

DIRECTORATE OF ENGINEERING SERVICES



Sean Peard
DIRECTOR:
ENGINEERING SERVICES

The Directorate of Engineering Services comprises of the following departments

<p>FOCUS</p>	<ul style="list-style-type: none"> • Electricity & Mechanical Services • Roads Construction & Maintenance • Water, Sewerage & Scientific Services
<p>OBJECTIVES</p>	<p>OVERALL OBJECTIVES</p> <ul style="list-style-type: none"> • Operation and maintenance of roads services, electricity and Mechanical Services, Water, Sewerage and Scientific Services. • Extension of the abovementioned services to meet the growing needs of Buffalo City. • Avail plant and human resources to react effectively to flood and other disasters. • A rolling works program, based on engineering needs assessment, for the construction and maintenance of infrastructure. • Maintain standards of design and construction that satisfy user demands delivered in a cost effective manner. • Implementation of an infrastructure strategy, which meets the need of the community. • Raw water resource management, water purification and usage demand management.

DEPARTMENTAL OBJECTIVES

ELECTRICITY DEPARTMENT

- Examine the status of the 132/33 kV transmission system.
- Reinforce 11 kV supply in the Nahoon area. Upgrade the 66 kV overhead circuit between Eskom's Buffalo Substation and Potsdam (Mdantsane).
- Provision of electricity supplies for 2,100 houses using Integrated National electrification Programme funding, with counter funding provided by the Municipality.
- Reinforcement of the electricity distribution network in the coastal area of Buffalo City
- Upgrading of the electricity distribution network in Zwelitsha.
- Continuation of the Integrated National electrification Programme, providing new electricity supplies to houses, subject to the availability of INEP funding and Municipal Counter funding.

PRIORITY AREAS

- Unsafe & unstable electricity network

OBJECTIVE

- A safe and stable network
- Provision of street lighting
- Provision of festive lighting

STRATEGIES

- Compliance with NRS 048.
- Compliance with SABS 098.
- Obtain funding.

PERFORMANCE INDICATOR

- No of hours electricity supply breakdowns to Nahoon, Berea, parts of Baysville, and backup supply to Vincent Park
- Lead time on the repair of broken street lights
- No of street lighting breakdowns per area.
- Lead time on the installation of festive lighting by Distribution Depot in order to meet the deadline for the official opening of the holiday season by the Mayor.

PRIORITY AREAS

- Provision of adequate supply to consumers

OBJECTIVE

- Provision of adequate electricity supply and street lighting to low income consumers.

STRATEGIES

- Compliance with NRS 048.

PERFORMANCE INDICATORS

- Provision of electricity supplies to commercial, industrial & residential customers.

PRIORITY AREAS

- Restructuring

OBJECTIVE

- Municipal Systems Act Section 78 Compliance.

STRATEGIES

- Section 78 Evaluation policy.

PERFORMANCE INDICATOR

- Compliance with the Municipal Systems Act



PRIORITY AREAS

- Network Efficiency

OBJECTIVE

- Optimise network Efficiency

STRATEGIES

- Load Control.
- Power Factor Correction.

PERFORMANCE INDICATOR

- 2 % savings on bulk electricity account from Eskom for East London, Beacon Bay & Gonubie
- 3 % savings on bulk electricity account from Eskom Woodbrooke, & Stafford

PRIORITY AREAS

- Loss of Revenue

OBJECTIVE

- Optimise network Efficiency

STRATEGIES

- Reduce tampering and illegal connections

PERFORMANCE INDICATOR

- 2 % Reduction in system losses

PRIORITY AREAS

- Shortage of Transport and plant to perform duties

OBJECTIVE

- Purchase new equipment and fleet

STRATEGIES

- Replace ageing fleet.
- Maintenance of existing fleet.

PERFORMANCE INDICATOR

- Increased vehicle availability & reduction in fleet age. Fleet Age below 8 years.
- Lead time on Vehicles brought in for regular servicing – 1 day
- Lead time on Vehicles brought in for Breakdowns – 5 days

ROADS & DESIGN DEPARTMENT

- Implementation of a Pavement management system encompassing all roads in Buffalo city.
- Upgrade and maintenance of rural roads to the extent of available funding.
- Reduce local areas susceptible to frequent flooding.
- Reduce the number of tarred roads which are in danger of requiring reconstruction if not resurfaced in the short term.
- Development of maintenance and monitoring strategies for road infrastructure, e.g. stormwater systems.
- To shift from a partially reactionary service to a fully pro-active service.
- To completely eradicate the backlog of roads requiring resurfacing before deterioration to a reconstruction situation.

PRIORITY AREAS

- Inadequate maintenance due to lack of funding for the roads network

OBJECTIVE

- To provide a safe & economical road network.

STRATEGIES

- Develop a Pavement Management System (PMS).
- Implement a Pavement Management System (PMS).
- Formulation of a services charter to establish levels of services to be provided.
- Engage in community partnerships for roads maintenance.

PERFORMANCE INDICATOR

- 25 % of roads that conform to quality standards Km of roads that conforms to quality standards/total roads.

WATER, SEWERAGE & SCIENTIFIC SERVICES

- Take over responsibility for Water services powers and functions relating to rural villages and previous R293 townships that were previously administered by the department of Water Affairs and Forestry (DWA), Department of Public Works (DPW), Department of Provincial and Local Government and Traditional Affairs (DPLGTA) and Amathole District Municipality (ADM).
- Provision of water services to approximately 61 villages currently not supplied to R.D.P. standard.
- Ring fencing of water and sewerage services in terms of section 78 of the systems Act to ensure sustainable water services provision.
- Provide a reliable supply of potable water to all served areas to reduce the volume of “unaccounted for” water by 50%.
- Water audits, unaccounted for water, water conservation, industrial effluent, pollution control, water education and public relations.
- Feasibility studies, project management, township establishment and installation of infrastructure.
- Installation of meters to unmetered consumers as the budget allows.
- Finalisation of by-laws.
- To reduce water services backlogs by 50%
- To reduce the volume of “unaccounted for” water to the lowest level economically possible.
- Obtain funding to fill critical vacancies.
- Obtain funding to increase mobile/moveable assets.
- To have all consumers on full pressure connections metered

PRIORITY AREAS

- Backlogs in the provision of water and access to basic services.

OBJECTIVE

- Reduce water services backlog

STRATEGIES

- Implementation of the approved Water Services Development Plan.

PERFORMANCE INDICATOR

- 100 % of water development capital budget spent for the year.
- 100 % of projects for the year of the 5 year water development plan completed successfully

PRIORITY AREAS

- Infrastructure is at capacity and in a poor condition

OBJECTIVE

- Increased infrastructure capacity to support sustainable development within the city.

STRATEGIES

- Implement an effective preventative maintenance programme.

PERFORMANCE INDICATOR

- % of water busts/ sewerage chokes reduced by 5% incidents per year
- 5% of approved budget spent for the year on preventative maintenance programme
- 85% of projects for the year of the preventative maintenance plan completed successfully

OBJECTIVE

- All treatment works to operate in compliance with the National Water Act.



STRATEGIES

- Operate works in terms of permits issued.

PERFORMANCE INDICATOR

- Reduce % contraventions of permit requirements under National Water Act.

OBJECTIVE

- Adequate maintenance and replacement of infrastructure.

STRATEGIES

- Provide emergency resources.

PERFORMANCE INDICATOR

- Lead time on water bursts and sewerage choakes.
- % of water infrastructure replacement budget spent for the year.

PRIORITY AREAS

- Organisational inefficiencies

OBJECTIVE

- A capacitated and efficient water services institution.

STRATEGIES

- Establishment of a Water Services Authority unit

PERFORMANCE INDICATOR

- Council decision on section 78(1) Municipal Structure Act outcome
- A fully capacitated and efficient water services institution established in terms of establishment plan