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05/10/13 PC water

**BOTSELO WATER PRESENTATION (DRAFT)**  
**HEARING ON DWAF ANNUAL REPORT 2004/2005, 12-14 October 2005**  
**REPORT OF ACTIVITIES FOR WATER SERVICES UTILIZING**  
**DWAF SUBSIDIES AND OTHER FUNDS FROM MUNICIPAL**  
**AND OWN GENERATED SERVICES**

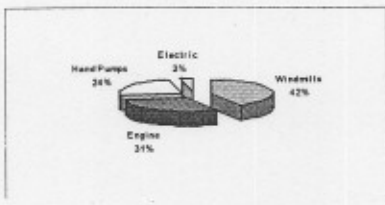
**30 JUNE 2005**

**OPERATIONS**

The Board operates and maintains reticulation systems under the jurisdiction of different Water Services Authorities. The Board also operates Sewage and Water Treatment Plants, which also fall outside its area of jurisdiction;

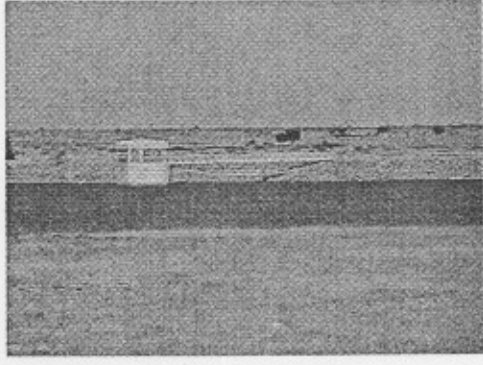
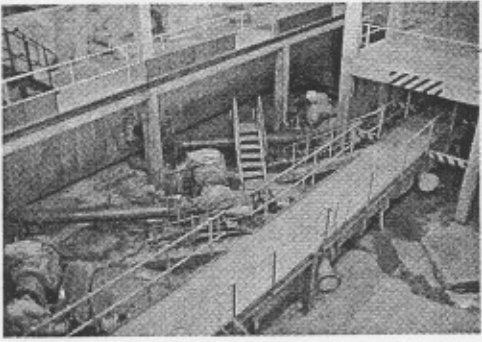
Within our area of jurisdiction the Board is responsible for the maintenance of boreholes, in order to provide safe drinking water for consumers in rural areas, made up of the following quantities and types:

Boreholes	Qty
Windmills	971
Engine	714
Hand Pumps	564
Electric	72
Total	2,321



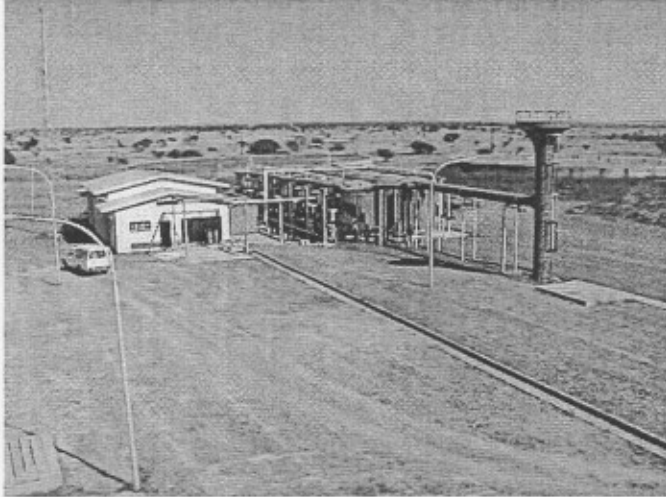
Retailing of water including cost recovery is carried out in the following urban and rural areas together with the operations and maintenance of their reticulation systems for the following areas of four municipalities:

- ☞ Ditsobotla : Ditsobotla Municipality / Central District Municipality
- ☞ Ganyesa : Bophirima District Council
- ☞ Madikwe : Zeerust Local / Central District Municipality
- ☞ Molopo : Mafikeng Local Municipality / Central District Municipality



## ASSET MANAGEMENT

Preventative Maintenance System through the aid of computer software (PRAGMA SYSTEM) has been the strength of Botshelo Water in maintaining its Assets. This computerized system



help to effectively plan, monitor, control and report. Parallel to this is Project Management Software that aid in running the aspect of preventative maintenance as a project.

Clear Performance Indicators promote accountability as they measure what the Treatment Works has achieved relative to its objective while they also can be used to measure performance of the assigned team. The programme creates weekly, monthly and yearly preventative maintenance schedules, which are

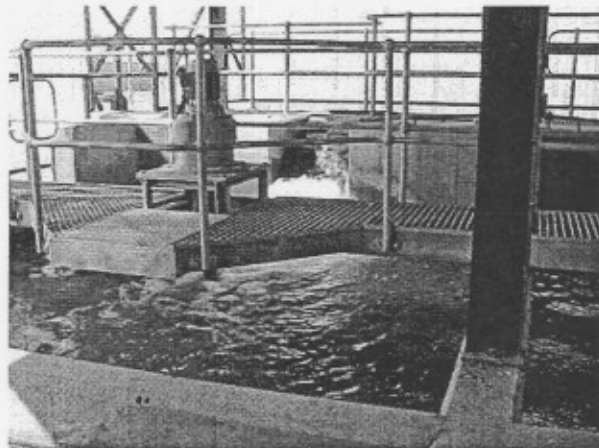
strictly being adhered to.

Part of Asset Management includes the safety aspect of the Treatment Works to employees, where adjustments or modifications are required in terms of safety regulations these are implemented.

Overall review takes place annually to see which modification can be effected to existing Preventative Maintenance Tools looking also at upgrades if necessary. A continual attention to Preventative Maintenance has resulted in longer life expectancy of equipment and reduced maintenance costs.

## BULK WATER SUPPLY

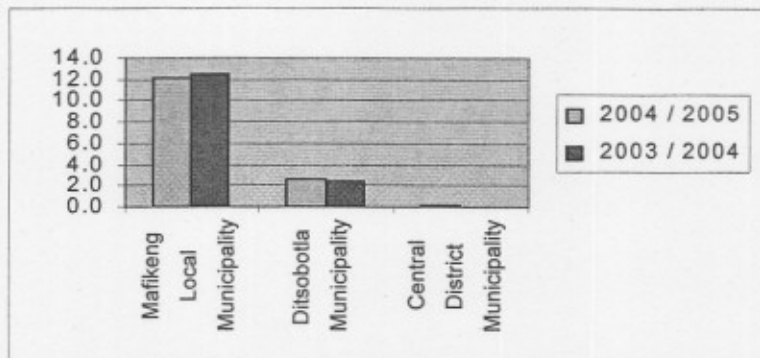
Botshelo Water supply bulk water to two Water Services Authorities which are Moses-Kotane Local Municipality and Central District Municipality. Within Central District Municipality, Botshelo Water supply directly to Ditsobotla Local Municipality and Mafikeng Local Municipality.



Municipality	2004 / 2005	2003 / 2004
	million Kl	million Kl
Mafikeng Local Municipality	12.213	12.535
Ditsobotla Municipality	2.670	2.520
Central District Municipality	0.130	0.013



Central District Municipality is supplied from both Mafikeng and Mmabatho Water Works for its peri-urban areas around Mafikeng Town while Verdwaal in Itsoseng is supplied by Itsoseng Bulk from local dolomite Aquifers. Mafikeng Local Municipality is supplied from both Mafikeng and Mmabatho Water Works.



Ditsobotla Local Municipality is supplied from local dolomite Aquifers.

## **NATIONAL AND INTERNATIONAL INTERACTION**

Botshelo Water presented a paper on "Water as a key to socio-economic development and poverty eradication in North-West Province, as projected for entire South Africa" to the National Water Advisory Council. The paper was also presented at International Water Association (IWA) Conference at Victoria Falls in Zimbabwe. The said paper was initially presented on May 2004 at Water Institute of South Africa Biennial Conference, Cape Town, South Africa. It is also available as published in Water SA Vol 30 No 5.

A co-operation agreement was also signed with Nyeri Water and Sanitation Company (NYEWASCO) in Kenya which formalize the interaction between the two organisations.

## **BULK ASSETS**

It is expected that all water treatment plants and bulk lines will be transferred from DWAF at no cost to Botshelo Water. An investigation into all the conditions of the assets has been completed and submitted to Department of Water Affairs and Forestry. Botshelo Water is expected to take over the operations of the Upper Bulk Water Supply Scheme, from DWAF, which will reduce its dependence on subsidies.

Botshelo Water is committed to enter into municipal partnerships with water services authorities, and partnership with other water services institutions in order to raise capital to develop large water resources and water services infrastructures in the region.



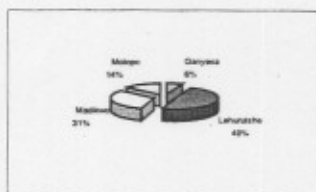


## **RETAIL WATER SALES**

Botshelo Water supplied water directly to consumers in urban and rural areas. The distribution of these consumers in Botshelo Water's area of jurisdiction is as follows : A sliding scale of tariffs has been applied in order to make water more affordable for the majority of consumers. This activity is subsidised by Government (DWA) R34.632m annually (paid monthly R2.886m). This subsidy contributes to the difference between the cost of supply to consumers and cost recovery effected from the consumers. Water for this activity is produced in Bulk Water Treatment Plants of Botshelo Water. Strict quality control measures are applied on a continuous basis to ensure that the highest water quality standards are met and maintained.

Maintenance of retail infrastructure is undertaken in the following areas with the respective number of connections (consumer points).

Ganyesa	794
Lehurutshe	6,544
Madikwe	4,232
Molopo	1,868

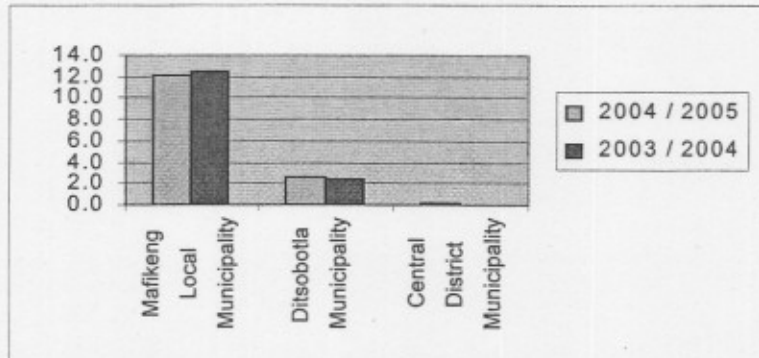


## **COST RECOVERY, WATER LOSS AND DEMAND MANAGEMENT**

Cost Recovery has been low due to lack of infrastructure systems. Statutory measures are taken on an ongoing basis to improve the recovery rate. Illegal connections continue to impact adversely on our water loss management efforts; most of the illegal connections have been regularised except in Dinokana and Driefontein. Amnesty programmes have been developed and implemented in order to bring illegal connections into the billing net. A major capital investment will be required to establish cost recovery infrastructure in rural areas. Water process loss in Bulk Supply is in the order of 2-10%. In the Retail Activity, water losses are in the order of 15% due to unauthorised connections. Reticulation Systems in certain areas are in need of refurbishment/upgrading. The inadequate Bulk source in Lehurutshe still adversely affects cost recovery. Large infrastructure investment plans will be more actively promoted in the next financial year.



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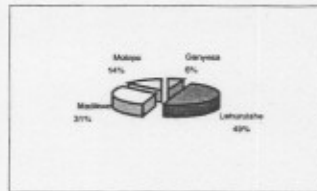


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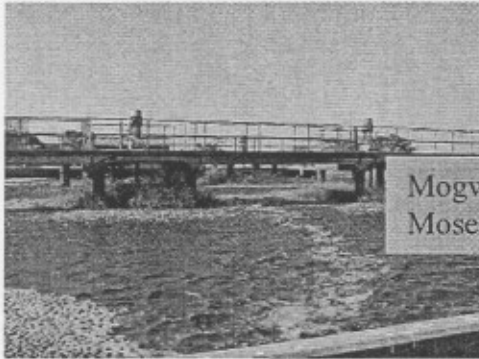
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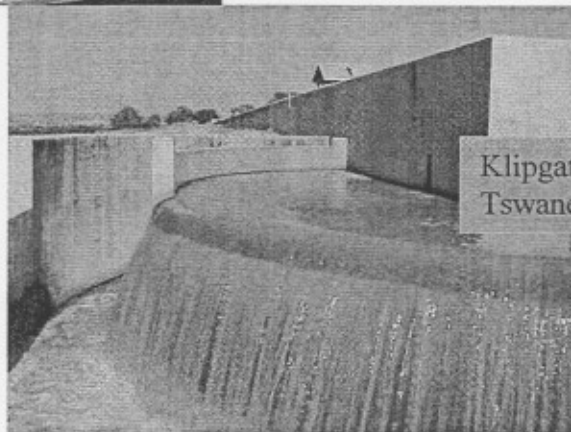


## **SEWAGE TREATMENT**

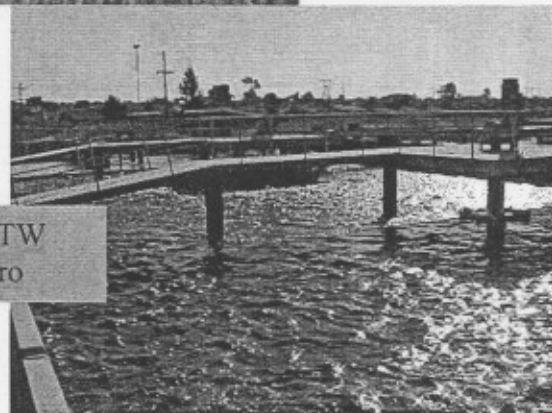
A number of plants are operated and maintained on behalf of the Department of Public Works (Provincial), Department of Public Works (National), Tshwane Metropolitan Municipality (handed over to the Metro with effect from 1 Oct 2005) and Moses Kotane Municipality. These processes range from simple oxidation pond systems to sophisticated activated sludge plants.



Mogwase WWTW  
Moses Kotane LM



Klipgat WWTW  
Tswane Metro



Temba WWTW  
Tswane Metro

During the review period, the cost of this activity amounted to **R 9.74 million**. The plan to upgrade these plants to NOSA specifications continued to be implemented during the course of the year.



## **PROJECTS : ACHIEVEMENTS 2004/2005**

### **Moses Kotane Local Municipality (MKLM) Drought Relief Projects (R2.0m)**

- Pella and Madikwe dams: New suction pipes to serve as inlet structures to accommodate low dam levels
- Siga Village: Borehole testing and electrification
- Mmatau source development and equipping

### **Central District Municipality**

Refurbishment of Matlhase and Dinokana Wellfields, phase 1 for Central District Municipality, were largely implemented. Phase 2 implementation would be followed in the coming year.

The villages of Majemantsho, Montshiwa Stadt and Lomanyaneng were reticulated as part of Mafikeng Peri-Urban Phase 2 and brought to RDP standard level of service for Central District Municipality.

### **Tsunami Intervention Sri Lanka**

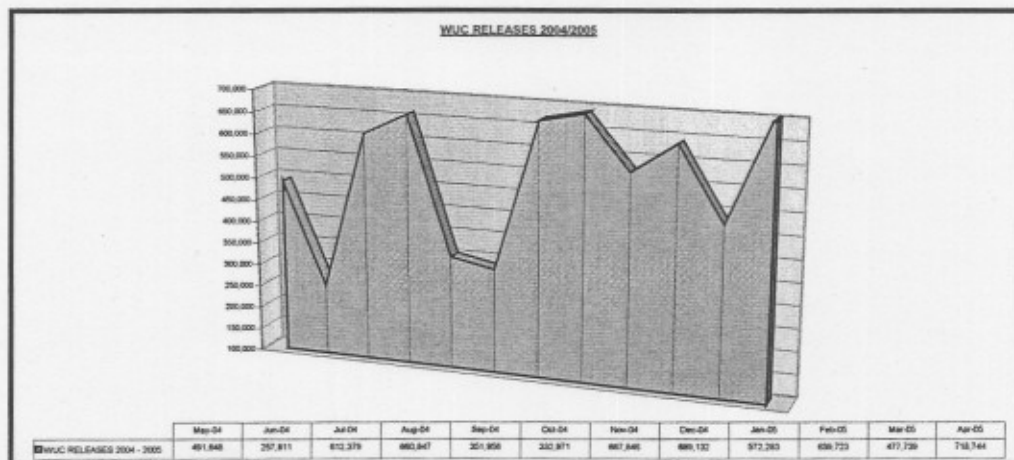
Following the disaster of the earthquake in the Indian Ocean the SA water Sector mobilized and SAAWU got involved via the water boards and Botshelo Water visited Sri Lanka during April as part of a specialist task team. The main purpose of the team was to assess the situation as part of a strategy to provide sector support and resources in the form of people and offer implementation services of Botshelo Water for the refurbishment of infrastructure.





## INTERNATIONAL WATER SERVICES: TSWASA WATER SUPPLY SCHEME

The Tswasa Water Scheme had a successful year in fulfilling its functions of managing, operating and maintaining bulk raw water supply from the Molatedi dam to Gaborone in Botswana. During the operating period, 6 473 megalitres or an average of 18 megalitres per day was pumped in to the Gaborone Dam and 11 757 megalitres or an average of 32.6 megalitres per day of irrigation water was released to Deerdepoort Irrigation Board downstream in the Marico river as the scheme's secondary function.



Additional function is also to provide water to Parks Board at Madikwe Game Reserve which include private lodges, Kofopontein Border Post, Deerdepoort Hospital, Deerdepoort village and Molatedi Village.



## HUMAN RESOURCES

### Skills Provision

Botshelo Water has set up a joint Training Committee comprising membership from Union and Management as required by the Skills Development Act. The Training Committee conduct skills audits and needs analysis of the organisation. These audits give employees an opportunity to identify their own training and development needs. The Training Committee has had several meetings in which an agreement has been reached about the formulation of a Workplace Skills development need in line with the strategic direction of the organisation and the developmental needs of employees. This plan was drafted, discussed, signed and sent to the Local Government and Water Sector Education and Training Authority.

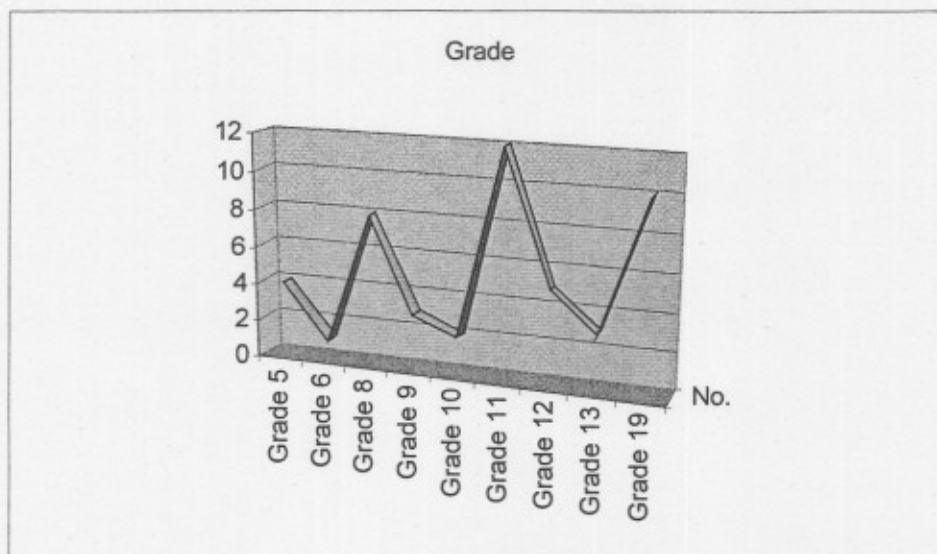
### Training Report

During the period under review, Botshelo Water embarked on a programme of education and training, in which 48 of its employees of which 34 were male and 14 were female participated, was conducted. Education was offered to employees who wished to improve their skills and qualifications through enrolment with educational institutions or receive training through an education and training provider. The employees who benefited from this intervention include :

- 1 Coloured
- 47 Africans

The employees were drawn from the following grades

Grade	No.
Grade 5	4
Grade 6	1
Grade 8	8
Grade 9	3
Grade 10	2
Grade 11	12
Grade 12	5
Grade 13	3
Grade 19	10



## **Involvement in the Matlhase Borehole Refurbishing Project.**

Besides engaging in the routine work of public relation by participating in annual event such as Water Week, Arbor Day, Baswa le Meetse, Vision 2020 and communication strategies such as the monthly radio programme, Botshelo Water is actively involved in the Matlhase Project to improve water supply in the Lehurutshe area of Central District Municipality.

Botshelo Water assisted in communicating the project objectives to the community in the area by holding a total of 13 meetings with different groups. We are now on waiting for the go-ahead of the project committee to commence with capacity building in terms of the various wards in the same area.



### Development of Capacity Building Curriculum:

Botshelo Water has in the last year developed a capacity building curriculum intended to train stake-holder groups in the operational areas of Botshelo Water. This curriculum includes crucial aspect of the core business of this organisation:

- Trusteeship Water.
- Water Conservation
- Institutional Arrangements
- Cost Recovery and
- Free Basic Water.

The five lessons can be delivered by the current staff of Botshelo Water to any group of rural community based water project.

### Presentation of Botshelo Water to other Organisations:

Furthermore, Botshelo Water has created a marketing tool to promote and explain Botshelo Water's services to other organisation. The tool is in the form of a power-point presentation of 20 slides.

These slides are on Botshelo Water's vision, mission, legal background, service areas, business activities, operating structure, departments etc.

The intention is to capture the attention of the target population to ensure maximum service delivery to all consumers.

## **HUMAN RESOURCES DEVELOPMENT ACHIEVEMENTS**

There are several employees who are studying with the local and other institutions. These employees are assisted through the loan scheme which is part of the training strategy of Botshelo Water. In the last year of skills development planning, the following training was done for the number of people indicated:

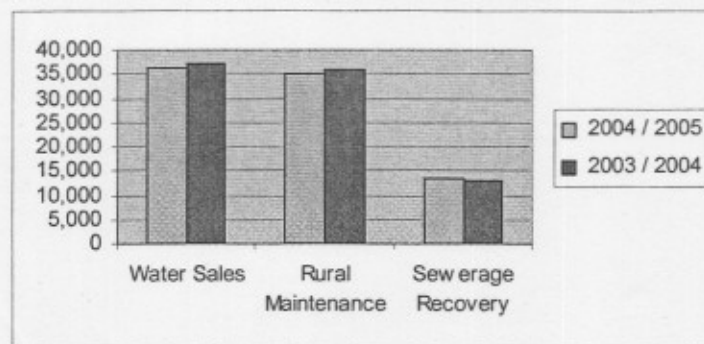
- |                                    |    |
|------------------------------------|----|
| • HIVE AIDS Educators –            | 9  |
| • Chlorine handling by operators – | 30 |
| • Performance management –         | 12 |
| • Annual Secretaries training –    | 5  |



## FINANCIAL SUMMARY



Financial Summary	2004 / 2005	2003 / 2004
	R million	R million
Water Sales	36,246	36,960
Rural Maintenance	35,028	36,048
Sewerage Recovery	13,608	13,025



The Major Items of Expenditure are analyzed as follows :

Financial Summary	2004 / 2005	2003 / 2004
	R million	R million
Direct Cost of Bulk & Retail Supply	24,342	21,709
Direct Cost of Rural Maint	29,049	29,084
Direct Cost of Sewerage Plant	9,745	12,750
General Admin Expenditure	7,259	5,707
Indirect Human Resource Expenditure	11,410	11,614
Recurrent Capital Expenditure	597	89

Total assets at 30 June 2005 amounted to R99,981 million compared to R98,44 million at 30 June 2004.

Sewage and Water Treatment Plants together with concomitant water conveyance systems are not reflected as Assets of this Board as they are still owned by Department of Water Affairs and Forestry and have not been transferred to the Board.

**Utilization of DWAF subsidies: DWAF subsidies are utilized for water services delivery in the rural and retail areas of the operations of Botshelo Water.**

