

BUFFALO CITY MUNICIPALITY

STATE OF INFRASTRUCTURE “A MUNICIPAL PERSPECTIVE”

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BACKGROUND

- Shortage of Backlog Funds
 - the Minister Of Energy – 27 Billion
- Shortage of Maintenance/Operating Funds
 - New Infrastructure
 - Asset Upgrades
 - Electrification projects
 - New Developments
- Bad Debt
 - 5 billion

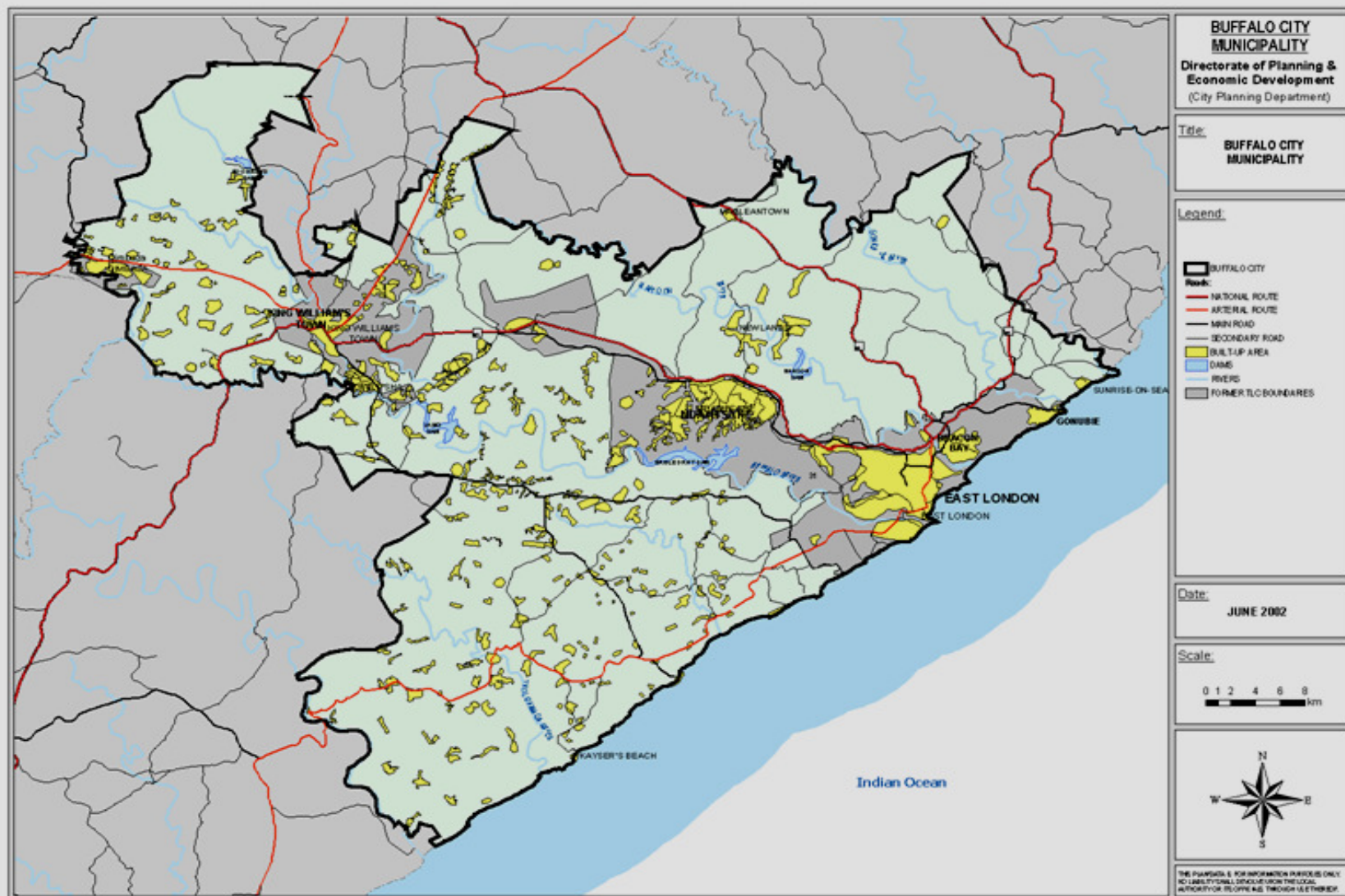
MUNICIPAL PERSPECTIVE

- Majority of municipalities have a major backlog which directly impacts on the state of the infrastructure & networks in a poor and deteriorated condition due to a number of factors;
 - Extensive Electrification and Development
 - Insufficient Maintenance
 - Ageing and Obsolete Equipment
 - Insufficient network upgrades
 - Diminutive Capital Investment in the network
 - Skills and Staff Shortage

BUFFALO CITY MUNICIPALITY

- BCM completed its ringfencing
- Completed an asset register
- Completed a Master Plan looking at the following planning periods:
 - Short Term : (0-5 years)
 - Medium Term : (10 years)
 - Long Term : (20 years)

BCM BOUNDARY MAP



MASTER PLAN

- Status of electricity network report
(Complete Load Flow reports)
- Infrastructure Refurbishment Plan
- Network Integrity, Strengthening and
Development Plan
- Electrification Plan
- Servitude Plan

MASTER PLAN

- **Spatial Development Framework Plan**
Impact. (Housing Plan, Nodal Development, Urban Renewal, Quinera Development, Beach Front Development, etc)
- **BCM Sector Plans Impact**
- **BCM Local Integrated Resource Plan (LIRP)**

MASTER PLAN

- Risk Management Plan (Power Outages and Disaster Management)
- Programme for investment in Electricity Infrastructure
- Lists of Projects
- Capital Investment Requirements
- Operation and Maintenance Exp Req

STAUS QUO

- The Master Plan indicates that the Electricity network has a back log of Upgrading, refurbishment and replacement estimated at **R 680 million**
- The above figure does not include ongoing maintenance.

DEFERRED MAINTENANCE

Equipment	Total	Poor	Very poor	Maintenance		Consider replacement		Replace	
				Quant ity	Cost (R)	Quanti ty	Cost	Quant ity	Cost
MV minisubs	592	5	178	223	5 235 000	15	32 649 362	84	31 691 252
MV switchgear	68	16	0	21	1 470 000	27	4 725 000	9	3 150 000
MV transformers	445	196	5	178	3 570 000	115	14 177 069	113	38 697 530
Pole mounted transformers	1065	212	17	212	4 260 000	0	0	17	59 640 000

CURRENT FUNDING

- Totally inadequate compared to our requirements
- Non compliance with NERSA requirements
- Capital & Operational
- Additional funding will have to be sourced.

IDENTIFIED RISKS/CHALLENGES

- Staff Retentions
 - Overworked due to staff shortages
 - Salaries
 - Working environment
- Staff Attraction
 - Salaries
 - Career paths
- Staff Training
 - Apprentice Schools
 - Accreditation

IDENTIFIED RISKS/CHALLENGES

- Financial Viability
 - Sustainability
 - Cross subsidisation
- Stakeholder Participation
 - NERSA
 - Tariff harmonisation
 - Licensee conditions & Enforcement
 - Power Quality
 - Reliability of supply
 - DOE
 - Policy guidance
 - Funding Issues

IDENTIFIED RISKS/CHALLENGES

- Service Delivery
 - Illegal connections
 - Lack of monitoring systems
 - Inadequate Maintenance
 - Lack of funding
 - Lack of capable staff

IDENTIFIED RISKS/CHALLENGES

- Service Delivery
 - Loss of focus on core functions
 - Unionised Environment
 - Procurement Processes
 - Aged & Deteriorated Equipment
 - Free Basic electricity Provision
 - Electrification of Informal areas

(Please note some slides have been
removed in order to compress
presentation)

LICENSE CONDITIONS

- NRS047 ELECTRICITY SUPPLY; QUALITY OF SERVICE
- NRS048 ELECTRICITY SUPPLY; QUALITY OF SUPPLY
- Customer Forums

“The only way to meet the energy demand in a carbon constraint environment is through government policy and regulation but **Politics is more difficult than Physics**”

Clay Sell (Deputy secretary DOE – US)