parts	Minimum basic requirement	Critical	45
Maintenance	Spare Parts	Above minimum requirement	Low	45
Operation	Tools & Equipment	Minimum basic requirement	Critical	45
Maintenance	Tools & Equipment	Above minimum requirement	Low	45
Operation	Budget	Below Minimum requirement	Critical	45
Maintenance	Budget	Minimum basic requirement	Critical	45
4.2 Resources				
4.2.7 Existing Tower & Reservoir Infrastructure				
Operation	Staff	Below Minimum requirement	Critical	45
Maintenance	Staff	Minimum basic requirement	Critical	45
Operation	External resources	Minimum basic requirement	Critical	45
Maintenance	External resources	Minimum basic requirement	Critical	45
Operation	Spare Parts	Minimum basic requirement	Critical	45
Maintenance	Spare Parts	Above minimum requirement	Low	45

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Operation	Tools & Equipment	Minimum basic requirement	Critical	45
Maintenance	Tools & Equipment	Above minimum requirement	Low	45
Operation	Budget	Below Minimum requirement	Critical	45
Maintenance	Budget	Minimum basic requirement	Critical	45
4.2 Resources				
4.2.8 Existing Reticulation Infrastructure				
Operation	Staff	Below Minimum requirement	Medium/High	45
Maintenance	Staff	Minimum basic requirement	Critical	45
Operation	External resources	Minimum basic requirement	Medium/High	45
Maintenance	External resources	Minimum basic requirement	Critical	45
Operation	Spare Parts	Minimum basic requirement	Medium/High	45
Maintenance	Spare Parts	Above minimum requirement	Low	45
Operation	Tools & Equipment	Minimum basic requirement	Low	45
Maintenance	Tools & Equipment	Above minimum requirement	Low	45
Operation	Budget	Below Minimum requirement	Critical	45
Maintenance	Budget	Minimum basic requirement	Critical	45
4.3 Information				
4.3.1 Existing Groundwater Infrastructure				
Operation	Manuals Available	Minimum basic requirement	Low	45
Maintenance	Manuals Available	Minimum basic requirement	Low	45
Operation	Asset Register	Above minimum requirement	Low	45
Maintenance	Asset Register	Above minimum requirement	Low	45
Operation	As-Built info.	Above minimum requirement	Medium/High	45
Maintenance	As-Built info.	Above minimum requirement	Medium/High	45
Operation	Tools & Equipment	Minimum basic requirement	Low	45
Maintenance	Tools & Equipment	Minimum basic requirement	Low	45
Operation	Contingency & Safety Plan	Below Minimum requirement	Critical	45
Maintenance	Contingency & Safety Plan	Below Minimum requirement	Critical	45
4.3 Information				
4.3.2 Existing Surface Water Infrastructure				
Operation	Manuals Available	Minimum basic requirement	Low	45
Maintenance	Manuals Available	Minimum basic requirement	Low	45

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Operation	Asset Register	Above minimum requirement	Low	45
Maintenance	Asset Register	Above minimum requirement	Low	45
Operation	As-Built info.	Above minimum requirement	Medium/High	45
Maintenance	As-Built info.	Above minimum requirement	Medium/High	45
Operation	Tools & Equipment	Minimum basic requirement	Low	45
Maintenance	Tools & Equipment	Minimum basic requirement	Low	45
Operation	Contingency & Safety Plan	Below Minimum requirement	Critical	45
Maintenance	Contingency & Safety Plan	Below Minimum requirement	Critical	45
4.3 Information				
4.3.3 Existing Water Treatment Works Infrastructure				
Operation	Manuals Available	Minimum basic requirement	Low	75
Maintenance	Manuals Available	Minimum basic requirement	Low	75
Operation	Asset Register	Above minimum requirement	Low	90
Maintenance	Asset Register	Above minimum requirement	Low	90
Operation	As-Built info.	Above minimum requirement	Medium/High	75
Maintenance	As-Built info.	Above minimum requirement	Medium/High	75
Operation	Tools & Equipment	Minimum basic requirement	Low	75
Maintenance	Tools & Equipment	Minimum basic requirement	Low	75
Operation	Contingency & Safety Plan	Below Minimum requirement	Critical	60
Maintenance	Contingency & Safety Plan	Below Minimum requirement	Critical	60
4.3 Information				
4.3.4 Existing Waste Water Treatment Works Infrastructure				
Operation	Manuals Available	Below Minimum requirement	Medium/High	45
Maintenance	Manuals Available	Below Minimum requirement	Medium/High	45
Operation	Asset Register	Below Minimum requirement	Medium/High	45
Maintenance	Asset Register	Below Minimum requirement	Medium/High	45
Operation	As-Built info.	Above minimum requirement	Medium/High	45
Maintenance	As-Built info.	Above minimum requirement	Medium/High	45
Operation	Tools & Equipment	Minimum basic requirement	Critical	45
Maintenance	Tools & Equipment	Minimum basic requirement	Critical	45
Operation	Contingency & Safety Plan	Below Minimum requirement	Critical	45
Maintenance	Contingency & Safety Plan	Below Minimum requirement	Critical	45

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4.3 Information				
4.3.5 Existing Pump Station Infrastructure				
Operation	Manuals Available	Minimum basic requirement	Low	45
Maintenance	Manuals Available	Minimum basic requirement	Low	45
Operation	Asset Register	Above minimum requirement	Low	45
Maintenance	Asset Register	Above minimum requirement	Low	45
Operation	As-Built info.	Above minimum requirement	Medium/High	45
Maintenance	As-Built info.	Above minimum requirement	Medium/High	45
Operation	Tools & Equipment	Minimum basic requirement	Low	45
Maintenance	Tools & Equipment	Minimum basic requirement	Low	45
Operation	Contingency & Safety Plan	Below Minimum requirement	Critical	45
Maintenance	Contingency & Safety Plan	Below Minimum requirement	Critical	45
4.3 Information				
4.3.6 Existing Bulk Pipeline Infrastructure				
Operation	Manuals Available	Minimum basic requirement	Low	45
Maintenance	Manuals Available	Minimum basic requirement	Low	45
Operation	Asset Register	Above minimum requirement	Low	45
Maintenance	Asset Register	Above minimum requirement	Low	45
Operation	As-Built info.	Above minimum requirement	Medium/High	45
Maintenance	As-Built info.	Above minimum requirement	Medium/High	45
Operation	Tools & Equipment	Minimum basic requirement	Low	45
Maintenance	Tools & Equipment	Minimum basic requirement	Low	45
Operation	Contingency & Safety Plan	Below Minimum requirement	Critical	45
Maintenance	Contingency & Safety Plan	Below Minimum requirement	Critical	45
4.3 Information				
4.3.7 Existing Tower & Reservoir Infrastructure				
Operation	Manuals Available	Minimum basic requirement	Low	45
Maintenance	Manuals Available	Minimum basic requirement	Low	45
Operation	Asset Register	Above minimum requirement	Low	45
Maintenance	Asset Register	Above minimum requirement	Low	45
Operation	As-Built info.	Above minimum requirement	Medium/High	45
Maintenance	As-Built info.	Above minimum requirement	Medium/High	45

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Operation	Tools & Equipment	Minimum basic requirement	Low	45
Maintenance	Tools & Equipment	Minimum basic requirement	Low	45
Operation	Contingency & Safety Plan	Below Minimum requirement	Critical	45
Maintenance	Contingency & Safety Plan	Below Minimum requirement	Critical	45
4.3 Information				
4.3.8 Existing Reticulation Infrastructure				
Operation	Manuals Available	Minimum basic requirement	Low	45
Maintenance	Manuals Available	Minimum basic requirement	Low	45
Operation	Asset Register	Above minimum requirement	Low	45
Maintenance	Asset Register	Above minimum requirement	Low	45
Operation	As-Built info.	Above minimum requirement	Medium/High	45
Maintenance	As-Built info.	Above minimum requirement	Medium/High	45
Operation	Tools & Equipment	Minimum basic requirement	Low	45
Maintenance	Tools & Equipment	Minimum basic requirement	Low	45
Operation	Contingency & Safety Plan	Below Minimum requirement	Critical	45
Maintenance	Contingency & Safety Plan	Below Minimum requirement	Critical	45
4.4 Activity Control & Management				
4.4.1 Existing Groundwater Infrastructure				
Operation	Procedures	Above minimum requirement	Medium/High	45
Maintenance	Procedures	Zero Compliance	Medium/High	45
Operation	Record keeping in place	Minimum basic requirement	Medium/High	45
Maintenance	Record keeping in place	Above minimum requirement	No Impact	45
Operation	Quality Control procedures established	Above minimum requirement	Medium/High	45
Maintenance	Quality Control procedures established	Above minimum requirement	No Impact	45
Operation	Risk Management	Minimum basic requirement	Medium/High	45
Maintenance	Risk Management	Above minimum requirement	Low	45
Operation	Reporting (data analysis & report generation est.)	Above minimum requirement	Medium/High	45
Maintenance	Reporting (data analysis & report generation est.)	Above minimum requirement	Low	45
4.4 Activity Control & Management				
4.4.2 Existing Surface water infrastructure				
Operation	Procedures	Above minimum requirement	Medium/High	45
Maintenance	Procedures	Minimum basic requirement	Medium/High	45

Water Services Development Plan

Operation	Record keeping in place	Minimum basic requirement	Medium/High	45
Maintenance	Record keeping in place	Above minimum requirement	No Impact	45
Operation	Quality Control procedures established	Above minimum requirement	Medium/High	45
Maintenance	Quality Control procedures established	Above minimum requirement	No Impact	45
Operation	Risk Management	Minimum basic requirement	Medium/High	45
Maintenance	Risk Management	Above minimum requirement	Low	45
Operation	Reporting (data analysis & report generation est.)	Above minimum requirement	Medium/High	45
Maintenance	Reporting (data analysis & report generation est.)	Above minimum requirement	Low	45
4.4 Activity Control & Management				
4.4.3 Existing Water Treatment Works infrastructure				
Operation	Procedures	Below Minimum requirement	Critical	90
Maintenance	Procedures	Minimum basic requirement	Medium/High	90
Operation	Record keeping in place	Minimum basic requirement	Medium/High	75
Maintenance	Record keeping in place	Above minimum requirement	Medium/High	75
Operation	Quality Control procedures established	Minimum basic requirement	Medium/High	90
Maintenance	Quality Control procedures established	Above minimum requirement	Medium/High	90
Operation	Risk Management	Minimum basic requirement	Critical	75
Maintenance	Risk Management	Above minimum requirement	Low	75
Operation	Reporting (data analysis & report generation est.)	Minimum basic requirement	Medium/High	90
Maintenance	Reporting (data analysis & report generation est.)	Above minimum requirement	Low	90
4.4 Activity Control & Management				
4.4.4 Existing Waste Water Treatment Works infrastructure				
Operation	Procedures	Above minimum requirement	Medium/High	45
Maintenance	Procedures	Minimum basic requirement	Medium/High	45
Operation	Record keeping in place	Minimum basic requirement	Medium/High	45
Maintenance	Record keeping in place	Above minimum requirement	Medium/High	45
Operation	Quality Control procedures established	Minimum basic requirement	Medium/High	45
Maintenance	Quality Control procedures established	Above minimum requirement	Medium/High	45
Operation	Risk Management	Minimum basic requirement	Critical	45
Maintenance	Risk Management	Above minimum requirement	Low	45
Operation	Reporting (data analysis & report generation est.)	Above minimum requirement	Medium/High	45
Maintenance	Reporting (data analysis & report generation est.)	Above minimum requirement	Low	45

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4.4 Activity Control & Management

4.4.5 Existing Pump Station infrastructure

Operation	Procedures	Above minimum requirement	Medium/High	45
Maintenance	Procedures	Minimum basic requirement	Medium/High	45
Operation	Record keeping in place	Minimum basic requirement	Medium/High	45
Maintenance	Record keeping in place	Above minimum requirement	Medium/High	45
Operation	Quality Control procedures established	Not Required	Medium/High	45
Maintenance	Quality Control procedures established	Above minimum requirement	Medium/High	45
Operation	Risk Management	Minimum basic requirement	Medium/High	45
Maintenance	Risk Management	Above minimum requirement	Low	45
Operation	Reporting (data analysis & report generation est.)	Above minimum requirement	Medium/High	45
Maintenance	Reporting (data analysis & report generation est.)	Above minimum requirement	Low	45

4.4 Activity Control & Management

4.4.6 Existing Bulk Pipeline infrastructure

Operation	Procedures	Minimum basic requirement	Medium/High	45
Maintenance	Procedures	Minimum basic requirement	Medium/High	45
Operation	Record keeping in place	Minimum basic requirement	Medium/High	45
Maintenance	Record keeping in place	Above minimum requirement	Medium/High	45
Operation	Quality Control procedures established	Minimum basic requirement	Critical	45
Maintenance	Quality Control procedures established	Above minimum requirement	Medium/High	45
Operation	Risk Management	Minimum basic requirement	Medium/High	45
Maintenance	Risk Management	Above minimum requirement	Low	45
Operation	Reporting (data analysis & report generation est.)	Above minimum requirement	Medium/High	45
Maintenance	Reporting (data analysis & report generation est.)	Above minimum requirement	Low	45

4.4 Activity Control & Management

4.4.7 Existing Tower & Reservoir infrastructure

Operation	Procedures	Minimum basic requirement	Medium/High	45
Maintenance	Procedures	Minimum basic requirement	Medium/High	45
Operation	Record keeping in place	Minimum basic requirement	Medium/High	45
Maintenance	Record keeping in place	Above minimum requirement	Medium/High	45
Operation	Quality Control procedures established	Minimum basic requirement	Critical	45
Maintenance	Quality Control procedures established	Above minimum requirement	Medium/High	45

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Operation	Risk Management	Minimum basic requirement	Medium/High	45
Maintenance	Risk Management	Above minimum requirement	Low	45
Operation	Reporting (data analysis & report generation est.)	Above minimum requirement	Medium/High	45
Maintenance	Reporting (data analysis & report generation est.)	Above minimum requirement	Low	45
4.4 Activity Control & Management				
4.4.8 Existing Reticulation infrastructure				
Operation	Procedures	Minimum basic requirement	Medium/High	45
Maintenance	Procedures	Minimum basic requirement	Medium/High	45
Operation	Record keeping in place	Minimum basic requirement	Medium/High	45
Maintenance	Record keeping in place	Above minimum requirement	Medium/High	45
Operation	Quality Control procedures established	Minimum basic requirement	Critical	45
Maintenance	Quality Control procedures established	Above minimum requirement	Medium/High	45
Operation	Risk Management	Minimum basic requirement	Medium/High	45
Maintenance	Risk Management	Above minimum requirement	Low	45
Operation	Reporting (data analysis & report generation est.)	Above minimum requirement	Medium/High	45
Maintenance	Reporting (data analysis & report generation est.)	Above minimum requirement	Low	45

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	No
4.1.1 Is There an Operation and Maintenance Plan?	Yes	No
4.2 Resources	Yes	No
4.3 Information	Yes	No
4.4 Activity Control & Management	Yes	No

Strategic Interpretation

Detail situation assessments per Topic element

4.1 Operation & Maintenance Plan

Interpret Situation Assessment:	There are existing Operation & Maintenance Plans for various asset components managed i.e. Water Distribution, Water Management & Bulk Supply, Wastewater Treatment and Wastewater Conveyance.
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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 Water Distribution, Water Management & Bulk Supply, Wastewater Treatment and Wastewater Conveyance Departments.
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4.2 Resources

Interpret Situation Assessment:	In terms of staffing water and sanitation resourcing, there are total of 1212 posts, of which 741 posts (61%) are filled, and 471 posts (39%) are vacant. Due to the high vacancies, this indicates inadequate resourcing / staffing from a water and sanitation perspective.
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Water Services Development Plan

4.3 Information

Interpret Situation Assessment:	There are adequate and information access in terms of Manuals Available, Asset Register, As-built Information, EDAMS.
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4.4 Activity Control & Management

Interpret Situation Assessment:	There are adequate Activity & Control Management: Procedures, Record keeping, Quality Control procedures, Risk Management and Reporting.
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Business Element Report Items	Compliance Score	Intervention Required	%	Solution description as identified by Master Plan	%	Is there an Existing project addressing this problem?	%	Does this current listed project address the problem totally?	%	Project Approved by Council as part of WSDP Database?	%	Approved by council, in project database and part of 5 yr IDP cycle projects	%	Project listed in 3 yr MTEF - cycle	%	Total Points	Current Demand Overall Scoring %
4.1 Operation & Maintenance Plan	100	Yes	100	Update & Maintain Operation & 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?	50.25	Yes	100	Update & Maintain Operation & Maintenance Plan.	100	No	0	No	0	No	0	No	0	No	0	200	28.57
4.2 Resources	48.75	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	49.88	Yes	100	Maintain & Update Access to Information including Manuals Available, Asset Registers, As Built Information, EDAMS.	100	No	0	No	0	No	0	No	0	No	0	200	28.57
4.4 Activity Control & Management	44.25	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	

WSDP FY2019: Strategies and Objectives

Nelson Mandela Bay Metropolitan Municipality

Objective	Key	Baseline (2018)	WSDP	WSDP	WSDP	WSDP	WSDP
Water Services O&M							

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
1	Ensure effective and efficient Operations & Maintenance of Water Services in terms of Resources.	O&M Resources in terms of Staffing, External Resources, Spare Parts, Tools & Equipment and Budget, as a Percentage.	70%	20200000, Recruitment of additional staff and upskilling of existing staff	70%	70%	75%	77%	80%
2	Ensure effective and efficient Operations & Maintenance of Water Services in terms of Information.	O&M Information in terms of Availability of Manuals, Asset Registers, As Built Information, Tools & Equipment, and Contingency & Safety Plans, as a percentage.	70%	20200000, Develop Operational & Maintenance System	70%	70%	75%	77%	80%
3	Ensure effective and efficient Operations & Maintenance of Water Services in terms of Activity Control & Management.	O & M Activity Control & Management in terms of Procedures, Record keeping, Quality Control procedures, Risk Management and Reporting.	70%	20200000, Operational Call Centre	70%	70%	75%	77%	80%

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	Yes	60
5.1.2 Day flow metering	Yes	60
5.1.3 Reticulation leaks	Yes	75
5.1.4 Illegal connections	Yes	60
5.1.5 Un-metered connections	Yes	60
5.2 Leak and meter repair programmes. Consumer units targeted by:		
5.2.1 Leak repair assistance programme	Yes	60

Water Services Development Plan

5.2.2 Retro-fitting of water inefficient toilets	Yes	60
5.2.3 Meter repair programme	Yes	60
5.3 Consumer/end-use demand management: Public Information & Education Programmes		
5.3.1 Schools targeted by education programmes	Yes	75
5.3.2 Consumers targeted by public information programmes	Yes	75

Demand Info Question 8		
Question	Number of Settlements	Assessment Score

Conjunctive use of surface - and groundwater		
Surface Water	250	90
Artificial Recharge	250	90
Rain Water Harvesting	250	90

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Water Services Development Plan

Demand Info Question 9

Question	Yes/No	Assessment Score
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5.5 Working for Water

Is there a Working for Water Programme in place:	Yes	100
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Demand Info Question 10

Project Name	Assessment Score
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Provide List of Projects

Bulk Water Supply & Bulk Water Meters; Greater Meter Area (GMA) & District Meter Area (DMA) Meters	75
Remote Reading; Non-Revenue Water (NRW) Monitoring	75
Pressure Management; Industrial, Commercial and Institutional (ICI) Users and Billing Management	75
Water and Sanitation Tariffs; Leak Repairs	75
Leak Repair Contractor; Domestic Meter Audit	75

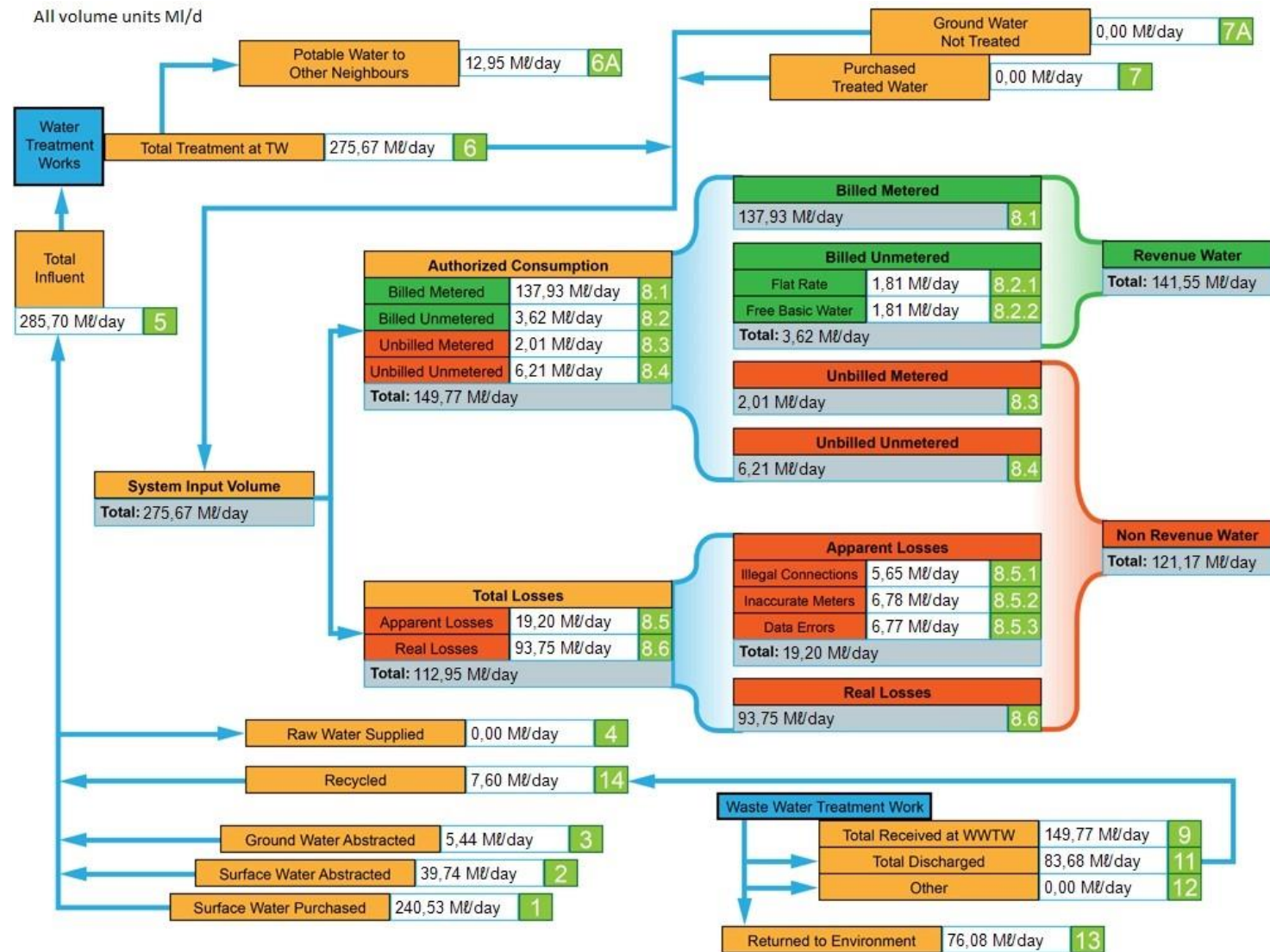
Water Services Development Plan

Valve & Hydrant Audit; Meter Replacement Programme	75
Pipe Replacement Programme; Reservoir Rehabilitation; Publicity Awareness Programme	75

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	Yes
5.2 Leak and meter repair programmes.	Yes	Yes
5.3 Consumer/end-use demand management: Public Information & Education Programmes	Yes	Yes
5.4: Conjunctive use of surface - and groundwater	Yes	Yes
5.5 Working for Water	Yes	Yes

Topic 5.2: Water Balance

Water Services Development Plan



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.	100
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.	100
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).	45
5.2.8.2.2 Free basic water used through unbilled unmetered stand pipes or yard connections.	45
5.2.8.5.1 Water used through illegal connections.	100
5.2.8.5.2 Water used but not billed for because of inaccurate meters.	45
5.2.8.5.3 Water used but not billed for because of data transfer errors, low estimated readings or any administrative errors.	45
5.2.9 Total amount of water received at waste water treatment works.	90
5.2.11 Total amount of water discharged from waste water treatment works.	90
5.2.12 Other	100
5.2.13 Amount of water returned to the environment.	90
5.2.14 Amount of recycled water supplied.	90

Topic 5.2 Master Plan

Water Services Development 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 including 14 Workstream Plans & Monitoring NRW levels.
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5.2 Leak and meter repair programmes.

Interpret Situation Assessment:	Audit and assess the condition of all existing meters; Repair / Replace faulty meters; Identify and install new metering points; and Maintain all four (4) Leak Repair Programmes to minimise NRW.
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5.3 Consumer/end-use demand management: Public Information & Education Programmes

Interpret Situation Assessment:	Update communication plan with respect to water restrictions, rollout of a number of awareness interventions for current water shortage, continue with Service Delivery Ambassador Programme, and undertake awareness and education to schools on a continuous basis.
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5.4: Conjunctive use of surface - and groundwater

Water Services Development Plan

Interpret Situation Assessment:	Continued investigation, planning and development of groundwater to distribute the supply sources efficiently.
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5.5 Working for Water

Interpret Situation Assessment:	Ongoing Development of the Working for Water Programme.
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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.
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Business Element Report Items	Compliance Score	Intervention Required	%	Solution description as identified by Master Plan	%	Is there an Existing project addressing this problem?	%	Does this current listed project address the problem totally?	%	Project Approved by Council as part of WSDP Database?	%	Approved by council, in project database and part of 5 yr IDP cycle projects	%	Project listed in 3 yr MTEF - cycle	%	Total Points	Current Demand Overall Scoring %
5.1 Reducing unaccounted water and water inefficiencies	64.5	Yes	100	Implementation of Waterloss Programme including 14 Workstream Plans & Monitoring NRW levels.	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
5.2 Leak and meter repair programmes.	90	Yes	100	Audit and assess the condition of all existing meters; Repair / Replace faulty meters; Identify and install new metering points; and Maintain all four (4) Leak Repair Programmes to minimise NRW.	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
5.3 Consumer/end-use demand management: Public Information & Education Programmes	75	Yes	100	Update communication plan with respect to water restrictions, rollout of a number of awareness interventions for current water shortage, continue with Service Delivery Ambassador Programme, and undertake awareness and education to schools on a continuous basis.	100	Yes	100	Partial	50	Yes	100	No	0	No	0	450	64.29
5.4: Conjunctive use of surface - and groundwater	90	Yes	100	Continued investigation, planning and development of groundwater to distribute the supply sources efficiently.	100	No	0	No	0	No	0	No	0	No	0	200	28.57

Water Services Development Plan

5.5 Working for Water	100	Yes	100	Ongoing Development of the Working for Water Programme.	100	No	0	No	0	No	0	No	0	No	0	200	28.57
5.2 Water Balance	84.4	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	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
Demand Overall Scoring Average																70.24	

WSDP FY2019: Strategies and Objectives

Nelson Mandela Bay Metropolitan Municipality

Nr	Objective Strategy	Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
Water Resource Management									
1	Conservation and Demand Management of Water Resources using Pressure Management.	Pressure Management, as a percentage of Water Supply system.	50%	20060083, Rudimentary Service: Water	50%	50%	60%	70%	80%
2	Conservation of Water Resources.	Leak Repairs, to prevent/reduce water losses, as a percentage of total reported leak repairs.	50%	20060083, Rudimentary Service: Water	50%	50%	60%	70%	80%
3	Water Conservation, by verification of Operating Water Supply System.	Valve and Hydrant Audit, to ensure effectiveness of water supply, as a percentage of total valves and hydrants in the water supply network.	50%	20060083, Rudimentary Service: Water	50%	50%	60%	70%	80%

Water Services Development Plan

Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
4	Conservation of Water Resource, through prevention of losses in the water supply system.	Pipe Replacement Programme, to prevent/reduce water loss, as a percentage of total network requiring replacement (250km out of total of 560km).	50%	20060083, Rudimentary Service: Water	50%	50%	60%	70%	80%
5	Conservation of Water Resource, through prevention of water losses in the water storage system.	Reservoir Rehabilitation, as a percentage of total reservoirs requiring rehabilitation, 14No out of 73No total.	70%	19990184, Reservoir Fencing	70%	70%	80%	90%	100%
5	Conservation of Water Resource, through prevention of water losses in the water storage system.	Reservoir Rehabilitation, as a percentage of total reservoirs requiring rehabilitation, 14No out of 73No total.	70%	19990185, Reservoir Rehabilitation	70%	70%	80%	90%	100%
5	Conservation of Water Resource, through prevention of water losses in the water storage system.	Reservoir Rehabilitation, as a percentage of total reservoirs requiring rehabilitation, 14No out of 73No total.	70%	20030295, Amanzi Reservoir and Pipeline	70%	70%	80%	90%	100%
5	Conservation of Water Resource, through prevention of water losses in the water storage system.	Reservoir Rehabilitation, as a percentage of total reservoirs requiring rehabilitation, 14No out of 73No total.	70%	20030601, Uitenhage RE Reservoir	70%	70%	80%	90%	100%

Water Services Development Plan

Nr		Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
5	Conservation of Water Resource, through prevention of water losses in the water storage system.	Reservoir Rehabilitation, as a percentage of total reservoirs requiring rehabilitation, 14No out of 73No total.	70%	20100034, Balmoral Reservoir and Bulk Pipeline	70%	70%	80%	90%	100%
6	Conservation of Water Resources, through Public Awareness.	Public Awareness Programme, as a effective means of reducing water consumption, aim to reduce from 300MI/day to 250MI/day.	300MI/d	20060083, Rudimentary Service: Water	300MI/d	300MI/d	280MI/d	265MI/d	250MI/d

Strategic Interpretation

Detail situation assessments per Topic element

5.1 Reducing unaccounted water and water inefficiencies

Interpret Situation Assessment:	Implementation of Waterloss Programme including 14 Workstream Plans & Monitoring NRW levels.
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5.2 Leak and meter repair programmes.

Interpret Situation Assessment:	Audit and assess the condition of all existing meters; Repair / Replace faulty meters; Identify and install new metering points; and Maintain all four (4) Leak Repair Programmes to minimise NRW.
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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 Service Delivery Ambassador Programme, and undertake awareness and education to schools on a continuous basis.
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5.4: Conjunctive use of surface - and groundwater

Interpret Situation Assessment:	Continued investigation, planning and development of groundwater to distribute the supply sources efficiently.
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5.5 Working for Water

Interpret Situation Assessment:	Ongoing Development of the Working for Water Programme.
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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.
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Business Element Report Items	Compliance Score	Intervention Required	%	Solution description as identified by Master Plan	%	Is there an Existing project addressing this problem?	%	Does this current listed project address the problem totally?	%	Project Approved by Council as part of WSDP Database?	%	Approved by council, in project database and part of 5 yr IDP cycle projects	%	Project listed in 3 yr MTEF - cycle	%	Total Points	Current Demand Overall Scoring %
5.1 Reducing unaccounted water and water inefficiencies	64.5	Yes	100	Implementation of Waterloss Programme including 14 Workstream Plans & Monitoring NRW levels.	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
5.2 Leak and meter repair programmes.	90	Yes	100	Audit and assess the condition of all existing meters; Repair / Replace faulty meters; Identify and install new metering points; and Maintain all four (4) Leak Repair Programmes to minimise NRW.	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100

Water Services Development Plan

5.3 Consumer/end-use demand management: Public Information & Education Programmes	75	Yes	100	Update communication plan with respect to water restrictions, rollout of a number of awareness interventions for current water shortage, continue with Service Delivery Ambassador Programme, and undertake awareness and education to schools on a continuous basis.	100	Yes	100	Partial	50	Yes	100	No	0	No	0	450	64.29
5.4: Conjunctive use of surface - and groundwater	90	Yes	100	Continued investigation, planning and development of groundwater to distribute the supply sources efficiently.	100	No	0	No	0	No	0	No	0	No	0	200	28.57
5.5 Working for Water	100	Yes	100	Ongoing Development of the Working for Water Programme.	100	No	0	No	0	No	0	No	0	No	0	200	28.57
5.2 Water Balance	84.4	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	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
Demand Overall Scoring Average																70.24	

WSDP FY2019: Strategies and Objectives

Nelson Mandela Bay Metropolitan Municipality

Nr	Objective Strategy	Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
Water Balance									
1	Effective Monitoring of Bulk Water Supply within Water Supply Schemes.	Bulk Water Metering of Bulk Water Supply, as a percentage of total bulk water supply.	70%	20190237, Bulk Water Metering and Control	70%	70%	80%	90%	100%
2	Effective Monitoring of Bulk Water Supply within the Greater or District Supply Areas.	Greater Meter Area (GMA) and District Area Meter (DMA) Metering, as a percentage of GMA & DMA Metering with the Bulk Water Supply Area.	70%	20190237, Bulk Water Metering and Control	70%	70%	80%	90%	100%

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
3	Effective Measurement & Recording of water consumption.	Remote Reading of all Meters, as a percentage of total Meters.	50%	20162356, Advanced Meter Infrastructure	50%	50%	60%	70%	80%
4	Effective Revenue Collection of Water Supply to all Users.	Non-revenue Water Monitoring, as a percentage of total Non Revenue Users.	50%	20190237, Bulk Water Metering and Control	50%	50%	60%	70%	80%
5	Conservation and Demand Management, through Water Use Management and Billing.	Industrial, Commercial and Institutional (ICI) User and Billing Management, as a percentage of total ICI Water Users.	50%	20190237, Bulk Water Metering and Control	50%	50%	60%	70%	80%
6	Demand Management, through Monitoring of Water Usage.	Domestic Meter Audit to ensure accurate monitor water usage, as a percentage of total domestic water meters.	50%	20190239, Installation of Zone Water Meters	50%	50%	60%	70%	80%
7	Demand Management of Water Resources, through effective metering.	Meter Replacement Programme, to ensure accurate monitor of water usage, as a percentage of total meters in water supply system.	50%	20000052, Purchase of Water Meters for NMBM	50%	50%	60%	70%	80%

Water Services Development Plan

Topic 6: Water Resources

* Current Water Sources	* Number of sources	* Current abstraction (Mm ³ /A)	Components abstraction registered	Components abstraction recorded	* Licensed abstraction (Mm ³ /A)	* Community water supply		Assessment Score
						Rural	Urban	
Boreholes	1	1.99	1	1	2.16	0	250	90
Surface Water Abstract	6	18.59	6	6	25.65	0	250	90
External Sources (Bulk Purchase)	3	86.27	3	3	101.38	0	250	90
Water returned to source	0	0	0	0	0	0	0	100
Conjunctive Use	0	0	0	0	0	0	0	100

Additional Source Available	* Number of sources	Potential Volume	* Licensed abstraction (Mm ³ /A)	Assessment Score
Ground Water	9	40.90	14.94	90

Water Services Development Plan

Surface Water	2	110	40.15	90
External Sources (Bulk Purchase)	1	60	21.90	90

Question	In Place	Assessment Score
6.2 Monitoring		
Is there a monitoring plan in place?	Yes	75

Question	General Assessment	Status Quo	Assessment Score
6.2 Monitoring			
6.2.1 % of water abstracted monitored: Surface water	100	No	75
6.2.2 % of water abstracted monitored: Ground water	100	No	75
6.2.4 Surface water levels (1: daily, 2: weekly, 3: monthly, 4: annually, 5: never)	2	Yes	75
6.2.5 Ground water levels (1: daily, 2: weekly, 3: monthly, 4: annually, 5: never)	1	Yes	90
6.2.6 Water quality for formal schemes? (1: daily, 2: weekly, 3: monthly, 4: annually, 5: never)	2	Yes	90

Water Services Development Plan

6.2.7 Water quality for rudimentary schemes? (1: daily, 2: weekly, 3: monthly, 4: annually, 5: never)	5	Yes	75
6.2.8 Borehole abstraction? (1: daily, 2: weekly, 3: monthly, 4: annually, 5: never)	1	Yes	90

Question	In Place	Assessment Score
6.3 Water Quality		
Is there a Water Safety Plan in Place?	Yes	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	Yes	90
6.3.2 Quality of water returned to the resource: urban	0	No	60
6.3.3 Quality of water returned to the resource: rural	0	No	100
6.3.4 Is there a Pollution contingency measures plan in place?	100	Yes	75

Water Services Development Plan

6.3.5 Quality of water taken from source: urban - % monitored by WSA self?	100	Yes	75
6.3.6 Quality of water taken from source: rural - % monitored by WSA self?	0	Yes	100
6.3.7 Quality of water returned to the source: urban - % monitored by WSA self?	0	Yes	100
6.3.8 Quality of water returned to the source: rural - % monitored by WSA self?	0	Yes	100
6.3.9 Are these results available in electronic format? (Yes/no)	100	No	75
6.3.10 % Time (days) within SANS 241 standards per year	100	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	1	9	0	0	0	0	0	0	0	100
6.4.1.2 The abstraction IS NOT registered with DWS	9	0	0	0	0	0	0	0	0	100
6.4.2.1 The abstraction IS recorded	1	9	0	0	0	0	0	0	0	100

Water Services Development Plan

6.4.2.2 The abstraction IS NOT recorded	9	0	0	0	0	0	0	0	0	0	100
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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 surface water sources from the Dams are limited due to the drought. NMBM are currently planning additional water resources, by the provision of additional 9 groundwater sources, extension of 2 existing surface water resources, and planning of 3 new alternative water sources in terms of desalination.
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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.
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Water Services Development Plan

6.3 Water Quality

Interpret Situation Assessment:	Update & Maintain of the IRIS Water Quality Monitoring Processes with DWS.
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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 both surface water and groundwater sources; and increase recycling of wastewater to increase water resource sustainability.
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Business Element Report Items	Compliance Score	Intervention Required	%	Solution description as identified by Master Plan	%	Is there an Existing project addressing this problem?	%	Does this current listed project address the problem totally?	%	Project Approved by Council as part of WSDP Database?	%	Approved by council, in project database and part of 5 yr IDP cycle projects	%	Project listed in 3 yr MTEF - cycle	%	Total Points	Current Demand Overall Scoring %
6.1.1 Current Water Sources	92.5	Yes	100	Maintain and rehabilitate infrastructure when required by conducting Dam Safety Inspections that are required in terms of the Dam Safety Regulations. The WSA has to keep up-to-date with the compulsory five-yearly inspections, emergency preparedness and in preparation of operation and maintenance manuals. Furthermore, a proper groundwater management plan is undertaken for the WSA, including an underground water balance, proper monitoring of rainfall, borehole water levels, abstraction volumes and water chemistry are undertaken to predict the sustainable yield and limitations set.	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100

Water Services Development Plan

6.2 Monitoring	80.63	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
6.3 Water Quality	86.82	Yes	100	Update & Maintain of the IRIS Water Quality Monitoring Processes with DWS.	100	No	0	No	0	No	0	No	0	No	0	200	28.57
6.4 Operation	100	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	90	Yes	100	Continued investigation and exploration of both surface water and groundwater sources; and increase recycling of wastewater to increase water resource sustainability.	100	Yes	100	Yes	100	Yes	100	Yes	100	Yes	100	700	100
Demand Overall Scoring Average																57.14	

WSDP FY2019: Strategies and Objectives

Nelson Mandela Bay Metropolitan Municipality

Nr	Objective Strategy	Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
Water Resources									
1	Security of Water Supply from Groundwater Sources.	Develop potential Groundwater Water Supply from 9 potential groundwater sources , up to 40MI/day.	0	20182414, Drilling of Boreholes	0	0	10	20	40
1	Security of Water Supply from Groundwater Sources.	Develop potential Groundwater Water Supply from 9 potential groundwater sources , up to 40MI/day.	0	20070161, Groundwater: Drought Intervention	0	0	10	20	40

Water Services Development Plan

Nr	Objective Strategy	Key Performance Indicator	Baseline (2018 status quo)	Linked Project	WSDP	WSDP	WSDP	WSDP	WSDP
					FY2019	FY2020	FY2021	FY2022	FY2023
					Target	Target	Target	Target	Target
2	Security of Water Supply from Surface Water Sources.	Develop Surface Water Supply from potential sources namely desalination Schoenmakerskop , Coega IDZ, Lower Sundays River Return Flows, up to 170M/day.	0	20050097, Nooitgedagt/Coega Low Level System	0	0	0	50	100
3	Security of Water Supply by developing new Surface Water Sources.	Develop Surface Water Supply from potential surface water sources i.e larger dam below Kouga Dam, or upstream of Kouga at Guernakop, % complete.	0	19930320, General Improvements to System	0	0	0	5	10
4	Security of Treated Water Supply.	Treated Water Capacity, by completion of Coegakop WTW, 20M/day.	0	20070161, Coegakop Water Treatment Works	0	0	10	20	20

Water Services Development Plan

Topic 7: Finance

Expenditure Cost Standards & Ratios (Rand Million)

		2019	2020	2021	2022				
Ratios and efficacy indicators	Sanitation service O&M [and repair] as a % of budget	13.20	14.19	15.25	16.40				
	Sanitation service O&M [and repair] as a % Asset value [PPE]	7.60	8.20	8.80	9.40				
	Water service O&M [and repair] Cost as % of budget value	37.60	40.40	43.50	46.70				
	Water service O&M [and repair] Cost as % of Asset value [PPE]	8.20	8.80	9.50	10.20				
	Untreated waste water units released	0.00	0.00	0.00	0.00				
	Cost to purify water	669.19	675.65	722.51	780.51				
	Cost to deliver water to consumer	461.62	435.59	471.57	526.25				
	Cost to treat waste water	197.79	158.94	180.50	193.11				
	Cost to deliver waste water to treatment facility	670.18	619.43	684.56	746.77				
	Blue drop cost	0.60	0.45	0.48	0.51				
	Blue drop number WTW	98.20	99.90	99.90	99.90				
	Green drop cost	0.52	0.59	0.66	0.74				
	Green drop WWTW number of plants	65.20	75.00	85.00	95.00				
Water balance cost [Non Revenue Water]									
MTEF		2019		2020		2021		2022	
		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	13.50	100615000	14.51	108060510	15.60	116056987.7	16.77	124645204.8
	Billed Metered Consumption	24.08	51572945.18	25.89	55389343.13	27.83	59488154.52	29.91	63890277.95
	Billed Un Metered Consumption	24.08	1353542.1	25.89	1453704.21	27.83	1561278.33	29.91	1676812.92
	Un Billed Metered Consumption	24.08	751552.38	25.89	807167.26	27.83	866897.63	29.21	931048.06
	Un Billed Un Metered Consumption	24.08	2321960.34	25.89	2493785.4	27.83	2678325.52	29.21	2876521.61
	Apparent (commercial) losses	24.08	7009027	25.89	7527695	27.83	8084744.43	29.21	8683015.52
	Real (physical) losses	24.08	34220546	25.89	36752866.4	27.83	39472578.52	29.21	42393549.33
Water used [lost] during the process of Operation, Repair and Maintenance	24.08	4134458	25.89	4440407.89	27.83	4768998.08	29.91	5121903.93	

Water Services Development Plan

Operational Resource Costs [Cost to operate & or deliver service]						
MTEF		2019		2020	2022	2023
Resource (Required/used for Service delivery activities - In Public Procurement there are generally three procurement categories: goods, works and services.)	Staff	381013130.00		429626420.00	471010200.00	517105460.00
	Vehicles / transport	8750920.00		47556550.00	15397410.00	12768090.00
	Chemicals	48343480.00		43270000.00	46155730.00	49035100.00
	Materials	27982910.00		17841530.00	19062680.00	23429190.00
	Equipment	80446570.00		44697710.00	74852090.00	79785510.00
	Tools	100000.00		1112340.00	1180210.00	1252370.00
	Operation	30959880.00		21851060.00	24099470.00	26060820.00
	Administration	638115790.00		483736450.00	540428870.00	603917900.00
	Maintenance (corrective; adaptive; preventative)	242886630.00		287473480.00	307434260.00	328360770.00
	Billing	490158383.00		471045820.00	518115020.00	563731940.00
	Revenue collection	0.00		0.00	0.00	0.00
	Management	125419490.00		122007730.00	129322480.00	137098850.00

Water Services Development Plan

MTEF Expenditure Million				
MTEF	2019	2020	2021	2022
Property - WTW	35.1	15	15	15
Dams - WTW				
Springs - WTW				
Weirs - WTW				
Boreholes - WTW				
Reservoirs - WTW	24.41	14	37	38
Water Treatment Works (WTW) Civil works	6.59	43.78	70.98	98.6
Water Treatment Works (WTW) Mechanical works	0.78	5.15	8.35	11.6
Water Treatment Works (WTW) Electrical works	0.39	2.58	4.18	5.8
Pump Station (PS) Civil works	18.8	10	0.4	0.4
Pump Station (PS) Mechanical works	14.1	7.5	0.3	0.3
Pump Station (PS) Electrical works	14.1	7.5	0.3	0.3
Internal [water] reticulation - WTW				
Bulk [water] reticulation - WTW		1.5	7	16
Meters Bulk - WTW				
Meters Household - WTW				
Property - WWTW				
Waste Water Treatment Works (WWTW) Civil works	32.56	61.63	98.6	90.95
Waste Water Treatment Works (WWTW) Mechanical works	3.86	7.25	11.6	10.7
Waste Water Treatment Works (WWTW) Electrical works	1.92	3.63	5.8	5.35
Pump Station (PS) Civil works - WWTW				
Pump Station (PS) Mechanical works - WWTW				
Pump Station (PS) Electrical works - WWTW				
Internal sanitation reticulation	4	10	10	10
Bulk sanitation reticulation - WWTW	52.4	129.1	151.5	139
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						905.66							330.4	
Property, Plant and Equipment - Water Treatment System	Property - WTW						350.47								
	Dams - WTW														
	Springs - WTW														
	Weirs - WTW														
	Boreholes - WTW													97.00	
	Reservoirs - WTW						27.15							20.60	
	WTW Civil works						58.00							127.68	
	WTW Mechanical works													42.56	
	WTW Electrical works													42.56	
	Pump Station (PS) Civil works						28.50								
	Pump Station (PS) Mechanical works						9.40								
	Pump Station (PS) Electrical works						9.40								
	Internal [water] reticulation - WTW						4.00								
	Bulk [water] reticulation - WTW						2.00								
	Meters Bulk - WTW						8.00								
Meters Household - WTW						131.25									
Property, Plant and Equipment - Waste Water Treatment System	Property						351.48								
	WWTW Civil works						22.96								
	WWTW Mechanical works						7.65								
	WWTW Electrical works						7.65								
	Pump Station (PS) Civil works - WWTW														
	Pump Station (PS) Mechanical works - WWTW														
	Pump Station (PS) Electrical works - WWTW														
	Internal sanitation reticulation						34.00								
	Bulk sanitation reticulation						52.40								
	Meters Bulk WWTW														
Ponds - WWTW						13.50									
Total															

Water Services Development Plan

REVENUE Million									
Fund source name	Service charges - service	Water Services Operating and Transfer Subsidy Grant (Sch 6)	Water Services Operating and Transfer Subsidy Grant (Sch 7)	Transfers recognised - operational	Agency services	Interest earned - outstanding debtors	Equitable Share	Trading Entities [e.g. Rand Water; Pikitup; Etc.]	Partnership Funds
Votes	1683.44					150.51			
Agency services	41.53								
Agriculture + rural water services									
Agriculture + rural sanitation service									
FBS Sanitation									
FBS Water									
Urban HLS Water	863.14								
Sanitation Urban HLS	328.49								
Industrial Water	324.78								
Industrial Waste Water	125.51								
NRW									
Total									
The assumption is that rural and urban costs are differentiated and that Assumption is made that potable water and industrial water tariffs differ									
NRW excludes FBS and is a MTEF cost to service									
Pump stations should be included separate itemised in asset registers due to the impact of type of station [e.g. diesel costs; Etc.]									

Topic 8: Water Services Institutional Arrangements and Customer Services

Context Information

Questions	Answers
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Water Services Development Plan

Date of completion	11/19/2018 00:00:00						
Municipality type	A - Metro	B1 - LM	B2 - LM	B3 - LM	B4 - LM	C2 - DM	
Water service provider type	Internal (i.e. municipality)	External (e.g. Water Board, service provider)	Combination of internal and external				
Wastewater service provider type	Internal (i.e. municipality)	External (e.g. Water Care Company, service provider)	Combination of internal and external				
Water system maintenance	Internal (i.e. municipality)	External (e.g. service provider)	Combination of internal and external				
Wastewater system maintenance	Internal (i.e. municipality)	External (e.g. service provider)	Combination of internal and external				
You are able to respond within necessary timeframes to emergencies, via internal staff and resources, or through other procurement processes (e.g. 'as and when' required contracts)	Yes, strongly agree	In place, with occasional non-optimal response	Partially in place, but not ideal	No, disagree	Don't know		
The key staff (i.e. managerial) turnover in your WSA	High: > 25% (i.e. problematic, frequently lose staff)	Moderate: 10 - 25% (i.e. occasionally lose staff)	Low: < 10% (i.e. not an issue, good staff retention)	Don't know			
Your WSA has developed and implemented a scarce skills policy	Yes, developed and implemented	Yes, developed and partially implemented	In development	No, not developed	Don't know		
Your WSA is preparing for the impacts of pending and/or new regulations (for e.g. Regulation 813 (previously Regulation 17) (WTW and WWTW process controllers))	Yes, strongly agree	In process	No, disagree	Don't know			
Your WSA actively provides required drinking water related data to the Regulator (e.g. Blue Drop participation)	Yes, strongly agree	In process	No, disagree	Don't know			
Regular drinking-water quality monitoring and management (including boreholes) is performed for ALL communities/towns in the WSA	Yes, all (i.e. 100% of WSA population)	Almost all (i.e. >95% of WSA population)	Most (i.e. >75% of WSA population)	Some (i.e. >50% of WSA population)	<50% of WSA population	None (i.e. 0% of WSA population)	Don't know
WTWs operational capacity as a function of total design capacity (NOTE: Combine for ALL WTWs within your WSA)	>105%	>100% - 105%	>95% - 100%	90% - 95%	<90%	Don't know	Not applicable
Your WSA actively provides required wastewater related data to the Regulator (e.g. Green Drop participation)	Yes, strongly agree	In process	No, disagree	Don't know			
Regular wastewater quality monitoring and management is performed for ALL wastewater systems in the WSA	Yes, all (i.e. 100%)	Almost all (i.e. >95%)	Most (i.e. >75%)	Some (i.e. >50%)	<50%	None (i.e. 0%)	Don't know

Water Services Development Plan

WWTWs operational flow capacity as a function of total design capacity (NOTE: Combine for ALL WWTWs within your WSA)	>105%	>100% - 105%	>95% - 100%	90% - 95%	<90%	Don't know	Not applicable
WWTWs operational COD load as a function of total design load (NOTE: Combine for ALL WWTWs within your WSA)	>105%	>100% - 105%	>95% - 100%	90% - 95%	<90%	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)	Yes, strongly agree	In process	No, disagree	Don't know			
Your WSA actively promotes improved hygiene practices through campaigns in communities (e.g. hand washing education, safe and improved sanitation)	Yes strongly agree (i.e. campaigns established and functioning)	Partially in place, but not ideal	No, disagree	Don't know			
Billing & accounts - With regards to water and sanitation bills, please indicate the frequency of billing and posting of accounts.	Actual billing and posting of accounts on a monthly basis	Actual billing and posting of accounts at least every 2nd month	Billing and posting of accounts at least on a quarterly basis	Billing and posting of accounts less frequently than quarterly	Don't know		
Development contributions - With regard to new developments, by-laws in your municipality require developers to adequately contribute towards construction of new bulk infrastructure (i.e. developers charges).	Yes, strongly agree	In place, with occasional non-optimal response	in process	No, disagree	Don't know		
Please indicate what proportion of your requested water and sanitation services budget (CAPEX and OPEX) is actually funded?	>100%	>90% - 100%	>80% - 90%	>70% - 80%	<70%	Don't know	
Council is stable with functional Council meetings.	Yes, strongly agree (i.e. Council meetings are held at least quarterly)	Partially in place, but not ideal	No, disagree	Don't know			
Council has functional Oversight Committees and Ward Committees, as appropriate (DM would be served via LM Ward Committees)	Yes, strongly agree (i.e. Oversight and Ward Committees established and functioning)	Partially in place, but not ideal	No, disagree	Don't know			
Council has effective systems of internal control and functional governance structures (internal audit unit, audit committee, risk committee, IT governance)	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)	Partially in place, but not ideal	No, disagree	Don't know			

Water Services Development Plan

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)	Yes, strongly agree	Partially in place, but not ideal	No, disagree	Don't know			
Your municipality actively implements actions against identified instances of fraud and corruption, maladministration and failure to fulfil statutory obligations	Yes, strongly agree	In place, with occasional non-optimal response	Partially in place, but not ideal	No, disagree	Don't know		
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	Yes, strongly agree	In place, with occasional non-optimal response	Partially in place, but not ideal	No, disagree	Don't know		
Your municipality has ongoing and appropriate public participation, is transparent in its decision making, and is accountable to its constituency (fiscal and social).	Yes, strongly agree	Partially in place, but not ideal	No, disagree	Don't know			
Those of your 18 MuSSA Business Aspects which reflect Extreme and/or Highly Vulnerable, are included within your WSAs Corporate Risk Register	Yes, strongly agree	Partially in place, but not ideal	No, disagree	Don't know			
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).	Yes, strongly agree (i.e. Technical Services HOD, Finance AND HR all participated)	Agree (i.e. Technical Services HOD and either Finance OR HR participated)	Only Technical Services HOD	Other Technical Services	Don't know		
Names, designation and contact details (phone, email) of all MuSSA participants (e.g. Mr Thabo Smit; Technical Director; 0215436789; thabos@muni.gov.za)	Barry Martin, Senior Director: Water & Sanitation, 041-506 5435 / 079-490 0696, bmartin@mandelametro.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.	Yes, appropriate water services plans are developed and include all required plans and alignment (i.e. 100%)	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. > 75%)	Yes, appropriate water services plans are developed and include all required plans and alignment (i.e. > 50%)	Plans still in development	Plan development not yet initiated	Don't know	
You are implementing an up-to-date and adopted municipal water and sanitation services plan (e.g. WSDP.)	Yes, municipal water and sanitation services plans up-to-date, adopted and implemented	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 not adopted but implemented	Municipal water and sanitation services plans neither adopted nor implemented	Don't know		
Your current project list addresses existing needs/shortcomings identified through the WSDP and associated master planning process.	Yes, all projects are identified via the planning process (i.e. 100%)	Almost all (i.e. >95% of projects)	Most projects (i.e. >75%)	Some projects (i.e. >50%)	<50% of projects	None (i.e. 0%)	Don't know	
Project progress is monitored, tracked and reported to municipal top management/council and the Regulator (through the annual water and sanitation services report)	Yes, strongly agree (both to municipal top management/council and Regulator)	Only to municipal top management/council	Only to Regulator	No, disagree	Don't know			
Projects identified through your various planning processes have been implemented in the last 3 years.	Yes, all projects identified via planning have been implemented (i.e. 100%)	Almost all implemented (i.e. >95%)	Most implemented (i.e. >75%)	Some implemented (i.e. >50%)	<50% implemented	None implemented (i.e. 0%)	Don't know	
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).	Yes, and all posts filled (i.e. 100%)	Yes, and almost all posts filled (i.e. >95%)	Yes, and most posts filled (i.e. >75%)	Yes, but only some posts filled (i.e. >50%)	Yes, but <50% of posts filled	No, does not meet business requirements	Don't know	
You have sufficient technical management and technical support staff.	Yes, 100% as per approved organogram	Yes, strongly agree (i.e. >95% as per approved organogram)	Mostly agree (i.e. >75% as per approved organogram)	Agree somewhat (i.e. >50% as per approved organogram)	<50% as per approved organogram	None (i.e. 0% as per approved organogram)	Don't know	

Water Services Development Plan

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).	Yes, all (i.e. 100%)	Almost all (i.e. >95%)	Most (i.e. >75%)	Some (i.e. >50%)	<50%	None (i.e. 0%)	Don't know	
Managers and technical support staff regularly attend appropriate water and sanitation services skills development/training to support professionalisation	Quarterly (or more frequent) skills development/ training	Bi-annual skills development/ training	Annual skills development/ training	Less frequent skills development/ training (i.e. >1 year)	No skills development/ training	Don't know		
Key technical managers (e.g. Section 56 and other Senior Management) have signed and monitored Performance Agreements.	Yes, all (i.e. 100%)	Almost all (i.e. >95%)	Most (i.e. >75%)	Some (i.e. >50%)	<50%	None (i.e. 0%)	Don't know	
3. Staff Skill Levels (Technical)								
WTWs are operated by staff with the required skills/qualifications and experience (as per Regulation 2834).	Yes, all (i.e. 100%)	Almost all (i.e. >95%)	Most (i.e. >75%)	Some (i.e. >50%)	<50%	None (i.e. 0%)	Don't know	Not applicable
WWTWs are operated by staff with the required skills/qualifications and experience (as per Regulation 2834).	Yes, all (i.e. 100%)	Almost all (i.e. >95%)	Most (i.e. >75%)	Some (i.e. >50%)	<50%	None (i.e. 0%)	Don't know	Not applicable
Water system plumbers, millwrights, mechanics and electricians have the required skills/qualifications and experience (including contractors/outsourced resources)	Yes, all (i.e. 100%)	Almost all (i.e. >95%)	Most (i.e. >75%)	Some (i.e. >50%)	<50%	None (i.e. 0%)	Don't know	
Sewage system plumbers, millwrights, mechanics and electricians have the required skills/qualifications and experience (including contractors/outsourced resources)	Yes, all (i.e. 100%)	Almost all (i.e. >95%)	Most (i.e. >75%)	Some (i.e. >50%)	<50%	None (i.e. 0%)	Don't know	
Staff regularly attend appropriate water and sanitation services skills development/training (including safety) (e.g. ESETA courses).	Quarterly (or more frequent) skills development/ training	Bi-annual skills development/ training	Annual skills development/ training	Less frequent skills development/ training (i.e. >1 year)	No skills development/ training	Don't know		
4. Technical Staff Capacity (Numbers)								
Your council approved technical staff organisational organogram meets your business requirements, and posts are filled (i.e. Superintendent of WTWs/WWTWs and below).	Yes, and all posts filled (i.e. 100%) as per the approved organogram	Strongly agree, and most posts filled (i.e. >95%) as per the approved organogram	Yes, and most posts filled (i.e. >75%) as per the approved organogram	Yes, but only some posts filled (i.e. >50%) as per the approved organogram	Yes, but <50% of posts filled as per the approved organogram	No, does not meet requirements	Don't know	
WTWs are operated by the appropriate number of staff (as per Regulation 2834).	Yes, 100% as per requirements	Strongly agree (i.e. >95% as per requirements)	Mostly agree (i.e. >75% as per requirements)	Agree somewhat (i.e. >50% as per requirements)	<50% as per requirements	None (i.e. 0% as per requirements)	Don't know	Not applicable

Water Services Development Plan

WWTWs are operated by the appropriate number of staff (as per Regulation 2834).	Yes, 100% as per requirements	Strongly agree (i.e. >95% as per requirements)	Mostly agree (i.e. >75% as per requirements)	Agree somewhat (i.e. >50% as per requirements)	<50% as per requirements	None (i.e. 0% as per requirements)	Don't know	Not applicable
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).	Yes, 100% as per functional requirements	Strongly agree (i.e. >95% as per functional requirements)	Mostly agree (i.e. >75% as per functional requirements)	Agree somewhat (i.e. >50% as per functional requirements)	<50% as per functional requirements	None (i.e. 0% as per functional requirements)	Don't know	
An active mentoring/shadowing programme is in place where experienced staff train your younger, inexperienced municipal staff.	Yes, strongly agree	In place, but not ideal	No, disagree	Don't know				
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.	Yes, strongly agree	In process	No, disagree	Don't know	Not applicable			
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).	No shortage (i.e. sufficient water)	1 - 10% shortage	11-20% shortage	21-30% shortage	31-40% shortage	41-50% shortage	>50% shortage	Don't know
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).	No shortage (i.e. sufficient water)	1 - 10% shortage	11-20% shortage	21-30% shortage	31-40% shortage	41-50% shortage	>50% shortage	Don't know
The source water quality is currently acceptable for its purpose.	Yes, strongly agree (i.e. all sources (100%) by water volume are acceptable)	Mostly agree (i.e. >75% of sources by water volume are acceptable)	Agree somewhat (i.e. >50% of sources by water volume are acceptable)	<50% of sources by water volume acceptable	None (i.e. 0% of sources by water volume are acceptable)	Don't know	Not applicable	
The trend indicates a deteriorating source water quality.	Yes, all sources (100%) by water volume are deteriorating	>75% of sources by water volume are deteriorating	>50% of sources by water volume are deteriorating	>25% of sources by water volume are deteriorating	< 25% of sources by water volume are deteriorating	No, no sources (0%) are deteriorating	Don't know	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).	WC/WDM Strategy and water balance developed	Only WC/WDM Strategy developed	Only water balance developed	None developed	Don't know			
Please indicate your percentage Non-Revenue Water (NRW) as per the modified IWA water balance.	Less than 15%	Less than 20%	Less than 30%	Less than 40%	Less than 50%	50% or more	Don't know	

Water Services Development Plan

System input volumes (bulk) to the WSA are accurately monitored using calibrated bulk meters (e.g. check metering).	Yes, all (i.e. 100%)	Almost all (i.e. >95%)	Most (i.e. >75%)	Some (i.e. >50%)	<50%	None (i.e. 0%)	Don't know	
Please indicate what percentage of all connections are metered and billed (residential and non-residential (commercial, industrial, etc.)) on a monthly basis.	>98%	75% - 98%	50% - 75%	<50%	< 25%	No metering	Don't know	
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).	Yes, strongly agree (i.e. 100% implementation)	Mostly agree (i.e. >75% implementation)	Agree somewhat (i.e. >50% implementation)	<50% implementation	No implementation (i.e. 0%)	Don't know		
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.	99% - 100%	97% - <99%	95% - <97%	< 95%	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.	Yes, strongly agree (i.e. 100% covered)	Strongly agree (i.e. >95% covered)	Mostly agree (i.e. >75% covered)	Agree somewhat (i.e. >50% covered)	<50% covered	None covered (i.e. 0%)	Don't know	
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).	Yes, strongly agree (i.e. all (100%) tabled)	Strongly agree (i.e. >95% tabled)	Mostly agree (i.e. >75% tabled)	Agree somewhat (i.e. >50% tabled)	<50% tabled	Issues noted but none tabled (i.e. 0%)	Not applicable (no issues requiring council resolution exist)	Don't know
Sufficient funds have been made available to address all these identified water safety related issues.	Yes, strongly agree (i.e. 100% of required funds)	Strongly agree (i.e. >95% of required funds)	Mostly agree (i.e. >75% of required funds)	Agree somewhat (i.e. >50% of required funds)	<50% of required funds	Issues noted but no funds (i.e. 0%)	Not applicable (no issues requiring funding exist)	Don't know
Required corrective actions/remedial measures to address all these identified water safety related issues have been successfully implemented.	Yes, strongly agree (i.e. 100% implementation)	Strongly agree (i.e. >95% implementation)	Mostly agree (i.e. >75% implementation)	Agree somewhat (i.e. >50% implementation)	<50% implementation	Issues noted but no implementation (i.e. 0%)	Not applicable (no issues requiring corrective actions exist)	Don't know
8. Basic Sanitation								

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You have formal housing areas that are not fully serviced with sanitation infrastructure	No, all formal areas are fully serviced (i.e. no bucket sanitation service)	Yes, but these are new households that will be serviced within 2 years	Yes, still trying to meet formal backlog but >90% are serviced	Yes, still trying to meet formal backlog with 80 - 90% serviced	Yes, still trying to meet formal backlog with 60 - 80% serviced	Yes, still trying to meet formal backlog with <60% serviced (e.g. occurrence of bucket systems, existence of open defecation)	Don't know	
You have informal housing or rural areas that are not fully serviced with sanitation infrastructure	No, all informal and rural areas are fully serviced	We have no informal areas and rural areas are serviced	Yes, but these are new 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 but 80- 90% are serviced	Yes, still trying to meet informal or rural backlog with 60 - 80% serviced	Yes, still trying to meet informal or rural backlog with <60% serviced (e.g. occurrence of bucket systems, existence of open defecation)	Don't know
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)	Yes, strongly agree (i.e. 100% implementation)	Strongly agree (i.e. >95% implementation)	Mostly agree (i.e. >75% implementation)	Agree somewhat (i.e. >50% implementation)	<50% implementation	No implementation (i.e. 0%)	Don't know	Not applicable
Your sanitation budget is appropriate for required sanitation programmes (implementation and O&M)	Yes, strongly agree (i.e. 100% of required funds)	Mostly agree (i.e. >95% of required funds)	Some shortfall (i.e. >75% of required funds)	Disagree, significant shortfall (50-75% of required funds)	Serious underfunding (<50% of required funds)	No funds (i.e. 0%)	Don't know	Not applicable
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).	Yes, 100% as per requirements	Strongly agree (i.e. >95% as per requirements)	Mostly agree (i.e. >75% as per requirements)	Agree somewhat (i.e. >50% as per requirements)	No, we only manage to service <50% of the sanitation infrastructure	No, we have serious shortfalls in the servicing of sanitation infrastructure (i.e. <20 %)	Don't know	Not applicable
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.	>95%	90% - 95%	80% - <90%	<80%	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.	Yes, strongly agree (i.e. 100% covered)	Agree (i.e. >95% covered)	Mostly agree (i.e. >75% covered)	Agree somewhat (i.e. >50% covered)	< 50% covered	None covered (i.e. 0%)	Don't know	
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).	Yes, strongly agree (i.e. all (100%) tabled)	Agree (i.e. >95% covered)	Mostly agree (i.e. >75% tabled)	Agree somewhat (i.e. >50% tabled)	< 50% tabled	Issues noted but none tabled (i.e. 0%)	Not applicable (no issues requiring council resolution exist)	Don't know

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Sufficient funds have been made available to address all identified wastewater and environmental safety related issues.	Yes, strongly agree (i.e. 100% of required funds)	Agree (i.e. >95% covered)	Mostly agree (i.e. >75% of required funds)	Agree somewhat (i.e. >50% of required funds)	< 50% of required funds	Issues noted but no funds (i.e. 0%)	Not applicable (no issues requiring funding exist)	Don't know
Required corrective actions/remedial measures to address all identified wastewater and environmental safety related issues have been successfully implemented.	Yes, strongly agree (i.e. 100% implementation)	Agree (i.e. >95% covered)	Mostly agree (i.e. >75% implementation)	Agree somewhat (i.e. >50% implementation)	<50% implementation	Issues noted but no implementation (i.e. 0%)	Not applicable (no issues requiring corrective actions exist)	Don't know
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.	Yes, strongly agree (e.g. advanced asset register)	Yes, agree (e.g. basic asset register - i.e. not all aspects included)	Not ideal (e.g. outdated asset register)	No, disagree (i.e. no asset register)	Don't know			
You have developed an appropriate Infrastructure Asset Management (IAM) Plan for your WSA.	Yes, strongly agree	Partially in place, but not ideal	No, disagree	Don't know				
You are implementing the IAM outcomes	Yes, strongly agree (i.e. 100% implementation)	Agree (i.e. >95% implementation)	Mostly agree (i.e. >75% implementation)	Agree somewhat (i.e. >50% implementation)	< 50% implementation	No implementation (i.e. 0%)	Don't know	
Budget allocated to implement IAM outcomes is sufficient and is being effectively spent.	Yes, strongly agree (i.e. 100%)	Agree (i.e. >95%)	Mostly agree (i.e. >75%)	Agree somewhat (i.e. >50%)	< 50%	No (i.e. 0%)	Don't know	
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.	Yes, all systems (i.e. 100%)	Almost all systems (i.e. >95%)	Most systems (i.e. >75%)	Some systems (i.e. > 50%)	< 50% systems	No systems (i.e. 0%)	Don't know	Not applicable
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.	Yes, strongly agree	Partially in place, but not ideal	No, disagree	Don't know				
Appropriate water and sanitation services infrastructure/equipment planned/preventative maintenance schedules are developed.	Yes, strongly agree	Partially in place, but not ideal	No, disagree	Don't know				
Appropriate planned/preventative maintenance is performed at all WTWs and associated reservoirs, pump stations, distribution network.	Yes, all (i.e. 100%)	Most (i.e. >75%)	Some (i.e. > 50%)	< 50%	None (i.e. 0%)	Don't know		

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Appropriate planned/preventative maintenance is performed at all WWTWs and associated collection system, pump stations.	Yes, all (i.e. 100%)	Most (i.e. >75%)	Some (i.e. > 50%)	< 50%	None (i.e. 0%)	Don't know		
Please indicate your infrastructure repairs and maintenance costs as a function of total operating expenditure (%).	<5%	5% - <8%	8% - <10%	10% - <15%	15% or more	Don't know		
12. Financial Management								
Financial controls - Please state the audit opinion with regard to your last audit report on the financial statements.	Clean audit outcome (i.e. unqualified with no findings)	Financially unqualified audit opinion (with findings)	Qualified audit opinion	Disclaimer of audit opinion	Adverse audit opinion	Don't know		
Cash flow status - Please state your Cash/Cost Coverage Ratio (excluding Unspent Conditional Grants)	> 90 days	60 - 90 days	30 - 60 days	< 30 days	Don't know			
Your actual operating expenditure closely reflects your budgeted operating expenditure (i.e. Operating Expenditure Budget Implementation Indicator)	95% - 100%	90% - <95%	85% - <90%	80% - <85%	<80%	Don't know		
Your actual revenue closely reflects your budgeted operating revenue (i.e. Operating Revenue Budget Implementation Indicator)	95% - 100%	90% - <95%	85% - <90%	80% - <85%	<80%	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)	Never	Once per year	Twice per year	Once per quarter	More frequently than quarterly	Don't know		
13. Revenue Collection								
Please indicate the frequency of actual consumer meter readings.	Actual meter reading on a monthly basis	Actual meter reading at least every 2nd month	Meter reading at least on a quarterly basis	Meter reading less frequently than quarterly	Don't know			
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 new infrastructure).	Surplus (i.e. >0%)	Breakeven (i.e. = 0%)	Net deficit (i.e. <0%)	Don't know				
Revenue collection - Please state the revenue collection rate in respect to Water & Sanitation Services (%)	<50%	50% - <70%	70% - <80%	80% - <95%	95% or more	Don't know		

Water Services Development Plan

Revenue Growth - Please state your Water and Sanitation Services revenue growth for the last financial year(%).	>CPI	Equals CPI	<CPI, but >0%	Negative growth (-ve)	Don't know			
Grant dependency - Actual operating revenue less operational grants/subsidies (e.g. equitable share) sufficiently covers actual operating expenditure.	Yes, all (i.e. 100%)	Most (i.e. >75%)	Some (i.e. > 50%)	< 50%	None (i.e. 0%)	Don't know		
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)	<5%	5% - <10%	10% - <15%	15% - <20%	20% or more	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))	<25%	25% - <50%	50% - <75%	75% or more	Don't know			
Asset Renewal - Please state your Asset Renewal investment as percentage of Depreciation costs	100%	>90%	>75%	>50%	<50%	None (i.e. 0%)	Don't know	
Repairs and Maintenance - Please state your Repairs and Maintenance expenditure as a percentage of Property, Plant and Equipment, Investment Property (Carrying Value)	<5%	5% - <8%	8% - <10%	10% or more	Don't know			
Grant funding of capital expenditure - Please state your reliance on grant funding	>90%	> 75%	>50%	<50%	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.	Yes, developed, approved and being implemented	Developed and approved, but not yet implemented	Developed but not yet approved or implemented	In development	No, disagree	Don't know		
You have a developed, approved and implemented ICT Technology Master Plan that addresses your current and future IT infrastructure requirements.	Yes, developed, approved and being implemented	Developed and approved, but not yet implemented	Developed but not yet approved or implemented	In development	No, disagree	Don't know		
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).	Yes, strongly agree (i.e. 100% of required systems)	Mostly agree (i.e. >75% of required systems)	Agree somewhat (i.e. >50% of required systems)	< 50% of required systems	None (i.e. 0% of required systems)	Don't know		

Water Services Development Plan

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.	Yes, strongly agree (i.e. All (100%) in place)	Mostly agree (i.e. >75% in place)	Agree somewhat (i.e. >50% in place)	< 50% in place	Nothing in place (i.e. 0%)	Don't know		
You have sufficient budget and staff to keep key IT systems stable and up-to-date as per IT policies and procedures.	Yes, strongly agree (i.e. 100%)	Mostly agree (i.e. >75%)	Agree somewhat (i.e. >50%)	< 50%	No (i.e. 0%)	Don't know		

16. Organisational Performance Monitoring

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.	Yes, developed and implemented	Developed but not yet implemented	In development	No, disagree	Don't know			
An organisational performance management system is developed and implemented (i.e. effectively measure, monitor and track water and sanitation services performance indicators).	Yes, developed and implemented	Developed but not yet implemented	In development	No, disagree	Don't know			
A municipal risk management framework is developed and implemented and includes monitoring and tracking of water and sanitation related risks.	Yes, developed and implemented and includes water and sanitation related risks	Yes, developed and implemented but does not include water and sanitation related risks	Developed but not yet implemented	In development	No, disagree	Don't know		
Effective administration support is available to technical staff to assist with processing work orders, providing order numbers, handling correspondence, etc.	Yes, strongly agree (i.e. 100% effective)	Mostly agree (i.e. >75% effective)	Agree somewhat (i.e. >50% effective)	< 50% effective	No, completely ineffective (i.e. 0%)	Don't know		
"Access to Basic Water and Sanitation Services" progress reports are frequently produced and presented to council for discussion, action and follow-up.	At least quarterly	At least bi-annually	At least annually	Less frequently (i.e. > 1 year)	No, never	Don't know		

17. Water and Sanitation Service Quality

Water Services Development Plan

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).	Yes, strongly agree (i.e. 100% in place)	Mostly agree (i.e. >75% in place)	Agree somewhat (i.e. >50% in place)	< 50% in place	Nothing in place (i.e. 0%)	Don't know		
Customers have a functional, reliable and safe water supply system with sufficient quantity and flow, good quality, and minimal interruptions.	Yes, all have a functional, reliable and safe service (i.e. 100%)	At least 90% have a functional, reliable and safe service	Most have a functional, reliable and safe service (i.e. >75%)	Some have a functional, reliable and safe service (i.e. > 50%)	< 50% of customers have a functional, reliable and safe service	None have a functional, reliable and safe service (i.e. 0%)	Don't know	
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.	Yes, all (i.e. 100%)	>90% of households	>75% of households	>50% of households	<50% of households	None (i.e. 0%)	Don't know	
Households in your WSA do not experience water pressure problems (i.e. no flow/partial flow less than 10 litres/minute) (not to be confused with interruption to supply).	Yes, no households experience pressure problems (i.e. 100% do not experience pressure problems)	>90% of households do not experience pressure problems	>75% of households do not experience pressure problems	>50% of households do not experience pressure problems	<50% of households do not experience pressure problems	All households (i.e. 100%) experience pressure problems	Don't know	
Customers have a functional, reliable, dignified and safe sanitation system with no blockages resulting in overflows that impact on the environment, including effective collection and treatment of faecal sludge.	Yes, all customers have a functional, reliable, dignified and safe service with no impact on the environment (i.e. 100%)	> 98% of all customers have a functional, reliable, dignified and safe service with minimal impact on environmental health	Almost all have a functional, reliable, dignified and safe service (i.e. >90%)	Most have a functional, reliable, dignified and safe service (i.e. >75%)	Some have a functional, reliable, dignified and safe service (i.e. > 50%)	< 50% of customers have a functional, reliable, dignified and safe service	None have a functional, reliable, dignified and safe service (i.e. 0%)	Don't know
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.	Yes, strongly agree	In place, with occasional non-optimal performance	Partially in place, but not ideal	No, disagree	Don't know			
Regular municipal wide customer satisfaction surveys are conducted to determine customer satisfaction levels and inform the Customer Care Management Plan	Annual customer satisfaction surveys	Biennial (i.e. every 2nd year) customer satisfaction surveys	Less frequent customer satisfaction surveys (i.e. > 2 years)	No customer satisfaction surveys	Don't know			
Please indicate what percentage of the reported water related complaints/callouts are acknowledged, including consumer response, within 24 hours.	All (i.e. 100%)	Almost all (i.e. >95%)	Most (i.e. >75%)	Some (i.e. > 50%)	< 50%	None (i.e. 0%)	Don't know	

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Please indicate what percentage of the reported wastewater/sanitation related complaints/callouts are acknowledged, including consumer response, within 24 hours.	All (i.e. 100%)	Almost all (i.e. >95%)	Most (i.e. >75%)	Some (i.e. > 50%)	< 50%	None (i.e. 0%)	Don't know	
A comprehensive customer awareness programme (informing customers of water and wastewater system O&M activities, water quality, resource protection/pollution, reporting incidents/security concerns, etc.) is in place and implemented.	Yes, strongly agree	Partially in place, but not ideal	No, disagree (i.e. no awareness programme)	Don't know				

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%
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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	4,585.14	6,740.15	9,908.02	3,119.14	2,266.48	3,331.72	4,897.64	1,541.82
Sanitation Infrastructure Pipelines	Sewer internal Reticulation	0.00	0.00	0.00	136.74	0.00	0.00	0.00	796.10
	Sewer Bulk pipeline	1,970.49	2,896.62	4,258.04	0.00	1,170.27	1,720.30	2,528.84	0.00
Infrastructure Works	WTW	1,063.00	1,099.00	1,135.00	1,032.00	69.00	96.50	120.00	60.00
	WWTW	0.00	0.00	0.00	0.00	366.03	537.81	790.24	249.12
	Water Pump stations	75.27	110.60	162.51	51.23	66.78	98.11	144.16	45.45
	Sanitation Pump stations	170.79	250.95	368.73	116.24	60.58	89.01	130.79	41.23
Infrastructure	Reservoirs	3,045.84	4,475.34	6,575.75	2,072.95	181.45	266.61	391.74	123.49

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	26.34	0.00	0.00	0.00
Sanitation Infrastructure Pipelines	Sewer internal Reticulation	0.00	0.00	0.00	0.00
	Sewer Bulk pipeline	627.07	0.00	0.00	0.00

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Instructure Works	WTW	220.00	230.00	240.00	0.00
	WWTW	2,033.48	2,987.85	4,390.12	0.00
	Water Pump stations	8.82	13.00	19.03	0.00
	Sanitation Pump stations	1.90	2.06	2.22	0.00
Infrastructure	Reservoirs	156.59	230.08	340.46	0.00

Chapter 5: WSDP Scoring

Total Score	STATUS
76.20	

Overall Ability to Perform Water Services Planning

