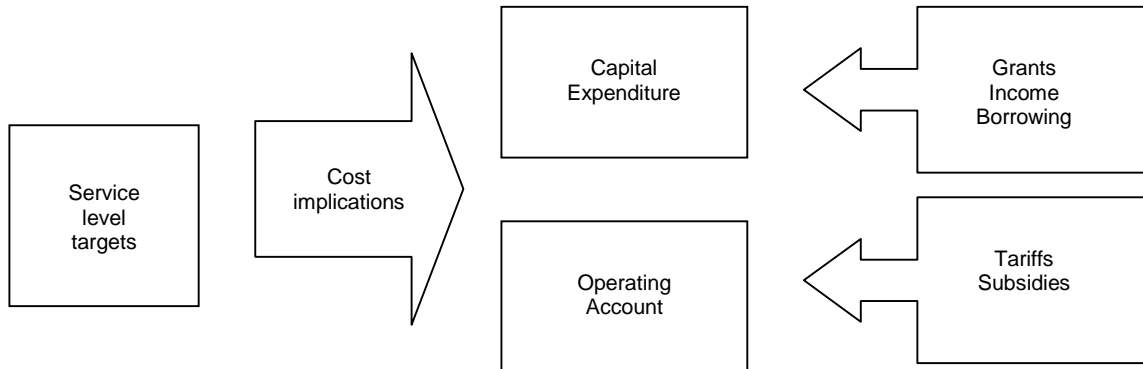


F.9 FINANCIAL PROFILE

This part of the planning process is critical to the final WSDP. By identifying the costs associated with service level targets and the sources to meet the costs, the WSA will be able to see how financially viable their plan is.

Finance overview



Service level targets are what drive costs. On the one hand there is capital cost which refers to how much it is going to cost to install the infrastructure. The section on capital expenditure requires the costs of infrastructure to be recorded according to a number of different categories. The section on capital income requires that the sources of finance to meet capital expenditure be recorded in terms of subsidies, consumer payments, money from the WSA’s current income and amounts to be borrowed.

Once the infrastructure has been built, there are ongoing operating costs. If the projected operating costs associated with capital expenditure are not factored in right from the start (i.e. when service levels are being considered), there is a danger that the WSA will not be able to afford the running cost of the services. Detailed operating costs are not required as part of the tables, however key information on the operating account is requested. This information gives an indication of how “healthy” the WSA’s finances are.

Income for operating costs comes from user payments (through tariffs) and subsidies (equitable share). The section on operating incomes requires information on current and future tariffs. Future tariffs are important since they provide an indication of the costs to users for the services set out in the targets.

Whilst income and expenditure will be calculated for the different settlement types, the tables require that the amounts are consolidated for the WSA area as a whole.

It also needs to be noted that costs can only be calculated once the necessary water services policies are in place, for example Free Basic Water Policy, indigent policy, and policies regarding the use of equitable share and other subsidies.

The capital expenditure for water and sanitation services depicts projects identified by the BM and backlogs identified.

Backlogs were determined from the service level targets, and related capital costs were calculated from the associated infrastructure requirement unit costs.

Infrastructure requirement unit costs regarding backlogs were based on the following DWAF typical unit costs (Guide for Water Services Development Projects):

Item	Service Component	Capital unit cost / household
1.	Internal Infrastructure	
1.1	Water reticulation <ul style="list-style-type: none"> • Street tap 	R 1 010-00
1.2	Sanitation <ul style="list-style-type: none"> • Dry on site (VIP) 	R 3 460-00
2.	Connector Infrastructure	
2.1	Water main <ul style="list-style-type: none"> • Pipeline 	R 720-00
3.	Bulk Infrastructure	
3.1	Water <ul style="list-style-type: none"> • Bulk main • Reservoir • WTW 	R 720-00 R 430-00 R 940-00

This amounts to a total unit cost of R3 820-00 for basic water and R3 460-00 for basic sanitation services per household needed to address backlogs.

F.9.1 Capital funds

F.9.1.1 Situation assessment (Capital Funds)

Note that capital expenditure (water) is divided into budget (2009/10) and backlogs categories.

F.9.1.1.1 (a) Capital expenditure (Budget) : Water (R Million)

Based on the service level targets and the associated infrastructure requirements, capital expenditure can be calculated.

For internal infrastructure (reticulation), capital costs needs to be estimated on a per consumer unit basis for the different levels of service. This needs to be done for newly serviced consumer units and for upgrading existing consumer units.

Capital costs for bulk and connector services (connector main, reservoirs, pump stations, bulk main, treatment and water source) also need to be estimated based on the proposals for extending these services).

Finally capital costs need to be estimated for the rehabilitation of internal, connector and bulk infrastructure.

These figures then need to be totalled for each of the settlements according to the tables below.

Description		1. Internal infrastructure	2. Connector infrastructure	3. Bulk infrastructure	4. Other	5. Total (1+2+3+4)	6. Cost per connection (item 5 divided by number of new connections being provided,R)
Aurora	2009						
	Record	2008					
		2007					
		2006					
		2005					
		2004					
Dwarskersbos	2009						
	Record	2008					
		2007					
		2006					
		2005					
		2004					
Eendekuil	2009						
	Record	2008					
		2007					
		2006					
		2005					
		2004					
Piketberg	2009						
	Record	2008					
		2002					
		2001					
		2000					
		1999					
Porterville	2009						
	Record	2008					
		2007					
		2006					
		2005					
		2004					
Redelinghuys	2009						
	Record	2008					
		2007					
		2006					
		2005					
		2004					
Velddrif	2009						
	Record	2008					
		2007					
		2006					
		2005					
		2004					
Farmland	2009						
	Record	2008					
		2007					
		2006					
		2005					
		2004					

F.9.1.1.2 Sources of capital income: Water (R Million)

Once the total costs have been calculated, sources of income need to be found otherwise the planned projects remain a “wish list”. Sources of finance for infrastructure are referred to as capital income.

Description	2009	Record :				
		2008	2007	2006	2005	2004
Subsidies						
1. Housing				n.a.	n.a.	n.a.
2. CMIP				n.a.	n.a.	n.a.
3. CWSS (from DWAF)				n.a.	n.a.	n.a.
4. Sub total : subsidies				n.a.	n.a.	n.a.
Other income						
5. Other ad hoc grants which may become available				n.a.	n.a.	n.a.
6. Consumer payments				n.a.	n.a.	n.a.
7. Expenditure from current income				n.a.	n.a.	n.a.
8. Sub total (5+6+7)				n.a.	n.a.	n.a.
Loans						
9. Capital development fund				n.a.	n.a.	n.a.
10. External				n.a.	n.a.	n.a.
11. Sub total: loans				n.a.	n.a.	n.a.
12. Total (4+8+11)				n.a.	n.a.	n.a.

F.9.1.1.3 Sources of capital income: Sanitation (R Million)

Description	2009	Record :				
		2008	2007	2006	2005	2004
Subsidies						
1. Housing				n.a.	n.a.	n.a.
2. CMIP				n.a.	n.a.	n.a.
3. CWSS (from DWAF)				n.a.	n.a.	n.a.
4. Sub total : subsidies				n.a.	n.a.	n.a.
Other income						
5. Other ad hoc grants which may become available				n.a.	n.a.	n.a.
6. Consumer payments	9.228	8.431		n.a.	n.a.	n.a.
7. Expenditure from current income				n.a.	n.a.	n.a.
8. Sub total (5+6+7)	9.228	8.431		n.a.	n.a.	n.a.
Loans						
9. Capital development fund				n.a.	n.a.	n.a.
10. External				n.a.	n.a.	n.a.
11. Sub total: loans				n.a.	n.a.	n.a.
12. Total (4+8+11)				n.a.	n.a.	n.a.

F.9.1.2 Future trends and goals (Capital Funds)

F.9.1.2.1 (a) Capital expenditure (Budget) : Water

Description		1. Internal infrastructure	2. Connector infrastructure	3. Bulk infrastructure	4. Other	5. Total (1+2+3+4)	6. Cost per connection (item 5 divided by number of new connections being provided,R)
Aurora	2010						
	2011						
	2012						
	2013						
Dwarskersbos	2010						
	2011						
	2012						
	2013						
Eendekuil	2010						
	2011						
	2012						
	2013						
Piketberg	2010						
	2011						
	2012						
	2013						
Porterville	2010						
	2011						
	2012						
	2013						
Redelinghuys	2010						
	2011						
	2012						
	2013						
Velddrif	2010						
	2011						
	2012						
	2013						
Farmland	2010						
	2011						
	2012						
	2013						

(b) Capital expenditure (Backlogs) : Water (R Million)

There are currently an estimated 240 households in the rural areas that receive water services below RDP standards. The BM is committed to ensure that these households will receive at least basic services by 2013, depending on external funding.

BERGRIVIER MUNICIPALITY : WATER SERVICES DEVELOPMENT PLAN

Description		1. Internal infrastructure	2. Connector infrastructure	3. Bulk infrastructure	4. Other	5. Total (1+2+3+4)	6. Cost per connection (item 5 divided by number of new connections being provided,R)
Aurora	2010	0	0	0	0	0	N/A
	2011	0	0	0	0	0	N/A
	2012	0	0	0	0	0	N/A
	2013	0	0	0	0	0	N/A
Dwarskersbos	2010	0	0	0	0	0	N/A
	2011	0	0	0	0	0	N/A
	2012	0	0	0	0	0	N/A
	2013	0	0	0	0	0	N/A
Eendekuil	2010	0	0	0	0	0	N/A
	2011	0	0	0	0	0	N/A
	2012	0	0	0	0	0	N/A
	2013	0	0	0	0	0	N/A
Piketberg	2010	0	0	0	0	0	N/A
	2011	0	0	0	0	0	N/A
	2012	0	0	0	0	0	N/A
	2013	0	0	0	0	0	N/A
Porterville	2010	0	0	0	0	0	N/A
	2011	0	0	0	0	0	N/A
	2012	0	0	0	0	0	N/A
	2013	0	0	0	0	0	N/A
Redelinghuys	2010	0	0	0	0	0	N/A
	2011	0	0	0	0	0	N/A
	2012	0	0	0	0	0	N/A
	2013	0	0	0	0	0	N/A
Velddrif	2010	0	0	0	0	0	N/A
	2011	0	0	0	0	0	N/A
	2012	0	0	0	0	0	N/A
	2013	0	0	0	0	0	N/A
Farmland	2010	0.121	0.086	0.251	0	0.458	3820
	2011	0.061	0.043	0.125	0	0.229	3820
	2012	0.030	0.022	0.063	0	0.115	3820
	2013	0.030	0.022	0.063	0	0.115	3820

(a) Capital expenditure (Budget) : Sanitation (R Million)

Description		1. Internal infrastructure	2. Connector infrastructure	3. Bulk infrastructure	4. Other	5. Total (1+2+3+4)	6. Cost per connection (item 5 divided by number of new connections being provided,R)
Aurora	2010						
	2011						
	2012						
	2013						
Dwarskersbos	2010						
	2011						
	2012						

Description		1. Internal infrastructure	2. Connector infrastructure	3. Bulk infrastructure	4. Other	5. Total (1+2+3+4)	6. Cost per connection (item 5 divided by number of new connections being provided,R)
	2013						
Eendekuil	2010						
	2011						
	2012						
	2013						
Piketberg	2010						
	2011						
	2012						
	2013						
Porterville	2010						
	2011						
	2012						
	2013						
Redelinghuys	2010						
	2011						
	2012						
	2013						
Velddrif	2010						
	2011						
	2012						
	2013						
Farmland	2010						
	2011						
	2012						
	2013						

(b) **Capital expenditure (Backlogs) : Sanitation (R Million)**

There are currently an estimated 620 households in the rural areas that receive sanitation services below RDP standards. The BM is committed to ensure that these households will receive at least basic services by 2013.

Description		1. Internal infrastructure	2. Connector infrastructure	3. Bulk infrastructure	4. Other	5. Total (1+2+3+4)	6. Cost per connection (item 5 divided by number of new connections being provided,R)
Aurora	2010	0	0	0	0	0	N/A
	2011	0	0	0	0	0	N/A
	2012	0	0	0	0	0	N/A
	2013	0	0	0	0	0	N/A
Dwarskersbos	2010	0	0	0	0	0	N/A
	2011	0	0	0	0	0	N/A
	2012	0	0	0	0	0	N/A
	2013	0	0	0	0	0	N/A
Eendekuil	2010	0	0	0	0	0	N/A
	2011	0	0	0	0	0	N/A
	2012	0	0	0	0	0	N/A
	2013	0	0	0	0	0	N/A

BERGRIVIER MUNICIPALITY : WATER SERVICES DEVELOPMENT PLAN

Description		1. Internal infrastructure	2. Connector infrastructure	3. Bulk infrastructure	4. Other	5. Total (1+2+3+4)	6. Cost per connection (item 5 divided by number of new connections being provided,R)
Piketberg	2010	0.035	0.025	0.073	0	0.134	3820
	2011	0.035	0.025	0.073	0	0.134	3820
	2012	0.040	0.029	0.084	0	0.153	3820
	2013	0.040	0.029	0.084	0	0.153	3820
Porterville	2010	0	0	0	0	0	N/A
	2011	0	0	0	0	0	N/A
	2012	0	0	0	0	0	N/A
	2013	0	0	0	0	0	N/A
Redelinghuys	2010	0	0	0	0	0	N/A
	2011	0	0	0	0	0	N/A
	2012	0	0	0	0	0	N/A
	2013	0	0	0	0	0	N/A
Velddrif	2010	0.010	0.007	0.021	0	0.038	3820
	2011	0.010	0.007	0.021	0	0.038	3820
	2012	0.010	0.007	0.021	0	0.038	3820
	2013	0.010	0.007	0.021	0	0.038	3820
Farmland	2010	0.273	0.194	0.564	0	1.031	3820
	2011	0.237	0.169	0.491	0	0.898	3820
	2012	0.091	0.065	0.188	0	0.344	3820
	2013	0.025	0.018	0.052	0	0.096	3820

F.9.1.2.3 Sources of capital income: Water (R Million)

Description	2009	Record :				
		2008	2007	2006	2005	2004
Subsidies						
1. Housing						
2. MIG						
3. CWSS (from DWAF)						
4. Sub total : subsidies						
Other income						
5. Other ad hoc grants which may become available			0.147888			
6. Consumer payments	4.080	3.228				
7. Expenditure from current income Special internal funds			1.046976			
8. Sub total (5+6+7)	4.080	3.228				
Loans						
9. Capital development fund			2.756777			
10. External						
11. Sub total: loans						
12. Total (4+8+11)						

F.9.1.2.4 Sources of capital income: Sanitation (R Million)

Description	2009	Record :				
		2008	2007	2006	2005	2004
Subsidies						
1. Housing						
2. MIG						
3. CWSS (from DWAF)						
4. Sub total : subsidies						
Other income						
5. Other ad hoc grants which may become available		2.053472	0.232694			
6. Consumer payments						
7. Expenditure from current income Special internal funds						
8. Sub total (5+6+7)						
Loans						
9. Capital development fund						
10. External						
11. Sub total: loans						
12. Total (4+8+11)						

F.9.1.3 Strategic gap analysis (Capital funds)

One of the goals of the Sector is that all water services providers are accountable, cost-effective, efficient, and viable, and implement appropriate employment and gender equity policies.

The water services authority can influence the financial viability of water services and water services providers through the following mechanisms:

- Investment choices*
- Choices related to the use of the local government equitable share*
- Tariff policy and the setting of tariffs*
- Credit control policies and revenue management*
- The contract (service delivery agreement) between the water services authority and an external water services provider, specifically the service obligations and the financial conditions of the agreement.*

INDICATOR	BENCHMARK	MEANS OF VERIFICATION
FINANCIAL PERFORMANCE		
<ul style="list-style-type: none"> <i>Affordability. Outstanding debt for water and sanitation services for all consumers expressed as debtor days. (Note: this is also a measure of the efficiency of revenue collection).</i> 	<p><i>Less than 90 days.</i></p>	<p><i>Reported by WSA to National Treasury as weighted average for the WSA area. Annual financial audits of financial reporting by the auditor general.</i></p>

F.9.1.4 Implementation strategies (Capital funds)

F.9.2 Operating cost and income

F.9.2.1 Situation assessment (operating costs and income)

F.9.2.1.1 Operating costs: Water (R)

Description	2009	Record :				
		2008	2007	2006	2005	2004
1. Purchase of bulk water	3 224 000	2 665 000	2 339 933	2 220 663		
2. Production costs (raw water if from own sources)						
3. Production costs (treatment system)						
4. Operating costs (including overheads, salaries and wages, maintenance and depreciation)	11 976 000	7 071 000	6 690 067	5 721 337		
5. Finance charges						
6. Other						
7. Total costs (1+2+3+4+5+6)	15 200 000	9 736 000	9 030 000	7 942 000		
8. Operating costs per consumer unit (R)	1 297	831	771	678		

F.9.2.1.2 Operating costs: Sanitation

Description	2009	Record :				
		2008	2007	2006	2005	2004
1. Treatment costs						
2. Operating costs (including overheads, salaries and wages, monitoring, maintenance and depreciation)	5 427 000	4 764 000	4 158 000	3 842 000		
3. Finance charges						
4. Other						
5. Total costs (1+2+3+4)	5 427 000	4 764 000	4 158 000	3 842 000		
6. Operating costs per consumer unit (R)	463	406	355	328		

F.9.2.1.3 Operating income: Subsidies

Description	2009	Record :				
		2008	2007	2006	2005	2004
1. Equitable share allocation	5 127 791	3 813 828				
2. % Equitable Share allocated to basic water supply	31.2%	35.63%				
3. % Equitable Share allocated to basic sanitation provided	20%	20%				
4. % of other subsidies allocated to basic water supply	-	-				
5. % of other subsidies allocated to basic sanitation provision	-	-				

F.9.2.1.4 Operating income: Tariffs

The WSA needs to have an income or tariff policy stating from where it will raise recurrent income, how tariffs are to be set for different consumer groups and levels of service, and actual tariff levels. This should include a policy to provide free water for those who cannot afford a basic level of supply.

The tariff set by the WSA must:

- support the viability and sustainability of water services to the poor;
- discourage wasteful or inefficient water use;
- take into account the incremental cost that would be incurred to increase capacity of the water supply infrastructure to meet an incremental growth in demand.

Tariffs often comprise both a fixed charge and a variable charge based on consumption. The WSA's tariffs should be reported according to the following tables.

F.9.2.2 Future trends and goals (Operating cost and income)

F.9.2.2.1 Operating costs: Water

Description	2009	2010	2011	2012	2013
1. Purchase of bulk water	3 223 200	3 568 000	3 924 000	4 278 000	4 706 000
2. Production costs (raw water if from own sources)	-	-	-	-	-
3. Production costs (treatment system)	-	-	-	-	-
4. Operating costs (including overheads, salaries and wages, maintenance and depreciation)	11 976 000	13 174 000	14 491 000	15 940 000	17 534 000
5. Finance charges					
6. Other					
7. Total costs (1+2+3+4+5+6)	15 199 000	16 742 000	18 415 000	20 218 000	22 240 000
8. Operating costs per consumer unit	1 297	1 375	1 456	1 538	1 628

Operating costs: Sanitation

Description	2009	2010	2011	2012	2013
1. Treatment costs					
2. Operating costs (including overheads, salaries and wages, monitoring, maintenance and depreciation)					
3. Finance charges					
4. Other					
5. Total costs (1+2+3+4)	5 427 000	5 969 000	6 566 000	7 223 000	7 945 000
6. Operating costs per consumer unit	463	490	519	549	582

F.9.2.2.2 Operating income: Subsidies

Description	2009	2010	2011	2012	2013
1. Equitable share allocation	5 794 404	6 547 676	7 398 875	8 360 727	
2. % Equitable Share allocated to basic water supply	33%	34%	35%	35%	
3. % Equitable Share allocated to basic sanitation provided	20%	21%	23%	25%	
4. % of other subsidies allocated to basic water supply					
5. % of other subsidies allocated to basic sanitation provision					

F.9.2.2.3 Operating income: Tariff

F.9.2.3 Strategic gap analysis (Operating cost and income)

Adequate, but needs to be updated annually.

F.9.2.4 Implementation strategic (Operating cost and income)

Adequate.

F.9.3 Tariff and charges

F.9.3.1 Situation assessment (tariff and charges)

F.9.3.1.1 Fixed charges: Residential (per month) for water

Please note that in the case of free basic water supply, the amounts may be zero.

Description	2009	Record :				
		2008	2007	2006	2005	2004
1. Communal water supply	0	0	0	0	0	0
2. Controlled volume supply	0	0	0	0	0	0
3. Uncontrolled volume supply	0	0	0	0	0	0

F.9.3.1.2 Fixed charges: Residential (per month) for sanitation

Description	2009	Record :				
		2008	2007	2006	2005	2004
1. Consumer installations: VIP or equivalent	0	0	0	0	0	0
2. Consumer installations: Wet (septic tanks etc.)	81.65	76.75	72.15	67.82	63.75	59.92
3. Discharge to water treatment works (intermediate or full waterborne)	81.65	76.75	72.15	67.82	63.75	59.92

F.9.3.1.3 Volume charges or other charge mechanisms: Residential sanitation

Description	2009	Record :				
		2008	2007	2006	2005	2004
1. Consumer installations: VIP or equivalent	0	0	0	0	0	0
2. Consumer installations: Wet (septic tanks etc.)	0	0	0	0	0	0
3. Discharge to water treatment works (intermediate or full waterborne)	0	0	0	0	0	0

F.9.3.1.4 Block tariffs: Residential (R/kℓ) for water

Service Level	Block	Block definition	2009	Record :				
				2008	2007	2006	2005	2004
Communal Water Supply	1(a) Free Basic Water	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	1(b) Not Free Basic Water	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Controlled Volume Supply	1(a) Free Basic Water	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	1(b) Not Free Basic Water	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Uncontrolled Volume Supply	1(a) Free Basic Water	0-6	0	0	0	n.a.	n.a.	n.a.
	1(b) Not Free Basic Water	0-6	381	340	309	281	255	232
	2	7-20	768	686	624	567	515	469
	3	21-50	769	687	625	568	516	469
	4	51-100	885	790	718	653	594	540
	5	101-200	930	831	755	687	624	568
	6	201-1000	977	872	793	721	655	596
	7	1001-1500	831	742	675	613	557	507
	8	1501-2000	706	630	573	521	473	430
9	2001+	599	535	486	442	402	365	

It is strongly suggested that the first block to residential consumers be set to provide the first six kilolitres per month for free. This implies that either the equitable share is used to cover this cost, or higher consumption blocks are charged at a rate greater than the cost in order to generate a surplus to cross-subsidise consumers who use up to six kilolitres per month. The WSA must include a description as to how they will address this in such a way that sustainable services can be provided. This should include the costs of supplying each block (i.e. cost versus charge). This implies that:

- the first block costs more to provide than is being charged for, and
- the higher consumption blocks cost less to provide than is being charged for.

F.9.3.2 Future trends and goals (Tariff and charges)

F.9.3.2.1 Fixed charges: Residential (per month) for water

Description	2009	2010	2011	2012	2013
1. Communal water supply	0	0	0	0	0
2. Controlled volume supply	0	0	0	0	0
3. Uncontrolled volume supply	0	0	0	0	0

F.9.3.2.2 Fixed charges: Residential (per month) for sanitation

Description	2009	2010	2011	2012	2013
1. Consumer installations: VIP or equivalent	0	0	0	0	n.a
2. Consumer installations: Wet (septic tanks etc.)	81.65	86.55	93.04	100.48	108.50
3. Discharge to water treatment works (intermediate or full waterborne)	81.65	86.55	93.04	100.48	108.50

F.9.3.2.3 Volume charges or other charge mechanisms: Residential sanitation

Description	2009	2010	2011	2012	2013
1. Consumer installations: VIP or equivalent	0	0	0	0	0
2. Consumer installations: Wet (septic tanks etc.)	81.65	86.55	93.04	100.48	108.50
3. Discharge to water treatment works (intermediate or full waterborne)	81.65	86.55	93.04	100.48	108.50

F.9.3.2.4 Block tariffs: Residential (cent/kl) for water

Service Level	Block	Block definition	2009	2010	2011	2012	2013
Communal Water Supply	1(a) Free Basic Water	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	1(b) Not Free Basic Water	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Controlled Volume Supply	1(a) Free Basic Water	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	1(b) Not Free Basic Water	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

Service Level	Block	Block definition	2009	2010	2011	2012	2013
	3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Uncontrolled Volume Supply	1(a) Free Basic Water	0-6	0	0	0	0	0
	1(b) Not Free Basic Water	0-6	340	381	407	440	475
	2	7-20	686	768	822	888	959
	3	21-50	687	769	823	889	960
	4	51-100	790	885	947	1022	1104
	5	101-200	831	930	995	1075	1161
	6	201-1000	872	977	1045	1129	1219
	7	1001-1500	742	831	889	960	1037
	8	1501-2000	630	706	755	815	880
	9	2001+	535	599	640	692	747

F.9.3.3 Strategic gap analysis (Tariff and charges)

TARIFF INCREASES

Where current tariffs do not adequately cater for system rehabilitation and maintenance, then tariffs will need to be increased appropriately.

SPECIAL TARIFFS

Water services authorities may implement special tariffs during periods of water restrictions to reduce water use to within sustainable levels.

F.9.3.4 Implementation strategies (Tariff and charges)

F.9.4 **Free basic water**

F.9.4.1 **Situation assessment (Free basic water)**

F.9.4.1.1 **Subsidy targeting approach for free basic water**

Subsidy targeting approach	Percentage of households targeted
1. Rising block tariff	100 %
2. Service level targeting	n.a.
3. Credits to water account	n.a.
4. Other	n.a.

F.9.4.2 **Future trends and goals (Free basic water)**

F.9.4.2.1 **Subsidy targeting approach for free basic water**

Subsidy targeting approach	Percentage of households targeted
1. Rising block tariff	
2. Service level targeting	
3. Credits to water account	
4. Other	

F.9.4.3 **Strategic gap analysis (Free basic water)**

Cross-subsidies

Tariffs shall support the viability and sustainability of water supply services to the poor through cross-subsidies (where feasible) and discourage wasteful or inefficient use.

F.9.4.4 **Implementation strategies (free basic water)**

F.9.5 **Charges and block tariffs**

F.9.5.1 **Situation assessment (Charges and block tariffs)**

F.9.5.1.1 **Fixed charges and block tariffs: Industrial for water (per kℓ)**

Description	Block definition	2009	Record :				
			2008	2007	2006	2005	2004
1. Fixed monthly charge	0-30 000	n.a	n.a	n.a	n.a	n.a	n.a
2. Volume charge	0-30 000	n.a	n.a	n.a	n.a.	n.a.	n.a.
3.	>30 000	n.a	n.a	n.a	n.a.	n.a.	n.a.

F.9.5.1.2 Fixed charges and block tariffs: Industrial for wastewater (per month)

Description	Block definition	2009	Record :				
			2008	2007	2006	2005	2004
1. Fixed monthly charge	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2. Volume charge	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

F.9.5.1.3 Fixed charges and block tariffs: Commercial for water (per kℓ)

Description	Block definition	2009	Record :				
			2008	2007	2006	2005	2004
1. Fixed monthly charge	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2. Volume charge	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

F.9.5.1.4 Fixed charges and block tariffs: Commercial for wastewater (per month)

Description	Block definition	2009	Record :				
			2008	2007	2006	2005	2004
1. Fixed monthly charge	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2. Volume charge	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

F.9.5.1.5 Fixed charges and block tariffs: Other for water

Description	Block definition	2009	Record :				
			2008	2007	2006	2005	2004
1. Fixed monthly charge	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2. Volume charge	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
a)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
b)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
c)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

F.9.5.1.6 Fixed charges and block tariffs: Other for sanitation

Description	Block definition	2009	Record :				
			2008	2007	2006	2005	2004
1. Fixed monthly charge	n.a.	81.65	76.75	72.15	67.82	63.75	59.92
2. Volume charge	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

F.9.5.2 Future trends and goals (Charges and block tariffs)

F.9.5.2.1 Fixed charges and block tariffs: Industrial for water

Description	Block definition	2009	2010	2011	2012	2013
1. Fixed monthly charge	0 - 3000	n.a	n.a	n.a	n.a	n.a
2. Volume charge	0 - 3000	n.a	n.a	n.a	n.a	n.a
3.	>30000	n.a	n.a	n.a	n.a	n.a

F.9.5.2.2 Fixed charges and block tariffs: Industrial for wastewater

Description	Block definition	2009	2010	2011	2012	2013
1. Fixed monthly charge	n.a	n.a	n.a	n.a	n.a	n.a
2. Volume charge	n.a	n.a	n.a	n.a	n.a	n.a
3.	n.a	n.a	n.a	n.a	n.a	n.a

F.9.5.2.3 Fixed charges and block tariffs: Commercial for water

Description	Block definition	2009	2010	2011	2012	2013
1. Fixed monthly charge	n.a	n.a	n.a	n.a	n.a	n.a
2. Volume charge	n.a	n.a	n.a	n.a	n.a	n.a

F.9.5.2.4 Fixed charges and block tariffs: Commercial for wastewater

Description	Block definition	2009	2010	2011	2012	2013
1. Fixed monthly charge	n.a	n.a	n.a	n.a	n.a	n.a
2. Volume charge	n.a	n.a	n.a	n.a	n.a	n.a

F.9.5.2.5 Fixed charges and block tariffs: Other for water

Description	Block definition	2009	2010	2011	2012	2013
1. Fixed monthly charge	n.a	n.a	n.a	n.a	n.a	n.a
2. Volume charge	n.a	n.a	n.a	n.a	n.a	n.a
a)	n.a	n.a	n.a	n.a	n.a	n.a
b)	n.a	n.a	n.a	n.a	n.a	n.a
c)	n.a	n.a	n.a	n.a	n.a	n.a

F.9.5.2.6 Fixed charges and block tariffs: Other for sanitation

Description	Block definition	2009	2010	2011	2012	2013
1. Fixed monthly charge	n.a	81.65	86.55	93.04	100.48	108.50
2. Volume charge	n.a	n.a.	n.a.	n.a.	n.a.	n.a

F.9.5.3 Strategic gap analysis (Charges and block tariffs)

F.9.5.4 Implementation strategies (Charges and block tariffs)

F.9.6 **Income and sales**

F.9.6.1 **Situation assessment (Income and sales)**

F.9.6.1.1 **Total income (and non-payment) and expenditure: Water (R)**

Non-payment is currently having a profound effect on the provision of water services. The WSA will need to determine the key factors causing non-payment and measures to address these factors. This needs to be done with reference to the section on affordability.

Description	2009	Record :				
		2008	2007	2006	2005	2004
1. Total income (billed income and subsidies)	n.a	n.a	n.a	n.a	n.a	n.a
2. Actual income received	n.a	n.a	n.a	n.a	n.a	n.a
3. % non-payment	n.a	n.a	n.a	n.a	n.a	n.a
4. Non-payment by residential consumers	n.a	n.a	n.a	n.a	n.a	n.a
5. Non-payment by commercial consumers	n.a	n.a	n.a	n.a	n.a	n.a
6. Non-payment by industrial consumers	n.a	n.a	n.a	n.a	n.a	n.a
7. Non-payment by other consumers	n.a	n.a	n.a	n.a	n.a	n.a
8. Total non-payment (4+5+6+7)	n.a	n.a	n.a	n.a	n.a	n.a
9. Operating expenditure	n.a	n.a	n.a	n.a	n.a	n.a
10. Capital expenditure	n.a	n.a	n.a	n.a	n.a	n.a
11. Total expenditure (9+10)	n.a	n.a	n.a	n.a	n.a	n.a
12. Equitable share allocated to water supply	n.a	n.a	n.a	n.a	n.a	n.a
13. Surplus (deficit) (2 minus 11)	n.a	n.a	n.a	n.a	n.a	n.a

F.9.6.1.2 **Total income (and non-payment) and expenditure: Sanitation**

Description	2009	Record :				
		2008	2007	2006	2005	2004
1. Total income (billed income and subsidies)	n.a	n.a	n.a	n.a	n.a	n.a
2. Actual income	n.a	n.a	n.a	n.a	n.a	n.a
3. % non-payment	n.a	n.a	n.a	n.a	n.a	n.a
4. Non-payment by residential consumers	n.a	n.a	n.a	n.a	n.a	n.a
5. Non-payment by commercial consumers	n.a	n.a	n.a	n.a	n.a	n.a
6. Non-payment by industrial consumers	n.a	n.a	n.a	n.a	n.a	n.a
7. Non-payment by other consumers	n.a	n.a	n.a	n.a	n.a	n.a
8. Total non-payment (4+5+6+7)	n.a	n.a	n.a	n.a	n.a	n.a
9. Operating expenditure	n.a	n.a	n.a	n.a	n.a	n.a
10. Capital expenditure	n.a	n.a	n.a	n.a	n.a	n.a
11. Total expenditure (9+10)	n.a	n.a	n.a	n.a	n.a	n.a
12. Surplus (deficit) (2 minus 11)	n.a	n.a	n.a	n.a	n.a	n.a

F.9.6.1.3 Sales arrangements

F.9.6.2 Future trends and goals (Income and sales)

F.9.6.2.1 Total income (and non-payment) and expenditure: Water

No relevant information is available. BM should record and monitor all parts of the cash flow.

F.9.6.2.2 Total income (and non-payment) and expenditure: Sanitation

No relevant information is available. BM should record and monitor all parts of the cash flow.

F.9.6.2.3 Sales arrangements

F.9.6.3 Strategic gap analysis (Income and sales)

Consumer friendly billing: Water services providers must present consumers with accounts that are clear and easy to understand. Wherever practical the account should be presented in the consumer's home language.

Water services authorities have the responsibility to develop a credit control policy. This policy must provide for credit control procedures which are fair and equitable, provide for warnings and adequate notice, provide for consumer representations, allow alternative payment arrangements, and set out a fair procedure that will be applied in the event of non-payment. Where a consumer continues to fail to pay for services provided after the application of such procedures and a fair warning, a municipality must be able to take actions that will limit its financial loss and promote good payment habits.

The following principles must be incorporated in the credit control policy:

- ***Compassion***
- ***Communication***
- ***Fair process***
- ***Warning***
- ***Restricting domestic connections***
- ***Tampering***
- ***Interference***
- ***Disconnecting water supply.***

F.9.6.4 Implementation strategies (Income and sales)

F.9.7 Metering and Billing Urban

F.9.7.1 Situation assessment (Metering and billing)

F.9.7.1.1 Metering and billing: Urban

All connections providing an uncontrolled volume of water supply shall be metered and tariffs shall be applied in proportion to water use.

All unrestricted water connections must be metered or controlled to a basic level. Where appropriate, water services providers should consider the benefits of offering households controlled flow connections (for example, yard tanks) that can provide a basic supply of water cost-effectively. Where pre-payment meters are installed, these must take into account the free basic water services policy and allow for access to a basic amount of water at zero tariff.

This section related to the water conservation/demand management section, the institutional and management section as well as the finance section.

Installing meters and implementing an adequate billing system is central to managing services effectively and building a relationship of understanding and trust between the provider and consumer. This type of information is important to be able to project income from tariffs and to adequately understand consumer patterns.

Description	2009	Record :				
		2008	2007	2006	2005	2004
1. % communal standpipes metered	-	-	-			
2. % communal standpipes metered (prepaid)	-	-	-			
3. % consumers billed monthly	100	100	100			
4. % consumers billed monthly						
5. % consumers meters read monthly	99	99	99			
6. % consumers consumption estimated	1	1	1			
7. No. billed consumer units/pay point	10 002	9850	9632			
8. No. prepaid consumer units/outlet	-	-	-			
9. No. of new meters installations	150	220				
10. % meters tested	1	1	1			
11. % meters replaced	2	2	2			

F.9.7.1.2 Metering and billing: Rural

Description	2009	Record :				
		2008	2007	2006	2005	2004
1. % communal standpipes metered	-	-	-			
2. % communal standpipes metered (prepaid)	-	-	-			
3. % consumers billed monthly	100	100	100			
4. % consumers billed monthly						
5. % consumers meters read monthly	99	99	99			
6. % consumers consumption estimated	1	1	1			
7. No. billed consumer units/pay point	15	15	15			
8. No. prepaid consumer units/outlet	-	-	-			
9. No. of new meters installations	-	-	-			

Description	2009	Record :				
		2008	2007	2006	2005	2004
10. % meters tested	-	-	-			
11. % meters replaced	-	-	-			

F.9.7.2 Future trends and goals (Metering and billing)

F.9.7.2.1 Metering and billing: Urban

Metering and billing system is adequate.

F.9.7.2.2 Metering and billing: Rural

Description	2009	2010	2011	2012	2013
1. % communal standpipes metered	-	-	-		
2. % communal standpipes metered (prepaid)	-	-	-		
3. % consumers billed monthly	100	100	100		
4. % consumers billed monthly					
5. % consumers meters read monthly	99	99	99		
6. % consumers consumption estimated	1	1	1		
7. No. billed consumer units/pay point	10 002	10 100	10 250		
8. No. prepaid consumer units/outlet	-	-	-		
9. No. of new meters installations					
10. % meters tested	1	1	1		
11. % meters replaced	2	1	1		

F.9.7.3 Strategic gap analysis (Metering and billing)

Metering and billing system is adequate.

F.9.7.4 Implementation strategies (Metering and billing)

Metering and billing system is adequate.

F.10 LIST OF PROJECTS

Identifying projects can only be done once the other components have been addressed.

When identifying and prioritising projects, emphasis must be placed on appropriate service level options and a progressive increase in service level coverage based on demand responsive criteria. It is important that the WSA has:

- a) Clear criteria for project selection;
- b) Engaged with communities concerning project prioritisation and selection;
- c) Based project selection on informed decision-making.

Project viability is a key criterion. This relates to:

- a technical solution with mixed service levels;
- Capital and operating cost;
- Tariff to be charged for each service level;
- Water services provider institutional arrangements to operate and maintain the services; and affordability and willingness of consumers to pay.

Once viable projects have been identified based on the above approach, it is necessary for these projects to be prioritised, based on stated criteria. A reasonable approach would be for projects to be identified for a three-year time horizon, with future infrastructure requirements based on capital allocation, project viability criteria and project prioritization criteria. A list of projects for the next financial year (i.e. for year 1) must be submitted as part of the WSDP. For the years thereafter, the projects to be implemented must be submitted together with the Water Services Audit.

F.10.1 Projects

F.10.2 Situation assessment (projects)

F.10.3 Annual water and sanitation projects list

Projects recorded in the table below refer to new infrastructure to be built.

The main source of financing is from the Regional Development Funds, the CMIP (Capital Municipal Infrastructure Projects) and Housing funds.

Sewage: List of Projects (sanitation)

Project Name	Status	Amount (R)	Funding Source	Year			
				09/10	10/11	11/12	12/13
Bergrivier: Various equipment	KATR0165	6 000	CR	6 000			
Velldrif: Pipes for sewer tankers	MATR0096	12 000	CR	12 000			
Porterville: Telemetry WWTW	MATR0097	35 000	CR	35 000			
Velldrif : Locking mechanisms – pump stations	MATR0098	50 000	CR	50 000			
Velldrif : Stand by sewer pumps	MATR0099	75 000	CR	75 000			
Piketberg: Chlorination contact tank	MATR0100	75 000	CR	75 000			
Piketberg: Concrete roof irrigation pump station	GEB0043	85 000	CR	85 000			

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Project Name	Status	Amount (R)	Funding Source	Year			
				09/10	10/11	11/12	12/13
Piketberg: Electrical switches	MATR0101	85 000	CR	85 000			
Velldrif: Telemetry on pump stations	MATR0102	120 000	CR	120 000			
Piketberg: Scrapers and pumping pipes at sedimentation bridge	MATR0103	120 000	CR	120 000			
Piketberg: Replace mixers ("roorders")	MATR0104	150 000	CR	150 000			
Piketberg: Stand by aerator and gear box	MATR0105	150 000	CR	150 000			
Eendekuil: Sewer main	RIOL0025	600 000	CR	600 000			
Piketberg: Sewer main 1 400 low cost units	RIOL0026	1 000 000	el	1 000 000			
Piketberg: Expansion WWTW 3MI	RIOL0027	2 500 000	el	2 500 000			
Velldrif: Upgrading of WWTW	RIOL0026	6 632 000	MIG	6 632 000			
Bergrivier: Various	Future	18 000	CR		6 000	6 000	6 000
Piketberg: Expansion to WWTW 3 MI	Future		CR		6 000 000	6 200 000	8 000 000 MIG
Piketberg: Bulk services 1 400 low cost units	Future		CR		250 000	400 000	100 000
Piketberg: Expand sludge dams	Future		CR		60 000	60 000	0
Piketberg: Design sewer module	Future		CR		0	35 000	0
Piketberg: Fence to dam at golf course	Future		CR		0	95 000	0
Redelinghuys: Septic tanks low cost units	Future		CR		50 000	50 000	50 000
Piketberg: Dry beds	Future		CR		0	0	270 000
Piketberg: Lawn mower WWTW	Future		CR				28 000
Velldrif: Telemetry pump stations	Future		CR		80 000	120 000	80 000
Dwarskersbos: Fencing of WWTW	Future		CR		0	0	200 000
Velldrif: Switchgear and pump stations	Future		CR		130 000	0	0
Velldrif: Sewer tanker pipes	Future		CR		12 000	14 000	14 000
Velldrif: Pipe cleaning equipment	Future		CR		0	15 000	15 000
Velldrif: Ugrading of WWTW	Future		MIG		8 087 000	9 727 000	0
Velldrif: Ugrading of WWTW	Future		EL		1 913 000	5 273 000	0
Velldrif: Irrigation at WWTW	Future		CR		0	20 000	0
Velldrif: Stand by sewer pumps	Future		CR		75 000	75 000	75 000
Velldrif: Ugrading of WWTW	Future		CR		0	0	0
Velldrif: Pump station locking mechanism	Future		CR		20 000	20 000	20 000
Velldrif: Closed sewer system Laaiplek Oos Str.	Future		CR		0	0	6 000 000

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Project Name	Status	Amount (R)	Funding Source	Year			
				09/10	10/11	11/12	12/13
Velddrif: Bicycles for pump station team	Future		CR		5 000	0	0
Velddrif: Replace CFP 3464 sewer tanker	Future		CR		0	1 300 000	0
Porterville: Sedimentation tank	Future		CR		0	0	1 400 000
Porterville: Dry beds	Future		CR		0	0	950 000
Porterville: Expand sludge dams	Future		CR		60 000	60 000	0
Porterville: Fencing to WWTW	Future		CR		0	150 000	50 000
Eendekuil: Sewer network					0	1 500 000	1 200 000
Porterville: Telemetry WWTW					0	75 000	45 000
Porterville: 300mm sewer Monte Bertha					0	150 000	1 400 000
Porterville: Irrigation pump					6 500	0	0
Other Sewer Master Plan items not yet included on budget	Future	-	Own Capital/ Budget	2009/2013			
Future totals					16 748 500	25 339 000	20 037 000

Water: List of Projects

Project Name	Status	Amount (R)	Funding Source	Year- Amount (R)			
				09/10	10/11	11/12	12/13
Bergrivier: Various equipment	KATR0170	6 000	CR	6 000			
Porterville: Replace FC pipe Basson Str	WATR0055	20 000	CR	20 000			
Porterville: Replace 50mm pipe at WWTW	WATR0063	35 000	CR	35 000			
Velddrif: Install air- and control valves -	MATR0106	35 000	CR	35 000			
Piketberg: Replace 50mm pipe Tuin Str 950m	WATR0064	40 000	CR	40 000			
Piketberg: Pressure reducing valves	MATR0107	42 000	CR	42 000			
Piketberg: Replace FC pipe Hoog Str 400m	WATR0056	45 000	CR	45 000			
Piketberg: Aluminium sulphate pump WTW	MATR0108	45 000	CR	45 000			
Piketberg: Lime dozing plant WTW	MATR0109	45 000	CR	45 000			
Piketberg: Pumps for Kloof Str booster	MATR0110	45 000	CR	45 000			
Porterville: Mag flow meters	MATR0111	45 000	CR	45 000			
Piketberg: Hour meters to WTW pumps	MATR0112	65 000	CR	65 000			
Porterville : Carbon dozing unit	MATR0113	65 000	CR	65 000			
Velddrif: Replace FC pipe Laaiplek	WATR0057	80 000	CR	80 000			
Piketberg: Upgrade raw water intake structure	WATR0058	150 000	CR	150 000			
Piketberg: Replace 75mm AC pipe N7 crossing	WATR0059	180 000	CR	180 000			
Piketberg: Soft starter unit water pumps	MATR0114	350 000	CR	350 000			
Aurora: Phase 1 network upgrade	WATR0060	550 000	CR	550 000			
Piketberg: Supply pipe 1400 low cost housing	WATR0061	1 800 000	EI	1 800 000			
Piketberg: Upgrade to WTW	WATR0062	2 000 000	EI	2 000 000			
Bergrivier: Various	Future	18 000	CR		6 000	6 000	6 000
Piketberg: Pre-paid water meters	Future		CR		0	0	7 000 000
Piketberg: Expansion to WW	Future		CR		3 200 000	6 500 000	1 173 000
Piketberg: Expansion to WW	Future		MIG		0	0	3 827 000
Piketberg: Bulk services 1 400 low cost units	Future		CR		400 000	250 000	200 000
Piketberg: Base radio – water treatment	Future		CR		45 000	0	0
Piketberg: Telemetry fountain supply	Future		CR		35 000	0	0
Piketberg: Fire hydrant signage	Future		CR		0	15 000	15 000
Piketberg: Nerina Str connection	Future		CR		35 000	0	0

BERGRIVIER MUNICIPALITY : WATER SERVICES DEVELOPMENT PLAN

Project Name	Status	Amount (R)	Funding Source	Year- Amount (R)			
				09/10	10/11	11/12	12/13
Piketberg: Replace AC pipe Hoog str.	Future		CR		45 000	45 000	0
Piketberg: Replace AC Pipe Tuin str	Future		CR		40 000	40 000	0
Redelinghuys: Replace 1980 Fiat tractor CBY 1399	Future		CR		0	300 000	0
Redelinghuys: Telemetry	Future		CR		45 000	0	0
Goedverwacht: Telemetry	Future		CR		85 000	0	0
Wittewater: Telemetry	Future		CR		65 000	0	0
Velddrif: Water pump	Future		CR		32 000	0	0
Velddrif: Replace AC pipes Laaiplek	Future		CR		80 000	100 000	25 000
Velddrif: Isolating valves	Future		CR		20 000	25 000	25 000
Velddrif: Noordhoek trickle feed water meters	Future		CR		40 000	50 000	50 000
Aurora: Network upgrade phase 2	Future		CR		600 000	650 000	700 000
Velddrif: Air- and control valves	Future		CR		0	35 000	35 000
Velddrif: 6MI reservoir	Future		CR		7 500 000	0	0
Porterville: Improve dam intake	Future		CR		0	65 000	0
Porterville: Water pump	Future		CR		35 000	0	0
Porterville: Lime storage at WTW	Future		CR			55 000	0
Porterville: Monte Bertha stand by pump	Future		CR		42 000	0	0
Porterville: Replace AC pipe Basson str	Future		CR		20 000	15 000	15 000
Porterville: Replace AC pipe WWTW	Future		CR		45 000	2 000	0
Porterville: Isolating valve marks	Future		CR		0	25 000	25 000
Porterville: Telemetry	Future		CR		60 000	0	60 000
Porterville: Source division works	Future		CR		500 000	1 400 000	0
Porterville: Enlarge storage dam	Future		CR		0	800 000	0
Porterville: Carbon dosing system	Future		CR		65 000	0	0
Porterville: Replace AC pipe Park str.	Future		CR		0	30 000	0
Porterville: Replace AC pipe Disa str	Future		CR		0	45 000	0
Porterville: Replace AC pipe Kraan str	Future		CR		0	0	60 000
Porterville: Replace AC pipe Frank str	Future		CR		0	45 000	0
Eendekuil: Kat river pipeline	Future		CR		750 000	450 000	0
Eendekuil: Replace AC pipe Van Niekerk str	Future		CR		50 000	0	0

BERGRIVIER MUNICIPALITY : WATER SERVICES DEVELOPMENT PLAN

Project Name	Status	Amount (R)	Funding Source	Year- Amount (R)			
				09/10	10/11	11/12	12/13
Eendekuil: Replace AC pipe Rossouw str	Future		CR		35 000	0	0
Eendekuil: Fencing to reservoirs	Future		CR		0	55 000	0
Other Water Master Plan items not yet included on budget	Future	-		2009/2013			
Future totals					14 257 000	10 997 000	13 285 000

F.10.4 WSA sustainability project list

Project name	Settlement type	Water/ sanitation	Key issues to be addressed	Amount	Funding source	Year
Retrofit projects						
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Area projects (where post 1994 schemes are grouped with pre-1994 schemes)						
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Rehabilitation projects						
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other sustainability projects (state)						
-	-	-	-	-	-	-
Description WSA capacity development	Key issues to be addressed			Amount	Funding source	Year
-	Urban	Water	n.a.	-	-	-

F.10.5 Future trends and goals (projects)

F.10.6 Annual water and sanitation project list

The BM needs to address needed water and sanitation projects as listed in Section F10.1.1

F.10.7 Strategic gap analysis (projects)

The BM needs to address needed water and sanitation backlogs as listed in Section F10.1.1

F.10.8 Implementation strategies (projects)

Implementation of projects as indicated in the complete project list, namely:

- Annual water and sanitation projects list (F.10.1.1.1)
- WSA sustainability project list (F.10.1.1.2)

Review investigative reports on infrastructure (water and sanitation projects) in Bergrivier area.

ID	Ref No.	Name	Comments	Status
1.		Water Master Plan	All items as detailed in the latest Water Master Plan must be scheduled as prioritized and as driven by the dynamics of changing demand.	
2.		Sewer Master Plan	All items as detailed in the latest Sewer Master Plan must be scheduled as prioritized and as driven by the dynamics of changing demand.	
3.				
4.				

The following is an abstract from the Bergrivier Municipality Annual Report for 2007/08 January 2009

Water challenges experienced:

- In Porterville the upgrading of the existing water networks and extension of the water purification plants;
- Identification of additional water sources in Porterville;
- The upgrading of the existing water network in Eendekuil (sourcing of external funds);
- Funding to construct another reservoir and purification works in Eendekuil;
- The upgrading of the existing network in Piketberg at an estimated R1.2 million;
- Upgrading of the water purification plans in Piketberg in order to address the growth expansion and provide capacity for the planned low cost

housing;

- Redelinghuys provision for the upgrade of the water purification plants;
- In the Goedverwacht mission station- upgrading of existing network, upgrading of their water purification plant, adequate metering, suitable management of the service accounts concluding a service level agreement between the Bergrivier Municipality and the two mission stations of Goedverwacht and Wittewater.
- Management and of the provision of telemetry in the two mission stations.

Sanitation challenges experienced:

- Install a new sewerage system in Eendekuil at an estimated cost of R6 million;
- The upgrading of the sewerage capacity for the low cost housing project in Porterville. The existing network is too small to carry the planned low cost housing project.
- Funding to construct a new water borne system in Redelinghuys to replace the existing septic tanks at an estimated cost of 5million ;
- Construct a new waste water purification plant in Redelinghuys at an estimated cost of R4 million;
- In Piketberg upgrading of the existing treatment plant at an estimated cost of R10 million;
- To upgrade the outfall line in Piketberg in order to accommodate the proposed low cost housing project of 81 houses at an estimated cost of R 4 million.
- In the Wittewater mission station funding is sought to construct a new sewerage system and purification plant at an estimated cost of R5 million;
- In the Goedverwacht mission station funding is sought to construct a new sewerage and purification plant at an estimated cost of R10 million.

BERGRIVIERSTREEK : HUIDIGE 10 JAAR - INFRASTRUKTUURPROJEKLYS

HERSIEN : April 2010

AREA	PROJEK BESKRYWING	BERAAMDE PROJEK KOSTE (KAPITAAL)
	<u>BERGRIVIER</u>	
	-	
Streek	Uitbreiding van Telemetrie stelsel	R 480 000
Landelik	Ondersoek na Watervoorsiening in Landelike Gebied	R 380 000
		R 860 000
	<u>EENDEKUIL</u>	
	-	
Eendekuil	Bou 500kl Reservoir.	R 1 500 000
Eendekuil	Hoof toevoer waterpyplyn	R 2 650 000
Eendekuil	Opgradering van riool pompstasie	R 700 000
	TOTAAL EENDEKUIL	R 4 850 000
	<u>AURORA</u>	
	-	
Aurora	Beplanning & Fase I : Oksidasiedamme	R 4 000 000
Aurora	Opgradering van water netwerk om druk te verhoog.	R 2 000 000
	TOTAAL AURORA	R 6 000 000

REFERENCES

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- Bergrivier Municipality Integrated Development Plan, 2009/2010.
- Bergrivier Municipality Spatial Development Framework, Rode & Associates, 2008.
- SA Census Data (2001).
- Strategic Framework for Water Services (water is life, sanitation is dignity). (September 2003).
- Typical Unit Cost for Water Services Development Projects, DWAF, 2003.
- Water Master Plan, CEs, 2005, updated 2007.
- Sewer Master Plan, CEs, 2005, amended 2006 and 2007.
- Bergrivier Municipality web site, active updates

