

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 2014 and the shortfall in funding in order to eradicate backlogs by not later than 2014.

Current and future refurbishment requirements have not yet been included since investigations in this regard are still being done and the results will be included in future revisions of the document. However, a Rural Sanitation Replacement Programme has been initiated by ZDM during 2013. 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 2 339 962 853	R 380 813 147	R 351 266 350	R 290 925 142	R 294 572 595	R 313 011 521	R 709 374 098
Secondary bulk	R 1 054 030 068	R 48 562 125	R 31 485 265	R 36 487 526	R 33 478 526	R 35 896 523	R 868 120 103
Reticulation	R 165 680 556	R 10 548 752	R 14 254 789	R 12 685 235	R 11 452 635	R 14 758 965	R 101 980 180
Total capital (new)	R 3 559 673 477	R 439 924 024	R 397 006 404	R 340 097 903	R 339 503 756	R 363 667 009	R 1 679 474 381
Regional bulk (WTW)	R 599 570 000	TBA	TBA	TBA			
Secondary bulk	TBA	TBA	TBA	TBA			
Reticulation	TBA	TBA	TBA	TBA			
Total capital (refurbishment)	R 599 570 000	TBA	TBA	TBA			
Total capital	R 4 159 243 477	R 439 924 024	R 397 006 404	R 340 097 903	R 339 503 756	R 363 667 009	R 1 679 474 381

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 380 070 000	47 000 000	47 000 000	47 000 000	47 000 000	47 000 000	145 070 000
Total capital (new)	R 380 070 000	R 47 000 000	R 47 000 000	R 47 000 000	R 47 000 000	R 47 000 000	R 145 070 000
Bulk infrastructure (WWTW)	322 510 000	TBA	TBA	TBA	TBA	TBA	TBA
Reticulation	TBA	TBA	TBA	TBA	TBA	TBA	TBA
VIP toilets (Replacement Prgm)	408 880 000	TBA	TBA	TBA	TBA	TBA	TBA
Total capital (refurbishment)	R 731 390 000	R -	R -	R -	R -	R -	R -
Total capital	R 1 111 460 000	R 47 000 000	R 47 000 000	R 47 000 000	R 47 000 000	R 47 000 000	R 145 070 000

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

WATER	Expected Funding	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	>2022
MIG	R 182 604 350	R 182 604 350	TBA	TBA	TBA	TBA	TBA
DWA (RBIG)	R 110 000 000	R 110 000 000	TBA	TBA	TBA	TBA	TBA
Housing							
WSIG	R 107 746 000	R 107 746 000	TBA	TBA	TBA	TBA	TBA
Loans							
TOTAL	R 400 350 350	R 400 350 350	R -	R -	R -	R -	R -
Capital requirements	R 4 159 243 477						
Shortfall	R -3 758 893 127						

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

SANITATION	Expected Funding	2017/2018	2018/2019	2019/2020	2020/2021	2021/2022	>2022
MIG	R 104 794 400	47 120 650	57 673 750	TBA	TBA	TBA	TBA
DWA							
Housing	R 4 300 000	R 4 300 000					
Other grant funding							
Loans							
TOTAL	R 109 094 400	R 51 420 650	R 57 673 750				
Capital requirements	R 1 111 460 000						
Shortfall	R -1 002 365 600						

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

LM	NONGOMA				ULUNDI				EDUMBE				PONGOLA			
DETAILS	NONGOMA	VAT	AMOUNT	%	ULUNDI	VAT	AMOUNT	%	EDUMBE	VAT	AMOUNT	%	PONGOLA	VAT	AMOUNT	%
WATER TARIFFS																
DOMESTIC																
CURRENT 0-6kl	0.00	0.00			0.00	0.00			0.00	0.00			0.00	0.00		
PROPOSED	0.00	0.00		0%	0.00	0.00		0%	0.00	0.00		0%	0.00	0.00		0%
CURRENT 7-30kl	4.40	0.62	5.02		4.40	0.62	5.02		4.40	0.62	5.02		3.72	0.52	4.24	
PROPOSED	4.84	0.68	5.52	10%	4.84	0.68	5.52	10%	4.84	0.68	5.52	10%	4.09	0.57	4.66	10%
CURRENT 30-40	5.39	0.75	6.14		5.39	0.75	6.14		5.39	0.75	6.14		5.24	0.73	5.97	
PROPOSED	5.93	0.83	6.76	10%	5.93	0.83	6.76	10%	5.93	0.83	6.76	10%	5.93	0.83	6.76	10.0%
CURRENT > 40	6.68	0.94	7.62		6.52	0.91	7.43		6.51	0.91	7.42		6.68	0.94	7.62	
PROPOSED	7.35	1.03	8.38	10%	7.35	1.03	8.38	10.0%	7.35	1.03	8.38	10.0%	7.35	1.03	8.38	10%
BUSINESS																
CURRENT	6.18	0.87	7.05		6.18	0.87	7.05		5.64	0.79	6.43		6.18	0.87	7.05	
PROPOSED	6.80	0.95	7.75	10%	6.80	0.95	7.75	10%	6.80	0.95	7.75	10.0%	6.80	0.95	7.75	10%
WATER CONNECTIONS:																
	3 months consumption				3 months consumption				3 months consumption				3 months consumption			
Residential	2 178.00	304.92	2482.92	10%	2 178.00	304.92	2482.92	10%	2 178.00	304.92	2482.92	10.0%	2 178.00	304.92	2482.92	10%
Businesses	cost +10%				cost +10%				cost +10%				cost +10%			
METER TEMPERING:																
First Offence	1 277.10	178.794	1455.89	10%	1 277.10	178.79	1455.89	10%	1 277.10	178.79	1455.89	10%	1 277.10	178.79	1455.89	10%
Second Offence	2 554.20	357.588	2911.79	10%	2 554.20	357.59	2911.79	10%	2 554.20	357.59	2911.79	10.0%	2 554.20	357.59	2911.79	10%
Third Offence		0	0.00			0.00	0.00			0.00	0.00			0.00	0.00	
WATER RECONNECTION FEE:																
WATER TANKERS: loads		0	0.00			0.00	0.00			0.00	0.00			0.00	0.00	
Rate per kiloliter (Portable Water)	7.70	1.08	8.78	10%	7.70	1.08	8.78	10%	7.70	1.08	8.78	10.0%	7.70	1.08	8.78	10%
Other Consumables																
Where no working water meter is installed on which the property is occupied	126.5	17.71	144.21	10%	126.5	17.71	144.21	10%	126.5	17.71	144.21	10.0%	126.5	17.71	144.21	10%
Businesses	418.00	58.52	476.52	10%	418.00	58.52	476.52	10%	418.00	58.52	476.52	10.0%	418.00	58.52	476.52	10%
STAND ALONE/ DEDICATED SCHEMES	cost +10%				cost +10%				cost +10%				cost +10%			

LM	NONGOMA				ULUNDI				EDUMBE				PONGOLA			
DETAILS	NONGOMA	VAT	AMOUNT	%	ULUNDI	VAT	AMOUNT	%	EDUMBE	VAT	AMOUNT	%	PONGOLA	VAT	AMOUNT	%
SEWERAGE CHARGES																
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CURRENT (Vat inclusive)	55.59	7.78	63.37		55.59	7.78	63.37		0.00	0.00	0.00		55.59	7.78	63.37	
PROPOSED	66.00	9.24	75.24	10.00%	66.00	9.24	75.24	10.0%	0.00	0.00	0.00		66.00	9.24	75.24	10.0%
SEWER EXCESS																
CURRENT (Vat inclusive)	2.50	0.35	2.85		2.50	0.35	2.85		0.00	0.00	0.00		2.50	0.35	2.85	
PROPOSED	3.03	0.42	3.45	10%	3.03	0.42	3.45	10%	0.00	0.00	0.00		3.03	0.42	3.45	10%
VACUUM TANK SERVICE per 5kl OR PART THEREOF																
Normal week days	116.60	16.324	132.92	10%	116.60	16.324	132.92	10%	116.60	16.324	132.92	10%	116.60	16.324	132.92	10%
Weekends and Public Holidays	408.10	57.134	465.23	10%	408.10	57.134	465.23	10%	408.10	57.134	465.23	10%	408.10	57.134	465.23	10%
Rate per km	5.50	0.77	6.27	10%	5.50	0.77	6.27	10%	5.50	0.77	6.27	10%	5.50	0.77	6.27	10%
STAND ALONE/ DEDICATED SCHEMES	cost +10%				cost +10%				cost +10%				cost +10%			
WATER DEPOSIT																
WATER DEPOSIT		0.00	0.00			0.00	0.00			0.00	0.00			0.00	0.00	
DOMESTIC	ESTIMATED TARRIF OF R250 MINIMUM				ESTIMATED TARRIF OF R250 MINIMUM				ESTIMATED TARRIF OF R250 MINIMUM				ESTIMATED TARRIF OF R250 MINIMUM			
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%			
TENDER FEE	176.00	24.64	200.64	10%	176.00	24.64	200.64	10%	176.00	24.64	200.64	10%	176.00	24.64	200.64	10%
INDONSA HALL HIRE	583.00	81.62	664.62	10%	583.00	81.62	664.62	10%	583.00	81.62	664.62	10%	583.00	81.62	664.62	10%
INDONSA DEPOSIT REFUNDABLE	233.2	32.65	265.85	10%	233.2	32.65	265.85	10%	233.2	32.65	265.85	10%	233.2	32.65	265.85	10%
R/D CHEQUE	93.5	13.09	106.59	10%	93.5	13.09	106.59	10%	93.5	13.09	106.59	10%	93.5	13.09	106.59	10%
SEWER POND DUMP SITE PER LOAD	61.6	8.62	70.22	10%	61.6	8.62	70.22	10%	61.6	8.62	70.22	10%	61.6	8.62	70.22	10%
FAX	2.20	0.31	2.51	10%	2.20	0.31	2.51	10%	2.20	0.31	2.51	10%	2.20	0.31	2.51	10%
CLEARANCE CERTIFICATE	11.00	1.54	12.54	10%	11.00	1.54	12.54	10%	11.00	1.54	12.54	10%	11.00	1.54	12.54	10%

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.