Water Services Local Regulation Case Study Report for the City of Cape Town

August 2011
# Contents

1 **Introduction**.................................................................................................................. 1  
   1.1 Aim of case study........................................................................................................... 1  
   1.2 Methodology .................................................................................................................. 1  
       1.2.1 Interviewees ............................................................................................................. 1  
   1.3 Risks to case study research and how these were mitigated ........................................... 1  

2 **Context and Background** ................................................................................................... 2  
   2.1 Contextual background .................................................................................................... 2  
   2.2 Institutional arrangements background ........................................................................... 2  
   2.3 WSA functions and outputs ............................................................................................. 3  
   2.4 WSA functions and outputs ............................................................................................. 5  
   2.5 Water and Sanitation: Strategic objectives ...................................................................... 5  
   2.6 Critical challenges .......................................................................................................... 6  
       2.6.1 Institutional Reform .................................................................................................. 8  
       2.6.2 Human Resources .................................................................................................. 8  
       2.6.3 Processes and Systems ......................................................................................... 8  

3 **Local Regulation** ................................................................................................................. 8  
   3.1 What do they understand local regulation to be? ............................................................. 8  
   3.2 Mechanisms for Local regulation ..................................................................................... 8  
       3.2.1 Establishment of by-laws ....................................................................................... 9  
       3.2.2 Consumer charter and customer satisfaction .......................................................... 9  
       3.2.3 Accountability and monitoring ............................................................................... 10  
       3.2.4 Economic Regulation ............................................................................................ 12  

4 **Effectiveness of Regulation** ................................................................................................ 12  
   4.1 By-laws ............................................................................................................................ 12  
       4.1.1 Consideration of DWA standards in drafting by-laws .............................................. 12  
   4.2 Economic regulation ......................................................................................................... 13  
       4.2.1 Accounting for water services .............................................................................. 14  
   4.3 Water quality monitoring ................................................................................................ 14  
   4.4 Managing external contractors ....................................................................................... 15  
       4.4.1 Lessons learnt from Zandvliet WWT Facility ......................................................... 15  
   4.5 Consumer charter and customer satisfaction ................................................................... 15  
   4.6 Special initiatives to promote education and awareness around regulation ................. 16  
   4.7 Overall comments on effectiveness ............................................................................... 18  

5 **Conclusion**.......................................................................................................................... 18  
   5.1 Lessons Learnt ............................................................................................................... 18
5.1.1 Has non-separation of WSA - WSP had an impact on the quality and efficiency of water services in CCT? 18
5.1.2 Factors influencing the rate and quality of water services 19
5.1.3 Regulation at the source 19
5.1.4 Education 19

5.2 Framework .............................................................................................................19
1 Introduction

1.1 Aim of case study
One of the key aims of the project is to understand and document current practises on local regulation by different types of municipalities with varying capacities and service delivery mechanisms. The aim of the case studies will be to understand the current practises of these municipalities in regulating water services. This report presents findings specific to the City of Cape Town.

1.2 Methodology
The methodology employed for this case study entailed conducting a review of background documentation (such as the Water Services Development Plan) and a focus group discussion with relevant officials from the City of Cape Town.

1.2.1 Interviewees
The following individuals were interviewed for this research (as a focus group):

<table>
<thead>
<tr>
<th>Name</th>
<th>Department</th>
<th>Designation</th>
<th>Date of Interview</th>
<th>Contact Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danie Klopper</td>
<td>Water and Sanitation – Water Demand Management</td>
<td>Head: Policy, Strategy and Regulation</td>
<td>26 November 2010</td>
<td>021 590 1488</td>
</tr>
<tr>
<td>Arne Singels</td>
<td>Water and Sanitation – Bulk Water</td>
<td>Specialist: Bulk Water</td>
<td>26 November 2010</td>
<td>021 487 2585</td>
</tr>
<tr>
<td>Bertus Saayman</td>
<td>Water and Sanitation – Finance and Commercial</td>
<td>Manager: Finance and Commercial</td>
<td>26 November 2010</td>
<td>021 514 4175</td>
</tr>
</tbody>
</table>

1.3 Risks to case study research and how these were mitigated
An initial risk associated with the case study included that only a handful of individuals were interviewed, therefore providing a limiting view of water and sanitation, particularly given the size of the City of Cape Town. To address this risk, a number of follow-up discussions and additional interviews were conducted. Furthermore, the city provided access to a number of useful resource documents to contribute towards this research.
2 Context and Background

This section provides an overview and background to the City of Cape Town with respect to water services.

2.1 Contextual background

The City of Cape Town (CCT) is one of six metropolitan municipalities in South Africa. It has an estimated population of over 3.6 million with over 900 000 households. Around 30% of the city’s population live in inadequate housing and depressed physical conditions.

In terms of service levels, all formal households have access to a metered water connection to the house or yard, with nearly all households having access to a flush toilet. All households receive the first 6kl for free. The first 4.2 litres of sewerage conveyance and treatment is free to all consumers per month. The City’s Indigent Policy allows for a R30 grant in account reduction per month to qualifying rate payers.

Informal settlements have access to a communal standpipe and water is provided for free. As at 30 June 2009, 4.7 households shared one toilet and 10.8 households shared a tap. The minimum standard for toilet access in informal settlements is at most 5 households to one toilet. However the City acknowledges that many toilet types can only sustain between 1 and 3 households and it is estimated that a further 30 000 households need to be serviced better with an additional 10 000 toilets required. The growing density of informal settlements and insufficient financial resources presents a challenge to the city in terms of providing adequate and sustainable water and sanitation access.

2.2 Institutional arrangements background

Following the first post-democracy restructuring process (during 1996/1997) to 2005, water and sanitation service provision to formal areas within the City were managed by six separate administrations. The Cape Metropolitan Council was one of the seven administrative councils at the time. The other administrative districts were: City of Cape Town, Tygerberg, Helderberg, Blaauwberg, Oostenberg and South Peninsula.

The new City of Cape Town and the Water and Sanitation Services department was formed with the amalgamation of the Cape Metropolitan Council and the 6 metropolitan local councils in December 2000. On 28 November 2001, Council authorized Water and Sanitation Services to operate as fully-fledged and functional internal business unit in order to ensure maximum independence and minimum constraints.

Water Service Provider (WSP) and Water Services Authority (WSA) functions have always been provided internally by the City (the WSA function in principle rests with the Executive Director: Utility Services) and no structures have been put in place by the WSA to independently regulate the WSP. There is thus no effective separation of functions between the WSA and the WSP. (The Water Dialogues: Cape Town Case Study, June 2009.) There is no service delivery agreement between WSA and WSP in place (WSDP, 2010). However, the WSDP (2010) mentions the separation of WSA/WSP powers and functions as one of its implementation strategies.

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1 This summary is based on: City of Cape Town Department Water and Sanitation, 2010. Service Delivery Budget Implementation Plan.
The diagram below provides an illustration of the organisational structure, should the WSA and WSP functions be separated.

**Figure 1 (Proposed) Water Service Institutional Arrangements**

![Diagram of organisational structure](source: WSDP (2010))

It is envisaged that in the new organisational structure there would be a clear separation between the WSA and WSP responsibilities, even though the City will continue to deliver water service internally. This relationship would be governed by a service delivery agreement. The WSP would be responsible for both bulk and retail water services, whilst the WSA would focus on its WSA role as well as the enforcement of bylaws.

### 2.3 WSA functions and outputs

The WSA roles and responsibilities and major functions, as detailed in the WSDP are shown below. (Y= Yes, N= No, I= insufficient / inadequate, NA= Not applicable). The major issue is staff capacity constraints.

**Table 2: WSA functions and outputs**

<table>
<thead>
<tr>
<th>Resources available to perform the function</th>
<th>Budget</th>
<th>Bylaws</th>
<th>Infrastructure</th>
<th>Personnel</th>
<th>If no by when?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indigent Policy</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td>Updated annually</td>
</tr>
<tr>
<td>Resources available to perform the function</td>
<td>Budget</td>
<td>Bylaws</td>
<td>Infrastructure</td>
<td>Personnel</td>
<td>If no by when?</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>--------</td>
<td>--------</td>
<td>----------------</td>
<td>-----------</td>
<td>----------------</td>
</tr>
<tr>
<td>Free basic water policy (including equitable share)</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free basic sanitation policy</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procurement Policy</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Credit Control and debt Collection Policy</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td>Updated annually</td>
</tr>
<tr>
<td>Regulation and Tariffs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Services bylaws with conditions as required by the Water Services Act</td>
<td>Y</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanisms to ensure compliance with bylaws</td>
<td>N</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tariff structure</td>
<td>Y</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tariffs promulgated</td>
<td>Y</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infrastructure development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanisms to undertake project feasibility studies</td>
<td>Y</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criteria for prioritising projects</td>
<td>Y</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanisms to assess and approve project business plans</td>
<td>Y</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanisms for selecting, contracting, managing and monitoring implementing</td>
<td>Y</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanisms to monitor project implementation</td>
<td>Y</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water conservation and demand management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water conservation and demand management strategy</td>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance management and monitoring</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance management systems</td>
<td>Y</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Service monitoring and evaluation system</td>
<td>Y</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WSDP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WSDP information system</td>
<td>I</td>
<td>NA</td>
<td>I</td>
<td>I</td>
<td>2009/10</td>
</tr>
<tr>
<td>Mechanisms for stakeholder participation</td>
<td>Y</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanisms to monitor and report on WSDP implementation</td>
<td>Y</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WSP institutional arrangements</td>
<td>Y</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criteria to select appropriate WSPs</td>
<td>Y</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mechanisms to contract, manage and monitor WSPs</td>
<td>Y</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
From a policy perspective the CCT is compliant and has indicated that it has budget allocated to most of its functional areas where this is considered necessary. The CCT views insufficient capacity as its major challenge, especially in the area of by-law enforcement and WSDP information systems.

In response to this the City has identified key skills required through a capacity needs assessment and has further identified its training needs. The City allocated a budget of R500,000 towards capacity building with the intention of having its training programme implemented during the course of 2009/10 financial year. This City also updates its workplace skills plan annually. In addition the department envisions taking a multi-pronged approach to addressing its capacity challenges including training and up-skilling of existing staff, headhunting capacity for high skilled posts and introducing a mentoring or traineeship programme for students and graduates.

### 2.4 WSA functions and outputs

The internal Water and Sanitation Department within the City of Cape Town is the retail water, sanitation, bulk water, and bulk sanitation provider. Some support functions are provided by support services agents. These contracts are for the wastewater treatment works at Zandvliet and meter reading in specific areas.

There has been a significant loss of staff as part of the City’s strategy to reduce the staff levels through natural attrition. For sanitation staff, staff capacity at the Wastewater Treatment Branch is a critical issue as staff levels have reduced from 449 in December 1997 to 279 in March 2007 – almost a 38% reduction. The WSDP highlights the urgent need to attract, develop and retain skilled staff in Water and Sanitation Services.

### 2.5 Water and Sanitation: Strategic objectives

The strategic objectives of the City of Cape Town’s Water and Sanitation Department provide some indication of the priorities in the short-medium term. These speak to aspects of water quality, operational efficiency, improving access levels and financial viability. These objectives are listed below:

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2 The Department also provides bulk water to Drakenstein and Stellenbosch.

To implement ISO 9001 for all our services in the next five years (2015/16);
To achieve Green Drop status for 60% of the waste water treatment plants by (2015/16);
To achieve 95% waste water effluent quality;
To ensure the presence and dominance in Africa of the water, waste water and air pollution testing services;
To reduce unaccounted for water to 15% in the next five years;
To provide basic or emergency sanitation services to all residents to Cape Town City by 2015/16;
To provide basic water to all residents in the city by 2015/16;
To achieve 90% customer satisfaction levels in all our service by 2015/16;
To establish an efficient and effective asset management programme for the Department 2011/12;
To be the reference City for water matters in the country;
To grow the training school and achieve SETA accreditation for the training modules (e.g. process controllers, artisans) by 2012/13;
To minimise river systems pollution by reducing sewage overflows by 20% by 2015/16;
To improve revenue collection to 96% by 2015/16;
To construct an office block for the department by 2015/16;
To be information efficient by 2012/13;
To improve security of supply for water systems to 120% of average demand by 2016/17 in all areas;
To increase the effluent re-use by 15% in 2015/16;
To roll out automation and remote control pilots on treatments and pump stations.

The strategic objectives of the department are heavily focused on compliance with national standards and the provision of basic services. The objectives above largely focus on outputs (for example delivery targets) and inputs (for example revenue collection and training of staff), with a much smaller focus on outcomes. Of note is the lack of reference to local regulation (for example by-law performance). The objectives reflect an intention to significantly improve the operational efficiency and effectiveness of the WSA, but the lack of emphasis on consumer regulation represents a gap.

2.6 Critical challenges

Cape Town Water Services faces a number of critical challenges which can be clustered into four categories, discussed below.4

Financial perspective

From a financial perspective the City has indicated that insufficiency of funding represents a challenge, especially since water and sanitation delivery has high financial requirements both on the operating and capital account. The recent economic downturn has also had a negative impact financially. There is always a need to make trade offs about where money will be channelled and meeting basic delivery targets and new infrastructure tends to be prioritised over repair to existing infrastructure. In recent years the CCT has increased its investment in replacement and repair of infrastructure but indications are that significant investment is required in future to

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adequately maintain existing networks. In terms of sustaining the service much of this hinges on the revenue base of the City and the ability of the City to collect revenue from consumers to cover the costs of the service as user tariffs are the main revenue source for the department. The City therefore also needs to ensure that it has an accurate sense of the costs for delivering water and sanitation and that its tariffs are set at appropriate levels to meet these costs. In summary the main financial challenges identified are:

- Sustainability of the service
- Cost recovery
- High financial requirements
- High debt due to non-payment

**Customer perspective**

From a customer perspective the city’s main challenge is increasing the delivery water and sanitation in response to the growing population – particularly the growing number of urban poor. This factor, coupled with increased economic development over the last decade has increased the demand for services.

Sanitation poses a particular challenge in informal settlements due to the density of these sites which can make installation and maintenance difficult. The city is also tasked with providing free basic services to the poor. With tariffs being the main revenue source, cross-subsidisation is necessary. However there is a need to ensure that the service remains affordable for all households as this has a bearing on payment rates and revenue collection.

- Provide basic services expansion
- Eradicate sanitation backlogs
- Provide affordable service

**Business process perspective**

In terms of improving business processes, water demand management is critical to the CCT and the implementation of the Water Demand Management strategy needs to be intensified. Furthermore meeting water quality and waste water quality standards is high on the agenda of the department. As discussed earlier, backlog eradication is an on-going task given the steady increase in the number of households and in particular the increase in informal households requiring services. Investments in new infrastructure have to be balanced with maintenance of existing infrastructure and water networks. In summary the challenges are to:

- Achieve water demand targets
- Meet wastewater effluent standards
- Provide infrastructure to meet City development/growth needs
- Maintenance of infrastructure to sustain operation

**Organisation and Learning perspective (internal)**

Institutionally the City has yet to implement a Council decision to separate the WSA and WSP functions. It is not clear that the implementation hereof will necessarily result in improved service delivery, but the city has identified the need to improve its institutional arrangements. In light of capacity constraints faced by the department, significantly more needs to be done to retain existing skills, fill key posts and ensure on-going training of current staff and the implementation of processes to attract new staff in future (such as mentoring or learnerships). Human resources development is seen as critical to addressing the department’s strategic objectives and to increasing its performance. The internal challenges are therefore to:
- Establish effective institutional arrangement
- Sufficient staff resourcing, skills retention and development
- Increase performance and efficiency

### 2.6.1 Institutional Reform

According to the City’s WSDP (2010), the City is looking at separating the service authority and service provision function to establish a municipal entity. At the moment, there is no service delivery agreement in place and the council decision to institute this separation has not been implemented. Part of the reasons for this include that the current model is working and there is some debate as to whether or not the separation of the WSA and WSP will indeed result in improved service delivery. There also seems to be concerns that institutional re-organisation may prove disruptive.

### 2.6.2 Human Resources

The lack of staff capacity in key areas such as Finance, technical and project management is hampering delivery. The city’s main goals are to not only attract the necessary skills but also to invest in retention strategies for staff.

### 2.6.3 Processes and Systems

Processes and systems to support service delivery need improvement. To enhance processes and systems and promote a world class status for the Water and Sanitation Services Department, it is intended that all branches achieve ISO 9001:2000 accreditation. There is a certification study to access the readiness of the Water and Sanitation for ISO 9001 certification.

### 3 Local Regulation

#### 3.1 What do they understand local regulation to be?

The officials interviewed referred to the Strategic Framework for Water Services (2003) and the Water Act (1997) when asked about how they understand regulation. They expressed a clear and comprehensive understanding of what regulation is, why it should take place and the legal and policy requirements placed on the metro in this regard. Specific mention was made of the establishing the appropriate mechanisms for regulation including developing and enforcing by-laws, having a consumer charter in place and ensuring regular reporting to DWAF as the national regulator.

The officials interviewed indicated that they “try to comply and improve” wherever possible but acknowledged that the City of Cape Town is not complying with the legal requirement to separate the water services authority and water services provider functions. At present the City has a single department: Water and Sanitation, which is responsible for both the regulation and provision of water services, with no institutional or financial separation of functions.

#### 3.2 Mechanisms for Local regulation

As mentioned earlier, there is no separation between WSA and WSP within the City of Cape Town. However this is not to say that there is no regulation taking place. Regulatory mechanisms do exist and there are a number of internal processes in place designed to ensure a chain of accountability for the efficiency and quality of water services delivery. This section provides some insight into some of these mechanisms.
3.2.1 Establishment of by-laws

Some of the primary regulatory instruments in place are the city’s by-laws. The bylaws affecting water services are shown in the table below.

*Table 3: Bylaws affecting water services*

<table>
<thead>
<tr>
<th>By-law</th>
<th>Date promulgated</th>
<th>Short Description</th>
<th>Effect on Water Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>1 September 2006</td>
<td>Updated and accepted by Council in Nov 2010 and to be promulgated by Province in Jan 2011</td>
<td>To control and regulate water services in the City</td>
</tr>
<tr>
<td>Wastewater and Industrial Effluent</td>
<td>1 September 2006</td>
<td>Currently being updated.</td>
<td>To control and regulate sewerage and industrial effluent and discharges</td>
</tr>
<tr>
<td>Credit Control and Debt Collection</td>
<td>Update still in draft form. (Existing policy dated June 2004)</td>
<td>To give effect to the Council’s credit control and debt collection policy, its implementation and enforcement, as required by Section 98 of the Municipal Systems Act, 32 of 2000, and to give effect to the duty imposed by Section 96 of the Municipal Systems Act to collect all money that is due and payable to the Council.</td>
<td>Water Services is more financially sustainable.</td>
</tr>
<tr>
<td>By-law relating to Stormwater Management</td>
<td>23 September 2005</td>
<td>To provide for the regulation of stormwater management and to regulate activities which may have a detrimental effect on the development, operation or maintenance of the stormwater system</td>
<td>More effective management of the discharge of stormwater by users</td>
</tr>
<tr>
<td>Treated Effluent</td>
<td>30 July 2010</td>
<td>To control and regulate the use of treated effluent in the City</td>
<td>More effective management of the use of treated effluent by users</td>
</tr>
</tbody>
</table>

*Source: WSDP (2010)*

While these by-laws are in place, the City of Cape Town faces challenges with respect to monitoring compliance with and enforcing contraventions of these bylaws due to the fact that the City does not have the capacity to ensure enforcement.

3.2.2 Consumer charter and customer satisfaction

Many departments within the public sector have adopted the model of instituting citizens’ Charter as a means of setting norms and parameters of public service. The intention is to make service delivery more outward-looking by enforcing accountability and efficiency of government whilst bolstering public participation and empowerment. Regulation at the level of the end consumer is even more important in a context where no formal separation of the WSA and WSP is evident. The Water and Sanitation Department has a Consumer Charter (2006/07) in place and the department is in the process of updating this. The website of the department also makes reference to a vision for water services which includes specific delivery targets.

A consumer satisfaction survey has been conducted by the Department of Water and Sanitation Services on an annual basis since 2002 (except for 2005). The surveys
sometimes focus on targeted neighbourhoods and specific functional areas for example sanitation delivery in informal settlements.

The City of Cape Town also conducts an Annual Customer Satisfaction Survey for Residents and Businesses. This survey covers a representative sample of residents and businesses and covers a broad spectrum of functional areas, including water and sanitation.

The City of Cape Town has developed a set of Service Standards for Water and Sanitation.

### 3.2.3 Accountability and monitoring

The officials interviewed expressed confidence in the city’s various mechanisms for accountability and monitoring of progress, as implemented through the performance management processes of the city. These processes include the following:

**Service Delivery and Budget Implementation Plans (SDBIP)**

The SDBIPs are detailed plans approved by the Mayor for implementing the municipality’s delivery of municipal services and its annual budget. Each department within the city has an SDBIP in place and the plans generally include the following:

- Monthly projections
- Revenue to be collected by source
- Operating and capital expenditure by vote
- Service delivery targets and performance indicators for each quarter
- Any other matters prescribed

The Executive Mayor is expected to approve the SDBIP within 28 days after the approval of the budget. In addition the Executive Mayor must ensure that the revenue and expenditure projections for each month and the service delivery targets and performance indicators as set out in the SDBIP are made public within 14 days after their approval.\(^5\)

The Department of Water and Sanitation’s SDBIP would have some linkage to the Water Service Development Plan (WSDP) prepared by the department and therefore serves as the main monitoring instruments. The SDBIP for the department includes performance indicators and targets which speak to functional areas such as:

- Providing universal access to water services
- Natural resource conservation
- Effective management of resources and infrastructure
- Ensuring enhanced service delivery with efficient institutional arrangements
- Management of key financial areas such as income control, cash flow, indigent support, asset and risk management

Water and Sanitation has eight branches which reports to the Director for Water and Sanitation. Each branch is guided by the SDBIP of the department. The eight branches are:

1. Bulk Water
2. Wastewater

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3. Reticulation
4. Finance and Commercial
5. Scientific Services
6. Engineering and Asset Management
7. Water Demand Management and Strategy
8. Support Services

The Water and Sanitation Department Director reports to the Executive Director: Utility Services. The WSDP is also an instrument for reporting on historic results and trends and achievement against targets.

**Executive Director’s scorecard**

The Executive Director for Utility Services (under which Water and Sanitation resides) reports to the City Manager and has to meet targets and objectives in line with a) his performance agreement and b) his performance scorecard. He/She is held accountable for delivery against these targets during the review processes held throughout the year. The Executive Director: Utility Services performance scorecard covers the following key performance areas:

- Providing universal access to basic services
- Natural resource conservation
- Effective management of infrastructure
- Management of key financial areas
- Planning, audits and spending on operating account
- Corporate indicators including organisational culture measures and satisfaction levels

From a political point of view, the Executive Director Utility Services is answerable to the Utility Services Portfolio Committee. All reports are sent to the Utility Services Portfolio Committee, then to Mayco (the Mayoral Committee comprising the Chairpersons of the various Portfolio Committees), then to full Council.

The scorecards are directly linked to the city’s performance management system which includes incentives for good performance. The targets and goals contained in the SDBIP and scorecards ensure that individuals as well as the department as a whole is held accountable for the quality of water services delivered. In some ways this represents a set of internal self-regulating arrangements.

When probed about the effectiveness of the SDBIPs and the manner in which it is implemented, city officials commented that the system works well as it creates a link between the priority, the budget available and the monitoring of the implementation with reporting to the political and administrative leadership. It was further added that in the City of Cape Town a culture of enforcement of the system is in place which supports the performance monitoring aspect and leads to timeous corrective action by the responsible official, suggesting that the implementation of the system promotes accountability within the institution.

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6 Executive Director of Utility Service Performance Agreement. Downloaded from: http://www.capetown.gov.za/en/IDP/Pages/Section57Employees.aspx
**DIMS**

In addition to the above the City of also reports the piloting of a Data Integration and Monitoring System project (DIMS) in 2010 on behalf of DWA. This integrates various data in real time, monitoring a number of sources and includes summary information about water and sanitation processes.

### 3.2.4 Economic Regulation

Consumer tariffs are the main revenue source for water and sanitation delivery in the city. The Water and Sanitation Department has a tariff policy in place. The Budget Steering Committee plays an oversight role on the process of setting tariffs within the city. The tariffs are modelled every year and changes in consumption patterns are factored into the annual adjustments.

From the financial and auditing perspective water services are not ring-fenced; however they are accounted for separately.

### 4 Effectiveness of Regulation

This section provides some insight into the effectiveness of the City’s Water and Sanitation Department with respect to regulation, based on the research conducted thus far.

**4.1 By-laws**

While the city has a set of by-laws in place it faces challenges with respect to enforcement. The main constraint is that there is insufficient capacity to ensure the level of enforcement that is necessary for a city the size of Cape Town. The city can not afford to recruit significant numbers of staff. In addition, new appointments would need training such as legal and peace officer training. On the one hand there is a shortage of appropriately skilled people in the market but even if there were sufficient capacity in supply to match demand, the city’s agenda has many competing priorities and it is unlikely that significant recruitment of workers such as inspectors would be possible.

When reflecting on what could be done better in terms of how the city regulates and enforces compliance, specific mention was made of “improving regulation at the source”. This speaks to the need to ensure that at the level of the user and supplier the right controls are in place so as to prevent the deepening of the problem. One example given was ensuring that suppliers of plumbing materials complied with national standards required. If the city was effective in regulating and monitoring at this level, it will save them having to address the consequences of poor quality materials at a later stage. The consequences include water leaks and pipe bursts.

**4.1.1 Consideration of DWA standards in drafting by-laws**

One area probed in this research was the extent to which the CCT’s by-laws were aligned to the Department of Water Affairs. The City acknowledged that the DWA questioned one aspect of its Water by-law of 2006, specifically the following:

**30. Restriction or cutting-off of supply**

(1) Subject to any other right the municipality may have, the City Manager may, if an owner has failed to pay a sum due in terms of the Tariff Policy By-law, by written notice inform him or her of the intention to restrict or cut off the supply of water on a specified date and to restrict or cut off such supply on or after that date.
(2) Subject to any other right the municipality may have, the Director: Water may, if an owner has contravened this by-law and has failed to rectify such contravention within the period specified in a written notice served on him or her requiring him or her to do so; by written notice inform him or her of the intention to restrict or cut off his supply of water on a specified date and to restrict or cut off such supply on or after that date.

(3) The consumer/owner must pay the fees for the restriction or cutting-off of supply and restoration of the water supply in terms of the Tariff Policy By-law: provided that all such fees are paid prior to the restoration of the water supply.

(4) A consumer whose access to water supply services has been restricted or disconnected, who intentionally reconnects it, will on written notice be disconnected.

Source: City of Cape Town Water By-law (2006)

The DWA took issue with the implication that the by-law gave the CCT the right to cut off domestic water supply and felt that this was incorrect. The CCT has however never implemented the by-law in that manner, i.e. it has never shut off water supply to domestic consumer but has, when necessary restricted the flow of supply. In response to the DWA concerns, the CCT has recently amended its water by-law and it is now more specific about the treatment of domestic consumers. The amendment reads as follows:

25. Restriction or cutting-off of supply

(1) Subject to any other law, the City Manager may, if an owner has failed to pay an amount due in terms of the Tariff By-law, by written notice inform him or her of the intention to –

(a) restrict the domestic supply on a specified date, and restrict such supply on or after that date while not denying access to basic water services; or

(b) restrict or cut off the supply of water to all other non-domestic consumers on a specified date, and restrict or cut off such supply on or after that date.

(2) Subject to any other law, the Director may, if an owner has contravened this By-law and has failed to rectify such contravention within the period specified in a written notice served on him or her requiring him or her to do so, by written notice, inform him or her of the intention to restrict or cut off his or her supply of water on a specified date and to restrict or cut off such supply on or after that date.

(3) The consumer or owner must pay the fees for the restriction or cutting-off of supply and restoration of the water supply in terms of the Tariff By-law provided that all such fees are paid prior to the restoration of the water supply.

(4) A consumer whose access to water supply services has been restricted or disconnected, and who unlawfully reconnects it will, on written notice be disconnected, and shall be liable for the costs incurred by the City.

(5) The City must ensure that no domestic consumer is denied access to basic water services in terms of this By-law.

Source: City of Cape Town Water By-Law (2010).

Section 25 (5) in above is particularly important as it specifies that the city will not deny access to domestic consumers.

4.2 Economic regulation

Economic regulation includes the approval of investment plans and tariffs. The allowed tariffs are related to both the investment programme and the operational efficiency of the water services provision. For the City of Cape Town all investment planning and tariff settings are undertaken by the Water and Sanitation Department. The department has a Finance and Commercial division responsible for ensuring that the appropriate capital investments take place and that operational efficiency is achieved. In recent years this has necessitated significant tariff increases (tariff being the main revenue source for water services). The City reports steady increases in payment ratios despite tariff hikes and despite the economic down turn, as shown below:
Capital expenditure incurred during the 2008/09 financial year amounted to R684.3 million with an expenditure level of 94% original budget reached. With respect to the impact of these investments, the City reports that increased investments in 2008/09 on water and sewer reticulation replacements (12 km of sewer mains and 46km of water mains) resulted in an estimated 10% reduction in both sewer blockages and water main bursts. While this has made an important contribution, the City will need to continue making significant investments into its infrastructure to respond to the growing demand for water and sanitation services and to address the need for extensive repair and extension.\(^7\)

In 2008/09 operating costs amounted to approximately R3.57 billion, equivalent to approximately R3 200 per household per annum.

### 4.2.1 Accounting for water services

The City of Cape Town indicated that while water and sanitation is not ring-fenced financially, they are confident in the accuracy of their financial reporting for water and sanitation services. Their accounts are a reflection of the actual costs for carrying out the service and include internal billing, charged for activities by other Departments, charged for corporate services, etc). The City also has a 10 year program, reflected in the Medium Term Revenue and Expenditure Framework (MTREF) to determine future costs.

Currently, when audits are performed, the City of Cape Town as an entity is audited. All the aspects of this audit, i.e. revenue, expenditure, variances, procurement, performance, etc. is also applicable to Water and Sanitation. The Financial Statement prepared for Water and Sanitation is in the same format and on the same basis as that of the City of Cape Town. As the detailed items are being scrutinized as part of the overall audit, the City has indicated that it is confident in these accounts.

### 4.3 Water quality monitoring

The City’s Scientific Services department is responsible for water quality monitoring in the CCT. Scientific Services’ operational reports go to the Director: Water and Sanitation; with the department essentially being the client.

The process of sampling is audited by the City’s internal auditors. Blue Drop and Green Drop audit processes also guarantee that there is a regulatory mechanism in place to ensure that the City is compliant with water quality standards.

The Department of Water Affairs (DWA)’s 2010 Blue Drop assessments resulted in the certification of 38 water supply systems across South Africa with the Blue Drop Status for Water Quality. The City of Cape Town was one of the municipalities which received Blue Drop certification for 2009/10.\(^8\)

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\(^7\) City of Cape Town, 2010. Department of Water and Sanitation: SDBIP.

The municipality was also identified as being “excellent” by the Minister of Water and Environment for its management of waste water treatment, during a press statement regarding the Green Drop assessment results for 2009/10.  

4.4 Managing external contractors

The City of Cape Town’s Water and Sanitation Department had only two contracts in place with external service providers with regards to waste water. These are the Zandvliet Waste Water Treatment Facility, which was fully managed by a private contractor for a five year period. This contract has recently concluded. The second is the Cape Flats Waste Water Treatment Facility where a contractor was appointed for the sludge processing.

4.4.1 Lessons learnt from Zandvliet WWT Facility

The municipality reports having a particularly good experience with the contractors appointed to manage the Zandvliet facility. This has highlighted the importance of having contractors that are appropriately skilled and experienced as a key success factor to this sort of arrangement. In general, it was noted that there is a shortage of reliable, skilled and capable contractors for waste water treatment management in the private sector; the city has to therefore be highly selective in making these appointments.

From a contracts management point of view, the city had specialists involved in the drafting and management of the contract and it was acknowledged that having an experienced team within the city was very significant. The skills within the CCT include technical expertise, project management and contracts management. The city regularly engaged with the contractor, holding monthly meetings and conducting weekly reviews. This was to ensure that monitoring and accountability measures were in place.

One of the areas of weakness which the city hopes to address in future is the enforcement of the contracts, specifically related to penalty clauses and performance criteria.

As for the way forward, the CCT underwent a Section 78 assessment process and based on this, has decided to continue utilising private contractors for these two waste water facilities. These will be 15 year contracts, a decision that was taken upon realising that the initial 5 year contracts were too short. The city is currently commencing its procurement processes for these tenders.

The CCT reports having a generally positive experience in managing the previous contracts and has learnt a number of lessons, including the tightening up of performance criteria for contractors and setting of targets to be met. In principle, the city supports contractual arrangements with private contractors but is highly selective about when it does so. The focus is on maintaining the right mix of arrangements (i.e. internal and external) to ensure efficient and effective service delivery. The CCT also expressed that it is important for the city to maintain responsibility for the design aspect, only calling on private sector support in terms of operations and maintenance when this need is identified.

4.5 Consumer charter and customer satisfaction

The findings from the department’s customer surveys conduct over a number of years are shown below.

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The general conclusions drawn by the CCT’s analysis of these results are:

- The increasing satisfaction level for respondents living in formal residential areas has been reversed.
- Respondents living in informal residential areas are generally dissatisfied.
- 82% of business respondents are satisfied.

A possible cause for the drop is the introduction of the highest-ever tariff increase during the 2007/2008 financial year, which precedes the latest survey. Another factor with an influence is likely the rapid introduction of water management devices in various suburbs across the City (Water and Services Department, 2010).

The surveys have been a valuable mechanism for identifying consumer needs and trends. The officials interviewed indicated that the survey findings are used to respond to these needs and “identify areas for improvements in the department”.

### 4.6 Special initiatives to promote education and awareness around regulation

The Department of Water and Sanitation considers education to be essential in ensuring that all consumers are aware of their responsibilities, particularly with respect to regulation. These responsibilities include that they:

- adhere to acts, municipal ordinances, by-laws and water restriction notices
- be water conservation conscious and make saving water a way of life
- not to flush foreign objects, used oil and materials into the sewer system
- not to discharge rain / surface water to the sewer system
- pay for services over and above any free allocation
- report by-law contraventions to the Water Hotline number

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• ensure that the water meter and sewer boundary chamber are always accessible

The department has embarked on a number of campaigns to promote education and awareness of the above, including the “Raising the Citizens’ Voice in the Regulation of Water Services” campaign. This is a public education initiative by the Department of Water Affairs and Forestry - DWAF (now DWA), as National Regulator in South Africa.\(^{11}\) It supports a bottom-up approach to water services regulation by actively involving citizens in the local monitoring of water and sanitation services. It aims to empower citizens through:

• Training them about their rights
• Setting up Users Platforms that serves as, as monthly meetings between the municipality and the community for solving problems reported by civil society.

The first ‘Citizen’s Voice’ pilot project began in Cape Town in 2006 covering four townships. It demonstrated its value through reduced water losses and increased payment levels. Citizens played a more effective oversight role in water provision. The City of Cape Town found the pilot so successful that it took over the funding from DWAF to continue the user platforms in the four pilot areas (Win-SA, 2009).

From 2007 it scaled up the programme to new low-income areas and rolled out to 23 areas. The department hired 23 community facilitators to assist the user platforms to track their service delivery problems. A ten-week training programme was carried out in the twenty three targeted areas across the City of Cape Town. The training workshops were well-received and valuable as a means of building credibility with communities, providing information on water services to communities. It was also a mechanism for feeding information back into the municipality regarding the experiences of the communities with which the city engaged during this initiative.\(^{12}\).

The programme won the Utility Prestige Award for customer service in 2007 and continued to be implemented across 23 areas until its conclusion March 2009. The reason for its ending was largely due to funding, as the DWA had not renewed its funding of the project and the city could not afford to sustain the programme. The City, in its closure report presented DWA with a proposal for revisions to the programme, based on its experience.

Win-SA identified some of the key lessons learnt from this initiative to be:

• Securing political support at the outset of the introduction of a project
• Keep momentum going
• Ensure citizen ownership of user platforms

Other initiatives to involve communities and to encourage greater responsibility for water services include the Water Demand Management Integrated Leaks Repair Project, started in 2005. This was a major initiative to encourage households to report water leaks, sewer blockages as well as billing queries and consumption problems. It also ensured that household plumbing leaks were minimized and that water bills were lowered.\(^{13}\)

\(^{11}\) This summary is based on: WIN-SA (2009). Public Accountability through Citizen’s Voice: City of Cape Town shares good practice, Lessons Series 20, WIN-SA, Pretoria, South Africa.


4.7 Overall comments on effectiveness

Given the lack of separation between the WSA and WSP it is difficult to make an assessment of how the provider function is regulated by the authority. The staff interviewed for this project have however indicated confidence in the City’s performance monitoring processes as measures to ensure internal accountability. A number of reporting processes take place and progress towards targets is monitored regularly.

From the perspective of consumer regulation the City has a number of by-laws in place but has indicated a serious lack of capacity and resources to enforce these. The City has been involved in a number of projects to promote education and awareness around regulation amongst for consumers, which have reportedly yielded positive results.

With respect to economic regulation, the City regularly updates it Tariff policy, which is informed by a process of financial modeling. The City of Cape Town indicated that while water and sanitation is not ring-fenced financially, they are confident in the accuracy of their financial reporting for water and sanitation services.

In terms of water quality monitoring, as one aspect of regulation, the City has excelled in obtaining and maintaining its Blue and Green Drop status.

With respect to managing external contractors, the City, in principle, supports contractual arrangements with private contractors but is highly selective about when it does so. There have been a number of key lessons learnt from its experience with contractors and the findings suggest that these have informed the manner in which the City plans on dealing with contractors in future.

In summary the City appears to have a number of processes in place to promote regulation but there is room for improvement. Much of its challenges related to human resource and financial constraints, while the issue of separating the WSA and WSP still needs to be resolved.

5 Conclusion

5.1 Lessons Learnt

This section reviews some of the lessons learnt from the Cape Town case study.

5.1.1 Has non-separation of WSA – WSP had an impact on the quality and efficiency of water services in CCT?

From the interviews conducted there was a general sense that the non-separation of the WSA and WSP functions and roles has not directly had a negative impact on delivery. There is recognition within the CCT that by law this separation should be in place and that there may be certain benefits in terms of clearer lines of accountability, roles and responsibilities etc. However there is also an awareness that any efforts to align with the legal expectations would be a costly exercise and require restructuring the capacity and management approach to water services in the city (for example staff restructuring may be necessary and from the financial perspective it would entail complete financial ring fencing). This process could be disruptive during the transition phase and there is no guarantee that the efficiency and quality of services currently being delivered would improve as a direct result hereof. It is therefore debatable whether the separation of the WSA and WSP would improve service delivery in the city.
The current arrangement does present some obstacles in terms of conventional mechanisms of regulation, because of the absence of a service delivery contract between the WSA and WSP and the lack of financial ring-fencing. Forms of regulation do take place through other means and the city is fulfilling the expectations of ensuring the provision of water services, including planning, monitoring, operations and maintenance. The city has, for example, relied on a number of internal mechanisms (such as performance management systems) to ensure accountability for services delivery.

5.1.2 Factors influencing the rate and quality of water services

Financial resources and capacity are the main variables influencing the city’s ability to deliver water services at the targeted rate and quality. There is a need to strike the right balance in terms of where resources are channelled. For example in order to address need for greater enforcement of by-laws significant capacity would need to be employed. However in the context of many competing agenda items, this is not always possible.

Another lesson learnt with respect to capacity was the need to retain experienced staff within the municipality. Mechanisms are also needed for ensuring that there are returns to the investment made into training new staff.

5.1.3 Regulation at the source

The officials interviewed acknowledged that there is room for improvement with respect to its roles as authority and provider. There was specific mention made of by-laws and the need to improve enforcement of by-laws. One of the main lessons learnt here has been that channelling energy to ensure better regulation at entry level or at the source will improve controls and prevent future costs.

5.1.4 Education

The Department of Water and Sanitation considers education to be essential in ensuring that all consumers are aware of their responsibilities, particularly with respect to regulation. It has embarked on a number of campaigns to promote education and awareness of the above, including the “Raising the Citizens’ Voice in the Regulation of Water Services” campaign. It demonstrated its value through reduced water losses, increased payment levels and citizens played a more effective oversight role in water provision.

5.2 Framework

The City of Cape Town has indicated that a framework or guide for regulation would be useful as they would like to learn about how other municipalities are managing the regulation of water services, particularly those in a similar context where the authority and provider roles are not separate.
References

City of Cape Town. 2006. Water By-law.


City of Cape Town. 2010. Water By-law.


