

## 4. SERVICE LEVEL PROFILE

Service levels currently differ across the ZDM, predominantly based on a rural/urban split. In general urban areas have water services equal to or higher than, and many rural areas have either no water services or these services do not meet, the compulsory national standards determined by the Minister of Water Affairs and Forestry in terms of Section 9(1)(a) of the Water Services Act, 1997 (Table 4a). The potential service levels for water include:

- Communal supply at the minimum prescribed levels listed – this service level is the ‘basic’ supply.
- Controlled volume supply – this would include yard tanks that are filled daily or low pressure connections either as yard or house connections.
- Uncontrolled volume supply – these are usually high-pressure connections either as yard taps or house connections.

The potential sanitation service levels include:

- Dry installations at the minimum prescribed levels listed – this usually comprises a ventilated improved pit (VIP) latrine that is the ‘basic’ supply.
- Wet installations – these are onsite waste “treatment” and would include septic tanks.
- Waterborne installations – these are connected to a wastewater treatment works (WWTW) either for the digester effluent only (intermediate) or for the entire wastewater flow (full).

**Table 4a: National standards for water services provision.**

<b>Water (Regulation 3)*</b>	<b>Sanitation (Regulation 4)*</b>
Minimum availability of 25l/capita/day or 6kl/household/month	A toilet which is: Safe, reliable, environmentally sound, easy to keep clean, provides privacy and protection against the weather, well ventilated, keeps smells to a minimum and prevents the entry and exit of flies and other disease carrying pests.
Minimum flow rate of 10l/minute	
Maximum walking distance of 200m to the nearest tap	
SABS Water quality standards for domestic water apply	
Guaranteed assurance of water for 98% of the year	

\*Government Regulation No. 501/2001

It is important for the WSA to have a service level policy. The concept of service levels relates to consumer options with regard to convenience, and hence the volume of water consumption and associated wastewater generated. This involves identifying the different levels of service that will be offered, and highlighting the capital and operating cost implications of each service level – the free basic water service component may be included. The key issue in preparing a service level policy is that higher than basic services should be provided only where households can afford these levels of service, due to the necessity of recovering the increased capital and operating and maintenance costs. While politically difficult, this is likely to be the only way in which sustainable services can be provided over the long term. There are numerous examples of unaffordable service levels being provided with catastrophic results for both households and municipalities. The following should be taken into account when formulating a service level policy:

- The types of service levels decided upon have a major impact on capital and operating costs and hence on the long-term viability of service provision. If service levels are set too high the consumers who

receive them will not be able to afford to pay for them and are likely to default on their payments that in turn impacts on the viability of the service provider.

- Service levels relate to the quantity of water used and thus there is an impact on the environment from which this water has to be abstracted and returned to.
- Risks of pollution associated with the various levels of services must be considered. Higher levels of service have higher risks of pollution.
- The size and density of the settlement should be taken into account when deciding levels of service. In general large settlements produce more waste and hence higher risks of pollution while pollution from smaller settlements is easier to manage.

The primary strategic objective in the ZDM is to provide improved quality of life and develop sustainability through access to water services. The key to this objective is to ensure an initial basic supply of water and sanitation to consumers, especially in light of the high poverty levels in the district that result in many consumers not being able to afford higher levels of supply. Consumer density is also a key factor in determining the cost effectiveness of service level options. However, finalising a service level policy and setting targets must be done in consultation with the public.

In addition to the national standards, two levels of water supply have been identified based on settlement type and a ZDM standard (Table 4b). It is interesting to note that only 3% of settlements (containing 33% of the population) have a water supply in excess of the ZDM standard. The areas suffering the most widespread hardship in regard to water supply are Abaqulusi, Nongoma and Ulundi LMs.

**Table 4b: ZDM standard service levels as per settlement classification.**

Settlement Classification	Assumed quantity (l/c/d)	Desired quantity (l/c/d)	Level of Service	Assumed service distance (m)
Urban	60	250	House connections	10
Rural	25	25	Standpipes	500

This WSDP primarily focuses on the supply of residential water services, however where information is available account has been taken of commercial and public institutions consumers. A summary of the residential water and sanitation consumers is given in Table 4c and Table 4d respectively. A more detailed look at each settlement type is given in the sections that follow. It is important to note that a consumer is by necessity a billable unit i.e. a household. However, although this is adequate for urban and rural house or yard connections, it does result in assumptions when related to communal rural supply. The objective is therefore to ensure equitable access to water services for each household rather than for each person. The following sections therefore deal with households as consumer units. With the assumption that all persons requiring water services are part of a household.

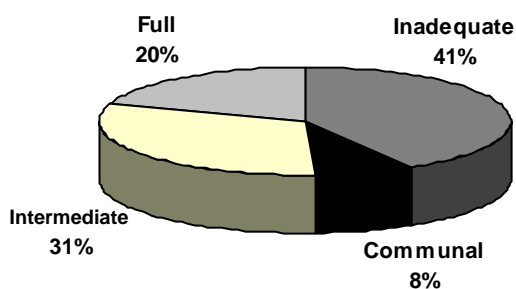
**Table 4c: Summary of the residential consumer units for water in the ZDM (based year 2003/4).**

Consumer units with:	2003/2004	2004/2005	2005/2006	2006/2007	2007/2008	2008/2009
None or inadequate	68,392					
Communal water supply	13,033					
Controlled volume supply	50,852					
Uncontrolled volume supply: yard tap or house connection	33,288					
<b>Total served</b>	<b>97,173</b>					
<b>Total consumers</b>	<b>165,565</b>					

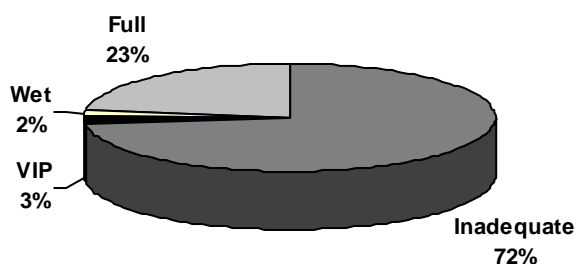
**Table 4d: Summary of the residential consumer units for sanitation in the ZDM (base year 2003/4).**

Consumer units with:	2003/2004	2004/2005	2005/2006	2006/2007	2007/2008	2008/2009
None or inadequate: Pit	120,796					
None or inadequate: Bucket	0					
Consumer installations: On site dry or equivalent	4,332					
Consumer installations: Wet	2,844					
Discharge to WTW	37,592					
<b>Total served</b>	<b>44,768</b>					
<b>Total consumers</b>	<b>165,564</b>					

**Water supply summary**



**Sanitation provision summary**



## 4.1 Residential consumer units for water: urban

Urban areas for the purposes of this WSDP include any former TLC areas or R293 proclaimed towns, as well as formal settlements where the erven are smaller than 2,500 m<sup>2</sup>. Details pertaining to the population, households and water service level of each of these settlements are given in the consumer profiles in Appendix 5. A summary of the urban consumers for water per service level is given in Table 4.1. Service roll out projections still need to be determined for individual years, however the projected service levels at year 2020 are included.

**Table 4.1: Residential consumer units for water supply: urban.**

<b>Consumer units with:</b>	<b>2003/2004</b>	<b>2004/2005</b>	<b>2005/2006</b>	<b>2006/2007</b>	<b>2007/2008</b>	<b>2008/2009</b>	<b>2020</b>
None or inadequate	0						0
Communal water supply	699						769
Controlled volume supply	10,668						11,735
Uncontrolled volume supply: yard tap or house connection	28,767						31,644
<b>Total served</b>	<b>40,135</b>						<b>44,148</b>
<b>Total consumers</b>	<b>40,135</b>						<b>44,148</b>

## 4.2 Residential consumer units for water: rural: dense

There are currently 64 communities within the ZDM that are classified as dense, however the projected population increase changes the number of dense settlements by the year 2020 to 92. The residential dense consumer units for water supply per service level are given in Table 4.2. Details pertaining to the population, households and water service level of each of these settlements are given in the consumer profiles in Appendix 5. Service roll out projections still need to be determined for individual years, however the projected service levels at year 2020 are included.

**Table 4.2: Residential consumer units for water supply: dense.**

<b>Consumer units with:</b>	<b>2003/2004</b>	<b>2004/2005</b>	<b>2005/2006</b>	<b>2006/2007</b>	<b>2007/2008</b>	<b>2008/2009</b>	<b>2020</b>
None or inadequate	10,278						0
Communal water supply	6,719						23,875
Controlled volume supply	10,488						17,423
Uncontrolled volume supply: yard tap or house connection	2,377						3,005
<b>Total served</b>	<b>19,584</b>						<b>44,304</b>
<b>Total consumers</b>	<b>29,862</b>						<b>44,304</b>

### 4.3 Residential consumer units for water: rural: village

There are currently 290 communities within the ZDM that are classified as villages, however the projected population increase changes the number of village settlements by the year 2020 to 325. This number includes the removal of those villages that are redefined as dense settlements and the incorporation of the scattered settlements that are redefined as villages. The residential village consumer units for water supply per service level are given in Table 4.3. Details pertaining to the population, households and water service level of each of these settlements are given in the consumer profiles in Appendix 5. Service roll out projections still need to be determined for individual years, however the projected service levels at year 2020 are included.

**Table 4.3: Residential consumer units for water supply: village.**

<b>Consumer units with:</b>	<b>2003/2004</b>	<b>2004/2005</b>	<b>2005/2006</b>	<b>2006/2007</b>	<b>2007/2008</b>	<b>2008/2009</b>	<b>2020</b>
None or inadequate	33,860						0
Communal water supply	3,330						40,444
Controlled volume supply	22,684						19,956
Uncontrolled volume supply: yard tap or house connection	1,854						1,646
<b>Total served</b>	<b>27,868</b>						<b>62,046</b>
<b>Total consumers</b>	<b>61,728</b>						<b>62,046</b>

#### 4.4 Residential consumer units for water: rural: scattered

There are currently 547 communities within the ZDM that are classified as scattered, however the projected population increase changes the number of scattered settlements by the year 2020 to 512. This number includes the removal of those scattered settlements that are redefined as village or dense settlements. The residential scattered consumer units for water supply per service level are given in Table 4.4. Details pertaining to the population, households and water service level of each of these settlements are given in the consumer profiles in Appendix 5. Service roll out projections still need to be determined for individual years, however the projected service levels at year 2020 are included.

**Table 4.4: Residential consumer units for water supply: scattered.**

Consumer units with:	2003/2004	2004/2005	2005/2006	2006/2007	2007/2008	2008/2009	2020
None or inadequate	16,197						0
Communal water supply	1,530						17,224
Controlled volume supply	5,789						5,454
Uncontrolled volume supply: yard tap or house connection	289						319
<b>Total served</b>	<b>7,609</b>						<b>22,998</b>
<b>Total consumers</b>	<b>23,806</b>						<b>22,998</b>

A large number of households located in these settlements currently rely on rudimentary water sources namely, hand pump equipped boreholes, springs (protected & unprotected), rivers and streams. A survival level of service, at 5 litres of potable water per person per day, will be supplied through the rudimentary programme to ensure that in the short-term all communities have access to potable water sources within 1,000 m of their homestead. Although this falls below the national standards, the ultimate objective is to obtain water services to the national basic standard and above. The rudimentary programme will enable the ZDM to spread funding for improved water services to a larger number of consumers.

## 4.5 Residential consumer units for water: rural: farmland

There are 106 communities within the ZDM that are classified as farmlands, and this does not change with the year 2020 projected population increase. The residential farmland consumer units for water supply per service level are given in Table 4.5. Details pertaining to the population, households and water service level of each of these settlements are given in the consumer profiles in Appendix 5. Service roll out projections still need to be determined for individual years, however the projected service levels at year 2020 are included.

**Table 4.5: Residential consumer units for water supply: farmland.**

<b>Consumer units with:</b>	<b>2003/2004</b>	<b>2004/2005</b>	<b>2005/2006</b>	<b>2006/2007</b>	<b>2007/2008</b>	<b>2008/2009</b>	<b>2020</b>
None or inadequate	8,056						0
Communal water supply	755						9,674
Controlled volume supply	1,222						1,343
Uncontrolled volume supply: yard tap or house connection	0						0
<b>Total served</b>	<b>1,977</b>						<b>11,018</b>
<b>Total consumers</b>	<b>10,033</b>						<b>11,018</b>



## 4.6 Residential consumer units for sanitation: urban

Urban areas for the purposes of this WSDP include any former TLC areas or R293 proclaimed towns, as well as formal settlements where the erven are smaller than 2,500 m<sup>2</sup>. Details pertaining to the population, households and water service level of each of these settlements are given in the consumer profiles in Appendix 5. A summary of the urban consumers for sanitation per service level is given in Table 4.6. Service roll out projections still need to be determined for individual years, however the projected service levels at year 2020 are included.

**Table 4.6: Residential consumer units for sanitation provision: urban.**

<b>Consumer units with:</b>	<b>2003/2004</b>	<b>2004/2005</b>	<b>2005/2006</b>	<b>2006/2007</b>	<b>2007/2008</b>	<b>2008/2009</b>	<b>2020</b>
None or inadequate: Pit	751						0
None or inadequate: Bucket	0						0
Consumer installations: On site dry or equivalent	0						826
Consumer installations: Wet	2,566						2,822
Discharge to WTW	36,818						40,500
<b>Total served</b>	<b>39,384</b>						<b>43,322</b>
<b>Total consumers</b>	<b>40,135</b>						<b>44,148</b>

## 4.7 Residential consumer units for sanitation: rural: dense

There are currently 64 communities within the ZDM that are classified as dense, however the projected population increase changes the number of dense settlements by the year 2020 to 92. The residential dense consumer units for sanitation provision per service level are given in Table 4.7. Details pertaining to the population, households and water service level of each of these settlements are given in the consumer profiles in Appendix 5. Service roll out projections still need to be determined for individual years, however the projected service levels at year 2020 are included.

**Table 4.7: Residential consumer units for sanitation provision: dense.**

<b>Consumer units with:</b>	<b>2003/2004</b>	<b>2004/2005</b>	<b>2005/2006</b>	<b>2006/2007</b>	<b>2007/2008</b>	<b>2008/2009</b>	<b>2020</b>
None or inadequate: Pit	28,799						0
None or inadequate: Bucket	0						0
Consumer installations: On site dry or equivalent	308						43,475
Consumer installations: Wet	0						0
Discharge to WTW	755						829
<b>Total served</b>	<b>1,063</b>						<b>44,304</b>
<b>Total consumers</b>	<b>29,862</b>						<b>44,304</b>

## 4.8 Residential consumer units for sanitation: rural: village

There are currently 290 communities within the ZDM that are classified as villages, however the projected population increase changes the number of village settlements by the year 2020 to 297. This number includes the removal of those villages that are redefined as dense settlements and the incorporation of the scattered settlements that are redefined as villages. The residential village consumer units for sanitation supply per service level are given in Table 4.8. Details pertaining to the population, households and water service level of each of these settlements are given in the consumer profiles in Appendix 5. Service roll out projections still need to be determined for individual years, however the projected service levels at year 2020 are included.

**Table 4.8: Residential consumer units for sanitation provision: village.**

<b>Consumer units with:</b>	<b>2003/2004</b>	<b>2004/2005</b>	<b>2005/2006</b>	<b>2006/2007</b>	<b>2007/2008</b>	<b>2008/2009</b>	<b>2020</b>
None or inadequate: Pit	59,674						0
None or inadequate: Bucket	0						60,534
Consumer installations: On site dry or equivalent	1,233						1,353
Consumer installations: Wet	821						158
Discharge to WTW	0						0
<b>Total served</b>	<b>2,054</b>						<b>1,512</b>
<b>Total consumers</b>	<b>61,728</b>						<b>62,046</b>

## 4.9 Residential consumer units for sanitation: rural: scattered

There are currently 547 communities within the ZDM that are classified as scattered, however the projected population increase changes the number of scattered settlements by the year 2020 to 512. This number includes the removal of those scattered settlements that are redefined as village or dense settlements. The residential scattered consumer units for sanitation provision per service level are given in Table 4.9. Details pertaining to the population, households and water service level of each of these settlements are given in the consumer profiles in Appendix 5. Service roll out projections still need to be determined for individual years, however the projected service levels at year 2020 are included.

**Table 4.9: Residential consumer units for sanitation provision: scattered.**

<b>Consumer units with:</b>	<b>2003/2004</b>	<b>2004/2005</b>	<b>2005/2006</b>	<b>2006/2007</b>	<b>2007/2008</b>	<b>2008/2009</b>	<b>2020</b>
None or inadequate: Pit	22,895						0
None or inadequate: Bucket	0						0
Consumer installations: On site dry or equivalent	612						22,670
Consumer installations: Wet	278						306
Discharge to WTW	20						22
<b>Total served</b>	<b>910</b>						<b>22,998</b>
<b>Total consumers</b>	<b>23,806</b>						<b>22,998</b>

#### 4.10 Residential consumer units for sanitation: rural: farmland

There are 106 communities within the ZDM that are classified as farmlands, and this does not change with the year 2020 projected population increase. The residential farmland consumer units for sanitation provision per service level are given in Table 4.10. Details pertaining to the population, households and water service level of each of these settlements are given in the consumer profiles in Appendix 5. Service roll out projections still need to be determined for individual years, however the projected service levels at year 2020 are included.

**Table 4.10: Residential consumer units for sanitation provision: farmland.**

<b>Consumer units with:</b>	<b>2003/2004</b>	<b>2004/2005</b>	<b>2005/2006</b>	<b>2006/2007</b>	<b>2007/2008</b>	<b>2008/2009</b>	<b>2020</b>
None or inadequate: Pit	10,030						0
None or inadequate: Bucket	0						0
Consumer installations: On site dry or equivalent	3						11,018
Consumer installations: Wet	0						0
Discharge to WTW	0						0
<b>Total served</b>	<b>3</b>						<b>11,018</b>
<b>Total consumers</b>	<b>10,033</b>						<b>11,018</b>

## 4.11 Public institutions and 'dry' industries: urban

Businesses and commercial consumers are located in the towns and the impact on the ZDM in terms of water services has been taken into account when considering the residential requirements for the urban areas. Details of the individual public institutions are given in the consumer profiles in Appendix 5. All these consumers obtain fully treated uncontrolled volumes of water. A list of the known urban public institutions is given in Table 4.11.

**Table 4.11: Public institution consumer units for water supply: urban.**

Public amenities consumer types	Time frame	No. of consumer units	No. of consumer units with access to:			
			None or inadequate	Communal supply	Controlled volume supply	Uncontrolled volume supply
Police stations	Prior 1	11	0	0	0	11
	Current	11	0	0	0	11
	5 years	11	0	0	0	11
Magistrate offices	Prior 1	0	0	0	0	0
	Current	0	0	0	0	0
	5 years	0	0	0	0	0
Businesses	Prior 1	Unknown	Unknown	Unknown	Unknown	Unknown
	Current	Unknown	Unknown	Unknown	Unknown	Unknown
	5 years	Unknown	Unknown	Unknown	Unknown	Unknown
"Dry" industries	Prior 1	Unknown	Unknown	Unknown	Unknown	Unknown
	Current	Unknown	Unknown	Unknown	Unknown	Unknown
	5 years	Unknown	Unknown	Unknown	Unknown	Unknown
Office buildings	Prior 1	Unknown	Unknown	Unknown	Unknown	Unknown
	Current	Unknown	Unknown	Unknown	Unknown	Unknown
	5 years	Unknown	Unknown	Unknown	Unknown	Unknown
Garages	Prior 1	Unknown	Unknown	Unknown	Unknown	Unknown
	Current	Unknown	Unknown	Unknown	Unknown	Unknown
	5 years	Unknown	Unknown	Unknown	Unknown	Unknown
Prisons	Prior 1	2	0	0	0	2
	Current	2	0	0	0	2
	5 years	2	0	0	0	2
Schools	Prior 1	33	0	0	0	33
	Current	33	0	0	0	33
	5 years	33	0	0	0	33
Hospitals	Prior 1	10	0	0	0	10
	Current	10	0	0	0	10
	5 years	10	0	0	0	10
Clinics	Prior 1	6	0	0	0	6
	Current	6	0	0	0	6
	5 years	6	0	0	0	6
Crèches	Prior 1	Unknown	Unknown	Unknown	Unknown	Unknown
	Current	Unknown	Unknown	Unknown	Unknown	Unknown
	5 years	Unknown	Unknown	Unknown	Unknown	Unknown
Municipal buildings	Prior 1	6	0	0	0	6
	Current	6	0	0	0	6
	5 years	6	0	0	0	6
<b>Total</b>	<b>Prior 1</b>	<b>68</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>68</b>
	<b>Current</b>	<b>68</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>68</b>
	<b>5 years</b>	<b>68</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>68</b>

In addition there are a further 14 mobile clinic points

## 4.12 Public institutions and 'dry' industries: rural

Businesses and commercial consumers are located in the towns and the impact on the ZDM in terms of water services has been taken into account when considering the residential requirements for the urban areas. Details of the individual public institutions are given in the consumer profiles in Appendix 5. A list of the known rural public institutions is given in Table 4.12.

**Table 4.12: Public institution consumer units for water supply: rural.**

Public amenities consumer types	Time frame	No. of consumer units	No. of consumer units with access to:			
			None or inadequate	Communal supply	Controlled volume supply	Uncontrolled volume supply
Police stations	Prior 1	3	0	0	3	0
	Current	3	0	0	3	0
	5 years	3	0	0	3	0
Magistrate offices	Prior 1	0	0	0	0	0
	Current	0	0	0	0	0
	5 years	0	0	0	0	0
Businesses	Prior 1	Unknown	Unknown	Unknown	Unknown	Unknown
	Current	Unknown	Unknown	Unknown	Unknown	Unknown
	5 years	Unknown	Unknown	Unknown	Unknown	Unknown
"Dry" industries	Prior 1	0	0	0	0	0
	Current	0	0	0	0	0
	5 years	0	0	0	0	0
Office buildings	Prior 1	0	0	0	0	0
	Current	0	0	0	0	0
	5 years	0	0	0	0	0
Garages	Prior 1	Unknown	Unknown	Unknown	Unknown	Unknown
	Current	Unknown	Unknown	Unknown	Unknown	Unknown
	5 years	Unknown	Unknown	Unknown	Unknown	Unknown
Prisons	Prior 1	0	0	0	0	0
	Current	0	0	0	0	0
	5 years	0	0	0	0	0
Schools	Prior 1	686	0	0	686	0
	Current	686	0	0	686	0
	5 years	686	0	0	686	0
Hospitals	Prior 1	8	0	0	8	0
	Current	8	0	0	8	0
	5 years	8	0	0	8	0
Clinics	Prior 1	44	0	0	44	0
	Current	44	0	0	44	0
	5 years	44	0	0	44	0
Crèches	Prior 1	Unknown	Unknown	Unknown	Unknown	Unknown
	Current	Unknown	Unknown	Unknown	Unknown	Unknown
	5 years	Unknown	Unknown	Unknown	Unknown	Unknown
Municipal buildings	Prior 1					
	Current					
	5 years					
<b>Total</b>	<b>Prior 1</b>	<b>741</b>	<b>0</b>	<b>0</b>	<b>741</b>	<b>0</b>
	<b>Current</b>	<b>741</b>	<b>0</b>	<b>0</b>	<b>741</b>	<b>0</b>
	<b>5 years</b>	<b>741</b>	<b>0</b>	<b>0</b>	<b>741</b>	<b>0</b>

### 4.13 Wet Industries: urban and rural

There is a weak industrial base within the region, therefore industrial water use has not been considered in this document. Further detail will be obtained in a future review of the WSDP to complete Table 4.13.

**Table 4.13: Wet industry consumer units for water supply: urban.**

List individual "wet" industries	Time frame	Monthly water use (kl)	Pressure (kPa)	Water quality				Reliability	Billing system (metered c/KI VAT) +
				Raw	Filtered	Chlorinated	Fully treated		
	2002/2003								
	2003/2004								
	5 years								
	2002/2003								
	2003/2004								
	5 years								
	2002/2003								
	2003/2004								
	5 years								
<b>Total</b>	<b>2002/2003</b>								
	<b>2003/2004</b>								
	<b>5 years</b>								



#### 4.14 'Raw' water consumers: urban and rural

There do not appear to be any raw water consumers in the ZDM, other than those not supplied with adequate water services i.e. the backlog. All water supplied is passed through a treatment facility.

**Table 4.14: Raw water consumer units for water supply.**

"Raw" water consumer	Time frame	Monthly water use (kl)	Pressure (kPa)	Water quality			Tariff (R/kl)	Reliability (inadequate adequate special treatment)	Billing system (none flat rate metered)
				Raw	Filter-ed	Other			
	Prior 1								
	Current								
	5 years								
Total	Prior 1								
	Current								
	5 years								

## 4.15 Industrial consumer units for sanitation: urban and rural

No industry discharges wastewater directly into the river system. All wastewater passes through the WWTWs prior to discharge at the requisite standards. However, detailed data on the effluent received from industrial consumers still needs to be obtained in order to complete Table 4.15. This will be completed in a subsequent review.

**Table 4.15: Industrial consumer units for sanitation provision.**

Industry	Time frame	Number of service units	Monthly waste water (kl)	Monthly sewage (kl)	Washing, leaches through storm water system (kl)	Total treated effluent (kl)	Total untreated effluent (kl)	Total return flow to river system (kl)
	Prior 1							
	Current							
	5 years							
<b>Total</b>	<b>Prior 1</b>							
	<b>Current</b>							
	<b>5 years</b>							

## 4.16 Industries and their permitted effluent releases

No industry discharges wastewater directly into the river system. All wastewater passes through the WWTWs, however details of the effluent are still required. Table 4.16 does not require completion at this stage.

**Table 4.16: Permitted industrial effluent releases.**

Industry	Time frame	Permitted volume (MI/yr)	Permitted effluent quality (units)	Constituent 1		Constituent 2		Constituent 3	
				Name		Name		Name	
				Permitted volume	Conc. limit	Permitted volume	Conc. limit	Permitted volume	Conc. limit
	Prior 1								
	Current								
	5 years								
Total	Prior 1								
	Current								
	5 years								