

## Chapter 2: Basic Service Delivery Performance Highlights

### 2.1. Overview

This chapter focuses on the extent to which the municipality has progressed in delivery of basic services to the citizenry of the city as was planned in the integrated development plan. The chapter reviews performance of the period under review and highlights the challenges which confronted the municipality in discharging its constitutional obligations. The Directorates of Engineering Services, Community Services, Health and Public Safety, Office of the Chief Operating Officer and part of Development Planning responsible for service delivery within the Municipality have provided input in the chapters following in this report. In these chapters these Directorates further elaborate on the remedial actions to be undertaken with regard to those areas where the municipality has not met its target.

### 2.2. Water services

BCM is both the Water Services Authority (WSA) for its entire area of jurisdiction and the Water Services Provider (WSP) for a large percentage of the area. The Amatola Water Board is an external WSP contracted to the provision on bulk portable water to BCM in order to augment the demand by consumers. BCM has an established WSA in place, which has the ability and resources to undertake the WSA functions in its current format. However, it has been identified that the current form of the WSA is inadequate to successfully undertake all its functions, and needs to be restructured and appropriately resourced. The report on the restructuring has been forwarded to the Section 78 Committee for consideration after which it will be cascaded upwards to Council for approval.

#### Water Services Provider

BCM is the retail WSP for its entire area of jurisdiction and the bulk WSP for three of the six surface water supply areas servicing BCM and all the groundwater sources. Amatola Water is an external bulk WSP contracted to BCM to provide bulk portable water to the remaining three surface water supply areas, delivering 40% of the total volumes of potable water consumed within BCM. In addition Amatola Water also deliver raw water in bulk to both the BCM (supply to the KWT water treatment plant) and Da Gama Textiles in the KWT area. A service level agreement exists between BCM and Amatola Water in terms of the provision of bulk potable water by the latter to BCM. This SLA is being revised especially as BCM is to become a Metro. By resolution of Council the Water Services Department will form an internal mechanism and ring fence the two internal provider functions (water and sanitation). An SLA will be drawn up between the WSA Business Unit and these internal WSP's therefore it is imperative that the SLA with the external WSP (Amatola Water) be revised with definite KPA's.

#### Key areas requiring attention include the following:

- Ability/mechanisms to ensure compliance with the by -laws;
- Development and implementation of a WC/WDM strategy;
- Development of a mechanism to manage and monitor the implementation of the WSDP; and
- Establishment of WSA staff capacity and systems.

BCM has recently completed the preparation of a WSA capacity building business plan, based on which funding will be made available to address the identified capacity building requirements.

**Levels and standards in water services:**

**Rural:**

The level of service for households outside of the Urban Edge is the basic level of service (i.e communal standpipes to RDP standards).

**Urban:**

The level of service for households within the Urban Edge is as follows:

- Target level: erf connection and water borne sanitation; and
- Minimum level: yard connection

c. Annual performance as per key performance indicators in water services

	Indicator name	Total number of household/customer expected to benefit	Estimated backlogs (actual numbers)	Target set for the FY under review (actual numbers)	Number of HH/customer reached during the FY	Percentage of achievement during the year
1	Percentage of households with access to potable water	225249	7671	2685	1249	47%
2	Percentage of indigent households with access to free basic potable water	65539	7671	2685	1249	47%
3	Percentage of clinics with access to potable water	28	0	28	28	100%
4	Percentage of households using buckets	9	0	9	9	100%



## Major challenges in water services and remedial actions

BCM is currently serviced by 4 regional surface water supply schemes located primarily within BCM, 2 surface regional water supply schemes located primarily outside of BCM but feeding portions of BCM, 1 No. regional groundwater scheme and a number of smaller local groundwater schemes.

- The main schemes, which service around 81% of the BCM population reside within the KWT/East London corridor, are as follows:
  - Upper Buffalo RWSS – KWT, Breidbach & surrounds
  - Middle Buffalo RWSS – KWT, Bhisho, Zwelitsha, Ndevana, Phakamisa, Berlin & Mdantsane; and
  - Lower Buffalo RWSS – Mdantsane & the greater East London;
- The Sandile and the Peddie RWSS's service around 14% of the BCM population, which reside in the Dimbaza and Chalumna areas respectively;
- The Ncera RWSS services several rural villages and Kaysers Beach, to the west of East London;
- The groundwater schemes service rural villages to the north of KWT and many of the resorts on the coast to the west of East London;
- The Upper Buffalo RWSS is stressed from a water resource perspective, with supplies to the KWT area already being augmented from the Middle Buffalo RWSS. Infrastructure capacity constraints however restrict the extent of augmentation possible.
- The Middle Buffalo RWSS has surplus yield, but the WTP is operating near capacity, the same applies for the Sandile RWSS;
- The Lower Buffalo RWSS is stressed from a water resource perspective and water treatment is nearing capacity for the scheme as a whole. The yield of this scheme can however be augmented with supplies from the Wriggleswade Dam;
- The Ncera WTP is scheduled to be decommissioned shortly, with supplies to the Ncera RWSS being fed from the Lower Buffalo RWSS (Damspot Reservoir);
- Apart from the resource and treatment constraints, the following are seen as key infrastructure constraints:
  - The conveyance capacity of the Buffalo River pumping system;
  - Inadequate storage in the East London and KWT areas;
  - The conveyance capacity from the Laing dam WTP to the Beacon Hill Reservoir;
  - Conveyance capacity to the West Bank high level zone;
  - The conveyance capacity of the Ncera pipeline and the ability to feed Kidds Beach;
  - The absence of a dedicated bulk supply system for large parts of East London and also in the Breidbach area;
  - The zoning in East London, KWT, West Bank & Gonubie;
  - High water loses in the Duncan Village/Gompo and KWT areas; and
  - Lack of accurate as-built record for infrastructure in the Dimbaza and Zwelitsha areas.

## OBJECTIVES:

- Infrastructure of adequate capacity to reliably meet existing and expected demands in key identified development areas within BCM, within 5 years.
- Infrastructure of adequate capacity to reliably meet existing demands within with identified supply problem areas, within 5 years.

The key responsibilities of a Water Services Authority in terms of the Water Services Act 108 of 1997, are as follows:

1. **Ensuring access:** It must ensure the realization of the right of access to water services, particularly basic water services, subject to available resources by seeing that appropriate investments in water services are made;
2. **Planning:** It must prepare water services development plan to ensure effective, efficient, affordable, economical and sustainable access to water services that promote sustainable livelihoods and economic development;
3. **Provision:** It must ensure the provision of effective, efficient and sustainable water services (including the water conservation and demand management) either by water services themselves or by selecting, procuring and contracting with external water services providers; and
4. **Regulation:** They must regulate water services provision and Water Services Providers within their areas of jurisdiction and within the policy and regulatory frameworks set by DWAF through the enactment of by-laws and the regulation of contracts.

## IDENTIFIED STRATEGIES

- Engage with the City Planning Department and IDP Unit in general and the Housing Branch in particular, to obtain greater clarity with regard anticipated future housing requirements with BCM and:
  - The key development areas within BCM;
  - Housing demands and level of service requirements;
  - Other anticipated development.
- Via the ongoing Water Services Master Plan:
  - Develop and calibrate hydraulic models;
  - Review the implication of various scenarios (ranges) of levels of service;
  - Present findings to Council for consideration;
  - Review level of service policy; and
  - Undertake detailed master planning based on the reviewed / adopted level of service policy.
- Define WC/WDM as the key service delivery objective and implement WC/WDM initiatives on a sustained basis as defined in terms of strategies defined previously.
- Form part of the committee to be established to implement the Reconciliation Strategy for the ABWSS and assist in investigating measures of institutional reform leading to operational efficiency of key bulk water supply infrastructure components.
- Undertake the necessary master planning to:
  - Adequately identify and cost the infrastructure upgrade requirements for BCM in general, and the key delivery areas in particular;
  - Review zoning, storage and requirements;



<ul style="list-style-type: none"> <li>➤ Identify areas with surplus capacity where development and readily proceed;</li> <li>➤ Determine appropriate/affordable levels of service;</li> <li>➤ Identify, prioritise and package projects for implementation</li> </ul>
<ul style="list-style-type: none"> <li>• Investigate alternative measures to obtain the necessary funding to undertake the required capital works, including the following: <ul style="list-style-type: none"> <li>➤ Private sector contributions;</li> <li>➤ PPP intervention.</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>• Progressively upgrade existing and build new infrastructure, focusing on areas with current shortages and identified priority development areas.</li> </ul>
<ul style="list-style-type: none"> <li>• Address the rural backlogs as identified in terms of the interim rural water master plan.</li> </ul>



### 2.3. Electricity Services

The purpose of the Electricity Department is to provide an effective and efficient electrical service and infrastructure in accordance with legal and statutory requirements to all Buffalo City Consumers. Both Eskom and Buffalo City supply electricity within the Buffalo City Municipal area. BCM supplies the former King William’s Town and East London areas, whilst Eskom supplies the remaining rural areas.

The electricity network in Buffalo City is currently in a poor condition. This is a result of budget constraints, which force the Electricity Department to cut down on the maintenance and upgrading or replacement of equipment. The consequences are frequent power outages and a poor quality of supply to electricity consumers. In addition, the electricity department is at high risk of non – compliance to the license issued by the National Electricity Regulator (NER) and to non – compliance of occupational health and safety regulations.

The electricity department has a backlog of R680 Million in replacement upgrading and deferred maintenance. Without a significant capital reinvestment plan and the funding to implement the plan Buffalo City could experience a number of electrical failures which would have an impact on city growth and income as electricity sale account for the largest portion of Buffalo City’s yearly income.

Consultants were appointed to conduct a Status Quo assessment of Buffalo City’s electrical service delivery in terms of Section 78 of the Municipal Systems Act. The outcome of the assessment is that the current electricity service delivery mechanism is not sustainable and should be restructured.

The BCM electricity department purchases bulk Electricity from Eskom via 15 intake points of distribution in the BCM supply area. This is re-distributed to all consumers within the urban edge as follows:

Type of Consumer	Metering Method	Number
Domestic	Pre paid	61522
Domestic Indigent	Pre paid	42255
Domestic	Conventional	9728
Small Power	Conventional	3809
Small Power	Pre paid	2260
Large Power (LV)	Conventional	633
Large Power (MV)	Conventional	74
Time of Use	Conventional	4

These services extend to include all consumers within the defined urban edge, but do not take account of rural outside the urban edge which resides within the jurisdiction of Eskom

During the 2009/2010 financial year the following has been achieved. A number of projects have commenced and have progressed well and other projects have been successfully completed

- 2.3.1. The Electricity master plan indicates a backlog of Capital Replacement at approximately R680 million. It is imperative that capital funding be made available annually over the next couple of years so that a comprehensive Capital Replacement program is put in place to ensure network reliability. This is crucial as the Electricity Department is the biggest revenue generator within the Municipality;
- 2.3.2 In terms of electrification of RDP housing, the Electricity Department in conjunction with the Department of Energy (DoE) provide electricity to formal houses. Annually, Buffalo City's Electricity Department is invited to request funding from the DoE's Integrated National Electrification Program (INEP). Every project that is proposed to the DoE is visited by the DoE to ensure that it meets the criteria set by the DoE and if approved, funding is made available. The funding that is provided by the DoE is only partial funding, as the Municipality is required to provide counter funding. Therefore the number of houses that can be connected is dependent on the funding from DoE, the counter funding provided by Buffalo City Municipality and the number of housing projects that are completed;
- 2.3.3 The Buffalo City Council has taken a decision to pilot Electrification to informal dwellings in Duncan Village. The Electricity Department has prepared a Document calling for proposals which includes a feasibility study on the processes which need to be followed to make it a success, this includes consultation with the community and other role players involved in the upgrade of Duncan Village.  
Based on the current status of Duncan Village, the following needs to be addressed to comply with the Occupational Health and Safety Act:
  - ❖ De-densification of the area in order to make road reserves for access to install and maintain the network.
  - ❖ Upgrading of the electrical backbone infrastructure to Duncan Village in order to cater for all the shacks. Other factors that need to be taken into consideration are as follows:
  - ❖ The cost to carry out this electrification will have to be funded by BCM at the present time as, the Department of Minerals and Energy will only fund the connection to a formal sites. A positive to the funding is that Metro Municipalities and two major Municipalities including BCM have set up a national committee to discuss this issue with the Department of Energy which is in the process of making policy changes that may assist in the Electrification of informal settlements.
  - ❖ Once the connection has been done to an informal dwelling, the owner will be responsible to pay for the removal of supply when relocating to a formal dwelling.
- 2.3.4 The DoE also provide funding to upgrade the electrical network if it is required to supply electricity to low income areas. BCM has been the recipient of two such projects namely Reeston Sub-station which has been completed and Queens Park Zoo sub-stations. The need for these Injection substations was required since numerous Low Cost Developments within the boundaries of the Municipal area has taken place over a number of years. This in turn has exhausted the City's spare capacity. New developments are constructed on a continuous basis and Commercial Developments and other Municipal services have all resulted in large power requirements in the City. The latest being the Queenspark Injection Substation which is designed for an ultimate 40 MVA firm capacity. That is to say, initially 2 x 40 MVA 132/11kV Power Transformer Substation and



enough space to be upgraded in the future with an additional 40 MVA Power Transformer.

The Environmental Impact Assessment has been completed; all role players consulted and no objections were received. The Department has submitted all relevant documentation to the Department of Environmental Affairs for approval before construction begins. This process of approvals could take up to 6 months before BCM can commence work on site. The construction phase should be complete by December 2012 subject to delivery of major equipment which has long lead times dependent on demand.

2.3.5 The BCM electricity Department provide a 40 amp RDP service connection which is higher than the normal 20 amps RDP service connection. Access to this supply for low income consumers is through the INEP funding, BCM counter funding and an approved subsidized connection fee. The council has approved that indigent consumers are provided with a service connection free of any charges.

2.3.6 REDS may be implemented in the near future and therefore the ring fencing of the electricity department needs to be updated and a final section 78.4 decision needs to be taken to ensure that BCM is ready to move to REDS. The electricity Department is in the process of updating all the required information.

2.3.7 Network Enhancement:

The Electricity Department received R6, 84 million on the capital budget and roll over of R 8,48 million for the 2009/2010 financial year and the following projects have been completed or are in progress:

2.3.7.1 The following switch Houses were Built or extended:

- Dawn Switch House: new building and switchgear project completed
- Dyer Switch House: new building and switch gear project completed
- North end Switch: House new building and switch gear project completed
- Amalinda Switch House: Building re-vamped and new switch gear installed
- Wilsonia Switch House: building extended and new switch gear installed.
- Royston Switch House: new building and switchgear project in progress
- Greenacres Switch House: new building and switchgear project in progress

2.3.7.2 The installation of two new 300 mm<sup>2</sup> cables from Progress substation to Wilsonia Switch House, and from Progress substation to Amalinda Switch Houses

2.3.7.3 A number of new commercial and industrial connections listed below were successfully completed:-

- Jireh Supermarket / Berlin
- Renill Clinic / KWT
- Erf 5026 / KWT
- Steve Biko / Centre KWT
- Maclean Suare / KWT
- Nicks Food / KWT
- St. Marks Road / EL
- Kersboom Cresent / EL





- Chamberlain Road / EL
- 44 Pearce Street / EL
- Polyoak Mercury Road / EL
- 26 Pearce Street / EL
- Gonubie Primary School / Gonubie
- Gonubie View / Gonubie
- S A Reserve Bank / EL
- Parkside Pool / EL
- Law Courts / EL
- Emerald Sky / EL
- Fish and Chip Shop – Gilwell Road / EL
- Buffalo City FET College / EL
- Thembalabantu High School / Zwelitsha
- Erf 4123 / Beacon Bay
- Erf 23045 / EL
- Multichoice / EL

### 2.3.8 Street Lighting

Through the Mayoral Imbizo, funded projects are being carried out in a number of areas as indicated below:

Duncan Village: Ward 8 & 9  
 Fynbos: Ward 5  
 Needs Camp: Ward 33  
 Newlands: Ward 13  
 Mdantsane East: Ward 13  
 Mdantsane Highway Rank  
 Clubview Ext. 30:

### 2.3.9 Annual performance as per key performance indicators in Electricity services

	Indicator name	Total number of household/customer expected to benefit	Estimated backlogs (actual numbers)	Target set for the f. year under review (actual numbers)	Number of HH/customer reached during the FY	Percentage of achievement during the year
1	Percentage of households with access to electricity services	97% of all formalized dwellings have access to electricity	2000	1000	385	19.25 %

