

## 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**

<b>WATER</b>	<b>Capital requirements</b>	<b>2014/15</b>	<b>2015/2016</b>	<b>2016/2017</b>	<b>2017/2018</b>
Regional bulk Pipes	R 732 568 088	R 11 584 808	R 76 405 893	R 127 159 412	R 517 417 975
Regional bulk Components	R 819 319 694	R 97 645 428	R 45 699 845	R 44 267 521	R 631 706 900
Secondary bulk	R 1 144 063 499	R 57 291 804	R 44 491 516	R 26 385 475	R 1 015 894 704
Reticulation	R 123 805 640	R 8 939 760	R 8 484 820	R 10 699 920	R 95 681 140
<b>Total capital: water</b>	<b>R 2 819 756 921</b>	<b>R 175 461 800</b>	<b>R 175 082 074</b>	<b>R 208 512 328</b>	<b>R 2 260 700 719</b>

**Table 9.1 (b): Capital requirements: sanitation**

<b>SANITATION</b>	<b>Capital requirements</b>	<b>2014/15</b>	<b>2015/2016</b>	<b>2016/2017</b>	<b>2017/2018</b>
Bulk infrastructure	R -	R -	R -	R -	R -
Reticulation	R -	R -	R -	R -	R -
VIP toilets	R 354 407 900	55 405 500	55 405 500	55 405 500	188 191 400
<b>Total capital (new)</b>	<b>R 354 407 900</b>	<b>R 55 405 500</b>	<b>R 55 405 500</b>	<b>R 55 405 500</b>	<b>R 188 191 400</b>
Bulk infrastructure	383 259 553	TBA	TBA	TBA	TBA
Reticulation	TBA	TBA	TBA	TBA	TBA
VIP toilets	314 414 100	11 081 100	11 081 100	11 081 100	281 170 800
<b>Total capital (refurbishment)</b>	<b>R 697 673 653</b>	<b>R 11 081 100</b>	<b>R 11 081 100</b>	<b>R 11 081 100</b>	<b>R 281 170 800</b>
<b>Total capital</b>	<b>R 668 822 000</b>	<b>R 66 486 600</b>	<b>R 66 486 600</b>	<b>R 66 486 600</b>	<b>R 469 362 200</b>

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

<b>WATER</b>	<b>Expected Funding</b>	<b>2014/15</b>	<b>2015/2016</b>	<b>2016/2017</b>	<b>2017/2018</b>
MIG	R 498 649 500	R 166 216 500	R 166 216 500	R 166 216 500	R 166 216 500
DWA (RBIG)	R 95 400 000	R 95 400 000	Unknown	Unknown	Unknown
Housing	R -	R -	R -	R -	R -
Other grant funding (MWIG)	R 39 000 000	R 39 000 000	R -	R -	R -
Loans	R -	R -	R -	R -	R -
<b>TOTAL</b>	<b>R 633 049 500</b>	<b>R 300 616 500</b>	<b>R 166 216 500</b>	<b>R 166 216 500</b>	<b>R 166 216 500</b>
Capital requirements	R 2 819 756 921				
<b>Shortfall</b>	<b>R -2 186 707 421</b>				

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

<b>SANITATION</b>	<b>Expected Funding</b>	<b>2014/15</b>	<b>2015/2016</b>	<b>2016/2017</b>	<b>2017/2018</b>
MIG	R 166 216 500	R 55 405 500	R 55 405 500	R 55 405 500	R 55 405 500
DWA	R -	R -	R -	R -	R -
Housing	R -	R -	R -	R -	R -
Other grant funding	R -	R -	R -	R -	R -
Loans	R -	R -	R -	R -	R -
<b>TOTAL</b>	<b>R 166 216 500</b>	<b>R 55 405 500</b>	<b>R 55 405 500</b>	<b>R 55 405 500</b>	<b>R 55 405 500</b>
Capital requirements	R 668 822 000				
<b>Shortfall</b>	<b>R -502 605 500</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**

**Tariff Projections:**

It is essential for Zululand District Municipality to access adequate sources of funding throughout the planning horizon. To achieve this, it is necessary to determine the projected tariffs and kiloliters sold. Therefore the tariffs have been projected as

DESCRIPTION	ULUNDI				
	09/10	10/11	11/12	12/13	13/14
<b>WATER TARIFFS</b>					
0-6/KL	-	-	-	-	-
7-30/kl	4.40	4.40	4.40	4.40	4.40
31-40/kl	5.30	5.30	5.30	5.39	5.39
>40 kl	6.15	6.15	6.15	6.68	6.68
Commercial and Industrial	4.82	5.30	5.83	6.09	6.09
Unmetered	58.19	64.01	70.41	73.58	73.58
Other business and state	-	-	-	-	-
Residential-3 months consumption limited to R250	100.00	104.70	109.52	114.44	114.44
<b>WATER CONNETIONS :</b>					
Residential	cost +10%	cost +10%	cost +10%	cost +10%	cost +10%
Businesses	cost +10%	cost +10%	cost +10%	cost +10%	cost +10%
	-	-	-	-	-
<b>METER TAMPERING:</b>					
First Offence	-	-	-	-	-
Second Offence	-	-	-	-	-
<b>THIRD OFFENCE :</b>					
	-	-	-	-	-
<b>WATER RECONNETION FEE</b>	57.00	59.68	62.42	65.23	65.23
<b>WATER TANKERS :</b>					
Loads					
Rate per kilometer	-	-	-	-	-
Rate per kiloliter	4.96	5.19	5.43	5.68	5.68
<b>Other Consumers</b>					
Where no working water meter is installed on which the property is occupied					
<b>STAND ALONE / DEDICATED SCHEMES</b>	cost + 10%	cost + 10%	cost + 10%	cost + 10%	cost + 10%
	0.00	0.00	0.00	0.00	0.00

DESCRIPTION	ULUNDI				
	09/10	10/11	11/12	12/13	13/14
<b>SEWAGE TARIFFS</b>					
<b>DOMESTIC</b>					
Basic 0-40kl	42.00	43.97	46.00	48.07	48.07
SEWER EXCESS >40kl OF WATER CONSUMPTION	1.89				-
SEWER EXCESS - FIXED CHARGE					-
					-
<b>NON DOMESTIC, COMMERCIAL, HIGH DENSITY</b>					
Basic 0-40kl	42.00	43.97	46.00	48.07	48.07
SEWER EXCESS >40kl OF WATER CONSUMPTION	1.89	1.98	2.07	2.16	2.16
					-
<b>VACUUM TANK SERVICE per 5kl OR PART THEREOF</b>					
Normal week days	80.00	83.76	87.61	91.56	91.56
Weekends and Public Holidays	280.00	293.16	306.65	320.44	320.44
Rate per KI	3.79	3.97	4.15	4.34	4.34
<b>STAND ALONE / DEDICATED SCHEMES</b>	cost + 10%	cost + 10%	cost + 10%	cost + 10%	cost + 10%
	0.00	0.00	0.00	0.00	0.00

DESCRIPTION	NONGOMA				
	09/10	10/11	11/12	12/13	13/14
<b>WATER TARIFFS</b>					
0-6/KL					
7-30/kl	4.17	4.40	4.40	4.40	4.40
31-40/kl	5.32	5.30	5.30	5.39	5.39
> 40kl	5.55	5.81	6.15	6.68	6.68
Commercial and Industrial					-
Unmetered					-
Other business and state	4.17	4.37	4.57	4.77	4.77
Residential-3 months consumption limited to R250	250.00	261.25	273.27	285.56	285.56
					-
<b>WATER CONNETIONS :</b>					
Residential	cost +10%	cost +10%	cost +10%	cost +10%	cost +10%
Businesses	cost +10%	cost +10%	cost +10%	cost +10%	cost +10%
					-
<b>METER TAMPERING:</b>					
First Offence					-
Second Offence	900.00	942.30	985.65	1 030.00	1 030.00
THIRD OFFENCE :	1 800.00	1 884.60	1 971.29	2 060.00	2 060.00
					-
<b>WATER RECONNETION FEE</b>	100.00	104.70	109.52	114.44	114.44
					-
<b>WATER TANKERS :</b>					
Loads					-
Rate per kilometer	3.79	4.17	4.36	4.56	4.56
Rate per kiloliter	4.96	5.19	5.43	5.68	5.68
<b>Other Consumers</b>					
Where no working water meter is installed on which the property is occupied					
<b>STAND ALONE / DEDICATED SCHEMES</b>	cost + 10%	cost + 10%	cost + 10%	cost + 10%	cost + 10%
	0.00	0.00	0.00	0.00	0.00

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DESCRIPTION	NONGOMA				
	09/10	10/11	11/12	12/13	13/14
<b>SEWARAGE TARIFFS</b>					
<b>DOMESTIC</b>					
Basic 0-40kl	42.00	43.97	46.00	48.07	48.07
SEWER EXCESS >40kl OF WATER CONSUMPTION	1.89				-
SEWER EXCESS - FIXED CHARGE					-
					-
<b>NON DOMESTIC, COMMERCIAL, HIGH DENSITY</b>					
Basic 0-40kl	42.00	43.97	46.00	48.07	48.07
SEWER EXCESS >40kl OF WATER CONSUMPTION	1.89	1.98	2.07	2.16	2.16
					-
<b>VACUUM TANK SERVICE per 5kl OR PART THEREOF</b>					
Normal week days	80.00	83.76	87.61	91.56	91.56
Weekends and Public Holidays	280.00	293.16	306.65	320.44	320.44
Rate per KI	3.79	3.97	4.15	4.34	4.34
<b>STAND ALONE / DEDICATED SCHEMES</b>	cost + 10%	cost + 10%	cost + 10%	cost + 10%	cost + 10%

DESCRIPTION	PONGOLA				
	09/10	10/11	11/12	12/13	13/14
<b>WATER TARIFFS</b>					
0-6/KL					
7-30/kl	2.64	2.90	3.19	3.51	3.51
31-40/kl	3.87	4.26	4.68	5.15	5.15
> 40kl	5.10	5.61	6.15	6.68	6.68
Commeccial and Industrial	5.03	5.53	5.83	6.09	6.09
Unmetered	60.75	66.83	73.51	76.82	76.82
Other business and state	2.64	2.90	3.19	3.51	3.51
Residential-3 months consumption limited to R250	250.00	261.25	273.27	285.56	285.56
<b>WATER CONNETIONS :</b>					
Residential	cost + 10%	cost + 10%	cost + 10%	cost + 10%	cost + 10%
Businesses	cost + 10%	cost + 10%	cost + 10%	cost + 10%	cost + 10%
<b>METER TAMPERING:</b>					
First Offence	900.00	942.30	985.65	1 030.00	1 030.00
Second Offence	1 800.00	1 884.60	1 971.29	2 060.00	2 060.00
THIRD OFFENCE :					
<b>WATER RECONNETION FEE</b>	100.00	104.70	109.52	114.44	114.44
<b>WATER TANKERS :</b>					
Loads					
Rate per kilometer	3.79	3.97	4.15	4.34	4.34
Rate per kiloliter	4.96	5.19	5.43	5.68	5.68
<b>Other Consumers</b>					
Where no working water meter is installed on which the property is occupied					
<b>STAND ALONE / DEDICATED SCHEMES</b>	cost + 10%	cost + 10%	cost + 10%	cost + 10%	cost + 10%
	0.00	0.00	0.00	0.00	0.00

DESCRIPTION	PONGOLA				
	09/10	10/11	11/12	12/13	13/14
<b>SEWARAGE TARIFFS</b>					
Health Awareness/ Promotion					
Basic 0-40kl	42.00	43.97	46.00	48.07	48.07
SEWER EXCESS >40kl OF WATER CONSUMPTION	1.89				-
SEWER EXCESS - FIXED CHARGE					-
<b>NON DOMESTIC, COMMERCIAL, HIGH DENSITY</b>					
Basic 0-40kl	42.00	43.97	46.00	48.07	48.07
SEWER EXCESS >40kl OF WATER CONSUMPTION	1.89	1.98	2.07	2.16	2.16
<b>VACUUM TANK SERVICE per 5kl OR PART THEREOF</b>					
Normal week days	80.00	83.76	87.61	91.56	91.56
Weekends and Public Holidays	280.00	293.16	306.65	320.44	320.44
Rate per KI	3.79	3.97	4.15	4.34	4.34
<b>STAND ALONE / DEDICATED SCHEMES</b>	cost + 10%	cost + 10%	cost + 10%	cost + 10%	cost + 10%
	0.00	0.00	0.00	0.00	0.00



DESCRIPTION	EDUMBE				
	09/10	10/11	11/12	12/13	13/14
<b>WATER TARIFFS</b>					
0-6/KL					
7-30/kl	4.40	4.40	4.40	4.40	4.40
31-40/kl	4.60	5.30	5.30	5.39	5.39
> 40kl	4.80	5.28	5.81	6.39	6.39
Commercial and Industrial	4.40	4.84	5.32	6.09	6.09
Unmetered					-
Other business and state	4.40	4.61	4.82	5.04	5.04
Residential-3 months consumption limited to R250	250.00	261.75	273.79	286.11	286.11
					-
<b>WATER CONNETIONS :</b>					-
Residential	cost + 10%	cost + 10%	cost + 10%	cost + 10%	cost + 10%
Businesses	cost + 10%	cost + 10%	cost + 10%	cost + 10%	cost + 10%
					-
<b>METER TAMPERING:</b>					-
First Offence	900.00	942.30	985.65	1 030.00	1 030.00
Second Offence	1 800.00	1 884.60	1 971.29	2 060.00	2 060.00
THIRD OFFENCE :					-
					-
<b>WATER RECONNETION FEE</b>	100.00	104.70	109.52	114.44	114.44
					-
<b>WATER TANKERS :</b>					-
Loads					-
Rate per kilometer	3.79	4.17	4.36	4.56	4.56
Rate per kiloliter	4.96	5.18	5.42	5.66	5.66
					-
<b>Other Consumers</b>					-
Where no working water meter is installed on which the property is occupied					-
					-
<b>STAND ALONE / DEDICATED SCHEMES</b>	cost + 10%	cost + 10%	cost + 10%	cost + 10%	cost + 10%
					-
					-
	0.00	0.00	0.00	0.00	0.00

DESCRIPTION	EDUMBE				
	09/10	10/11	11/12	12/13	13/14
<b>SEWARAGE TARIFFS</b>					
<b>DOMESTIC</b>					
Basic 0-40kl	42.00	43.97	46.00	48.07	48.07
SEWER EXCESS >40kl OF WATER CONSUMPTION	1.89				-
SEWER EXCESS - FIXED CHARGE					-
					-
<b>NON DOMESTIC, COMMERCIAL, HIGH DENSITY</b>					-
Basic 0-40kl					-
SEWER EXCESS >40kl OF WATER CONSUMPTION	42.00	43.97	46.00	48.07	48.07
	1.89	1.98	2.07	2.16	2.16
<b>VACUUM TANK SERVICE per 5kl OR PART THEREOF</b>					-
Indegenous Games	80.00	83.76	87.61	91.56	91.56
Gender Conference	280.00	293.16	306.65	320.44	320.44
Rate per KI	3.79	3.97	4.15	4.34	4.34
Youth Day Celebration					-
Widows,Orphans & Disability Day	cost + 10%	cost + 10%	cost + 10%	cost + 10%	cost + 10%
					-
	0.00	0.00	0.00	0.00	0.00

## **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.