

## 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	2016/2017	2017/2018	>2018
Regional bulk	R 1 923 123 833	R 380 813 147	R 351 266 350	R 1 191 044 336
Secondary bulk	R 1 054 030 068	R 48 562 125	R 31 485 265	R 973 982 678
Reticulation	R 135 680 556	R 10 548 752	R 14 254 789	R 110 877 015
<b>Total capital (new)</b>	<b>R 3 112 834 457</b>	<b>R 439 924 024</b>	<b>R 397 006 404</b>	<b>R 2 275 904 029</b>
Regional bulk (WTW)	R 295 123 300	TBA	TBA	TBA
Secondary bulk	TBA	TBA	TBA	TBA
Reticulation	TBA	TBA	TBA	TBA
<b>Total capital (refurbishment)</b>	<b>TBA</b>	<b>TBA</b>	<b>TBA</b>	<b>TBA</b>
<b>Total capital</b>	<b>R 3 407 957 757</b>	<b>R 439 924 024</b>	<b>R 397 006 404</b>	<b>R 2 275 904 029</b>

Table 9.1 (b): Capital requirements: sanitation

SANITATION	Capital requirements	2016/2017	2017/2018	>2018
Bulk infrastructure	R -	R -	R -	R -
Reticulation	R -	R -	R -	R -
VIP toilets	R 310 710 000	56 255 250	51 906 375	TBA
<b>Total capital (new)</b>	<b>R 310 710 000</b>	<b>R 56 255 250</b>	<b>R 51 906 375</b>	<b>R -</b>
Bulk infrastructure (WWTW)	88 136 253	TBA	TBA	TBA
Reticulation	TBA	TBA	TBA	TBA
VIP toilets (Replacement Prgm)	408 880 000	-	5 763 750	TBA
<b>Total capital (refurbishment)</b>	<b>R 497 016 253</b>	<b>R -</b>	<b>R 5 763 750</b>	<b>R -</b>
<b>Total capital</b>	<b>R 719 590 000</b>	<b>R 56 255 250</b>	<b>R 57 670 125</b>	<b>TBA</b>

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

<b>WATER</b>	<b>Expected Funding</b>	<b>2016/2017</b>	<b>2017/2018</b>	<b>&gt;2018</b>
MIG	R 346 042 500	R 173 021 250	R 173 021 250	TBA
DWA (RBIG)	R 108 000 000	R 108 000 000	TBA	TBA
Housing	R -	R -	R -	R -
Other grant funding (MWIG)	R -	TBA	TBA	TBA
Loans	R -	R -	R -	R -
<b>TOTAL</b>	<b>R 454 042 500</b>	<b>R 281 021 250</b>	<b>R 173 021 250</b>	<b>R -</b>
Capital requirements	R 3 407 957 757			
<b>Shortfall</b>	<b>R -2 953 915 257</b>			

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

<b>SANITATION</b>	<b>Expected Funding</b>	<b>2016/2017</b>	<b>2017/2018</b>	<b>&gt;2018</b>
MIG	R 115 347 500	57 673 750	57 673 750	TBA
DWA	R -	R -	R -	R -
Housing	R 9 300 000	R 5 000 000	R 4 300 000	TBA
Other grant funding	R -	R -	R -	R -
Loans	R -	R -	R -	R -
<b>TOTAL</b>	<b>R 124 647 500</b>	<b>R 62 673 750</b>	<b>R 61 973 750</b>	<b>R -</b>
Capital requirements	R 719 590 000			
<b>Shortfall</b>	<b>R -594 942 500</b>			

## 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**

<b>Operating costs and income</b>	<b>Total 5yr projected</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2015-2016</b>	<b>2016-2017</b>	<b>2017-2018</b>
Operational costs	R 1 702 170 457	R 314 899 527	R 331 904 101	R 362 107 374	R 395 059 145	R 431 009 527
Personnel costs	R 592 140 014	R 107 731 006	R 117 534 528	R 128 230 170	R 139 899 116	R 152 629 935
<b>Total O&amp;M costs</b>	<b>R 2 294 310 471</b>	<b>R 422 630 533</b>	<b>R 449 438 629</b>	<b>R 490 337 544</b>	<b>R 534 958 261</b>	<b>R 583 639 462</b>
Equitable share: FBS	R 1 517 800 300	R 277 840 000	R 299 001 000	R 326 210 091	R 355 895 209	R 388 281 673
Income: sales (actual payment)	R 144 709 365	R 15 700 199	R 17 128 917	R 18 687 649	R 20 388 225	R 22 243 553
<b>Total income</b>	<b>R 1 662 509 666</b>	<b>R 293 540 199</b>	<b>R 316 129 917</b>	<b>R 344 897 740</b>	<b>R 376 283 434</b>	<b>R 410 525 227</b>
<b>Deficit/surplus</b>	<b>R -631 800 805</b>	<b>R -129 090 334</b>	<b>R -133 308 712</b>	<b>R -145 439 804</b>	<b>R -158 674 827</b>	<b>R -173 114 236</b>

Table 9.3 (a): ZDM Water Services Tariffs

LM	NONGOMA				ULUNDI				EDUMBE				PONGOLA			
	DETAILS	NONGOMA	VAT	AMOUNT	% CHANGE	ULUNDI	VAT	AMOUNT	% CHANGE	EDUMBE	VAT	AMOUNT	% CHANGE	PONGOLA	VAT	AMOUNT
<b>WATER TARIFFS</b>																
<b>DOMESTIC</b>																
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%
<b>BUSINESS</b>																
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%
<b>WATER CONNECTIONS:</b>																
	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%			
<b>METER TEMPERING:</b>																
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	
<b>WATER RECONNECTION FEE:</b>																
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%
<b>Other Consumables</b>																
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	% CHANGE	ULUNDI	VAT	AMOUNT	% CHANGE	EDUMBE	VAT	AMOUNT	% CHANGE	PONGOLA	VAT	AMOUNT	% CHANGE
<b>SEWERAGE CHARGES</b>																
<b>SEWERAGE CHARGES</b>																
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%
<b>SEWER EXCESS</b>																
CURRENT (Vat inclusive)	2.50	0.35	2.85		2.50	0.35	2.85			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		3.03	0.42	3.45	10%
<b>VACUUM TANK SERVICE per 5KI OR PART THEREOF</b>																
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%
<b>STAND ALONE/ DEDICATED SCHEMES</b>																
	cost +10%				cost +10%				cost +10%				cost +10%			
<b>WATER DEPOSIT</b>																
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.