

9. Financial profile

The financials of water services are divided into two aspects namely, new capital projects and operations and maintenance (O&M) of existing infrastructure. The financial budgets of the ZDM are divided between income and expenditure for each of these aspects, and are further separated between water and sanitation.

9.1 Capital funds

Indicated below in Tables 9.1 (a) & (b) is the capital required to meet the national objectives of eradicating backlogs for water and sanitation by providing at least the RDP level of service to all households. The costs indicated have been calculated at present value and therefore excludes an allowance for future escalation. Tables 9.1 (c) & (d) indicate available funding up to 2022 and the shortfall in funding in order to eradicate backlogs by not later than 2022.

Current and future bulk refurbishment requirements have been included and short-, medium- and longterm interventions are being addressed. A Rural Sanitation Replacement Programme has been estimated at a cost of approximately R408m. The purpose of this programme will be to replace the old Archloo-, Block- and Zink-type VIP's. The Archloo-type VIP is not sustainable for longer than 3-5years, after which the structure starts to collapse. This causes a serious risk to people using the unit. Furthermore, these units are immovable, and most of the pits are full or nearly full. The purpose of the replacement programme is to replace all these units with movable pre-cast units. These structures have a long lifespan and can be moved in the case where pits get filled up.

Table 9.1 (a): Capital requirements: water

WATER	Capital requirements	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	>2022
Regional bulk	R 1 608 189 416			R 294 473 452	R 294 572 595	R 313 011 521	R 706 131 848
Secondary bulk	R 946 404 450			R 76 915 407	R 33 478 526	R 35 896 523	R 800 113 994
Reticulation	R 146 907 688			R 11 939 361	R 11 452 635	R 14 758 965	R 108 756 726
Total capital (new)	R 2 701 501 553	R -	R -	R 383 328 220	R 339 503 756	R 363 667 009	R 1 615 002 568
Regional bulk (WTW)	R 599 570 000						
Secondary bulk	TBA						
Reticulation	TBA						
Total capital (refurbishment)	R 599 570 000			R -			
Total capital	R 3 301 071 553	R -	R -	R 383 328 220	R 339 503 756	R 363 667 009	R 1 615 002 568

Table 9.1 (b): Capital requirements: sanitation

SANITATION	Capital requirements	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	>2022
Bulk infrastructure	R -						
Reticulation	R -						
VIP toilets	R 350 689 500			51 310 825	51 310 825	51 310 825	196 757 025
Total capital (new)	R 350 689 500	R -	R -	R 51 310 825	R 51 310 825	R 51 310 825	R 196 757 025
Bulk infrastructure (WWTW)	322 510 000				TBA	TBA	TBA
Reticulation	TBA				TBA	TBA	TBA
VIP toilets (Replacement Prgm)	551 988 000				TBA	TBA	TBA
Total capital (refurbishment)	R 874 498 000	R -		R -	R -	R -	R -
Total capital	R 1 225 187 500	R -	R -	R 51 310 825	R 51 310 825	R 51 310 825	R 196 757 025

Table 9.1 (c): Source of capital income: water

WATER	Expected Funding	2017/2018	2018/2019	2019/2020	2020/2021 (Est.)	2021/2022 (Est.)	>2022
MIG	R 631 607 200.00			R 180 459 200.00	R 225 574 000.00	R 225 574 000.00	TBA
DWA (RBIG)	R 163 774 000.00			R 163 774 000.00	TBA	TBA	TBA
Housing							
WSIG	R 100 000.00			R 100 000.00	TBA	TBA	TBA
Loans							
TOTAL	R 795 481 200	R -	R -	R 344 333 200	R 225 574 000	R 225 574 000	R -
Capital requirements	R 3 301 071 553						
Shortfall up to 2022	R -2 505 590 353						

Table 9.1 (d): Source of capital income: sanitation

SANITATION	Expected Funding	2017/2018	2018/2019	2019/2020	2020/2021 (Est.)	2021/2022 (Est.)	>2022
MIG	R 135 344 400.00			R 45 114 800.00	R 45 114 800.00	R 45 114 800.00	TBA
DWA							
Housing	R -			R -	R -	R -	R -
Other grant funding							
Loans							
TOTAL	R 135 344 400	R -	R -	R 45 114 800	R 45 114 800	R 45 114 800	R -
Capital requirements	R 1 225 187 500						
Shortfall up to 2022	R -1 089 843 100						

9.2 Operating costs and income (water & sanitation)

Of critical importance is the funding of Operations and Maintenance of existing and future schemes as they are being commissioned. Correct O&M of physical infrastructure is arguably more important than infrastructure construction because unless successful preventative maintenance procedures are instituted schemes will become inoperative. As a large proportion of expenditure relates to staff, competent personnel are required to ensure that the large investments in water services are not negated through dysfunction or dereliction.

Table 9.2 (a) below shows the operational costs associated with the provision of water services in the district.

9.3 Tariffs and charges

The ZDM tariff structure for various levels of water and sanitation services, including the Free Basic Services (FBS) allowance to households, are indicated in Table 9.3 (a) below. The demographics of the ZDM indicate that the level of poverty in the ZDM is high (Section 1). The ZDM cannot afford the expenses of maintaining an indigent roster and therefore provides all households in the district with FBS. Only institutions (schools, clinics, etc.) are not provided with FBS. ZDM might in future refine the above approach to a more targeted approach based on different residential areas.

Table 9.2 (a): Operational costs and income

Operating costs and income	Total 5yr projected	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Operational costs	R 2 584 611 744	R 431 009 527	R 470 231 394	R 513 022 451	R 559 707 494	R 610 640 876
Personnel costs	R 915 267 755	R 152 629 935	R 166 519 259	R 181 672 512	R 198 204 710	R 216 241 339
Total O&M costs	R 3 499 879 499	R 583 639 462	R 636 750 654	R 694 694 963	R 757 912 205	R 826 882 215
Equitable share: FBS	R 2 328 387 910	R 388 281 673	R 423 615 306	R 462 164 298	R 504 221 250	R 550 105 383
Income: sales (actual payment)	R 133 386 724	R 22 243 553	R 24 267 717	R 26 476 079	R 28 885 402	R 31 513 974
Total income	R 2 461 774 634	R 410 525 227	R 447 883 022	R 488 640 377	R 533 106 652	R 581 619 357
Deficit/surplus	R -1 038 104 865	R -173 114 236	R -188 867 631	R -206 054 586	R -224 805 553	R -245 262 859

Table 9.3 (a): ZDM Water Services Tariffs

WATER, SANITATION TARIFFS AND OTHER CHARGES 2018- 2019

DETAILS	NONGOMA	VAT	AMOUNT	% CHANGE	2018/2019 CHANGE	ULUNDI	VAT	AMOUNT	% CHANGE	2018/2019 CHANGE	EDUMBE	VAT	AMOUNT	% CHANGE	2018/2019 CHANGE	PONGOLA	VAT	AMOUNT	CHANGE	2018/2019 CHANGE
WATER TARIFFS																				
DOMESTIC																				
CURRENT 0-6kl	0.00	-				0.00	0.00				0.00	0.00				0.00	0.00			-
PROPOSED	0.00	-		0%	0.00	0.00	0.00			0%	0.00	0.00			0%	0.00	0.00			0%
CURRENT 7-30kl	6.30	0.88	7.18			6.30	0.88	6.52			6.30	0.88	6.52			5.32	0.75	6.07		
PROPOSED	6.93	1.04	7.96	10%	0.79	6.93	1.04	7.96	10%	0.59	6.93	1.04	7.96	10%	0.59	5.85	0.88	6.73	10%	0.67
CURRENT 30-40	8.43	1.18	9.61			8.43	1.18	9.61			8.43	1.18	9.61			8.43	1.18	9.61		
PROPOSED	9.69	1.45	11.15	15%	1.54	9.69	1.45	11.15	10%	1.54	9.69	1.45	11.15	10%	1.54	9.69	1.45	11.15	10%	1.54
CURRENT > 40	11.37	1.59	12.97			11.37	1.59	12.97			11.37	1.59	12.97			11.37	1.59	12.97		
PROPOSED	13.65	2.05	15.70	20%	2.73	13.65	2.05	15.70	10%	2.73	13.65	2.05	15.70	10%	2.73	13.65	2.05	15.70	10%	2.73
BUSINESS																				
CURRENT	8.84	1.24	10.08			8.84	1.24	10.08			8.84	1.24	10.08			8.84	1.24	10.08		
PROPOSED	9.73	1.46	11.19	10%	1.11	9.73	1.46	11.19	10%	1.11	9.73	1.46	11.19	10%	1.11	9.73	1.46	11.19	10%	1.11
WATER CONNECTIONS:																				
CURRENT	2 833.03	396.62	3 229.66			2 833.03	396.62	3 229.66			2 833.03	396.62	3 229.66			2 833.03	396.62	3 229.66		
Proposed Residential	3 116.34	467.45	3 583.79	10%	354.13	3 116.34	467.45	3 583.79	10%	354.13	3 116.34	467.45	3 583.79	10%	354.13	3 116.34	467.45	3 583.79	10%	354.13
Proposed Businesses	cost +10%					cost +10%					cost +10%					cost +10%				
NEW SEWER CONNECTIONS:																				
CURRENT																				
Proposed Residential	cost +10%					cost +10%					cost +10%					cost +10%				
Proposed Businesses	cost +10%					cost +10%					cost +10%					cost +10%				
METER TEMPERING:																				
CURR - First Offence/ILLEGAL FEE	1 661.19	232.57	1 893.75			1 661.19	232.57	1 893.75			1 661.19	232.57	1 893.75			1 661.19	232.57	1 893.75		
PROP - First Offence/ILLEGAL FEE	1 827.31	274.10	2 101.40	10%	207.65	1 827.31	274.10	2 101.40	10%	207.65	1 827.31	274.10	2 101.40	10%	207.65	1 827.31	274.10	2 101.40	10%	207.65
CURR-Second Offence/ILLEGAL FEE	3 322.38	465.13	3 787.51			3 322.38	465.13	3 787.51			3 322.38	465.13	3 787.51			3 322.38	465.13	3 787.51		
PROP-Second Offence/ILLEGAL FEE	3 654.61	548.19	4 202.81	10%	415.30	3 654.61	548.19	4 202.81	10%	415.30	3 654.61	548.19	4 202.81	10%	415.30	3 654.61	548.19	4 202.81	10%	415.30
Third Offence																				
WATER RECONNECTION FEE:																				
CURRENT	167.41	23.44	190.84			167.41	23.44	190.84			167.41	23.44	190.84			167.41	23.44	190.84		
PROPOSED	184.15	27.62	211.77	10%	20.93	184.15	27.62	211.77	10%	20.93	184.15	27.62	211.77	10%	20.93	184.15	27.62	211.77	10%	20.93
WATER TANKERS: loads																				
Rate per kiloliter (Portable Water)	10.02	1.40	11.42			10.02	1.40	11.42			10.02	1.40	11.42			10.02	1.40	11.42		
PROPOSED	11.02	1.65	12.67	10%	1.25	11.02	1.65	12.67	10%	1.25	11.02	1.65	12.67	10%	1.25	11.02	1.65	12.67	10%	1.25
Other Consumables																				
Where no working water meter is installed on which the property is occupied	164.54	23.04	187.58			164.54	23.04	187.58			164.54	23.04	187.58			164.54	23.04	187.58		
PROPOSED	181.00	27.15	208.15	10%	20.57	181.00	27.15	208.15	10%	20.57	181.00	27.15	208.15	10%	20.57	181.00	27.15	208.15	10%	20.57
Businesses	543.71	76.12	619.83			543.71	76.12	619.83			543.71	76.12	619.83			543.71	76.12	619.83		
PROPOSED	598.08	89.71	687.80	10%	67.96	598.08	89.71	687.80	10%	67.96	598.08	89.71	687.80	10%	67.96	598.08	89.71	687.80	10%	67.96
STAND ALONE/ DEDICATED SCHEMES	cost +10%					cost +10%					cost +10%					cost +10%				

SEWERAGE CHARGES																				
CURRENT	85.85	12.02	97.87			85.85	12.02	97.87			0.00	0.00	-		0	85.85	12.02	97.87		
PROPOSED	94.43	14.17	108.60	10%	10.73	94.43	14.17	108.60	10%	10.73	0.00	0.00	-		0	94.43	14.17	108.60	10%	10.73
SEWER EXCESS																				
CURRENT	3.94	0.55	4.49			3.94	0.55	4.49			0.00	0.00	-		0	3.94	0.55	4.49		
PROPOSED	4.34	0.65	4.99	10%	0.49	4.34	0.65	4.99	10%	0.49	0.00	0.00	-		0	4.34	0.65	4.99	10%	0.49
VACUUM TANK SERVICE per 5kl OR PART THEREOF																				
Normal week days	151.67	21.23	172.90			151.67	21.23	172.90			151.67	21.23	172.90			151.67	21.23	172.90		
PROPOSED	166.83	25.03	191.86	10%	18.96	166.83	25.03	191.86	10%	18.96	166.83	25.03	191.86	10%	18.96	166.83	25.03	191.86	10%	18.96
Weekends and Public Holidays	482.58	67.56	550.14			530.84	74.32	605.15			530.84	74.32	605.15			530.84	74.32	605.15		
PROPOSED	530.84	79.63	610.46	10%	60.32	583.92	87.59	671.51	10%	66.35	583.92	87.59	671.51	10%	66.35	583.92	87.59	671.51	10%	66.35
Rate per km	7.15	1.00	8.16			7.15	1.00	8.16			7.15	1.00	8.16			7.15	1.00	8.16		
PROPOSED	7.87	1.18	9.05	10%	0.89	7.87	1.18	9.05	10%	0.89	7.87	1.18	9.05	10%	0.89	7.87	1.18	9.05	10%	0.89
STAND ALONE/ DEDICATED SCHEMES	cost +10%					cost +10%					cost +10%					cost +10%				
WATER DEPOSIT																				
DOMESTIC	ESTIMATED TARRIF OF R250 FIXED					ESTIMATED TARRIF OF R250 FIXED					ESTIMATED TARRIF OF R250 FIXED					ESTIMATED TARRIF OF R250 FIXED				
NON DOMESTIC	AVERAGE MONTH WATER SERVICES					AVERAGE MONTH WATER SERVICES					AVERAGE MONTH WATER SERVICES					AVERAGE MONTH WATER SERVICES				
GENERAL TARRIFS:																				
METER TESTING	cost +10%				cost +10%				cost +10%				cost +10%				cost +10%			
INDONSA HALL HIRE	758.34	106.17	864.50			758.34	106.17	864.50			758.34	106.17	864.50			758.34	106.17	864.50		
PROPOSED	834.17	125.13	959.30	10%	94.79	834.17	125.13	959.30	10%	94.79	834.17	125.13	959.30	10%	94.79	834.17	125.13	959.30	10%	94.79
INDONSA DEPOSIT REFUNDABLE	303.33	42.47	345.80			303.33	42.47	345.80			303.33	42.47	345.80			303.33	42.47	345.80		
PROPOSED	333.67	50.05	383.72	10%	37.92	333.67	50.05	383.72	10%	37.92	333.67	50.05	383.72	10%	37.92	333.67	50.05	383.72	10%	37.92
R/D CHEQUE	121.62	17.03	138.65			121.62	17.03	138.65			121.62	17.03	138.65			121.62	17.03	138.65		
PROPOSED	133.78	20.07	153.85	10%	15.20	133.78	20.07	153.85	10%	15.20	133.78	20.07	153.85	10%	15.20	133.78	20.07	153.85	10%	15.20
NEW - SEWER SLUDGE PER 5000 LITRES	2345.07	328.31	2 673.38			2345.07	328.31	2 673.38			2345.07	328.31	2 673.38			2345.07	328.31	2 673.38		
PROPOSED	2579.58	386.94	2 966.51	10%	293.13	2579.58	386.94	2 966.51	10%	293.13	2579.58	386.94	2 966.51	10%	293.13	2579.58	386.94	2 966.51	10%	293.13
FAX	2.86	0.40	3.26			2.86	0.40	3.26			2.86	0.40	3.26			2.86	0.40	3.26		
PROPOSED	3.15	0.47	3.62	10%	0.36	3.15	0.47	3.62	10%	0.36	3.15	0.47	3.62	10%	0.36	3.15	0.47	3.62	10%	0.36
CLEARANCE CERTIFICATE	14.31	2.00	16.31			14.31	2.00	16.31			14.31	2.00	16.31			14.31	2.00	16.31		
PROPOSED	15.74	2.36	18.10	10%	1.79	15.74	2.36	18.10	10%	1.79	15.74	2.36	18.10	10%	1.79	15.74	2.36	18.10	10%	1.79

Sewer dump fee is R 91.34 per 25 Litre up to a maximum of R2500 per dump
Tender Fees: The minimum tender fee is R250.00 for amounts up to 2 million. And R100.00 for every 1 million or part thereof thereafter up to a maximum of R2500.00

The minimum deposit be R250.00, subject to the accounting officer review on a case by case basis.

9.4 Income and sales

ZDM has developed a WSP reporting system, which is in the process of being rolled out, where actual income from water sales will be monitored on a monthly basis. Data from this system will be included in future revisions of the WSDP.

9.5 Metering and billing

The WSP reporting system referred to above will also report on metered and unmetered supply points and strategies being implemented to improve the situation. Data from this system will be included in future revisions of the WSDP.