Sedibeng WATER

ANNUAL REPORT

2017/2018

"Sustaining the source and flow of life forever"

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CORPORATE PROFILE

INTRODUCTION

Sedibeng Water was established on 1 June 1979. Initially it serviced the Free State Goldfields and parts of the former Western Transvaal. In 1996, Sedibeng Water extended its operational area to the North West Province. Since then, Sedibeng Water grew to include the Vaal Gamagara Water Scheme in the Northern Cape Province.

In 2011, Sedibeng Water expanded its operational area further with the incorporation of the Namakwa Water Board. As a result, Sedibeng Water is now serving the Nama Khoi Local Municipality (Steinkopf, Okiep, Concordia, Carolusberg, Nababeep, and Springbok), as well as mines in the arid north-western part of the Northern Cape. Sedibeng Water has recently also incorporated the Pelladrift and Botshelo Water Boards into its operations.

The organisation currently services an operational area spanning across three provinces: The Free State, North West and Northern Cape. This makes Sedibeng Water one of the largest water utilities in the country in terms of the geographical area that it serves.

VISION AND MISSION

Sedibeng Water is driven by its vision of *Excellence in Water Services Provision.*

Sedibeng Water's mission statement underpins this excellence by focusing on:

- The appropriate treatment of wastewater and the supply of potable water;
- Ensuring viability and sustainability;
- Creating an environment that is conducive to the growth and retention of skills;
- Providing effective and efficient communications; and
- Ensuring compliance.

CORPORATE PHILOSOPHY AND VALUES

- Accessibility to an affordable consistent service;
- Conducive and safe working environment;
- Treating employees with respect and equality;
- Promoting responsible behaviour in all our employees;
- Fair and balanced employee rewarding system;
- People development;
- Promoting excellence and innovation for efficiency and cost-effectiveness;
- Honesty and integrity in all our business engagements;
- Upholding principles of environmental sustainability in all our operations; and
- Promoting economic growth and development strategy.

STATEMENT OF CAPABILITY

TECHNICAL SERVICES

- Evaluation and planning of systems;
- Project planning and management;
- Refurbishment and upgrade of existing infrastructure; and
- Implementing agency.

SOCIAL SERVICES AND COMMUNITY INVOLVEMENT

- Capacity building and training; and
- Community involvement in water and sanitation facilitation.

WASTEWATER TREATMENT

- Chemical and bacteriological analysis;
- Chemical treatment and process upgrading;
- Process problem solving and control;
- Process optimisation; and
- Consultancy.

WATER QUALITY MANAGEMENT IN NETWORK AND ENVIRONMENTAL SERVICES

- Chemical analysis;
- Bacteriological analysis;
- Toxicity testing; and
- Consultancy (waste disposal and pollution control).

WATER AND WASTEWATER MANAGEMENT SERVICES

- Bulk water treatment and distribution;
- Retail water services;
- Bulk sanitation management; and
- Water metering and billing services.

OPERATIONS AND MAINTENANCE SERVICES

- Optimisation of operational and infrastructure efficiencies; and
- Infrastructure maintenance and support services.

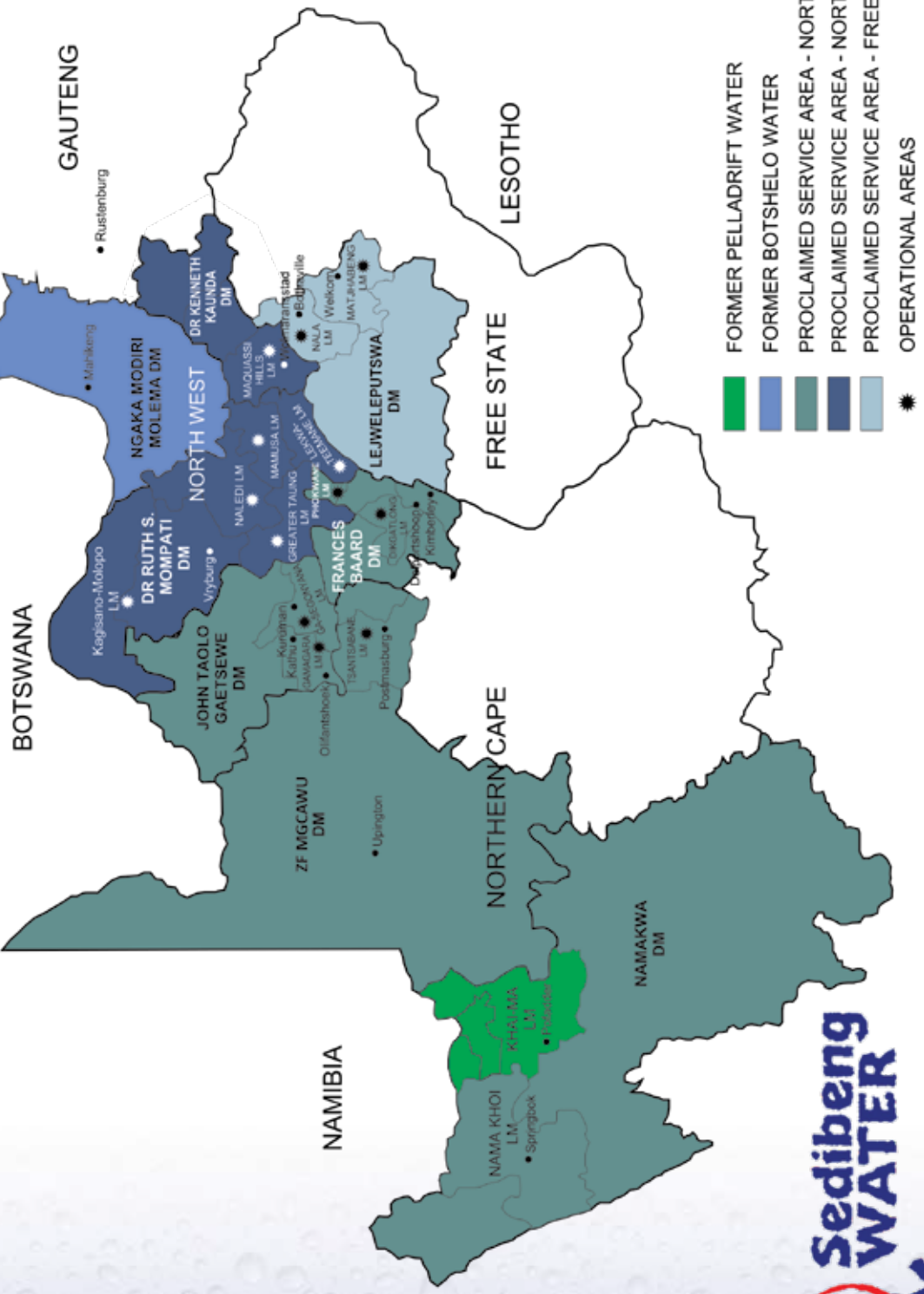
WATER PURIFICATION

- Chemical analysis;
- Bacteriological analysis;
- Process upgrading;
- Process problem solving and control;
- Process optimisation; and
- Consultancy.

TRAINING AND DEVELOPMENT SERVICES

- Water purification and distribution:
  - Theoretical and practical aspects of the operation and maintenance of different unit processes;
  - Process optimisation;
  - Comprehensive filter evaluation;
  - Sampling procedures and techniques;
  - Management of water quality in the network; and
  - Reservoir cleaning.
- Wastewater treatment:
  - Plant optimisation; and
  - Theory of wastewater treatment.
- Establishment of laboratories:
  - Implementation of a quality management system; and
  - Performing of chemical and bacteriological analyses on drinking water and wastewater.
- Industrial cost-recovery;
- Pollution control; and
- Student training programmes.

AREA OF SUPPLY



FOREWORD BY THE MINISTER OF WATER AND SANITATION

Mr. Gugile Nkwinti (MP)
Minister of Water and Sanitation

The Department of Water and Sanitation is governed by the National Water Act (Act No. 36 of 1998) and the Water Services Act (Act No.108 of 1997). These Acts, together with national strategic objectives, governance and regulatory frameworks, provide an enabling environment for effective water use and management. The Ministry is primarily responsible for the formulation and implementation of policy governing the water sector. While striving to ensure that all South Africans gain access to clean water and dignified sanitation, the Department of Water and Sanitation also promotes effective and efficient water resources management to ensure sustainable economic and social development. It is the strategic intent of the Ministry and Department of Water and Sanitation to put water provision and sanitation services at the centre of government programmes and to ensure that the implementation of its goals and objectives is guided by the National Development Plan and the National Water Strategy. In the process of promoting effective and efficient water resources management to ensure sustainable economic and social development, Water Boards are strategic partners.

The core functions of Sedibeng Water are to provide water services to its clients (mainly in the form of bulk water, wastewater treatment and retail water services); to operate and maintain water infrastructure; and, to act as an Implementing Agent for the Department of Water and Sanitation in respect of capital infrastructure projects.

The Minister of Water and Sanitation, as the Executive Authority, concluded a Shareholder Compact with the Board of Sedibeng Water for the 2017/2018 financial year. The Executive Authority, in consultation with the shareholder, agreed on performance objectives, measures and indicators, as well as annual targets in line with the Public Finance Management Act of 1999.

This Annual Report reflects the key milestones achieved by Sedibeng Water in its quest to improve its product base, through the delivery of accessible and high quality water services to areas in the Northern Cape, Free State and North West Provinces. All the regions of Sedibeng Water succeeded during the 2017/2018 financial year in delivering a sustainable water supply without major interruptions. Where interruptions occurred, it was often due to vandalism and/or theft of infrastructure, diesel and cabling. Excellent work done by Sedibeng Water's Scientific Services Department and its South African National Accreditation System (SANAS) accredited laboratory at Balkfontein, in

delivering safe potable water according to South African National Accreditation System 241:2015 standards, is noted.

The Report also indicates that the maintenance and refurbishment of infrastructure remains one of Sedibeng Water's important strategic objectives to meet the requirements of local authorities, the agricultural sector, mines and industries. A programme of planned maintenance for all plants, equipment and infrastructure has been implemented effectively throughout the 2017/18 financial year. In addition, Sedibeng Water's successful implementation of a turnaround strategy to enhance the operation and maintenance of the water and wastewater treatment plants in the Ngaka Modiri Molema District Municipality, is highly appreciated. Sedibeng Water's dedicated involvement as Implementing Agent of the Department of Water and Sanitation in the upgrading and refurbishment of the Pelladrift Water Scheme, the Vaal Gamagara Water Scheme and the Namakwa Regional Water Supply Scheme in the Northern Cape, is likewise valued. But, a lot remains to be done.

In conclusion, apart from improved operational performance, Sedibeng Water's 2017/2018 Annual Report also confirms the shared values of transparency, respect, excellence and teamwork.

Mr. Gugile Nkwinti (MP)
Minister of Water and Sanitation

3 October 2018

CHAIRPERSON'S REPORT

CONTENTS:

Mr. M.D. Dikoko
Chairperson

INTRODUCTION

During the 2017/2018 financial year, Sedibeng Water continued to progressively position itself as an important role player and partner in the water services sector in South Africa, especially in the Free State, Northern Cape and North West Provinces that form its area of operations. Driven by its vision of *Excellence in Water Services Provision*, the organisation has made a significant contribution towards addressing Government's imperatives related to the delivery of water services to communities. In so-doing, Sedibeng Water has fulfilled its mandate with honour and integrity.

As Chairperson of the Board of Sedibeng Water, it gives me much pleasure to present the organisation's Annual Report for the 2017/2018 financial year, which ended on 30 June 2018. I will now give a brief overview of some highlights of the past financial year, while the Acting Chief Executive of Sedibeng Water will provide a summary of other operational achievements during the review period.

GOVERNANCE

It is the task of the Board of Directors at Sedibeng Water to provide strategic direction to the organisation. The Chief Executive of Sedibeng Water, assisted by the Executive Committee (EXCO) and its Sub-committees, is accountable to the Board for implementing strategy.

Governance of the organisation, as well as the responsibility for driving good corporate citizenship, is vested in a unitary Board consisting of a Chairperson and five independent non-executive Directors. The governance framework at Sedibeng Water is mainly guided by the Water Services Act (Act No.108 of 1997); the Public Finance Management Act (Act No. 1 of 1999); the Companies Act (Act No. 71 of 2008); the King III and IV Reports on Corporate Governance; the Protocol on Corporate Governance in the Public Sector; and the Constitution of the Republic of South Africa (Act No. 108 of 1996). In fulfilling its responsibilities related to governance, the Board is supported by the following Sub-committees:

- Audit and Risk Committee;
- Finance and Information Technology Committee;
- Human Resources, Remuneration and Ethics Committee; and
- Infrastructural Development and Maintenance Committee.

The Board strives to create a corporate culture that fosters collective responsibility and shared accountability for stakeholder engagement in order to manage risk and reputation, with the key objective of building strong relationships. This assisted in creating an enabling corporate management environment in which the organisation could excel in its endeavours to deliver on the strategic intent mandated by Government within the context of Sedibeng Water's 2017/2018 Business Plan and a Shareholder Compact that had been concluded with the Minister of Water and Sanitation as Executive Authority, for the 2017/2018 financial year. During the review period, the Board held three scheduled meetings and eleven special meetings.

CUSTOMER AND STAKEHOLDER RELATIONS

Since Sedibeng Water places a high value on customer and stakeholder relations, various channels and platforms were used to reach targeted stakeholder groups effectively and efficiently. Among these were regularly scheduled meetings, involvement and collaboration on some projects, radio talk-shows, a corporate newsletter, roadshows, a website, print and electronic media, as well as an inspector phone-in programme.

Through coordinating committees, customer interaction forums, project steering committees and community forums, Sedibeng Water continues to enhance and support customer interaction structures. By using these structures, the organisation has driven systematic processes that captured and recorded customer issues. During the 2017/2018 financial year, Sedibeng Water held 95 customer interaction meetings across the Ngaka Modiri Molema District Municipality, as well as in the Greater Taung, Phokwane, Ga-Segonyana and Kagisano-Molopo Local Municipalities. In addition, as part of the Business Plan for turning around water and sanitation services in the Ngaka Modiri Molema District Municipality, Sedibeng Water was appointed as an Implementing Agent for establishing and managing Water and Sanitation Forums. Consequently, Sedibeng Water has established 11 such forums across the Ngaka Modiri Molema District Municipality.

A scientific and extensive customer satisfaction survey was conducted by an independent research company, drawing a representative sample amongst Sedibeng Water's bulk (municipalities and mines) and retail customers in the Ngaka Modiri Molema District Municipality and the Greater Taung, Ga-Segonyana, Phokwane, Ramotshere Moiloa and Kagisano-Molopo Local Municipalities. Statistical analyses using various customer service indicators, established that Sedibeng Water currently maintains a customer satisfaction level of 73% amongst its retail customers and 78% amongst its bulk customers. Therefore, it can be assumed that Sedibeng Water has been successful in maintaining above average levels of customer satisfaction during the 2017/2018 financial year.

WATER CONSERVATION AWARENESS CAMPAIGNS

Sedibeng Water in partnership with the Department of Water and Sanitation, implemented several Water Conservation Awareness Campaigns in the Free State, North West and Northern Cape Regions. Community members and school learners were targeted. During these campaigns, presentations were delivered by Sedibeng Water staff on water conservation, vandalism, water quality, pollution, etc. During the financial year concerned, a total of four awareness campaigns had been conducted.

CORPORATE SOCIAL INVESTMENT

The main focus of our Corporate Social Investment (CSI) Programme is to assist previously disadvantaged schools with special needs (learners with disabilities), women, non-governmental organisations, community-based organisations and other cause-worthy organs of civil society. A number of these organisations has benefitted through donations and sponsorships from our CSI Programme in order to create and maintain infrastructure, support feeding schemes, develop skills, provide transport, etc. Some of the CSI beneficiaries include the Lesedi Day Care Centre, the Emang Disability Care Centre, the Bosenyang Elderly Home and the M.M. Sebitloane Special School.

CAREER DEVELOPMENT INITIATIVES FOR LEARNERS

Given the scarce skills shortages being experienced in the South African water sector in general, Sedibeng Water also made concerted efforts during the 2017/2018 financial year to expose learners following mathematics and science related subjects at school, to potential career opportunities in the sector. Staff members of Sedibeng Water made presentations and exhibited at a career exhibition hosted by the Department of Correctional Services on 16 August 2017 at Ventersburg in the Free State Province. Learners from Grade 9-11 from schools in Ventersburg and Hennenman attended the event. Sedibeng Water also made presentations and exhibited at a career expo hosted by the Department of Rural, Environment and Agricultural Development and the Department of Agriculture, Forestry and Fisheries on 27–28 September 2017. Presentations were given to learners at the N. R. Mandela Secondary School and Ramatu High School, respectively. Furthermore, Sedibeng Water conducted a career exhibition during the South African Youth Water Prize Competition hosted by the provincial Department of Water and Sanitation. The event took place on 25 May 2018 at the North West University. Sedibeng Water likewise hosted numerous site visits by schools, tertiary institutions, training colleges, etc. to its water and wastewater treatment plants.

WORDS OF APPRECIATION

In conclusion, Sedibeng Water owes its existence and achievements to the organisation's valued customers, stakeholders, and other industry partners. I would like to express the Board's appreciation for their loyalty and contributions to Sedibeng Water's continued growth and success.

On behalf of the Board, I would also like to express my gratitude to the Minister of Water and Sanitation who has continuously expressed confidence in the Board and its governance of the organisation. The Minister's support, as well as the guidance provided to us by the Department of Water and Sanitation and the Portfolio Committee, are highly appreciated and played a significant role in our achievements during the 2017/2018 financial year.

I conclude by thanking the Management and all employees of Sedibeng Water for their contribution towards the achievements and success of the organisation during the past financial year. It is through your concerted efforts that we have succeeded once again in delivering effective and efficient services to all our clients. Sedibeng Water's achievements are your achievements. I am proud to be associated with you and this organisation.

M.D. Dikoko
Chairperson of the Board

BOARD MEMBERS

Mr. M.D. Dikoko
Chairperson

Dr. P. Molokwane

Mr. M.M. Mthombeni

Mr. E.A. Gaborone

Mr. C.D. Mboweni

Ms. K.G. Sereko

ACTING CHIEF EXECUTIVE'S REPORT

CONTENTS:

Ms. M.A. Shasha
Acting Chief Executive

INTRODUCTION

Sedibeng Water was established through Section 46 of the Water Services Act (Act No. 108 of 1997) and supports especially outcome 9 of the 12 strategic outcomes of the national Department of Water and Sanitation. Outcome 9 requires institutions such as Sedibeng Water to be responsive, accountable, effective and efficient in the developmental local government system.

As a role player of growing stature in the water services sector, Sedibeng Water is striving to deliver water services of a high standard and to engage effectively with stakeholders within the context of the legislative framework that governs the sector. This process is underpinned by our management philosophy that high levels of organisational performance in the past, should inspire even more exceptional standards in the present.

The 2017/2018 financial year was a testing year for many businesses, including Sedibeng Water, in respect of bottom line results. During the year under review, Sedibeng Water engaged in strategic planning to map a five year strategic plan for the organisation. Various scenarios were advanced where the focus was mainly on the core activities of the business, i.e. activities in terms of Section 29 of the Water Services Act of 1997. It was further noted during the strategic planning process that Sedibeng Water would also have to continue with performing secondary activities in support of local municipalities, i.e. Section 30 activities in terms of the aforementioned Act.

As the Acting Chief Executive, I will now briefly highlight important indicators of organisational performance achieved during the financial year that ended 30 June 2018.

FINANCIAL PERFORMANCE

Sedibeng Water continued its endeavors to contain expenditure, and increase and improve services and income generation, without sacrificing high standards in water services provision. The organisation received a qualified audit opinion for the 2017/2018 financial year. An action plan is being developed by Management to adequately address all the issues raised in the Independent Auditors Report by the Auditor-General of South Africa. Nonetheless, the Report provides a true reflection of the organisation's Section 29 activities. The content of our financial statements confirms that Sedibeng

Water is a viable and sustainable organisation. We are favourably positioned for future growth.

Total revenue increased from R1,3 billion in the previous financial year to R1,4 billion in the 2017/2018 financial year, which constitutes a 6% increase. An increase of 9% in operating and administrative expenses was evident due to an escalation in the cost of electricity and chemicals, increased salaries and wages, as well as the deprecation of property, plants and equipment due to the revaluation of infrastructure assets. The net profit for the year amounts to R64 million. This decline is attributed to a decrease of R38 million in project income fees earned as Implementing Agent for the Department of Water and Sanitation. Total assets increased from R6,3 billion in the previous financial year to R7,2 billion in the 2017/2018 financial year.

Based on these financial results, the overall financial and operational performance of Sedibeng Water remains healthy, despite the outstanding debt owed to the organisation by the Water Services Authorities. A concern is, however, that if the outstanding debt keeps on increasing, it could pose a threat to the financial stability of the organisation in the longer term.

PROVIDING POTABLE WATER TO THE MASSES

The process of providing potable water involves abstracting raw water, purification and distribution to different municipalities in our area of supply. The provision of water services to municipalities is the core business of Sedibeng Water and in doing so, the organisation is committed to delivering clean and safe water in an uninterrupted manner to all its customers.

It is worth noting that the availability of raw water continues to be a challenge, hence some areas have reported lower sales as compared to the previous financial year. All three regions (the Free State, Northern Cape and North West) performed operationally well during the year under review. Water supply in all the regions was delivered without major interruptions, hence my appreciation goes to the dedicated workforce. Where interruptions occurred, they were attended to within specified timeframes. Most interruptions were the result of vandalism and/or theft of infrastructure/equipment, diesel and electrical cables.

In comparison with the previous financial year, the bulk water sales for the Free State Region and the North West (Hartswater Sub-region) increased by 5%, whilst the North West (Mahikeng Sub-region) and the Vaal Gamagara operational area in the Northern Cape Region experienced a decrease in volumes due to a shortage of raw water.

PRODUCT QUALITY ASSURED

Sedibeng Water is committed to providing accurate, reliable, professional and economically viable laboratory services in terms of ISO/IEC 17025:2017 requirements to internal and external clients within agreed timeframes. In doing so, both our quality control laboratories (Balkfontein and Vaal Gamagara) are playing a critical role in serving our customers and fellow employees by successfully addressing research, process optimisation and quality control imperatives.

The main laboratory at Balkfontein in the Free State Region is a South African National Accreditation System (SANAS) accredited facility staffed by professionally qualified personnel equipped to analyse all chemical, hydrobiological and bacteriological determinands. The next SANAS audit has been scheduled for August 2018 in order to ensure that our Balkfontein Laboratory is still compliant with international and national standards, the Accreditation for Conformity Assessment, Calibration and Good Laboratory Practice Act (Act No. 19 of 2006) and our own Quality Management System.

The new laboratory at Vaal Gamagara in the Northern Cape Region was completed in April 2016. The main laboratory at Balkfontein oversees the operation and development of this facility to ensure that SANAS accreditation will be obtained as soon as possible. Several new scientific instruments were purchased during the year under review in order to increase the analytical capacity of the laboratories. All chemistry test methods were reviewed, updated and documented during the 2017/2018 financial year.

During the review period, Sedibeng Water continued to supply potable water of a high standard, and where challenges had been experienced, these were promptly addressed by experienced scientists and resolved as soon as possible.

CARING FOR INFRASTRUCTURE TO ENSURE BETTER PERFORMANCE

In order to acquire efficient performance of infrastructure, it is imperative to conduct proper maintenance and refurbishment timely. The maintenance and refurbishment of infrastructure is one of Sedibeng Water's strategic objectives. A programme of planned maintenance for all plants, equipment and infrastructure had been implemented successfully throughout the 2017/18 financial year.

Expenditure on refurbishment of R381,8 million and on maintenance of R66,3 million, constitutes an increase of 38% and a decrease of 8%, respectively when compared to the previous year. The primary objective of this expenditure is to augment water supply, enhance water quality and increase the lifespan of plants and equipment. The implementation of Sedibeng Water's Capital Programme is progressing well amidst some challenges, which include funding to a certain extent. It is worth mentioning that numerous unplanned maintenance and repair activities had to be carried out during the year under review. These were mainly caused by vandalism and theft. However, effective measures have been implemented in several areas to curb these challenges.

STAKEHOLDER RELATIONSHIPS

Our stakeholder base expects different products and services from Sedbeng Water. External stakeholders include local/district municipalities within our area of operation. Sedibeng Water has 15 valid Service Level Agreements signed with customers and another is in the process of being signed.

We are equally accountable to our internal stakeholder, the Sedibeng Water workforce. Currently, we have a staff compliment of 814 employees. These are the executors of our strategy and have performed well during the year under review. Therefore, Sedibeng Water places a high premium on the correct placement of staff, staff development and staff support. Allowances (medical aid, variable allowances, as well as risk and retirement benefits) were updated and improved during the 2017/2018 financial year. A total of ten learners took part in our Learnership Programme, while 12 candidates and 27 interns participated in our Apprenticeship and Internship Programmes, respectively. A total of 29 skills programmes were successfully implemented and attended in the review period, while the number of participants benefitting from these initiatives amounted to 412.

As part of stakeholder relations, Sedibeng Water has established sound relations with organised labour. At the end of the 2017/2018 financial year, 728 of our employees were registered members of labour unions. With regards to employment equity targets and the advancement of designated groups, Sedibeng Water's percentage of gender equity at senior management level has increased to 25%. Likewise, an improved figure of 37% was recorded at middle management level. The percentage of People with Disabilities employed increased to 1.8%, as compared to 1.45% in the previous financial year. A staff turnover of 4.44% was recorded for the 2017/2018 financial year.

The relationship between Sedibeng Water and its stakeholders (external and internal/labour) improved significantly during the year under review. This was as a result of substantial effort by the Sedibeng Water Leadership through the facilitating of stakeholder meetings.

SAFETY, HEALTH AND ENVIRONMENT

Sedibeng Water gives priority to the wellbeing of employees and caring for the environment alike. During the 2017/2018 financial year, 17 training courses related to safety, health and environmental issues were presented and attended by Sedibeng Water employees. The organisation successfully implemented its Occupational Hygiene Programme, Occupational Health Management Programme, Disease Management Programme, Employees Assistance Programme and the Employees Recreational Programme to enhance the wellbeing of our employees.

Sedibeng Water's overall Disabling Injury Frequency Rate (DIFR) at the end of the 2017/2018 financial year was 0.81, which met the organisation's strategic objective of creating an environment that is conducive to the growth and retention of skills, as defined in our Business Plan.

External NOSA CMB 253 audits were conducted in all the regions during the 2017/2018 financial year, and the outcomes were as follows:

Table 1: External NOSA CMB 253 Grading - 2017/2018

Region	Area / Municipality	NOSA Star Grading
North West	Dr. Ruth S. Mompati District Municipality, Ga-Segonyana Local Municipality and Phokwane Local Municipality	4
North West	Ngaka Modiri Molema District Municipality	2*
Northern Cape	Vaal Gamagara	5
Northern Cape	Namakwa and Pelladrift	5
Free State	Matjhabeng Municipality	5

** This area was incorporated into Sedibeng Water's operational area in the recent past and plans to improve on the grading result are in progress.*

IMPLEMENATION OF DEPARTMENT OF WATER AND SANITATION (DWS) PROJECTS

During the 2017/2018 financial year, Sedibeng Water dedicated its attention as Implementing Agent for the Department of Water and Sanitation (DWS) to the upgrading and expanding of the infrastructure of existing water schemes operated in the Northern Cape and North West Provinces.

- **Northern Cape Province**

Due to aging infrastructure and the growing water demand from the mining sector with new mines opening and existing mines expanding, new challenges arose in this operational area. In order to address this situation, the refurbishment and upgrading of three schemes continued during the review period. These are:

- ***Pelladrift Water Scheme:***
  The project entails the construction of a 20Mℓ/day water supply system parallel to the existing system to augment supply to the Gamsberg mining operation. Construction commenced on 1 March 2017 and was completed on 30 June 2018.

- ***Vaal Gamagara Water Scheme:***
  This project aims to satisfy the future water demands (up to 2030) of the local consumers and various mines in the area, while also providing for an allocation to Botswana. Phase 1 is in construction since November 2016, and Phase 2 is currently in its detail design stage.

- ***Namakwa Regional Water Supply Scheme:***
  The refurbishment of the infrastructure of this scheme was divided into two phases. Phase 1 is now complete with Phase 2 in construction since July 2016.

- **North West Province**

Sedibeng Water is currently also overseeing the implementation of a number of projects in the North West Province that are funded from the Regional Bulk Infrastructure Grant (RBIG) Programme and emanated from directives issued by the Minister of Water and Sanitation to eradicate water tankering in the area. The following are some of the projects that are being executed under Implementing Agent contracts:

- ***Wolmaransstad Wastewater Treatment Works:***
  The upgrading of the wastewater treatment plant to increase its capacity to 8Mℓ/day is underway since May 2015. The project is 95%

complete and will be ready for hand-over by October 2018.

- ***Mmabatho Water Treatment Works:***
  The project entails civil, mechanical and electrical works for the upgrading of the water treatment works from a nominal capacity of 20Mℓ/day to 30Mℓ/day. The project commenced on 2 February 2015 with final completion expected by the end of February 2019.

- ***Setlagole Bulk Water Scheme:***
  The project aims at constructing a 2.4Mℓ/day water supply system, which includes 32 boreholes, an Ion Exchange Plant, a 5.5Mℓ concrete reservoir and a reticulation network to supply Setlogole and its surrounding areas. The project commenced on 5 October 2015 and the planned completion date is 18 October 2018.

- ***Ditsobotla Groundwater Source Development (Bakerville):***
  This is one of the projects that emanated from Ministerial Directives. The primary scope of the works is the development of ground water sources in Bakerville village, which currently relies on tankering as its source of water supply. The project commenced in November 2016 with final completion expected in August 2018.

MANAGING RISK

Sedibeng Water is a risk conscious and compliant organisation as required by Section 51(1)(a)(I) of the Public Finance Management Act (Act No. 1 of 1999) (PFMA); Section 27.2.1 of the Treasury Regulations; and the King Reports on Corporate Governance. The Board of Sedibeng Water has delegated the monitoring of risk management activities to the organisation's Audit and Risk Committee (ARC), which convenes on a quarterly basis. The top twenty (20) critical risks are reported to the ARC on a quarterly basis to ensure that the Board is aware of the risks facing the organisation and to report on any matters that may require their immediate attention.

Internal committees assist with risk management processes and activities to ensure that risks that may impact on the achievement of the organisation's strategic objectives, are managed effectively. Risk Management meetings are held on a quarterly basis with the regions and departments, where the risk registers are updated with developments that transpired within a particular quarter. Sedibeng Water has progressed from a risk naïve level to a risk managed level of maturity, which is evident in the fact that risk is now being perceived as an integral part of the processes in the ogranisation.

ACKNOWLEDGEMENTS

As Acting Chief Executive, I wish to thank the Chairperson and Members of the Board for their continued support during the 2017/2018 financial year. Your guidance, leadership and involvement empowered Sedibeng Water not only to successfully address the challenges related to the ever-changing and demanding water services environment, but also to excel in optimising organisational efficiency, operational performance and risk management.

I express my gratitude to the Department of Water and Sanitation for the support that they have provided to the Management and Board of Sedibeng Water. This allowed us the opportunity to realise our mandate and make a significant contribution towards the development of our country and its people. We re-commit ourselves to supporting all governmental initiatives to improve the living conditions of communities in our area of operations by securing water supply and delivering water and sanitation services of a very high standard.

I also want to thank our stakeholders and customers. We regard you as partners in our quest for service excellence. Without your constructive involvement and support, our organisational progress, achievements and growth during the past financial year, would not have been possible.

As had been the case in previous years, the employees of Sedibeng Water have proven themselves a workforce to be reckoned with. Your dedication, skilled input and willingness to negotiate challenges in a positive manner, again ensured

that we have achieved favourable results in the 2017/2018 financial year. On behalf of Management, I want to express my profound appreciation to all of you for making us the service provider of choice in the areas where we serve.

In conclusion, Sedibeng Water has progressively earned its reputation as one of the largest water utilities in South Africa in terms of the geographical area that we serve. We see ourselves playing an increasingly important role in the water services sector in the years to come – focused on adding value from source to tap. In doing so, we are driven by our commitment to quality water services through quality processes.

M.A. Shasha
Acting Chief Executive

COMPANY SECRETARIAT

CONTENTS:

Adv. M. Dladla
Acting Company Secretary and Manager: Secretariat

INTRODUCTION

Sedibeng Water (formerly known as Goldfields Water) was established in 1979 in terms of Section 46 of the Water Services Act (Act No.108 of 1997) (WSA). The Company Secretariat is responsible for the overall governance of the Water Board. Sedibeng Water is listed as a Public Entity under Schedule 3B of the Public Finance and Management Act (Act No. 1 of 1999) (PFMA).

GOVERNANCE FRAMEWORK

Sedibeng Water adheres to a governance framework as informed by, but not limited to:

- the Constitution of the Republic of South Africa (Act No. 108 of 1996);
- the Companies Act (Act No. 71 of 2008);
- the Public Finance Management Act (PFMA) (Act No. 1 of 1999);
- the Water Services Act (WSA) (Act No.108 of 1997);
- the King Report on Corporate Governance (King III);
- the King IV Report on Corporate Governance; and
- the Protocol on Corporate Governance in the Public Sector.

As a public entity, Sedibeng Water's purpose is to deliver on the strategic intent mandated by Government. The Executive Authority over the organisation is vested in the Minister of Water and Sanitation, the Honourable Mr. Gugile Nkwinti, MP. The Minister of Water and Sanitation appoints the Board of Sedibeng Water. The Board guides the strategic direction of the organisation and monitors progress in executing the business strategy. The Board ensures that the organisation complies with the requirements of the Water Services Act, Companies Act, Public Finance Management Act, National Treasury Regulations, together with any other legislative requirements. The roles and responsibilities of the Executive Authority, the Accounting Authority and Management are clearly defined and do not overlap.

2017/2018 CORPORATE GOVERNANCE KEY FOCUS

During the financial year under review, the key focus was on the review of the corporate governance framework and the implementation of some of the principles contained in the King IV Report on Corporate Governance.

BOARD OF DIRECTORS AND SUB-COMMITTEES

Governance, as well as the responsibility for driving good corporate citizenship, is vested in a unitary Board, which is supported by several Board Committees and the Company Secretary. The Board, through its committees, provides the company's strategic direction, while the Chief Executive, assisted by the Executive Committee (EXCO) and its sub-committees, is accountable to the Board for implementing strategy.

Company Secretariat

The Company Secretariat is a central source of information and advice on matters of ethics and good governance to the Board and the organisation. The Company Secretary is responsible for coordinating meetings of the Board, its Sub-committees and the Executive Committee (EXCO).

Changes in Board Composition

The Minister of Water and Sanitation reviewed the composition of the Board and the following changes were made:

Mr. M.D. Dikoko was retained as Chairperson of the Board. The following Board Members were likewise retained:

- Dr. P.E .Molokwane;
- Mr. M.M. Mthombeni;
- Mr. C.D. Mboweni;
- Mr. E.A. Gaborone; and
- Ms. K.G. Sereko.

The current Board consists of a majority of independent non-executive directors, who possess diverse skills and experience in the fields of science, human resources, finance, accounting, business and risk management.

Board Meetings

Meetings of the Board and its committees are scheduled annually in advance. Special meetings are convened as and when required to address specific material issues. The Board held three (3) scheduled meetings and eleven (11) special meetings during the year under review.

Board Evaluation

The evaluation of the performance and effectiveness of the Board, individual directors and Board committees for 2017/18 will completed by December 2018.

Board Charter

The Board Charter regulates how the Board and individual members discharge their responsibilities according to the principles of good governance. The charter aims to ensure that all the Board Members understand their duties and responsibilities, as well as the laws, regulations and best practices governing their conduct. It also details the division of responsibilities at Board level and between the Board and Management.

Key Board Activities

- Provision of strategic direction to the organisation;
- Managing the negative impact of escalating arrear municipal debt on liquidity and financial sustainability, with consideration of alternative options for collecting arrear municipal debt, such as payment of the debt by National Treasury using the municipalities' equitable share;
- Approval of the implementation of a number of measures to manage the arrear municipal debt, as well as the disconnection of non-paying municipalities;
- Consideration of risk management;
- Approval of the following matters:
- Sub-committee reports to the Board;
- Declaration of Interest and Confidentiality Undertaking Procedures;
- The Audited Annual Financial Statements and the Annual Performance Report for the year ended 30 June 2018;
- Condonation of the Irregular Expenditure Report on the basis that the transactions did not expose the organisation to any financial loss;
- All the Performance Information Reports for the four (4) quarters;
- Approval of tariffs and budget for the financial year ending 30 June 2018;
- Approval of the budget allocation per Strategic Objectives for the year ending 30 June 2018;
- Approval of annual salary increases and performance incentive bonuses for the

2017/2018 financial year;
- Revision of Delegation of Authority (DoA);
- Power of Attorney - Appointment of Registered Tax Representative;
- Executive Organisational Structure;
- Appointment of External Auditors; and
- Business/Corporate Plan 2018/2023.

Stakeholder Engagement and Material Matters:

The Board strives to create a corporate culture that fosters collective responsibility and shared accountability for stakeholder engagement in order to manage risk and reputation, with the key objective of building strong relationships. The Board has delegated the managing of stakeholder relationships to Management. Sedibeng Water operates within a complex stakeholder landscape, consisting of multi-faceted stakeholder groups with differing needs and objectives. Our approach to stakeholder relations is guided by the principles of the King Report on Corporate Governance (King III) to ensure that the relationship between Sedibeng Water and its stakeholders is managed ethically and in compliance with relevant legislation and best practice.

Management of Risks and Opportunities:

A risk management system has been implemented to respond appropriately to all significant risks. Risk management is done at departmental, regional and operating unit level. The risks are consolidated into an Integrated Risk Report focusing on the top risks impacting the organisation. This report is reviewed by the Executive: Safety, Health and Environment, the Risk Management Committee and the Audit and Risk Committee. Risk controls and treatment plans have been put in place to manage risks to acceptable levels.

Performance Against the Shareholder Compact:

The Board concluded a Shareholder Compact with the Executive Authority, the Minister of Water and Sanitation, for the 2017/2018 financial year. The Board, in consultation with the shareholder, agreed on performance objectives, measures and indicators, as well as annual targets in line with the Public Finance Management Act of 1999.

Board Committees

Audit and Risk Committee (A&RC):

This Committee performs a statutory function as set out in the Companies Act of 2008, assisting the Board with oversight over financial reporting, internal control, risk management systems, as well as internal and external audit functions. Four (4) scheduled and two (2) special meetings were held during the period under review.

Some of the key activities included:

- Review of the Internal Audit Progress Report every quarter;
- Approval of the Internal Audit Plan 2017-2018;
- Approval of the Internal Audit Operation Plan for the 2017/2018 financial year;
- Approval or Risk Assessment Reports every quarter;
- Approval of the Risk Management Implementation Plan;
- Review of the Master Internal Audit Findings Tracker every quarter;
- Review of the Audited Annual Financial Statements for recommendation to the Board for approval; and
- Review of the Management Accounts; Performance Information Report; Top 20 Payments; Debt Management and Contingent Liabilities' Reports on a quarterly basis.

Finance and Information Technology Committee (FINCO):

This Committee oversees financial reporting, effective and efficient financial management, review of the investment portfolio and information technology (IT) governance. Four (4) scheduled meetings and three (3) special meetings were held during the year under review. Some of the key activities included:

- Recommend Significance and Materiality Framework to the Board for approval;
- Review of Irregular Expenditure and Fruitless and Wasteful Expenditure Reports for recommendation to the Board for condonation and noting;

- Review of Management Accounts for recommendation to the Board for approval every quarter;
- Review of the Audited Annual Financial Statements for recommendation to the Board for approval;
- Review of the Delegation of Authority for recommendation to the Board for approval;
- Recommend Annual Review of the FINCO Charter to the Board for approval;
- Review of the Business/Corporate Plan 2018/2023 for recommendation to the Board for approval;
- Review of the Finance Strategy Implementation Plan;
- Review of the Supply Chain Management, Debt Management and Information Technology Reports; and
- Review of the progress made on debt collection/cost-recovery for reporting to the Board.

Human Resources, Remuneration and Ethics Committee (REMCO):

This Committee is responsible for recommending remuneration, ethics and other human resource-related policies, succession planning, training, as well as the evaluation of the Board and its committees. Four (4) ordinary meetings and three (3) special meetings of which one was a joint meeting were held during the year under review. Some of the key activities included:

- Recommendation to the Board of the Minimum Services Agreement for the Amanzi Bargaining Council;
- Recommendation of the Marketing and Communication Policy to the Board for approval;
- Recommendation of annual Performance Incentive Bonuses for Employees to the Board for approval;
- Recommendation of the Annual Salary Increase for Non-Bargaining Levels 2017/2018 to the Board for approval;
- Recommendation of the Executive Organisational Structure to the Board for approval; and
- Review of Amanzi Bargaining Council (ABC) Matters, Feedback - South African Association of Water Utilities (SAAWU) Meeting, Safety, Health and Environment (SHE) Report, Skills Development and Employment Equity.

Infrastructural Development and Maintenance Committee (IDMC):

This Committee ensures that Sedibeng Water's procurement system is fair, equitable, transparent, competitive and cost-effective, as required by Section 217 of the Constitution, PFMA and Preferential Procurement Policy Framework Act (Act No. 5 of 2000) (PPPFA). The Committee is tasked with reviewing the infrastructure and expansion programmes of the organisation and with ensuring that the maintenance programme and schedules are adhered to. Four (4) ordinary meetings, were held during the period under review.

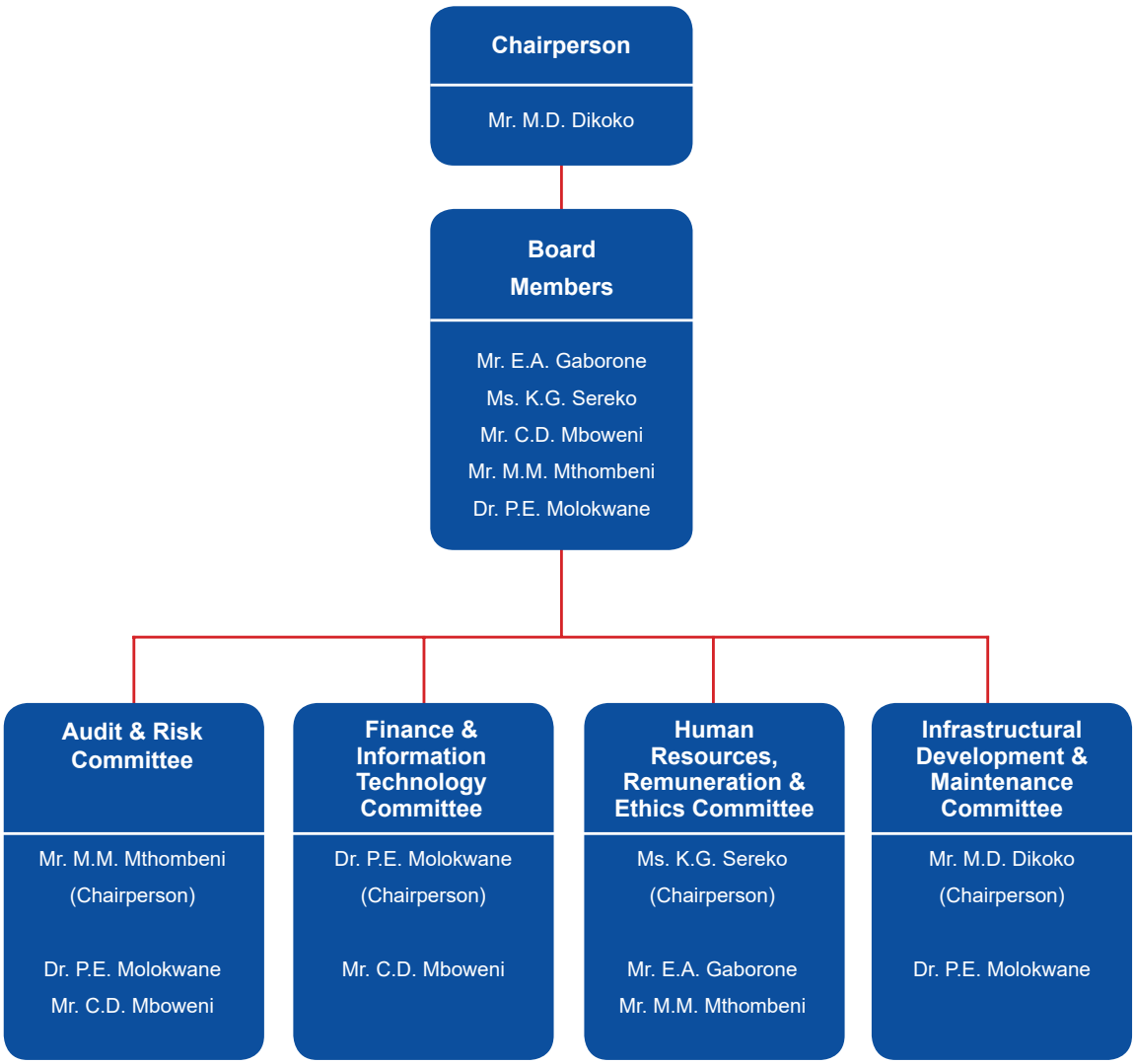
MANAGEMENT COMMITTEE (MANCO) / EXECUTIVE COMMITTEE (EXCO)

The Committee changed its name from Management Committee (MANCO) to Executive Committee (EXCO). EXCO has been established by the Chief Executive to assist in guiding the overall direction of the business and exercising executive control in managing day-to-day operations.

STRUCTURE OF THE BOARD

The structure of Sedibeng Water's Board is depicted in Illustration 1.

Illustration 1: Board Structure



SUMMARY OF BOARD AND SUB-COMMITTEE MEETINGS

Board and Sub-committee meetings held during the 2017/2018 financial year, are summarised in Table 1.

Table 1: Summary of Board and Sub-committee Meetings

Board Members	Board Meetings	Audit and Risk Committee Meetings	Finance and Information Technology Committee Meetings	Human Resources, Remuneration and Ethics Committee Meetings	Infrastructural Development and Maintenance Committee Meetings
Number of Scheduled Meetings	**14[a]**	**6[b]**	**7[c]**	**7[d]**	**4[e]**
Mr. M.D. Dikoko	14				4
Dr. P.E. Molokwane	14	6	7		4
Mr. C.D. Mboweni	14	6	7		
Mr. M.M. Mthombeni	14	6		5	
Ms. K.G. Sereko	14			5	
Mr. E.A. Gaborone	14			5	

a) Board Meetings: Three (3) meetings and eleven (11) Special Meetings
b) Audit and Risk Committee Meetings: Four (4) ordinary meetings and two (2) special meetings.
c) Finance and Information Technology Committee Meetings: Four (4) ordinary meetings and three (3) special meetings
d) Human Resources, Remuneration and Ethics Committee Meetings: Four (4) ordinary meetings and three (3) special meetings
e) Infrastructural Development and Maintenance Committee Meetings: Four (4) ordinary meetings

CONCLUSION

The overview provided above underscores the valuable contribution that the Corporate Secretariat made during the 2017/2018 financial year in enhancing the overall governance of Sedibeng Water as a public entity. This assisted in creating an enabling corporate management environment in which Sedibeng Water could excel in its endeavours to deliver on the strategic intent mandated by Government.

MEMBERS OF THE EXECUTIVE COMMITTEE

Ms. M.A. Shasha
Acting Chief Executive

Mr. N.T. Molobye
Human Resources Executive

Mr. T.E. Nteo
Internal Audit Executive

Ms. J.T. Busakwe
Acting Chief Financial Officer and Manager: Finance

Mr. N.A. Theys
Marketing and Communication Executive

Mr. I.M. Hasenjager
Acting Chief Operations Officer and New Business Development Executive

MEMBERS OF THE EXECUTIVE COMMITTEE (CONTINUED)

Mr. S.K. Sithole
Acting Regional Manager:
North West (Hartswater)

Mr. D.F. Traut
Scientific Services
Executive

Mr. N.E. Ratshitanga
Technical Support and
SHE Executive

Mr. O.A. Masia
Regional Manager:
Northern Cape

Mr. G.M. Dippenaar
Regional Manager:
Free State

Mr. M.P. Mokubung
Regional Manager:
North West (Mahikeng)

Adv. M. Dladla
Acting Company
Secretary and
Manager: Secretariat


BOTHAVILLE
Bonitas


MISSION

FINANCE

CONTENTS:

Ms. J.T. Busakwe
Acting Chief Financial Officer and Manager: Finance

LEGISLATIVE AND ACCOUNTING FRAMEWORK

The annual financial statements for the financial year ending 30 June 2018 were prepared and presented in accordance with South African Generally Accepted Accounting Practices (SA GAAP), the Public Finance Management Act (Act No. 1 of 1999) (PFMA) as amended, and reflect the reporting requirements of the Water Services Act (Act No. 108 of 1997). The Financial Department is guided in the performance of its tasks by the following Acts of Parliament and Financial Codes: the Water Services Act (Act No. 108 of 1997), the Public Finance Management Act (Act No. 1 of 1999), the Municipal Finance Management Act, the Preferential Procurement Policy Framework Act, the Supply Chain Management Framework, and other related prescripts.

CHANGE IN THE ACCOUNTING FRAMEWORK

All Schedule 3B entities (including Sedibeng Water) are reporting on a withdrawn Accounting Standard i.e. GAAP SA. Such Schedule 3B entities are required to opt for reporting based on Generally Accepted Accounting Practices (GRAP), or the International Financial Reporting Standards (IFRS). Directive 12 has been issued by the Accounting Standards Board where entities are obliged to choose a reporting accounting framework to be followed from the 30 June 2019 financial year.

The financial statements for the year ending 30 June 2018 have been prepared on the going concern basis using the SA GAAP accounting framework for the last time in this financial year. The going concern basis assumes that the organisation will continue to operate in the foreseeable future.

KEY OBJECTIVES

The Finance Department, as a contributor to the overall vision of the organisation, developed the following five key objectives for implementation:

- Ensuring the financial sustainability of the organisation;
- Enabling of the business to operate optimally by providing efficiencies in the business processes and providing appropriate information systems;
- Ensuring that risk management processes are embedded in the business processes;

- Ensuring compliance with the prescripts of legislation relevant to the managing of the finances of the organisation; and
- Ensuring that all employees receive training and development to enhance their capacity to deliver on the set objectives.

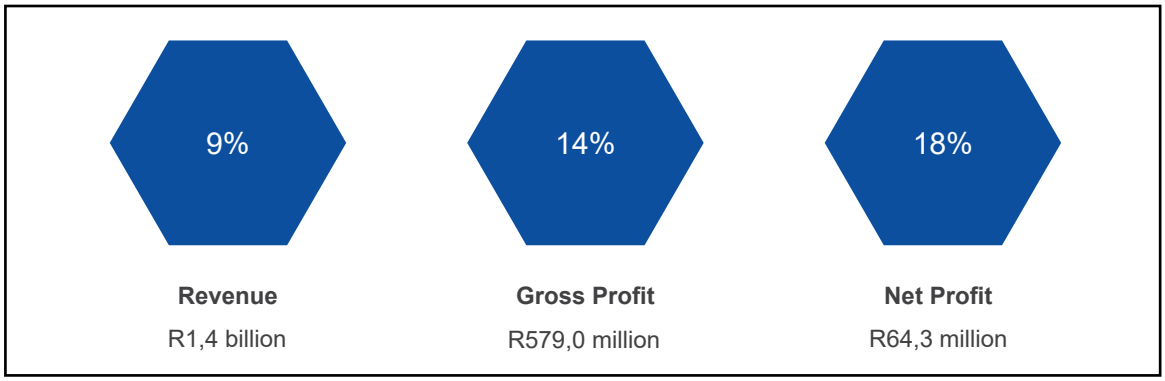
FINANCIAL HIGHLIGHTS

Sedibeng Water has realised a net profit of R64,3 million in the 2017/2018 financial year, against a restated net profit of R89,7 million in the previous year. Comparative amounts had to be restated following prior year adjustments in Property, Plant and Equipment.

Sedibeng Water measures its financial performance in terms of its achievement against financial indicators, which are aligned to the organisation's strategic objectives, and are included in the section on Performance against Shareholders Compact for the financial year ending 30 June 2018 in the Annual Report.

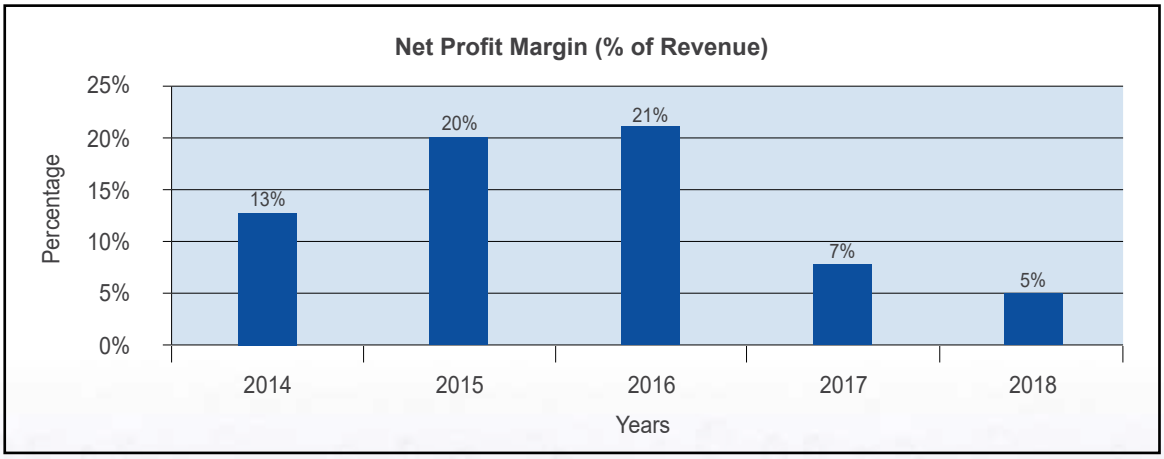
Graph 1 provides a summary of the most important financial highlights related to the financial year ending 30 June 2018.

Graph 1: Financial Highlights: Financial Year Ending 30 June 2018



The organisation achieved a net profit of R64,3 million (see Graph 2).

Graph 2: Net Profit Margin



The 2015/2016 financial year included government grants income, whereas no subsidies were received during the 2017 and 2018 financial years. The figure of 7% is the agreed upon target for the Net Profit Margin. However, a decline in the net profit has been realised due to a reduction in Project and Investment Income.

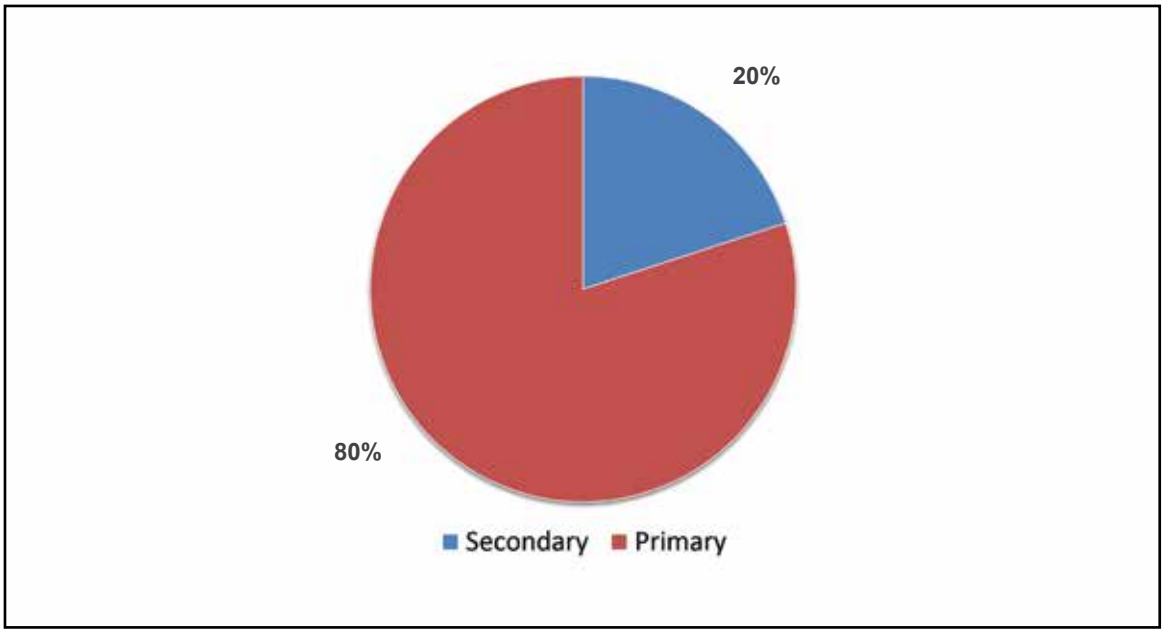
STATEMENT OF FINANCIAL PERFORMANCE

Total Revenue

The business of Sedibeng Water is divided into two operations, i.e. Section 29 and Section 30 activities as defined by the Water Services Act (Act No. 108 of 1997). Section 29 activities depict our primary activities, i.e. activities linked to bulk potable water supply, while Section 30 activities relate to other services, which are the operation and maintenance of rural schemes on behalf of municipalities. During the financial year ending 30 June 2018, total revenue from both operations amounted to R1,4 billion (2017: R1,3 billion).

During the year under review, Sedibeng Water achieved a 21% secondary business rating (2017: 19%) against a target of 15%, which means that at least 71% of the activities of the organisation relates to Section 29 of the Water Services Act that forms the core business of Sedibeng Water (see Graph 3). The achievement regarding secondary activities is in line with the achievement of the previous year. The slight increase is due to the Mamusa Plant in Schweizer Reneke that Sedibeng Water had to operate in the North West area.

Graph 3: Primary Versus Secondary Activities

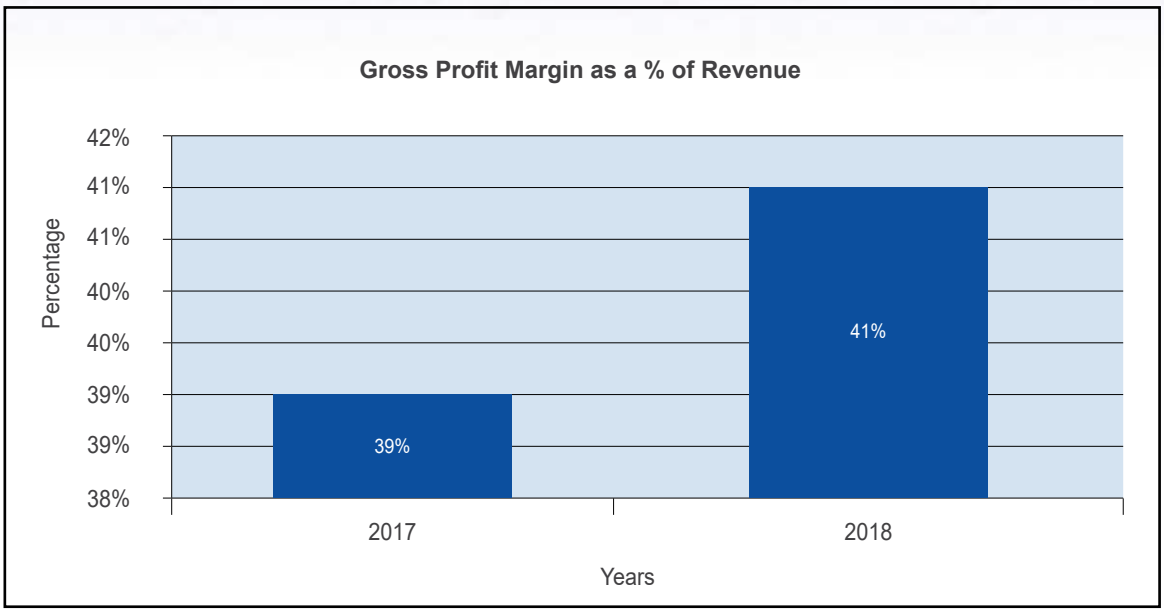


Gross Profit

Gross profit is influenced by all the direct costs involved in the production of potable water. Direct costs include Raw Water Purchases, Electricity, Purification Costs, as well as Direct Labour Costs.

Raw water remains the major expenditure in the cost of sales as it represents 47% of the total costs of sales. As can be seen in Graph 4, the gross margin was 41%.

Graph 4: Gross Profit Margin



Total Comprehensive Income

Sedibeng Water realised a total comprehensive income of R64,3 million for the financial year ended 30 June 2018, compared to the restated net income of R89,7 million for 30 June 2017. This decrease in net profit is as a result of the decrease in implementing agency fee income from implementing capital projects on behalf of the Department of Water and Sanitation.

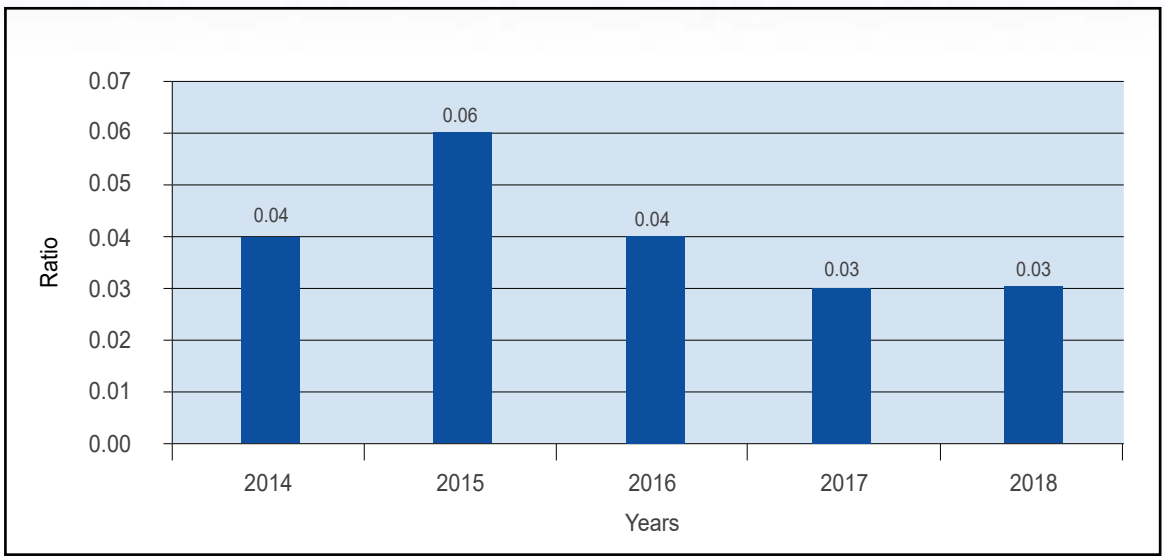
STATEMENT OF FINANCIAL POSITION

The financial position of the organisation remains viable - consistent with previous financial years. Debtor's Days have increased from 807 to 822, against a target of 635 days. Sedibeng Water is applying water restrictions in terms of Section 4(5) of the Water Services Act.

CAPITAL INVESTMENT PROGRAMME VERSUS DEBT

Sedibeng Water is continuing with the implementation of the Capital Investment Programme to refurbish the internal infrastructure. The Capital Investment Programme is funded by means of reserves generated year-on-year, which have increased by 2% in the financial year under review. As a result, the gearing ratio for the organisation remained at 0.03 (see Graph 5).

Graph 5: Gearing Ratio



TARIFF DETERMINATION

In terms of Section 42 of the Municipal Finance Management Act, Water Boards must submit proposed tariff increases to the Accounting Authority, National Treasury and South African Local Government Association upon consultation with the customers. Thereafter, the Department of Water and Sanitation must table such proposed tariff increases by all Water Boards to Parliament on, or before, 15 March each year for implementation. The Minister of Water and Sanitation approved the tariffs which were charged by Sedibeng Water during the financial year under review.

LOOKING FORWARD

The Finance Department will be focusing on a Back to Basics programme and thereby enhancing the internal control function. With the implementation of the change in the reporting accounting framework training will be provided to the Finance Department.

A programme is being developed to improve the performance of the organisation including the intent to increase the secondary activities and improve the cash reserves of the organisation.

HUMAN RESOURCES

CONTENTS:

Mr. N.T. Molobye
Human Resources Executive

INTRODUCTION

The goal of the Human Resources (HR) Department is to support and assist the organisation as a whole in its quest to achieve its strategic goals. HR as a Department broadly fulfills this role through fostering a positive and an engaging work environment, while identifying and responding to the ever-changing needs of our diverse community of stakeholders that the Department is required to serve.

STRATEGIC OBJECTIVES

In moving both the HR Department and the organisation forward, the following HR strategic objectives were pursued during the 2017/2018 financial year:

- To recruit skilled and competent individuals and offer them competitive market related remuneration;
- To make a concerted effort to improve the employment equity profile of the organisation focusing on gender, diversity and People With Disabilities (PWDs);
- To train and develop staff;
- To retain skilled technical staff in particular and promote of the well-being of employees in general; and
- To implement benchmarked employment best practices and policies and thereby, comply with relevant legislation.

STRATEGIC PRIORITIES AND THE HR DEPARTMENT'S STRATEGY MAP

During the year under review, the Department ensured alignment to the organisational strategy by formulating functional strategic objectives, which were vigorously pursued. The functional strategic objectives referred to, are broadly indicated in Table 1.

Table 1: HR Functional Strategic Objectives

Objective 1	Objective 2	Objective 3	Objective 4
Recruitment of staff in general and improvement of the organisation's employment equity profile	Training and development of staff	Retention of skilled technical staff in particular and promotion of the well-being of employees in general	Implementation of benchmarked employment best practices and policies, and compliance to relevant legislation

RECRUITMENT OF STAFF AND IMPROVEMENT OF THE EMPLOYMENT EQUITY PROFILE

During the year under review, the HR Department committed itself to filling vacant positions timeously, while also ensuring that set employment equity targets are being achieved in terms of the advancement of designated groups, i.e. women and People With Disabilities (PWDs). The percentage of gender equity at senior management level has increased to 25%. Likewise, an improved figure of 37% was recorded at middle management level. Table 2 indicates the distribution of employees who were recruited in terms of occupational levels, race and gender:

Table 2: Recruitment Distribution in Terms of Occupational Level, Race and Gender

Occupational Levels	Male				Female				Foreign Nationals		Total
	A	C	I	W	A	C	I	W	Male	Female	
Top management											
Senior management	1										1
Professionally qualified and experienced specialists and mid-management	1										1
Skilled technical and academically qualified workers, junior management, supervisors, foremen, and superintendents	11				5						16
Semi-skilled and discretionary decision making	14				11						25
Unskilled and defined decision making	60	1			6						67
GRAND TOTAL	87	1			22						110

The current Employment Equity Plan (for the period 1 July 2017 to 30 June 2022) is implemented and is updated as and when there are changes made to the organisational structure. To enforce compliance and ensure progress, the set employment equity targets are monitored in the various operational regions by representative Regional Employment Equity Forums, which are chaired by the Regional Managers who are also appointed as local Employment Equity Managers.

For the year under review, the percentage of PWDs increased to 1.8% as compared to 1.45%, which was the figure for the previous year. Table 3 provides a comparison in terms of the number of employed PWDs in the previous financial year, and the 2017/2018 financial year.

Table 3: Employment of People with Disabilities (PWDs) per Region

Region	Number of PWDs for 2016/2017	Number of PWDs for 2017/2018
Free State	8	7
North West: Hartswater	3	5
North West: Mahikeng	1	2
Northern Cape	0	2
Total	**12**	**16**
Total %	**1.45%**	**1.83%**

As a designated employer, the organisation was able to compile and submit its Employment Equity Report for the reporting period (1 September 2016 - 31 August 2017) to the Department of Labour. Receipt thereof was acknowledged accordingly.

A staff turnover of 4.44% was recorded for the 2017/2018 financial year. The gender distribution and reasons or types of terminations are provided in Table 4.

Table 4: Staff Turnover

Reasons/Types of Termination	Males	Females	Total
Resignations	14	7	21
Dismissals	2	0	2
Deaths	2	0	2
Ill-Health	2	0	2
Retirements	7	1	8
Expiry of Fixed-term Contract	3	0	3
Total	**30**	**8**	**38**

TRAINING AND DEVELOPMENT OF STAFF

Training and development helps in increasing job knowledge and improving the skills of employees at every level. Also, it allows expanding the horizons of the human intellect, improving interpersonal skills and building the characters of employees. During the year under review, the organisation made a significant investment in the training, skilling and development of its employees and members from local communities.

A number of training and development initiatives and interventions, such as a skills programme, artisan development programmes; learnerships; internships and staff bursaries, were approved and implemented with the aim of ensuring continuous learning and building of capacity within the organsiation. Training evaluation and quality assurance were conducted to determine the return on investment.

Skills Programmes

Skills programmes that were offered, included National Qualification Framework (NQF) credit bearing and non-credit courses and professional conferences that aimed to improve employees' occupational skills and to acquire Continuous Professional Development (CPD) points towards their professional licence.

A total of 29 skills programmes were successfully implemented and three professional conferences were attended. The number of participants benefitting from these initiatives amounted to 412. Table 5 shows that an average of 69 employees were trained each month during the 2017/2018 financial year.

Table 5: Total Number of Participants in Training

Jul 17	Aug 17	Sept 17	Oct 17	Nov 17	Dec 17	Jan 18	Feb 18	Mar 18	April 18	May 18	Jun 18
45	35	30	52	09	03	00	14	13	13	85	113

Artisan Development Programmes

The Department collaborated with external stakeholders to enhance the artisan development programme in the sector by creating opportunities for the placement of learners to benefit from workplace learning at Sedibeng Water's facilities. We successfully placed 12 apprentices in the War on Leaks Programme and 10 learners from the National Rural Youth Service Corps Programme. These placements commenced between April 2018 and May 2018, and all learners are unemployed youth. Tables 6 and 7 depict the different trades concerned and the number of participants in each.

Table 6: Apprenticeship Programme

Trade Certificate	Employed	Unemployed
Electrical	0	8
Fitting and turning	0	3
Welding	0	1
Total	**0**	**12**

Table 7: Learnership Programme

National Certificate	Employed	Unemployed
Water and Wastewater Treatment Process Operations	0	10
Total	**0**	**10**

Internship Programme

Through our flagship Internship Programme, the Department continued to provide work-based training for graduates to gain workplace experience. During the year under review, ten new interns were enlisted in addition to the 15 that were already on the programme. In this programme, interns are contracted for 18 months and given a monthly stipend to enable them to take care for their daily needs, such as transport, accommodation, meals, etc. Table 8 depicts the distribution of such interns.

Table 8: Internship Programme

Departments	Male				Female				Total
	A	C	I	W	A	C	I	W	
Scientific Services	6				5	1			12
Finance	1				4				5
Safety, Health and Environment	1				2				3
Corporate	1								1
Human Resources	1				3				4
Marketing and Communication	0				2				2
GRAND TOTAL	**10**				**16**	**1**			**27**

Financial Assistance for Graduate and Post-Graduate Studies

A total of 106 financial assistance applications, either in the form of bursaries or study loans to further studies at various institutions of higher learning, were approved in the 2017/2018 financial year. Table 9 illustrates the distribution of these beneficiaries in terms of race and gender.

Table 9: Bursary and Study Loan Allocation Distribution

Bursaries and Study Loans	Male				Female				Total
	A	C	I	W	A	C	I	W	
Bursary and Study Loans	61				33				94
GRAND TOTAL	**61**				**33**				**94**

RETENTION OF SKILLED AND COMPETENT INDIVIDUALS, AND PROMOTION OF THE WELL-BEING OF EMPLOYEES

Effective strategies are being implemented to ensure that skilled and competent employees are retained. These include: Recognition of long service; succession planning; accelerated personal development programmes; as well as offering market-related remuneration packages.

Recognition of Long Service

Employees who have completed one year in the service of the organisation, get recognised by being given an additional 1% for pay progression when annual salary increases are effected. Those who have completed five years of service, get rewarded for loyalty through leave credits equivalent to the number of vacation leave days they are entitled to per annum. Employees who have completed ten to 35 years of service, were recognised for their loyalty to the organisation at functions that had been sanctioned by the Board, and were held during November and December 2017 respectively. These employees were presented with long service awards, which were both in cash and in kind. In addition to the aforementioned awards, employees in the 35 years category also received a weekend vacation for two (employee and spouse or partner) i.e. a bus trip to a coastal city plus three nights hotel accommodation. Table 10 highlights the categories, tokens of recognition and total number of employees that received long service awards during the 2017/2018 financial year.

Table 10: Long Service Awards

Long Service Category	No. of Recipients	Awards and/or Tokens
10	32	• Long Service Certificate • Long Service Leave (Annual Leave credits applicable to the level) • A gift or cash payment not in excess of R5000.00
15	9	• Long Service Certificate • Long Service Leave • A gift or cash payment or a combination of the two, but not in excess of R7 500.00
20	6	• Long Service Certificate • Long Service Leave • A gift or cash payment or a combination of the two, but not in excess of R10 000.00

25	14	• Long Service Certificate • Long Service Leave • Company dinner for employee and spouse/partner together with two guests of his/her choice • A gift or cash payment or a combination of the two, but not in excess of R12 500.00
30	2	• Long Service Certificate • Long Service Leave • Company dinner for employee and spouse/partner together with two guests of his/her choice • A gift or cash payment or a combination of the two, but not in excess of R15 000.00
35	9	• Long Service Certificate • Long Service Leave • Weekend vacation for two (trip by bus to a coastal city of choice and three nights hotel accommodation) • A gift or cash payment or a combination of the two, but not in excess of R20 000.00
TOTAL	**72**	

Succession Planning and Accelerated Personal Development Programmes

The Succession Planning Policy was approved and implemented during the year under review. This meant that employees who have the required potential, were placed on the Succession Planning Programme to ensure that their development is accelerated and thereby, prepare them to succeed in posts, which were identified as critical. Most of the employees on the Succession Planning Programme were awarded bursaries to further their studies at tertiary level. It can be confirmed that this programme enabled the organisation to achieve the strategic objectives related to employee retention and well-being, with relative ease.

Improved Terms and Conditions of Employment

To ensure that Sedibeng Water continues to improve the working conditions of employees in order to attract and retain skills, jobs were re-evaluated in the recently acquired schemes, and the remuneration packages of most employees were adjusted accordingly in situations where it was found that the organisation was lagging behind compared to the market. As a matter of principle and to have a competitive edge, employees are remunerated at the upper quartile of the market. Through this approach, the organisation was able to lure young professionals from urban areas to serve in our remotely located operational areas. The success of this approach is evident from the large number of applications received from the targeted groups, as and when posts were advertised externally.

Communication, Employee Involvement and Participation

Since worker participation is an essential ingredient of workplace democracy as contemplated in Section 80 of the Labour Relations Act (Act No. 66 of 1995), serious efforts were made to ensure that workplace collective bargaining and consultative structures (such as the Local Labour Forum (LLF), Equity Consultative Forums (ECF) and Regional Union/Management Forums) were able to meet amidst the challenges that were encountered along the way. Executive Committee and Regional Management meetings were also convened to enhance communication and general monitoring of the implementation of decisions taken. Even though there had been employee participation at various levels and involvement of organised labour in consultative structures, it was evident that the level of understanding of issues differed amongst role players. In order to address this identified gap, appropriate intervention was solicited from Executive Management and the Commission for Conciliation, Mediation and Arbitration (CCMA).

Sedibeng Water upholds the ideals of the Constitution of South Africa in that the right to freedom of association is protected. In light of this, employees are free to join, or not to join trade unions. However, if they do join any union, such a union should have adequate representation in the water sector and in the workplace. SAMWU and UASA are recognised as collective bargaining agents for their members at the various work sites.

Table 11 reflects the distribution of union membership at Sedibeng Water as at 30 June 2018.

Table 11: Distribution of Union Membership

Region	SAMWU	UASA	Other	Total
Free State	149	86	13	248
North West: Hartswater	193	9	0	202
Northern Cape: Namakwa	30	1	7	38
Northern Cape: Pelladrift	7	0	4	11
Northern Cape: Vaal Gamagara	48	1	7	56
North West: Mahikeng	159	10	4	173
Total	**586**	**107**	**35**	**728**

Due to the fact that conflict is inherent in the workplace, a number of disputes arose between Management and organised labour. Some of these disputes were resolved internally, while others were referred for either conciliation or arbitration by the CCMA.

Table 12 depicts the nature and number of disputes that were referred to the CCMA.

Table 12: Disputes Referred to the CCMA

Dispute	Number of Disputes Referred to the CCMA	Total Resolved	Total Unresolved
Alleged unfair dismissal	2	2	**0**
Alleged unfair labour practice	1	1	**0**

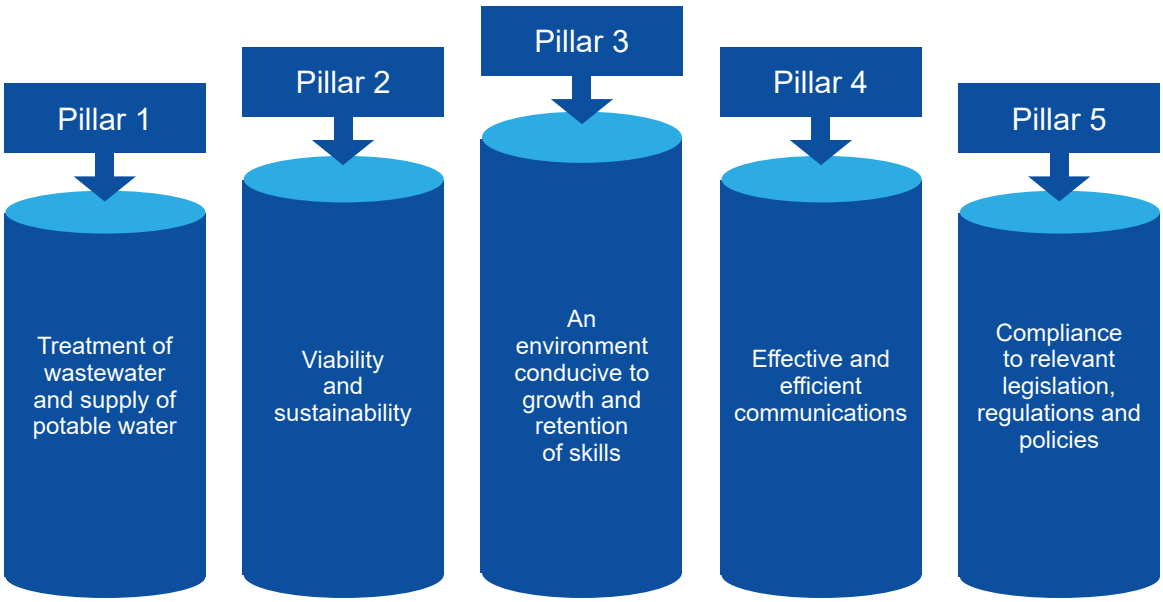
IMPLEMENTATION OF BENCHMARKED EMPLOYMENT BEST PRACTICES AND POLICIES, AND COMPLIANCE TO RELEVANT LEGISLATION

Finally, after promulgation of the amendments to relevant legislation, such as the Labour Relations Act, Basic Conditions of Employment Act, Employment Equity Act and recent trends in various sectors, etc., the Policy Review Committee continued to deliver on its mandate to review existing policies and procedures. In instances where gaps were identified, new policies were developed and approved for implementation, and these included: Bursaries for Community Members; Volunteerism; Alcohol Testing; Communication and Marketing; Social Media; and Accident Insurance Benefits Distribution. Newly-recruited employees and current employees are continuously being educated on the provisions of the approved policies to ensure awareness and compliance.

ORGANISATIONAL DESIGN

Sedibeng Water is in the process of aligning its organisational structure to its recently reviewed strategic objectives, which comprises of the following five pillars.

Illustration 1: Pillars Representing Reviewed Strategic Objectives



CONCLUSION

During the 2017/2018 financial year, the Human Resources Department was successful in its endeavours to support and assist Sedibeng Water in achieving its strategic goals by fostering a positive and engaging work environment, and identifying and responding to continuously changing organisational needs.

MARKETING AND COMMUNICATION

CONTENTS:

Mr. N.A. Theys
Marketing and Communication Executive

INTRODUCTION

Sedibeng Water persistently acknowledges the fact that the organisation owes its existence and increased market share to the establishment and enhancement of good relations with both its internal and external stakeholders through effective communication and marketing initiatives. In accordance with the mission of the organisation, the Marketing and Communication Department is responsible for stakeholder engagement, creating public awareness of Sedibeng Water, and promoting the services rendered by the organisation in respect of its mandate, brand, and products. Key to the Marketing and Communication Department's objectives is the implementation of a proactive Marketing and Communication Strategy that is relevant to stakeholders' needs and expectations.

FUNCTIONS

The Marketing and Communication Department takes responsibility for ensuring that Sedibeng Water establishes and maintains constructive relationships with internal and external stakeholders. It is the mission of the Marketing and Communication Department to promote the organisation's professional reputation by meeting the expectations of its stakeholders.

The functions of the Marketing and Communication Department include:

- Corporate social investment;
- Communication management (facilitating research on communication and customer service related issues);
- Technical communication support (photography, graphic design and layout, speech writing, video production, exhibitions, compilation of annual reports, designing and managing the organisation's website);
- Customer and stakeholder relations (fostering alliances and lobbying support for the activities of the organisation);
- Media relations;
- Marketing communication (using marketing communication and advertising media to create awareness);
- Market development; and
- Market positioning.

CORPORATE SOCIAL INVESTMENT

Sedibeng Water's Corporate Social Investment (CSI) Programme is designed to help the organisation to refocus its resources and efforts in ways that benefit the society and the organisation itself. The Corporate Social Investment Programme reflects the unique requirements of communities and contributes towards addressing the real needs of communities in our operational area. Our Corporate Social Investment activities have enhanced the organisation's image and assisted in building a strong brand identity. The CSI Programme has also ensured that the organisation continuously promotes customer goodwill and loyalty.

Our CSI Programme is geared towards cause-worthy initiatives by civil society. The special needs of previously disadvantaged communities are taken into account when considering any request for assistance. Therefore, vulnerable members of our society and schools have been prioritised. This includes the provision of donations, sponsorships and the development of sports and arts. To ensure accountability, monthly meetings are held with beneficiaries, while annual reviews are also conducted to assess the impact of the organisation's contributions within their respective communities.

Table 1 indicates the schools and community organisations that have benefited from Sedibeng Water's Corporate Social Investment Programme during the 2017/2018 financial year.

Table 1: Sponsorship Beneficiaries of CSI Programme

Description	Location	Use of Sponsorship
LETLOTLO NALEDI PUBLIC SCHOOL		
Accommodates more than 1 500 learners from previously disadvantaged communities	Kgotsong near Bothaville in the Nala Local Municipality (Free State Province)	Establishing a feeding scheme and a trust fund to assist learners
LESEDI DAY CARE CENTRE		
Accommodates more than 500 children from unemployed families and orphans	Saaiplaas, Virginia (Free State Province)	Supporting a feeding scheme
LEARAMELE SCHOOL		
Caters for more than 200 intellectually impaired learners	Kuruman in Ga-Segonyana Local Municipality (Northern Cape Province)	Developing technical skills and the arts
LOKGABENG CENTRE		
Promotes social, emotional, physical and psychological well-being of disabled and vulnerable people	Lokgabeng village in Greater Taung Local Municipality (North West Province)	Providing food and maintenance at centre
M.M. SEBITLOANE SPECIAL SCHOOL		
Caters for learners with special needs	Taung village in Greater Taung Local Municipality (North West Province)	Developing sports and maintenance at school
EMANG DISABILITY CARE CENTRE		
Accommodates orphaned children and people with disabilities	Wolmaransstad in Maquassi Hills Local Municipality (North West Province)	Supporting a feeding scheme and maintenance at centre
THLOMAMO CHILD CARE CENTRE		
Caters for learners with severe intellectual impairment	Dryharts village in Greater Taung Local Municipality (North West Province)	Supporting a feeding scheme and maintenance at centre

Table 1: Sponsorship Beneficiaries of CSI Programme (Continued)

Description	Location	Use of Sponsorship
LEBONENG SPECIAL SCHOOL		
Caters for intellectually impaired learners	Welkom (Free State Province)	Developing art and basic artisan skills
J.L.V. ECHOES PROVIDERS		
Accommodates destitute and vulnerable community members	Longlands in Dikgatlong Local Municipality (Northern Cape Province)	Supporting people living with HIV/AIDS based at centre and maintenance work
TEMOSO SPECIAL SCHOOL		
Caters for 127 learners from unemployed and previously disadvantaged parents	Ganyesa village in Kagisano-Molopo Local Municipality (North West Province)	Financing transport and renovations at school
BOSENYANG ELDERLY HOME		
Accommodates more than 30 destitute and neglected elderly people	Kraaipan in Ratlou Local Municipality(North West Province)	Erecting a fence
LAPA LA BOTLHE AGED CARE CENTRE		
Cares for 70 senior citizens	Signal Hill in Mahikeng Local Municipality (North West Province)	Assisting with operational costs, and buying food and medicine
GOODHOUSE PRIMARY SCHOOL		
Caters for 21 learners from unemployed parents	Henkries in Nama Khoi Local Municipality (Northern Cape Province)	Buying school uniforms and gardening equipment
DITHAKWANA A RE RATANENG CENTRE		
Caters for 44 elderly people	Ikageleng township in Ramotshere Moiloa Local Municipality (North West Province)	Constructing of ablution facilities and provision of food

Sedibeng Water will in the next financial year continue to expand its Corporate Social Investment Programme in order to reach more remote and isolated communities in its operational area.

COMMUNICATION MANAGEMENT

The Marketing and Communication Department facilitated the conducting of a Customer Satisfaction Survey involving both retail and bulk customers. This survey, which was conducted by an independent research company, afforded the organisation the opportunity to investigate the prevailing levels of customer satisfaction amongst its customers. Statistical analyses using various customer service indicators, established that Sedibeng Water currently maintains a customer satisfaction level of 73% amongst its retail customers, and 78% amongst its bulk customers. These results of the survey indicated that Sedibeng Water was able to maintain above-average levels of customer satisfaction during the 2017/2018 financial year.

TECHNICAL COMMUNICATION SUPPORT

The Marketing and Communication Department provides technical communication support to other departments at Sedibeng Water with regards to the graphic design and layout of their promotional material. The Department is likewise responsible for corporate photography, the production of DVDs and exhibition material, as well as participating in exhibitions. Additionally, this Department assists with managing the website of Sedibeng Water.

CUSTOMER AND STAKEHOLDER RELATIONS

Sedibeng Water places high value on customer and stakeholder relations. As a result, various channels

and platforms were used during the year under review to reach each targeted stakeholder group effectively and efficiently. These included regularly scheduled meetings, involvement and collaboration on some projects, roadshows, a corporate newsletter, the organisation's website, print and electronic media, WhatsApp group, as well as an inspector phone-in programme.

Customer Interaction Structures

In order to facilitate two-way communication between Sedibeng Water and stakeholders, the Marketing and Communication Department continued to establish and support customer interaction structures, such as coordinating committees, customer interaction forums, project steering committees and community forums. The organisation has used these forums to identify, capture and record issues raised by customers. Issues were referred to the relevant departments at Sedibeng Water to be solved timeously. During the 2017/2018 financial year, Sedibeng Water held 95 customer interaction meetings across the Ngaka Modiri Molema District Municipality, as well as the Greater Taung, Phokwane, Ga-Segonyana and Kagisano-Molopo Local Municipalities.

In the Ngaka Modiri Molema District Municipality, the primary focus was on the Mahikeng, Ramotshere Moiloa, Ratlou and Tswaing Local Municipalities. During these meetings, ward councillors, consumers, tribal authorities and sector players were afforded an opportunity to report water and sanitation challenges and receive feedback on planned and implemented water projects and programmes in their respective wards.

In addition, as part of the Business Plan for turning around water and sanitation services in the Ngaka Modiri Molema District Municipality, Sedibeng Water was appointed as an Implementing Agent for establishing and managing Water and Sanitation Forums.

Sedibeng Water has established 11 such forums across the Ngaka Modiri Molema District Municipality. The primary objectives of these Water and Sanitation Forums are:

- To introduce and promote systematic exchange of information, effective communications, intensive dialogue and improved programme coordination of water and sanitation issues;
- To promote transparency on water and sanitation issues affecting different communities and the implementation of projects, if applicable;
- To create an enabling environment for stakeholder participation/engagement and empowerment in water and sanitation governance; and
- To encourage active participation by local community members in water and sanitation matters.

During the 2017/2018 financial year, Sedibeng Water hosted 49 Water and Sanitation Forum meetings in the Tswaing, Ramotshere Moiloa, Mahikeng and Ratlou Local Municipalities.

Water Education and Plant Visits

Sedibeng Water has continued to host visits by schools, tertiary institutions, government departments, training institutions, etc. to its water and wastewater treatment plants. Themes covered during these visits included, amongst others, the water cycle; how water gets to our taps; the water treatment process and the importance of water conservation and water quality monitoring.

Water Conservation Awareness Campaigns

As part of Water Month activities, Sedibeng Water in partnership with the Department of Water and Sanitation, held several events in the Free State, North West and Northern Cape Regions. Community members and learners were targeted. Presentations were delivered on water conservation, vandalism, water quality, pollution and career opportunities. Amongst the school learners targeted during campaigns were the Pabalelo Primary Model School, Mmoledi High School, Molelwane High School and Mokgakala High School in the North West Region. During the financial year concerned, a total of four educational programmes were conducted.

Career Development Initiatives for Learners

Sedibeng Water made presentations and exhibited at a career exhibition hosted by the Department of Correctional Services on 16 August 2017 at

Ventersburg in the Free State Province. Learners from Grade 9-11 from schools in Ventersburg and Hennenman attended the event.

Sedibeng Water also made presentations and exhibited at a career expo hosted by the Department of Rural, Environment and Agricultural Development and the Department of Agriculture, Forestry and Fisheries on 27–28 September 2017. Presentations were given to learners at the N. R. Mandela Secondary School and Ramatu High School, respectively.

Sedibeng Water conducted a career exhibition during the South African Youth Water Prize Competition hosted by the Department of Water and Sanitation. The event took place on 25 May 2018 at the North West University.

Mandela Day Celebrations

Several Clear River Campaigns were launched as part of Mandela Day celebrations. In the North West Province, Sedibeng Water, the Department of Water and Sanitation, the Ngaka Modiri Molema District Municipality and community members joined hands in cleaning the Molopo River in Mahikeng. In the Free State Province, Sedibeng Water in partnership with the Department of Water and Sanitation, Coca Cola and the Nala Local Municipality, conducted a Clear River Campaign along the Vaal River at Bothaville. Furthermore, Sedibeng Water, the Department of Water and Sanitation and the Dikgatlong Local Municipality in Barkly West in the Northern Cape Province, cleaned the banks of the Vaal River at Gong Gong.

MEDIA RELATIONS

In order to communicate the organisation's goals, ideas, strategic intentions, as well as newsworthy events, Sedibeng Water has developed a healthy working relationship with representatives of the print and electronic media at a national, provincial, regional and local level. By means of monthly and bi-monthly radio talk shows, Sedibeng Water has not only established a two-way communication channel for our customers, but also managed to portray a positive corporate image of the organisation. These talk shows have likewise assisted the organisation in communicating directly with its customers. Long-term agreements have been entered into with various media entities, such as Motsweding, Modiri, Kopanong, Mahikeng, The Star, The Rock, Vaaltar, Kurura, Bophirima, Namakwa FM and Bodumedi FM. The Marketing and Communication Department is continuously engaging with a variety of print media. Two media tours were conducted in both the Dr. Ruth Segomotsi Mompati and Ngaka Modiri Molelema District Municipalities.

MARKETING COMMUNICATION

Sedibeng Water used integrated marketing communication messages delivered through both print and electronic media to create and promote awareness about its products and services. Apart from developing brand awareness, marketing communication also assisted in retaining the existing customer base and improving healthy relationships with customers. This is evidenced by the organisation retaining all its customers for the year ended 30 June 2018.

MARKET DEVELOPMENT

Sedibeng Water's market development initiatives are aimed at increasing the organisation's market share. Therefore, Sedibeng Water has conducted an assessment profiling current and potential customers' needs. The organisation's Market Development Strategy is also underpinned by the notion of providing excellent service in our areas of operation. Furthermore, Sedibeng Water's market development initiative is not only focusing on increasing sales volumes, but also enhancing the capacity and skills base of targeted municipalities. Regular presentations and technical audits are conducted, and results are shared with targeted clients.

MARKET POSITIONING

The Market Positioning Strategy has ensured that Sedibeng Water is able to understand and appreciate the needs of its customers. Customers' needs and challenges had been identified and addressed through rendering of the following services:

- Community capacity building;
- Water quality monitoring;
- Appointment as Implementing Agent for projects of the Department of Water and Sanitation;
- Environmental management services; and
- Operations and maintenance services.

CONCLUSION

During the 2017/2018 financial year, the Marketing and Communication Department's integrated Marketing and Communication Strategy and related programmes, activities and initiatives made a significant contribution towards ensuring that Sedibeng Water continuously engages with all its stakeholders. Central to its mandate, the Department has also successfully coordinated customer relations, market development and growth strategy initiatives.

OPERATIONS PORTFOLIO

CONTENTS:

Mr. I.M. Hasenjager
Acting Chief Operations Officer and New Business Development Executive

The Operations Portfolio at Sedibeng Water comprises the Free State Region; the North West Region; the Northern Cape Region; Scientific Services; Technical Support & Safety, Health and Environment, as well as New Business Development.

Operational assets include, amongst others, two quality control laboratories, 15 plants, 74 pump stations, 499 reservoirs and a pipeline network of more than 2 000km. The Water Board's operational area covers approximately 100 000km^3 and includes parts of the North West, Northern Cape and Free State Provinces. This makes Sedibeng Water one of the largest water utilities in South Africa in terms of the geographical area that its serves. The Water Board provides water to a population of about 2.9 million people living mainly in rural communities and a few larger towns.

Water treatment works operated and maintained by Sedibeng Water include:

Free State Region:

- Balkfontein Water Treatment Works; and
- Virginia Water Treatment Works.

Northern Cape Region:

- Vaal Gamagara Water Treatment Works;
- Henkries Water Treatment Works; and
- Pelladrift Water Treatment Works.

North West Region:

- Pampierstad Water Treatment Works;
- Pudimoe Water Treatment Works;
- Bogosing Water Treatment Works;
- Kgomotso Water Treatment Works;
- Mmabatho Water Treatment Works;
- Mahikeng Water Treatment Works;
- Dinokana Water Treatment Works;
- Motswedi Water Treatment Works;
- Itsoseng Water Treatment Works;
- Bloemhof Water Treatment Works; and
- Christiana Water Treatment Works.

Since Sedibeng Water's operational area covers three provinces, a regionalised operational approach is followed to ensure efficient service delivery at ground level.

FREE STATE REGION

CONTENTS:

Mr. G.M. Dippenaar
Regional Manager: Free State

INTRODUCTION

In order to honor Sedibeng Water's strategic intent of ensuring sustainable and reliable water supply, the Free State Region focuses on efficient purification practices, maintenance, the refurbishment of infrastructure, as well as new infrastructure development to meet the ever-increasing demand of consumers in its operational area. The Region supplies bulk potable water to:

- The Matjhabeng Local Municipality (Free State Province);
- The Nala Local Municipality (Free State Province);
- The Maquassi Hills Local Municipality (North West Province), and
- Various mines in the distribution area.

During the 2017/2018 financial year, the Free State Region continued to provide operations and maintenance services at the water and wastewater treatment works of Bloemhof and Christiana in the Lekwa-Teemane Local Municipality in the North West Province. Since Sedibeng Water took over both these water and wastewater treatment works, the plants have been operating optimally and produce potable water that meets high quality standards.

POTABLE WATER SUPPLY: ORIGINAL SUPPLY AREA

Water is being abstracted from the Vaal River, Sand River canal and boreholes. Most of these boreholes are located in the North West Province and supplement the water supply to the Maquassi Hills Local Municipality. Raw water treated at the Balkfontein Water Treatment Plant is drawn from the Vaal River, and that of the Virginia Water Treatment Plant is abstracted from the Sand River Canal (which is fed from the Allemanskraal Dam). The raw water from the Allemanskraal Dam is subject to a quota, and the amount of water to be used is dependent on the amount of water available in the dam, which is mostly influenced by rainfall. Raw water purchases and water volumes produced (sold) for the 2017/2018 financial year, are reflected in the ensuing two tables.

Table 1: Raw Water Purchases

Year	Volume (kℓ)	Increase in Demand (kℓ)	Increase (%)
2016/2017	77,424,519	-2,838,263	-3.54
2017/2018	85,347,246	7,922,727	10.23

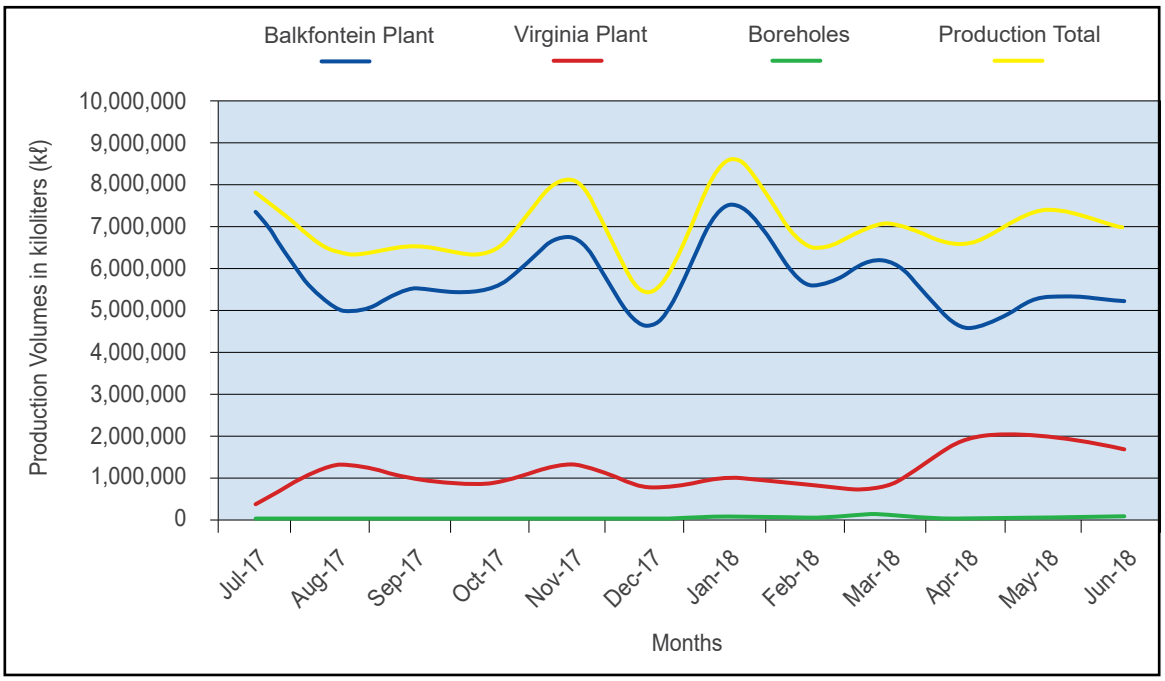
Table 2: Volume Produced (Sold)

Year	Volume (kℓ)	Increase in Demand (kℓ)	Increase (%)
2016/2017	74,157,293	-2,080,853	-2.73
2017/2018	76,235,439	2,078,146	2.80

During the year under review, raw water purchases and water sales volumes increased by 10.23% and 2.80%, respectively. These increases are attributed to the fact that raw water restrictions were uplifted, population growth in the area of supply and the fact that the Masilonyana Local Municipality was assisted with water from time to time.

Graph 1 reflects monthly production trends in the Region for the financial year under review.

Graph 1: Free State Region Monthly Production Trends



POTABLE WATER SUPPLY: ADDITIONAL SUPPLY AREA

Lekwa-Teemane Local Municipality

The Free State Region continues to provide operations and maintenance services at the Bloemhof and Christiana Water Treatment Works in the municipal area of the Lekwa-Teemane Local Municipality.

Bloemhof Water Treatment Works:

Raw water abstraction and volumes produced at the Bloemhof Water Treatment Works are depicted in Tables 3 and 4.

Table 3: Bloemhof Water Treatment Works: Raw Water Abstraction

Year	Volume (kℓ)	Increase in Demand (kℓ)	Increase (%)
2016/2017	3,628,600	49,500	1.38
2017/2018	3,969,240	340,640	9.39

Table 4: Bloemhof Water Treatment Works: Volume Produced (Sold)

Year	Volume (kℓ)	Increase in Demand (kℓ)	Increase (%)
2016/2017	3,270,950	-174,370	-5.06
2017/2018	3,632,810	361,860	11.06

Raw water abstraction increased by 9.39% and water sold by 11.06%. The increase in water sold compared to the lesser increase in water abstracted, can be attributed to less water losses at the respective plants.

Christiana Water Treatment Works:

Raw water abstraction at the Christiana Water Treatment Works is depicted in Table 5.

Table 5: Christiana Water Treatment Works: Raw Water Abstraction

Year	Volume (kℓ)	Increase in Demand (kℓ)	Increase (%)
2016/2017	1,109,930	49,500	1.38
2017/2018	2,547,110	1,437,180	129.48

The final meter to determine volumes of water produced. was not registering correctly at the Christiana Plant, due to an upgrading project at the Utlwanang Pump Station. This project is controlled by the Dr. Ruth Segomotsi Mompati District Municipality. The project entails new pumps and pipework, as well as changes to the building infrastructure, which interfered with the correct measurement of the final water produced.

Drought Relief

There were no drought interventions provided by the Free State Region in the 2017/18 financial year.

Emergency Supply of Water to the Masilonyana and Mafube Local Municipalities

Sedibeng Water supplied potable water to Winburg, Theunissen and Brandfort using water tankers. This was done from time to time on request by the municipality. From 6 May 2017, the Mafube Local Municipality was likewise supplied with potable water using water tankers. This supply still continues to date.

POTABLE WATER QUALITY

Potable Water Quality at the Balkfontein and Virgina Water Treatment Plants

Water quality statistics for the year under review are

summarised in Tables 6.1 and 6.2. Final water at both the Balkfontein and Virginia Water Treatment Works complied with SANS 241:2015 standards for drinking water with regards to microbiological, physical and organoleptic, as well as chemical parameters. Heavy rains in the catchment of the Vals River resulted in the deterioration of raw water quality due to high turbidity and algal blooms. Blue-green algal blooms were experienced in the Vaal River during the year under review.

Table 6.1: Water Quality Results - Balkfontein (Final Water)

Determinand	Unit	Specification	Compliance SANS 241:2015
Physical and Organoleptic Requirements			
pH	pH	5.0 – 9.5	>99.9
Turbidity	NTU	<1.0	>99.9
Microbiology Safety Requirements			
E. coli	Count/100mℓ		>99.9
Operational Water Quality Alert Levels			
Total Coliforms	Count/100mℓ	10	99.4
Average Free Chlorine	mg/ℓ	1.90	

Table 6.2: Water Quality Results - Virginia (Final Water)

Determinand	Unit	Specification	Compliance SANS 241:2015
Physical and Organoleptic Requirements			
pH	pH	5.0 – 9.5	>99.9
Turbidity	NTU	<1.0	>99.9
Microbiology Safety Requirements			
E. coli	Count/100mℓ		99.7
Operational Water Quality Alert Levels			
Total Coliforms	Count/100mℓ	10	99.3
Average Free Chlorine	mg/ℓ	1.80	

Water quality compliance for the different supply systems in the distribution network in the Free State Region is reflected in Table 6.3.

Table 6.3: Water Quality Results (Supply Systems)

Supply Systems in the Free State Region	Compliance Levels (%) - SANS 241:2015					
	Microbial: Acute Health (97% min)	Chemical: Acute Health (95% min)	Chemical: Chronic Health (95% min)	Chemical: Non-health: Aesthetic (95% min)	Operational: (95% min)	Disinfectant: (95% min)
MATJHABENG LM						
Welkom	>99.99	>99.99	96.91	>99.99	99.2	>99.99
Allanridge	>99.99	>99.99	>99.99	>99.99	99.7	>99.99
Odendaalsrus	>99.99	>99.99	95.74	>99.99	99.44	>99.99
Hennenman	>99.99	>99.99	95.41	99.53	99.21	98.18
Virginia	99.37	>99.99	97.38	99.75	99.25	>99.99
Ventersburg	>99.99	>99.99	91.03	>99.99	99.41	>99.99
MAQUASSI HILLS LM						
Leeudoringstad	>99.99	>99.99	>99.99	>99.99	99.48	96.58
Makwassie	99.53	>99.99	96.79	>99.99	99.39	>99.99
Wolmaransstad	99.15	>99.99	96.98	>99.99	99.38	>99.99
NALA LM						
Wesselsbron	>99.99	>99.99	97.1	99.64	99.67	>99.99
Bothaville	99.45	>99.99	96.88	>99.99	99.59	>99.99

Potable Water Quality in the Lekwa-Teemane Local Municipality

Water quality statistics at the Bloemhof and Christiana Water Treatment Works in the Lekwa-Teemane Local Municipality for the 2017/2018 financial year, are summarised in Tables 7.1 and 7.2.

Final water at the Bloemhof Water Treatment Plant complied with SANS 241:2015 standards for drinking water with regards to microbiological, physical and organoleptic, as well as chemical parameters. The Christiana Plant did not always comply with operational limits with regards to turbidity, due to the fact that the demand is much higher than the operational capacity of the plant.

Table 7.1: Water Quality Results - Bloemhof (Final Water)

Determinand	Unit	Specification	Compliance SANS 241:2015
Physical and Organoleptic Requirements			
pH	pH	5.0 – 9.5	>99.9
Turbidity	NTU	< 1.0	>99.9
Microbiology Safety Requirements			
E. coli	Count/100mℓ		>99.9
Operational Water Quality Alert Levels			
Total Coliforms	Count/100 mℓ	10	99.7
Average Free Chlorine	mg/ℓ	1.80	

Table 7.2: Water Quality Results - Christiana (Final Water)

Determinand	Unit	Specification	Compliance SANS 241:2015
Physical and Organoleptic Requirements			
pH	pH	5.0 – 9.5	>99.9
Turbidity	NTU	< 1.0 (Operational) <5 (Aestetic)	83.8 97.5
Microbiology Safety Requirements			
E. coli	Count/100mℓ		99.8
Operational Water Quality Alert Levels			
Total Coliforms	Count/100mℓ	10	99.6
Average Free Chlorine	mg/ℓ	1.80	

WASTEWATER EFFLUENT QUALITY

Balkfontein Wastewater Treatment Plant

In terms of the Department of Water and Sanitation General Authorisation, the effluent discharged from the Balkfontein Wastewater Treatment Plant complied with the General Standard for Wastewater, except for nitrates and *E. coli.* The final effluent is irrigated onto the golf course at the plant and not discharged into the Vaal River.

Bloemhof Wastewater Treatment Plant

In terms of the Department of Water and Sanitation's Water Use Licence, the effluent discharged from the Bloemhof Wastewater Treatment Plant did not comply with the Special Standard for Wastewater, due to hydraulic and organic overload at the plant. Upon the completion of the upgrade to the plant, the set standards will be complied with.

Christiana Wastewater Treatment Plant

In terms of the Department of Water and Sanitation's Water Use Licence, the effluent discharged from the Christiana Wastewater Treatment Plant complied with the Special Standard for Wastewater.

MAINTENANCE EXPENDITURE

A system of planned maintenance was carried out throughout the 2017/2018 financial year. All buildings, equipment and vehicles were inspected and serviced according to a daily, weekly, monthly, quarterly and annual schedule. Specific refurbishment projects were also implemented as part of the Maintenance Plan for the year under review. Provision for unplanned maintenance (repairs) was made in the Maintenance Budget. This expenditure is reflected in Table 8.

Table 8: Maintenance Expenditure

Year	Expenditure (R)	Increase/(Decrease) in Expenditure (R)	Increase/(Decrease) (%)
2016/2017	27,591,565	7,465,578	37.09
2016/2018	20,047,885	(7,543,689)	(27.34)

Reservoirs were cleaned according to a scheduled programme throughout the Region. The cleaning programme is also determined by the analysis of the quality of water released from the reservoirs. The joints and seals of the reservoirs were inspected and replaced as and when necessary. Water leaks at the Virginia Module 1 of the primary settling dams were sealed. Some of the more significant maintenance activities are indicated in Table 9.

UPGRADING AND REFURBISHMENT

Upgrading of the Buisfontein-Tswelelang Bulk Water Supply and the Wesselsbron Bulk Water Supply Line

These two projects commenced in September 2016. The projects were put on hold due to a lack of funding.

Upgrading of the Koppie Alleen-Ventersburg Bulk Water Supply

Project implementation did not commence due to a lack of funding.

New Sludge Dams at the Virginia Plant

An Environment Impact Assessment Study was completed and approved. The tender will be advertised during the 2018/2019 financial year.

Rapid Response Unit Project

The Rapid Response Unit Project ended on 31 March 2018.

OVERVIEW OF PLANNED AND UNPLANNED MAINTENANCE

Table 9 provides an overview of planned and unplanned maintenance performed in the Free State Region during the 2017/2018 financial year.

Table 9: Planned and Unplanned Maintenance in the Free State Region

Planned Maintenance	Unplanned Maintenance
• Pump Number 2 in the Beatrix Pump Station was refurbished; • New 150mm air valves were installed on the Welkom - Saaiplaas 900mm pipeline; • A new dirt box was installed on the Brabant reservoir pipeline; • Pump Number 2 at the Hennenman Pump Station was refurbished; • A new sump pump was installed at the Leeuwbult reservoir seepage pit (pipes were modified to accommodate the new pump); • A 6m section of the 300mm Wesselsbron pipeline was replaced; • Two new pumps were installed at the Koppie Alleen Chlorine Pump Station; • A new strainer was installed in the Virginia sludge pit; • New stainless steel spindles were installed on the filter actuator controlled valves at Virginia Plant; • The 700mm gate valve on the Welkom - Saaiplaas pipeline was repaired following vandalism; • The 900mm gate valve on the Welkom - Saaiplaas pipeline was repaired following vandalism; • The roof of the laboratory at Balkfontein was repaired following leaks that occurred; • The raw water strainer into the inlet pump station was replaced at Balkfontein Plant; • The poly dosing pump was refurbished at Virginia Plant;	• The pipe work at meter F04 draw-off was replaced due to severe corrosion; • A new 150mm “y”-piece was installed on the Bambanani shafts supply draw-off; • A new 700mm flange adaptor and flanges were installed on the 700mm Welkom supply pipeline; • The 660mm Leeuwbult pipeline was patched as a result of cathodic protection failure corrosion; • A section of the 660mm Leeuwbult pipeline was replaced following excessive wear and corrosion; • A section of the 900mm Welkom - Saaiplaas pipeline was repaired after bursting; • The 660mm Welkom supply line was repaired (it is still out of operation due to excessive corrosion); • A new recycling pump was installed at Virginia Plant (the old one was not economically repairable); • The main line feeding to Mmamahabane was repaired after being vandalised; • Gate valves were replaced on the 700mm Welkom line following vandalism; • Gate valves were replaced on the 900mm Welkom pipeline following vandalism; • Air valves were replaced on the 700mm Welkom pipeline following vandalism; • Air valves were replaced on the 900mm Welkom pipeline following vandalism; • Vandalism continues unabated on all main supply pipelines (Welkom - Saaiplaas, Virginia and Odendaalsrus);

Planned Maintenance	Unplanned Maintenance
• A new raw water meter was installed on the inlet side of the Virginia Water Purification Plant; • The Saaiplaas Pump Number 3 was refurbished and is back in operation; • A new control valve at Koppie Alleen was installed; • A new 300mm gate valve was installed on the Wesselsbron supply pipeline; • The 900mm gate valve on the Welkom - Saaiplaas pipeline was modified to minimise vandalism (a portable gearbox is now used to operate the valve); • KSB (FBL) Pump Number 2 and 3 at D-ERF Pump Station were refurbished; • The roof of the substation next to the Balkfontein filter block was repaired as it leaked excessively; • Upgrading of all filters in Virginia Plant has been completed; • All transformers at Balkfontein Pump Stations and all vacuum circuit breakers were serviced; • An extra borehole (P10B) was put in operation at Wolmaransstad to supplement existing boreholes; • Replaced Star/Delta starter at raw water intake at Bloemhof Plant; • Installed new pump set as standby for pressure tower pump station at Bloemhof reservoirs; and • Installed new sewage pumps with soft starters and RTU at N12 sewage pump in Bloemhof.	• The 800mm and 1100mm diameter pipelines were temporarily repaired between Balkfontein and D-ERF, and patched on various places due to their state of wear and tear (though still in operation); • The Leeudoringstad Old Pump Station was flooded due to a pipe burst and three motors went for repairs (the pumps are back in operation again); • A major pipe burst of the 400mm diameter pipelines between Leeudoringstad and Buisfontein resulted in Tsewlelang, Makwasi and Lebaleng being without water for four days; • Replaced circuit breaker of Saaiplaas Pump Number 3 at the Saaiplaas Pump Station; • Replaced stolen cable of Utlwanang water pressure tower level meter; • Installed emergency alarm at Christiana Water Purification Plant; • Replaced motor of Beatrix Pump Number 2; • Connected Christiana S2 pump to the soft starter; • Replaced chlorine dosing and pre-chlorination rotor meters at Christiana Plant; • Connected chlorine booster pump at the Christiana Wastewater Works; • Replaced motor of Brabant Pump Number 2; • Replaced Leeuwbult sump pump; • The Lebaleng pump station was flooded and the motors were repaired; • The Old Buisfontein Pump Station was flooded and the two pumps with their motors and variable speed drives were repaired; • The motors of the old high pressure pump station at Balkfontein, KSB pump and Sulzer 10 were burnt out and repaired; • Installed standby pump at Hoopstad turn-off Sewage Pump Station in Bloemhof; • Repaired both motors of the old sewage pump station at the golf course in Bloemhof; and • Installed new scraper cylinders of the DAF unit at Bloemhof Plant.

CONCLUSION

During the 2017/2018 financial year, the Free State Region succeeded in ensuring the provision of a sustainable and reliable water supply to customers and communities in its operational area. This was done through efficient purification practices, continuous maintenance, the refurbishment of infrastructure, as well as the development of new infrastructure in order to meet the ever-increasing water demand.

NORTH WEST REGION

CONTENTS:

INTRODUCTION

The North West Region comprises two sub-regions, namely North West (Hartswater) with its regional office in Hartswater, and North West (Mahikeng) whose regional office is situated in Mahikeng. Bulk water supply, and operations and maintenance services are rendered in the municipalities being served by the Region. Such services are defined in the Water Services Act (No. 108 of 1997) as Sections 29 and 30 activities. However, in certain areas Sedibeng Water also provides retail services as well.

SERVICES RENDERED IN THE NORTH WEST REGION

The services that the Region offers municipalities are, but not limited to, the following:

Bulk Water Services

- Infrastructure for the supply of bulk potable water (water treatment plants and main pump lines); and
- Operation and maintenance of bulk sewage services.

Reticulation Water Services

- Operations and maintenance of reticulation systems;
- Installing pre-paid meters;
- Replacement of all conventional yard water meters with pre-paid yard meters; and
- Connection of pre-paid yard meters to retail customers.

Management and Other Support Services

- Technical audits;
- Optimisation and management of water supply systems;
- Training of personnel; and
- Project management.

Water Quality Monitoring

- Sampling and testing; and
- Water quality monitoring of sources, reservoirs and points of use.

Retail Services

- Meter installation and management;
- Billing and collection; and
- Bulk meter replacement and installation to minimise water losses.

PRIMARY OBJECTIVE OF THE NORTH WEST REGION

The primary objective of Sedibeng Water in the North West Region is to fulfill the requirements of the Water Services Act, for which reason the organisation signed several water service provider agreements with Water Services Authorities in the North West and Northern Cape Provinces. The Region has entered into such agreements with the

Ngaka Modiri Molema District Municipality, Mahikeng Local Municipality and Ditsobotla Local Municipality for bulk water supply contracts. All these bulk water supply contracts are still valid and will be revised in 2019 and 2020. In addition, in the operational areas of the Ngaka Modiri Molema District Municipality, Sedibeng Water conducts operations and maintenance services in the rural areas (villages) of Mahikeng, Ramotshere Moiloa, Ditsobotla, and Ratlou Local Municipalities and to a lesser extent in the Tswaing Local Municipality. The water supply in these areas is sourced from a combination of both surface and underground sources. Sedibeng Water acquired the operational areas of the Ngaka Modiri Molema District Municipality as from the 2014/2015 financial year.

OPERATIONAL OVERVIEW: NORTH WEST (HARTSWATER) SUB-REGION

CONTENTS:

Mr. S.K. Sithole
Acting Regional Manager: North West (Hartswater)

BACKGROUND

The municipalities being served by Sedibeng Water in the North West (Hartswater) Sub-region include:

- Ga-Segonyana Local Municipality (Northern Cape Province);
- Phokwane Local Municipality (Northern Cape Province);
- Dr. Ruth Segomotsi Mompati District Municipality (North West Province);
- Kagisano-Molopo Local Municipality;
- Greater Taung Local Municipality;
- Lekwa-Teemane Local Municipality;
- Naledi Local Municipality; and
- Mamusa Local Municipality.

WATER SOURCES

The primary source of potable water in the Sub-region is ground water resources, which constitute 45% of the total potable water supply. The villages in the area are scattered over a vast area of operation, and each village has its own boreholes. This is not an ideal potable water supply system, as it consists of clusters of boreholes pumping into reticulation systems supplying multiple adjoining villages and thereby, increasing maintenance and operational costs. To remedy the intensity of operations and to reduce operational costs, telemetry to remotely control the water systems is used wherever possible for the start/stop of the borehole pumps and monitoring of the systems.

The remaining 55% of the total potable water supply in the area is surface water, which is abstracted from the Vaalharts Scheme and treated at the Pampierstad, Bogosing, Kgomotso, Pudimoe, Christiana and Bloemhof Water Treatment Works in the operational area of the Dr. Ruth Segomotsi Mompati District Municipality. Water is abstracted directly from the Vaal River into the respective plants. However, the Mamusa Treatment Works abstracts water from the Wentzels Dam, as well as from boreholes.

PRODUCTION VOLUMES

As can be seen in Table 1, total annual production volumes have increased by 26.36% (from 17 883 739kℓ in the previous financial year to 22 598 411kℓ in the 2017/2018 financial year) for the Dr. Ruth Segomotsi Mompati District Municipality, the Phokwane Local Municipality and the Ga-Segonyana Local Municipality. Water production from the treatment works (see Table 2) increased by 27.33% (from 11 686 675kℓ in the 2016/2017 financial year to 880 566kℓ in the year under review), while that of boreholes increased by 24.54% (from 6 197 064kℓ to 7 717 845kℓ in the review period (see Table 3).

This increase in the production from boreholes was mainly due to the drilling of new and the rehabilitation of existing boreholes. The increase in production by plants is mainly due to the acquisition of the Christiana and Schweizer Reneke Water Treatment Works.

Table 1: Total Potable Water Production

Source	2016/2017 Volume (kℓ)	2017/2018 Volume (kℓ)
Plants	11,686,675	14,880,566
Boreholes	6,197,064	7,717,845
Total Production	**17 883 739**	**22 598 411**

Table 2: Monthly Potable Water Production by Plants (in kilolitres)

Month	Pampierstad	Bogosing	Kgomotso	Pudimoe	Mamusa	Bloemhof	Christiana
JULY	191,820	35,740	31,318	359,400	82,040	313,900	180,680
AUG	179,960	40,650	28,210	314,880	89,040	273,700	173,650
SEPT	199,250	41,660	27,083	355,750	83,840	287,700	198,560
OCT	207,420	37,650	23,314	292,780	82,360	261,300	185,920
NOV	226,560	42,490	29,844	343,550	86,540	356,900	227,790
DEC	203,700	42,730	35,773	352,600	89,910	256 300	159,510
JAN	211,020	46,160	48,823	341,320	85,890	413,130	256,290
FEB	189,600	35,120	32,334	464,810	87,610	269,650	191,010
MAR	167,790	32,490	32,027	431,828	83,730	307,310	185,690
APR	158,550	37,260	33,701	403,332	86,290	582,260	180,870
MAY	170,920	39,110	31,518	448,935	84,430	302,410	190,280
JUNE	159,440	34,900	24,719	369,587	82,680	315,560	196,410
Total	**2,266,030**	**465,960**	**378,664**	**4,478,772**	**1,024,360**	**3,940,120**	**2,326,660**
Total Production							**14,880,566**

Table 3: Monthly Borehole Production Trends (in kilolitres)

Month	Ga-Segonyana	Greater Taung	Kagisano-Molopo
JULY	239,853	246,304	118,832
AUG	292,738	233,330	137,290
SEPT	263,719	261,820	137,501
OCT	304,930	332,090	113,350
NOV	272,127	237,311	139,031
DEC	373,952	196,048	150,792
JAN	351,553	246,430	145,461
FEB	276,564	207,087	114,680
MAR	287,548	205,249	129,998
APR	271,810	180,591	103,583
MAY	257,905	176,743	123,773
JUNE	245,118	219,075	123,659
Total	**3,437,817**	**2,742,078**	**1,537,950**
Total Production			**7,717,845**

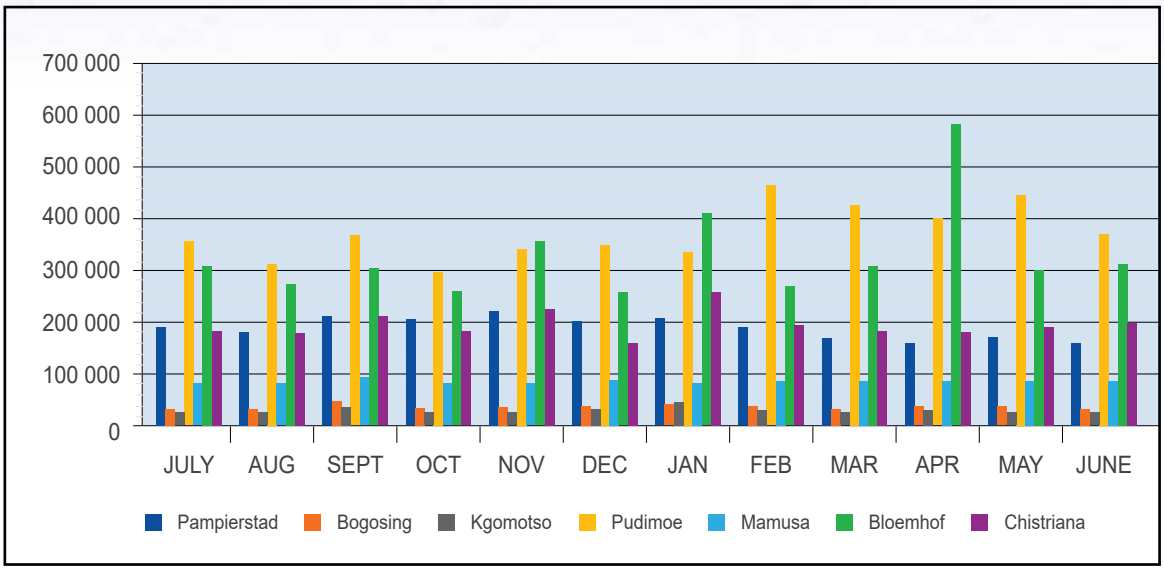
Monthly potable water production per municipality is shown in Table 4.

Table 4: Monthly Potable Water Production per Municipality (in kilolitres)

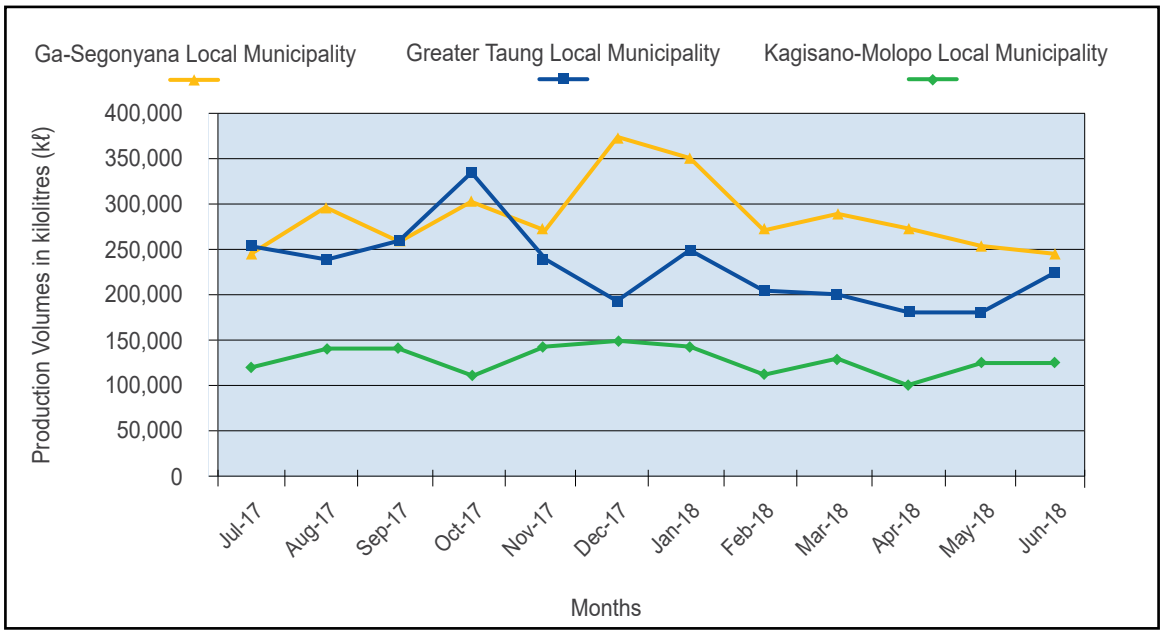
Month	Phokwane	Ga-Segonyana	Dr. Ruth S. Mompati
JULY	191,820	239,853	1,368,214
AUG	179,960	292,738	1,290,750
SEPT	199,250	263,719	1,393,914
OCT	207,420	304,930	1,328,764
NOV	226,560	272,127	1,463,456
DEC	203,700	373,952	1,283,663
JAN	211,020	351,553	1,583,504
FEB	189,600	276,564	1,402,301
MAR	167,790	287,548	1,408,322
APR	158,550	271,810	1,607,887
MAY	170,920	257,905	1,397,199
JUNE	159,440	245,118	1,366,590
Total	**2,266,030**	**3,437,817**	**16,894,564**
Total Production			**225,98,411**

Graphs 1-3 indicate water demand and production trends in the Sub-region, highlighting the periods of high demand and consumption. There were great fluctuations in production volumes from the Pudimoe Water Treatment Works due to the fact that the Vaalharts Water Users Association is busy upgrading and refurbishing the supply canal.

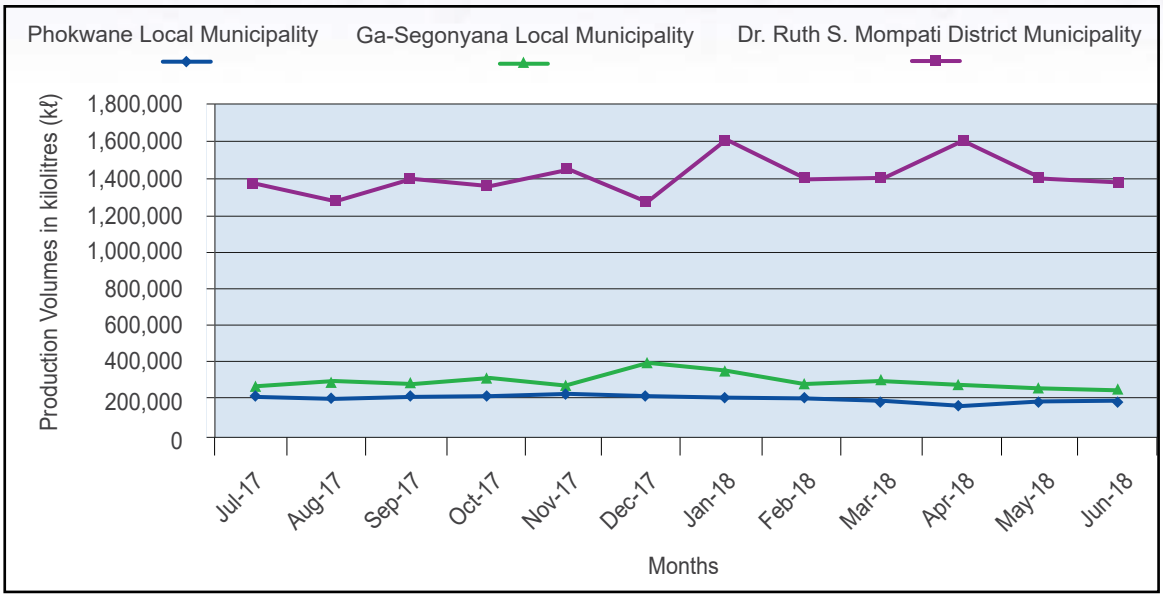
Graph 1: Water Treatment Works: Monthly Plant Production Trends (in kilolitres)



Graph 2: Monthly Borehole Production Trends



Graph 3: Monthly Production Trends per Municipality



WATER QUALITY MONITORING

Water Treatment Works

The Sub-region has developed and implemented a comprehensive Water Quality Monitoring Programme, which involves sampling and testing above minimum requirements. As monitoring process deviations may negatively impact on final water quality, operators have been trained to carry out the regular on-site sampling and testing procedures at the plants. The quality testing and recording procedures have also been extended to the Ganyesa District in the review period.

On a weekly basis, samples from the water treatment plants are sent to Sedibeng Water's accredited laboratory at Balkfontein for detailed analysis as per SANS 241:2015 standards. Table 5 summarises water quality statistics for the 2017/2018 financial year, which complied with SANS 241:2015 bacteriological requirements for drinking water, and with most of the microbiological requirements for final water.

Table 5: Treated Potable Water Quality Results

Treated Water	Bogosing Supply System	Kgomotso Supply System	Pampierstad Supply System	Pudimoe-Taung Supply System	Majeakgoro Supply System
	% Compliance				
Microbiological (Health)	100.0%	100.0%	100.0%	100.0%	100.0%
Chemical (Health)	99.6%	100.0%	100.0%	100.0%	100.0%
Physical, Organoleptic (Non-health)	91.6%	99.6%	99.8%	99.8%	99.6%
Operational	90.1%	99.3%	94.2%	96.0%	99.6%

No microbiological health failures were encountered for the water supply systems within the Water Service Authority, i.e. the Dr. Ruth Segomotsi Mompati District Municipality.

Boreholes

A water quality monitoring programme for the Ganyesa area was developed and implemented. Two samplers were appointed and trained to apply

sampling techniques. Most of the boreholes are vandalised and fencing is absent. A business plan for the refurbishment of the boreholes has been compiled and submitted to the Dr. Ruth Segomotsi Mompati District Municipality and the Department of Water and Sanitation.

Borehole water samples from the Ga-Segonyana Local Municipality are sent on a weekly basis to the laboratories at Balkfontein and Vaal Gamagara for bacteriological and chemical analysis. Table 6 summarises the water quality test results of boreholes in the Sub-region for the 2017/2018 financial year.

Table 6: Borehole Water Quality Results

Borehole Water	Taung East Borehole WMA	Taung West Borehole WMA	Ga-Segonyana North WMA	Ga-Segonyana West WMA
	% Compliance			
Microbiological (Health)	96.1%	91.6%	99.1%	96.7%
Chemical (Health)	99.9%	99.7%	100.0%	100.0%
Physical, Organoleptic (Non-health)	99.1%	99.3%	99.9%	99.9%
Operational	96.0%	97.1%	97.0%	96.1%

BULK WASTEWATER SERVICES

Sedibeng Water in the Sub-region renders operations and maintenance services to the Pampierstad Wastewater Treatment Works on behalf of the Phokwane Local Municipality, and to the Christiana, Bloemhof and Mamusa Wastewater Treatment Works, on behalf of the Dr. Ruth Segomotsi Mompati District Municipality. These wastewater treatment works treat household effluent from the townships of Pampierstad, Christiana, Bloemhof and Schweizer Reneke. The Pampierstad Wastewater Treatment Works is currently under-utilised, operating at below 60% of its design capacity due to current population figures in the area. However, the Christiana and Bloemhof Wastewater Treatment Works are overloaded, and projects to upgrade and refurbish these plants have been approved for the 2018/2019 financial year. Both these plants are licensed and authorised to discharge effluent into the nearby Harts River and Vaal River, respectively. Currently, 60% of the effluent is discharged into these rivers, while the rest is recycled back into the plants. It can be confirmed that the effluent discharged into these sources meets SANAS standards. The old Bloemhof Wastewater Treatment Works has been refurbished, and the new wastewater treatment plant is currently in the process of being refurbished. In Schweizer Reneke, effluent is also discharged into the Harts River. This plant is in the process of being refurbished and therefore, not optimally in operation. Much work still needs to be done before the plant will be fully operational and in compliance with SANAS requirements.

WASTEWATER EFFLUENT QUALITY

The final effluent from the Pampierstad Wastewater Plant complied with the General Standard for effluent. The presence of free chlorine was maintained within the limits, before discharging the final effluent into the Harts River. A fully equipped and on-site quality monitoring laboratory ensures compliance in this regard. Samples are sent on a weekly basis to the accredited main laboratory at Balkfontein for detailed analysis. The final effluent from the Christiana Wastewater Treatment Plant complied with the required standard.

RETAIL SERVICES

The Sub-region renders full retail services, including the installation of pre-paid water meters, maintenance and management of old meters, as well as billing and revenue collection. Sedibeng Water decided to replace all conventional water meters with pre-paid meters. This process has been completed. The Sub-region is likewise in the process of installing pre-paid meters in the Ganyesa area, replacing all conventional water meters.

The Sub-region also implements a cost-recovery strategy, which was developed in line with the credit control policies of the applicable Water Services Authorities.

RETICULATION WATER SERVICES

In addition to bulk water services, the Sub-region also renders operations and maintenance services to reticulation systems, making this a full-scale service ranging from source to tap. A refurbishment programme to replace the asbestos pipes in Pampierstad within the Phokwane Local Municipality was completed as far as the allocated budget allowed. This refurbishment of the reticulation system has increased the water demand in Pampierstad and a proposal regarding the upgrade of the water treatment works and raw water supply system was presented to the municipality. There is an increasingly high demand for yard connections. Yard connections are limited to areas where water sources are available and the areas are reticulated.

The Pudimoe Water Treatment Works Module 3 has been commissioned during May 2018 and is supplying the Naledi Local Municipality with potable water. The second plant will be supplying potable water to Greater Taung and its surrounding areas. However, progress has been delayed and this plant will only be commissioned during the 2018/2019 financial year. A new project supplying water from the Taung Water Treatment Works to the villages on the Eastern Plato has been approved. Certain aspects of the project are under construction and should be completed by the end of the 2018/2019 financial year.

The Sub-region also services the drought-stricken Ganyesa area. A ground water study was conducted and has identified the areas where potentially high-yield boreholes can be drilled. Plans and system designs to provide this area with a more sustainable water supply, are in progress. Consultants completed an Implementation Readiness Study and the tender documents were prepared to construct a bulk water supply system to the most needing areas by the beginning of the new financial year. However, this project has been placed on hold due to financial constraints.

MAINTENANCE AND REFURBISHMENT

A wide range of maintenance activities, in part (component replacement) and in full (general overhaul) was performed according to a Maintenance Plan with regards to the following assets:

- Process equipment at the water and wastewater treatment plants;
- Borehole equipment;
- Pump stations;
- Storage facilities, such as concrete reservoirs, steel tanks and plastic tanks;
- Reticulation equipment;
- Buildings; and
- Vehicles.

There was a notable increase in maintenance expenditure by the Sub-Region in the year under review. Aging equipment and frequent breakdowns demanded the refurbishment and replacement of equipment and machinery. Water supply shortages and disruptions in raw water supply have necessitated the acquisition of new mobile pumps to supply raw water to the treatment plants, especially in Pampierstad where the increased demand exceeded the capacity of the pumps to supply sufficient raw water. Dry periods caused by canal maintenance and upgrading, also contributed to more extensive mobile pumping.

OPTIMISATION AND MANAGEMENT OF WATER SUPPLY SYSTEMS

The Sub-region is currently operating and maintaining the water supply line from Pudimoe to Vryburg on behalf of the Dr. Ruth Segomotsi Mompati District Municipality, and the Christiana and Bloemhof Water and Wastewater Treatment Plants on a cost-recovery basis on behalf of the same district municipality. While temporarily managing these systems, Sedibeng Water assists the Water Services Authority in the optimisation of the water treatment processes to bring the water quality to acceptable standards and to ensure the correct dosing of chemicals.

MANAGEMENT AND OTHER SUPPORT SERVICES

In addition to standard services that are rendered in the fulfillment of Water Services Provider Agreements in the Sub-region, Sedibeng Water also renders management and other support services on request from the Water Services Authorities within its area of operations. Sedibeng Water is currently in negotiation with the Dr. Ruth Segomotsi Mompati District Municipality to take over the bulk water services of the district.

OPERATIONAL OVERVIEW: NORTH WEST (MAHIKENG) SUB-REGION

CONTENTS:

Mr. M.P. Mokubung
Regional Manager: North West (Mahikeng)

BACKGROUND

The North West (Mahikeng) Sub-region serves the Ngaka Modiri Molema District Municipality, which includes the following local municipalities:

- Ramotshere Moiloa Local Municipality;
- Ratlou Local Municipality;
- Tswaing Local Municipality;
- Ditsobotla Local Municipality; and
- Mahikeng Local Municipality.

The Ngaka Modiri Molema District Municipality's area of operations was transferred through Gazette Notice 38100 to Sedibeng Water in 2014. Apart from bulk water supply, the Sub-region also provides retail services in certain peri-urban areas in Mahikeng. The water services offered by Sedibeng Water (Water Service Provider) to the Ngaka Modiri Molema District Municipality (Water Service Authority) thus cover both primary and secondary activities in terms of the Water Services Act (Act No. 108 of 1997).

The 2017/2018 financial year has been characterised by additional responsibilities bestowed upon Sedibeng Water in the district municipality concerned. Sedibeng Water is expanding its offerings as Implementing Agent to also act on behalf of the North West Local Government and Human Settlements Department and as an Implementing Agent for the Municipal Infrastructure Support Agent (an entity of the National Department of Cooperative Governance and Traditional Affairs). Responsibilities in this regard relate to water treatment plants, wastewater treatment plants, wastewater pumping stations and ground water source development projects.

POTABLE WATER SOURCES

In the area of the Ngaka Modiri Molema District Municipality, Sedibeng Water depends on the following water resources for the provision of potable water:

- Dolomitic ground water compartments are located approximately 20km to the east of Mahikeng and are utilised to serve the surrounding peri-urban areas. There are two abstraction points, namely the previously high-yielding Grootfontein borehole fields and the Molopo Eye. The abstraction quantity allocated from these dolomitic ground water compartments previously amounted to 45Mℓ/day. This quantity has since reduced to approximately 23Mℓ/day. The water abstracted from these two sources is of good quality, however, the yield from the Molopo Eye abstraction point has been inconsistent over the reporting period, ranging from 600m^3 to 958m^3 per hour. A number of investigations undertaken during the 2017/2018 financial year delivered inconclusive findings on the reasons for this decline. Further investigations will be undertaken in the next financial year to explore various ways to augment the existing raw water supply from these sources.

- The Setumo Dam was constructed in 1996 to augment the bulk water supply to Mmabatho, Mahikeng and the surrounding peri-urban villages. It is situated to the west of Mahikeng and supplies raw water to the Mmabatho Water Treatment Works. The design capacity of the dam is 18 million m3 per annum. The abstraction quantity allocated from this source amounts at present to 20Mℓ/day. An upgrade project is currently underway at the Mmabatho Water Treatment Works to increase its capacity from 20Mℓ/day to 30Mℓ/day.

- The Sehujwane Dam is situated approximately 102km north east of Mahikeng and is used for supplying raw water to the Motswedi Water Treatment Works in the Ramotshere Moiloa Local Municipality. The abstraction quantity allocated from this resource is 2Mℓ/day.

- The Dinokana Eye is situated 100km north east of Mahikeng in the Dinokana Village. Water is pumped to five 600m^3 storage reservoirs and gravitates to supply the Dinokana village and other small surrounding villages. The quality of raw water abstracted here, is good. It only requires disinfection before it can be supplied to consumers. The abstraction quantity allocated to this resource is 2Mℓ/day.

- The Itsoseng well field is situated 32km south east of Mahikeng. Here, Sedibeng Water is licensed to abstract 4.6Mℓ/day. Water is pumped from 16 boreholes to a ground reservoir, then to an elevated reservoir, and thereafter, it gravitates to the Itsoseng Township. The water quality is very good and meets the set standards for potable water. The quantity of water that is supplied by the existing boreholes is not adequate to meet the demand of the consumers in the area. A previous study found that approximately 8Mℓ/day is required to augment the water supply to the Itsoseng area.

WATER TREATMENT WORKS

Water production by plants is undertaken through Bulk Water Contracts with the Ngaka Modiri Molema District Municipality, as well as Mahikeng and Ditsobotla Local Municipalities.

Mahikeng Water Treatment Works

The Mahikeng Water Treatment Works is situated 5km to the east of Mahikeng and has a total allocation of 30Mℓ/day, which constitutes 7.5Mℓ/day from the Grootfontein well fields and 22.5Mℓ/day from the Molopo Eye. The plant supplies peri-urban and urban areas around Mahikeng and Mmabatho. Although the Mahikeng Water Treatment Works has an allocation of only 30Mℓ/day, it has a design capacity of 45Mℓ/day. Sedibeng Water has requested the Department of Water and Sanitation to investigate declines in raw water supplies from these two sources. The fluctuations and reductions are affecting the quantities of potable water that are supplied to the areas of Mahikeng.

The treatment works consists of inlet chambers, pressure filters and chlorination processes. Due to the good quality of raw water, the sand filters are bypassed. The level of water production is highly dependent on the yield from the Molopo Eye and

Grootfontein boreholes. During the 2017/2018 financial year, the average production volume of the Mahikeng Treatment Works was 24.1Mℓ/day, compared to 28Mℓ/day in the previous financial year (a decrease of 13.9%). This reduction is due to decreases in raw water supply from both the Molopo Eye and Grootfontein well fields. This plant is characterised by minimal water loss, due to the good quality of the water sourced.

Mmabatho Water Treatment Works

Average production during the 2017/2018 financial year was 15.77Mℓ/day, which has increased from an average of 12.7Mℓ/day during the previous financial year. This increase is largely due to improved weather conditions experienced and the level of the Setumo Dam, which has stabilised in the area where the Mmabatho Plant is currently abstracting raw water. This plant has an allocation of 20Mℓ/day, although it was designed to be upgradable through phases up to a maximum capacity of 60Mℓ/day.

The average level of the Signal reservoir has remained constantly between 55% and 75%, as compared to the previous financial year. Currently, there are no major water supply interruptions to the customers as compared to previous years. However, Eskom power failures continue to pose a threat to the reliability of supply. Interruptions in electricity supply have also affected the Lokaleng Booster Station during the review period, most notably affecting the functioning of the variable speed drives.

Motswedi Water Treatment Works

The Motswedi Water Treatment Works is situated in Lehurutshe (Welbedacht), close to Zeerust. It has a design treatment capacity of 2Mℓ/day and only supplies peri-urban areas in Motswedi, Borakalalo, Gopane and Reagile. During the year under review, an average of 1.74Mℓ/day was estimated to have been produced from the Motswedi Water Treatment Works. This has increased from an average of 1.4Mℓ/day (24.29%). The increased production volumes are due to minor modifications done in the water treatment process, including changes in water treatment chemicals to reduce turbidities encountered in the past.

Dinokana Water Scheme

The Dinokana Water Scheme is located at the Dinokana village, which is 30km to the north west of Zeerust. This water source originates from a natural spring called the Dinokana Eye, as well as seven boreholes, which produce good quality water. Production volumes depend mainly on the water table and the natural yield of the spring. During the year under review, an average of 3.76Mℓ/day was estimated to have been produced from the Dinokana Eye, while 2Mℓ/day was yielded by the seven boreholes. The final product is disinfected with chlorine and then distributed to communities.

Itsoseng Water Scheme

The Itsoseng Water Scheme is situated 20km to the west of Lichtenburg in the Ditsobotla Local Municipality's area of jurisdiction. Water for this scheme emanates from 16 boreholes situated at the Itsoseng village. Of these 16 boreholes, seven supply the old reservoir, while the remaining nine feed the new reservoir. The overall total of the current yield amounts to 3.0Mℓ/day. This decrease is due to three boreholes that have dried up, one that is currently delivering a low yield, and two that have been vandalised. Water produced undergoes disinfection prior to distribution. It is important noting that potable water from these boreholes complies with SANS 241:2015 quality standards.

BULK POTABLE WATER PRODUCTION

Potable Water Supplied by Water Treatment Works

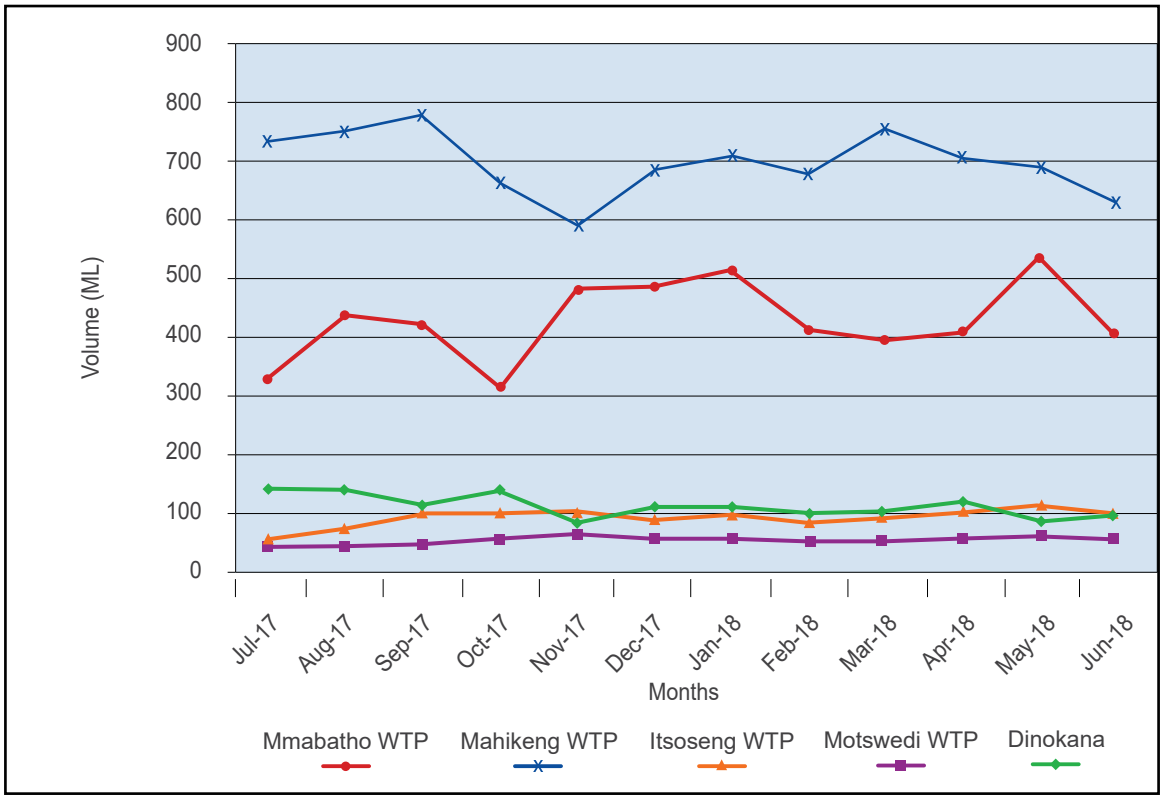
During the 2017/2018 financial year, plants in the Sub-region (Ngaka Modiri Molema District Municipality) produced a total of 16 489 000kℓ of potable water. Table 7 indicates that the Mahikeng Water Treatment Works produces the most potable water as compared to the rest of the schemes, while the second highest production volume of potable water comes from the Mmabatho Water Treatment Works.

Table 7: Bulk Water Production

Mahikeng WTW [Mℓ]	Mmabatho WTW [Mℓ]	Itsoseng WTW [Mℓ]	Motswedi WTW [Mℓ]	Dinokana WTW [Mℓ]	Total [Mℓ]
8,336	5,151	1,087	567	1,348	16,489

Trends in the bulk water production of the plants from July 2017 to June 2018 are revealed in Graph 4.

Graph 4: Monthly Bulk Water Production Trends per Plant



Potable Water Supplied from Boreholes

Water production by means of boreholes resides under an Operations and Maintenance Contract with the Ngaka Modiri Molema District Municipality. In most of its rural schemes, Sedibeng Water uses specialised meters to account for pumping time and energy used, as well as to avoid over-abstraction from boreholes, which could exceed the recharge rate. During the 2017/2018 financial year, Sedibeng Water utilised boreholes to supply a total of 3 717 555kℓ of potable water to the areas of the Ngaka Modiri Molema District Municipality.

Combined Potable Water Production

The combined potable water production by plants in the Sub-region (Ngaka Modiri Molema District Municipality) is depicted in Table 8.

Table 8: Potable Water Production

Source	2015/2016 Volume (kℓ)	2016/2017 Volume (kℓ)	2017/2018 Volume (kℓ)
Plants	16,380,500	17,705,811	16,488,000
Boreholes	3,773,033	4,150,336	3,717,555
Total Production	**20,153,533**	**21,856,147**	**20,205,555**

The total production volumes for both plants and boreholes have decreased by 7.55% from the previous financial year to the 2017/2018 financial year due to a reduction in raw water supply and a decline in the number of operational boreholes.

BULK POTABLE WATER SALES

The bulk of the potable water produced in the Sub-region is sold to the Mahikeng Local Municipality and the Ngaka Modiri Molema District Municipality (western side). The Sub-region's bulk potable water sales for the 2017/2018 financial year are indicated in Table 9.

Table 9: Bulk Water Sales in the Ngaka Modiri Molema District Municipality

Financial Year	2016 / 2017	2017 / 2018
Volume (Kℓ)	17,447,000	14,648,076

The drop in bulk water sales in the Ngaka Modiri Molema District Municipality's operational area resulted from a decrease in raw water supply from the Mahikeng Water Treatment Plant and Itsoseng Plant. Contributing to this decrease, is the reduction in the number of boreholes in operation, a decrease in the yield of current boreholes, and the reduction of raw water yield from the Molopo Eye and Grootfontein well fields. The Department of Water and Sanitation has been requested to intervene and further assessments will be undertaken in the 2018/2019 financial year. Total production volumes for both plants and boreholes have decreased by 16% from the previous financial year.

POTABLE WATER QUALITY

The Sub-region assists the Water Services Authority in the optimisation of the water treatment processes to bring water quality to acceptable standards, and to ensure the correct dosing of chemicals. This is done through sampling and analysing water samples at the sources, reservoirs and carefully selected points of use, while communicating the results to the municipalities affected for actions to be taken.

The Sub-region has developed and implemented a comprehensive Water Quality Monitoring Programme, which involves sampling and testing above minimum requirements. As monitoring process deviations may negatively impact on final water quality, operators have been trained to carry out regular on-site sampling and testing procedures at the plants.

Water Treatment Works

Samples are sent on a weekly basis to Sedibeng Water's accredited laboratory at Balkfontein for detailed analysis as per SANS 241:2015 standards. Water quality results from the water treatment plants are indicated in Table 10.

Table 10: Treated Potable Water Quality in the Ngaka Modiri Molema District Municipality (based on SANS 241: 2015)

Determinand	Unit	Specification	Mahikeng Plant	Mmabatho Plant	Itsoseng Plant	Dinokana Plant	Motswedi Plant
			% Compliance				
Microbiology Safety Requirements							
E. coli	MPN/100 ml	Not detected	100%	**100%**	**100%**	**100%**	**100%**
Physical and Organoleptic Requirements							
pH	pH	≥ 5 to ≤ 9.5	100%	**100%**	**100%**	**100%**	**100%**
Turbidity	NTU	< 1	98%	**96%**	**100%**	**84%**	**64%**
Operational Water Quality Alert Levels							
Total Coliforms	MPN/100 ml	≤ 10	100%	**100%**	**100%**	**100%**	**100%**
Average Free Chlorine	mg/l	≤ 5	**100%**	**100%**	**100%**	**100%**	**100%**

Most of the water quality parameters in the Ngaka Modiri Molema District Municipality complied with the SANS 241:2015 standard. During the financial year under review, some slight challenges were encountered regarding turbidity, especially at the Dinokana and Motswedi Plants. Interventions were undertaken, which included changes in the chemical dosing used, the installation of rain gauges to monitor rainfall and slight modifications in the configuration of the plant. Turbidity compliance at Motswedi decreased to 64%, as compared to 65.6% in the previous financial year. Turbidity compliance at the Dinokana Plant also shifted from 92.5% in the 2016/2017 financial year, to 84% in the year under review.

Boreholes

Boreholes are normally located in remote areas, which expose them to vandalism and theft of fences and diesel. The quality of borehole water is unstable, with major problems being the high concentration of nitrates and bacteriological contamination as a result of livestock activities around such ground water sources.

The following measures were put into place to remedy the situation:

- In case of bacteriological contamination, localised dosing of chlorine takes place and notices to boil water are issued to reduce exposure risks;
- The roofs of steel tanks are sealed to eliminate contamination; and
- Awareness campaigns are conducted to encourage communities to take ownership of water infrastructure and keep their livestock away from boreholes.

Borehole water samples from the Mahikeng, Ratlou, Ditsobotla, Ramotshere Moiloa and Tswaing Local Municipalities are sent to the laboratories at Balkfontein and Vaal Gamagara for bacteriological and chemical analysis.

OPERATIONS AND MAINTENANCE SERVICES

In terms of its Service Level Agreement with the Ngaka Modiri Molema District Municipality, Sedibeng Water is responsible for the maintenance, protection and preservation of the water supply infrastructure. This function includes proactive and reactive maintenance activities conducted according to planned schedules, as well as on an ad-hoc basis.

Operation and maintenance services relating to bulk water infrastructure include, but are not limited to:

- Pump operation and maintenance for raw water abstraction;
- Operation and maintenance of the sites and facilities of the water treatment works;
- Operation and maintenance of booster pump stations;
- Operation and maintenance of bulk reticulation; and
- Valves, and the cleaning and maintenance of reservoirs.

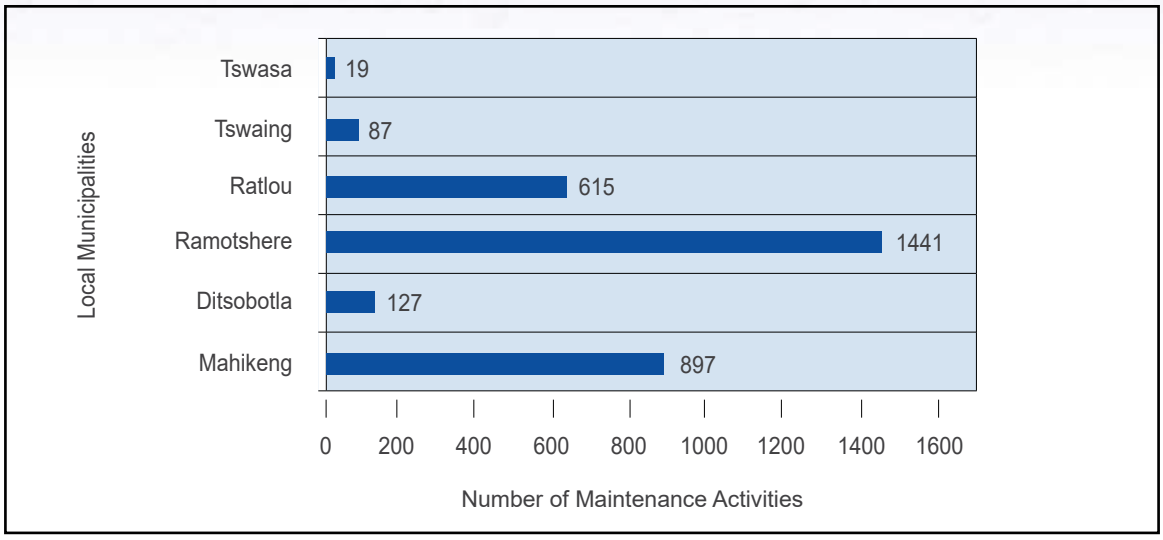
Operation and maintenance services associated with ground water abstraction, include:

- Repairs and maintenance of borehole pipes and pumps;
- Installations and the reading of borehole meters;
- Pipeline repair or replacement; and
- Valve maintenance.

The Mahikeng regional office performs operation and maintenance services in 67 villages in the Ngaka Modiri Molema District Municipality. During the review period, maintenance teams have been strengthened further to respond effectively to additional infrastructure-related challenges. This has assisted in improving service delivery and successful interventions in both existing and additional operational areas.

In the 2017/2018 financial year, 3 186 pipeline, plant and borehole maintenance activities were conducted within the Ngaka Modiri Molema District Municipality. These maintenance activities per local municipality are depicted in Graph 5.

Graph 5: Maintenance Activities



Trends in Graph 5 indicate the most extensive maintenance time was spent in villages of the Ramotshere Moiloa Local Municipality, followed by the Mahikeng and Ratlou Local Municipalities.

RETAIL SERVICES

The Sub-region renders retail services in some of the areas of the Nort West Region. In the Ngaka Modiri Molema District Municipality, retail services provided are minimal and done in Welbedacht (Lehurutshe) resorting under the Ramotshere Moiloa Local Municipality, and in peri-urban areas of the Mahikeng Local Municipality, including Signal Hill, Military, Moshawane, Top Village and Setumo Park. Readings of conventional water are being done on a monthly basis and account statements sent to customers. The Sub-region implements a cost-recovery strategy, which was developed in line with the credit control policies of the Water Services Authorities concerned.

TSWASA WATER SCHEME

The TSWASA Water Scheme was built in the late 1980s, following an agreement between the then Republic of Bophuthatswana, the Water Utilities Corporation of the Republic of Botswana and the former Department of Water Affairs in the Republic of South Africa. The total cost of the scheme in 1989 was estimated at R38 million. Sedibeng Water operates and maintains the TSWASA Water Scheme on behalf of the Department of Water and Sanitation. This scheme provides for an allocation of 7.3 million m^3 of water per annum to Botswana to augment water supply to Gaborone from Botswana's own resources. Furthermore, it also provides a small allocation for irrigation purposes in Botswana along the Marico River, which forms the border between the two countries. In South Africa, the scheme supplies about 10.6 million m^3 of water per annum to irrigation farmers along the Lower Groot Marico River, and about 5 million m^3 of water per annum for primary use in the Madikwe Game Reserve and the village of Molatedi. The scheme consists of the following infrastructure:

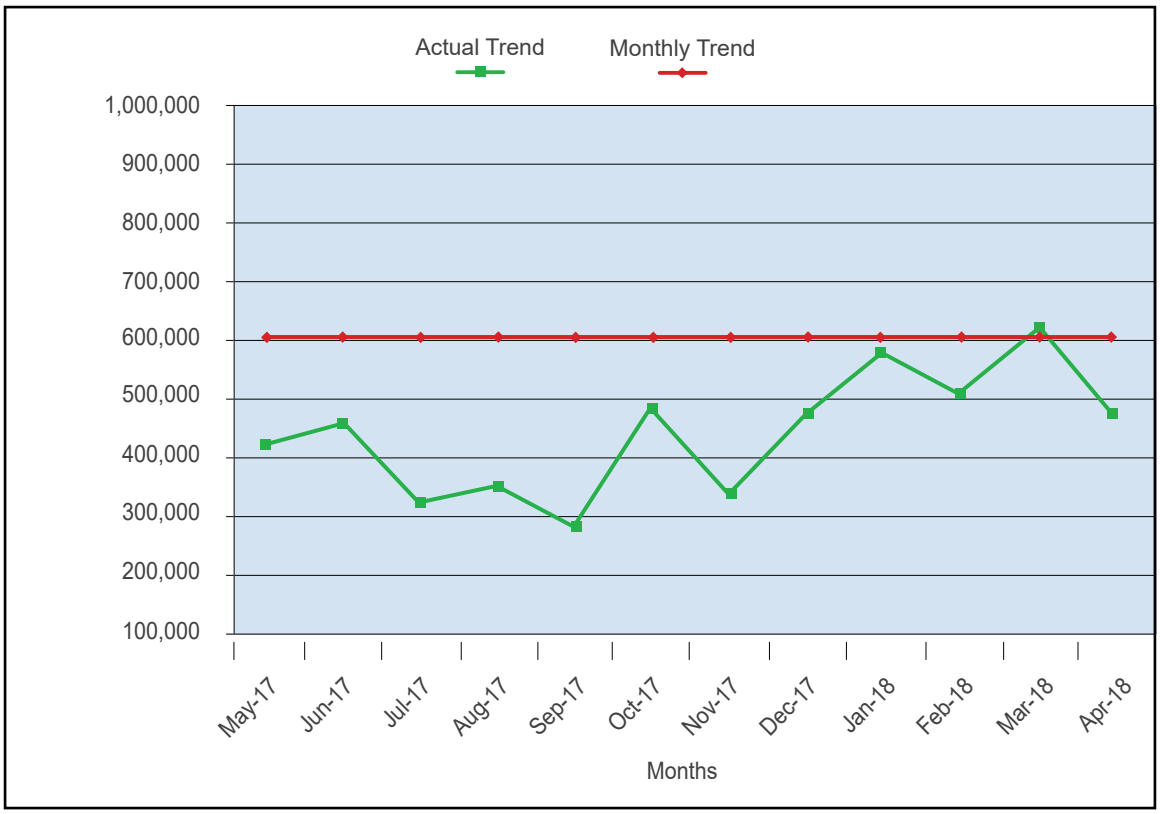
- The Molatedi Dam located on the Groot Marico River;
- A balancing reservoir;
- A pump station at Mooiplaats (26km downstream of the Molatedi Dam);
- A 22km feeder pipeline to the balancing reservoir; and
- A 32km gravity pipeline to the Gaborone Dam in Botswana.

During the 2017/2018 financial year, the TSWASA Scheme supplied a total volume of 4 849 139m^3 to the Water Utilities Corporation (Botswana) and released a total volume of 10 914 043 m^3 to South African farmers (Derdepoort Irrigation Board). Both these volumes of water supplied are less than the allocation of 7.3 million m^3 of water per annum

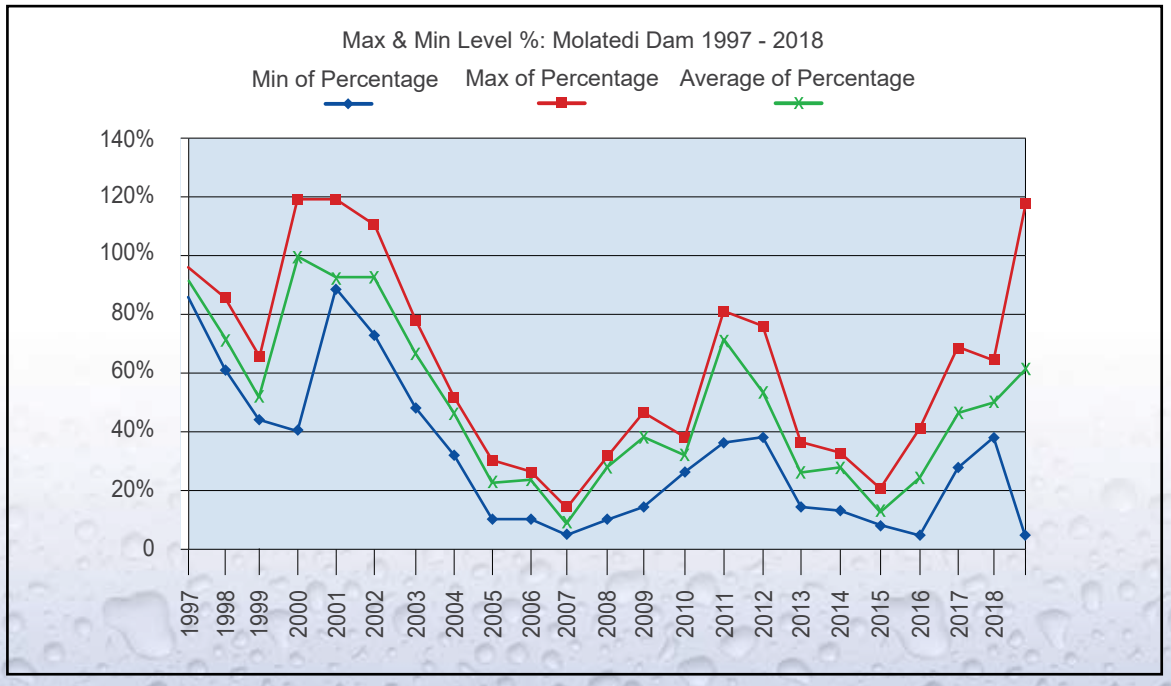
to Botswana and 10.6 million m³ of water per annum to irrigation farmers. However, supply has substantially increased from the previous financial year due to higher levels of water in the Molatedi Dam and improved rainfall.

Monthly water supply trends to the Utilities Corporation of Botswana from the TSWASA Transfer Scheme and trends in the level of the Molatedi Dam are illustrated in Graphs 6-7, respectively.

Graph 6: Monthly Water Supply Trends to the Water Utilities Corporation of Botswana from the TSWASA Water Transfer Scheme (in cubic metres)



Graph 7: Molatedi Dam Level Trends



INTERVENTIONS

The Sub-region performed a number of emergency maintenance related interventions within the Ngaka Modiri Molema District Municipality, specifically in an area that falls within the Tswaing Local Municipality, which was not part of the jurisdiction of the former Botshelo Water Board. The previous operational areas of the former Botshelo Water have been incorporated into Sedibeng Water's footprint in the North West Province. A number of boreholes were refurbished and drilled within this municipal area, while the unblocking of sewer lines also took place. All of these interventions had been performed in accordance with directives issued by the Minister of Water and Sanitation to Sedibeng Water in order to ensure that water and sanitation services are properly functioning within the district of Ngaka Modiri Molema.

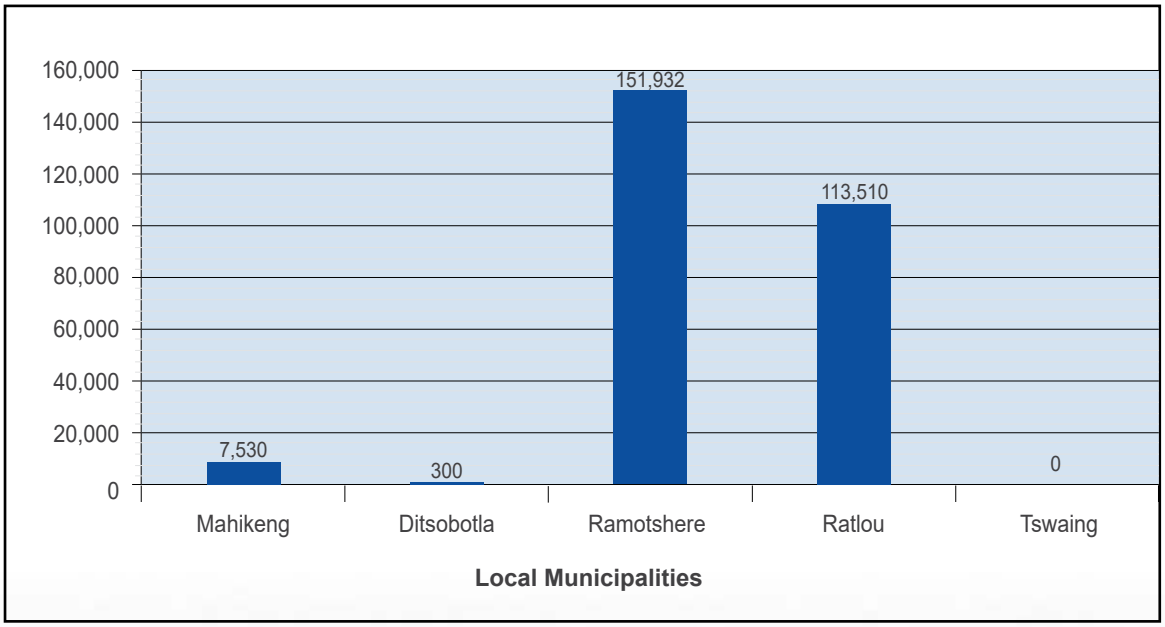
MANAGEMENT AND OTHER SUPPORT SERVICES

In addition to standard services that are rendered in fulfillment of Water Services Provider Agreements in the Sub-region, management and other support services were also rendered on request from the Water Services Authorities

Diesel supply

As part of its operations and maintenance function, the Sub-region is responsible for supplying diesel in order to pump water to various communities. In the Ngaka Modiri Molema District Municipality, the Sub-region supplies diesel to pump water from 104 boreholes to villages located within the Ratlou and Ramotshere Moiloa Local Municipalities. Most of these boreholes are entirely diesel-driven, but there are some boreholes where diesel generators are only used as back-up during Eskom power failures. Volumes of diesel supplied in the 2017/2018 financial year are shown in Graph 8.

Graph 8: Diesel Volumes Supplied to Boreholes in Ngaka Modiri Molema District Municipality (in litres)



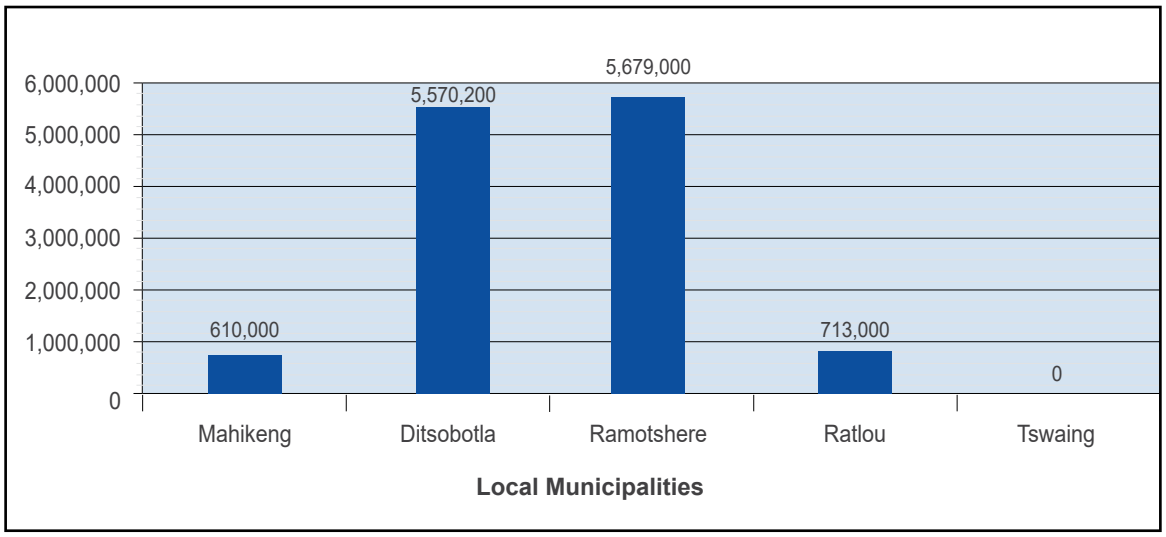
Water Tankering

Water tankering is a short-term intervention undertaken in various areas to assist communities with access to potable water. Water tankering services are being provided due to infrastructure breakdowns, special events, emergencies, etc. During borehole maintenance activities, tankering services were also organised to ensure water supply to affected areas. Due to a continuous drop in the water table caused by drought, such services were likewise used to augment existing water supplies. However, the total volume of tankered water supplied has significantly decreased as Sedibeng

Water is gradually phasing out water tankering in line with a directive from the Minister of Water and Sanitation.

In the Ngaka Modiri Molema District Municipality, volumes of water through water tankering were supplied to villages located within the Mahikeng, Ramotshere Moiloa, Ditsobotla and Ratlou Local Municipalities. During the 2017/2018 financial year, the highest volumes of tankered water (see Graph 9) were supplied to the Ramotshere Moiloa Local Municipality, followed by the Ditsobotla Local Municipality. The increased volumes delivered to the Ditsobotla Local Municipality resulted from the Bakerville Project still being in progress. It is expected that water tankering will decrease as more water supply projects are being successfully completed.

Graph 9: Water Tankering Volumes in the Ngaka Modiri Molema District Municipality (in litres)



CONCLUSION

Despite numerous challenges related to the acquisition and takeover of municipal infrastructure and operations to provide water services in several areas, Sedibeng Water in the North West Region excelled during the 2017/2018 financial year in supporting municipalities and supplying potable water that meet quality standards to local communities.

NORTHERN CAPE REGION

CONTENTS:

Mr. O.A. Masia
Regional Manager: Northern Cape

INTRODUCTION

The Vaal Gamagara, Pelladrift, and Namakwa Water Schemes are the main water treatment works in the operational area of Sedibeng Water's Northern Cape Region. As part of the Regional Water Utility Establishment processes, a due diligence investigation was conducted where Sedibeng Water's footprint would cover all the municipalities in the Northern Cape Province.

PRIMARY OBJECTIVE

The primary objective of the Northern Cape Region is to supply bulk potable water, maintain the extensive pipeline network in its operational area and ensure that the water supplied meets SANS: 241 standards. The Region also operates a quality control laboratory, which is located at the Vaal Gamagara offices of Sedibeng Water and provides services to internal and external customers in the Region. Various programmes were implemented to assist some of the municipalities in the area to attain Blue and Green Drop status.

WATER SOURCES

Vaal Gamagara Water Supply Scheme

Raw water is abstracted from the Vaal River and augmented with ground water from the dewatering operations at Kolomela (Beeshoek) and the Sishen Mines. The raw water from the Vaal River is treated at the Vaal Gamagara Water Treatment Plant near Delportshoop, and distributed through a bulk pipeline to Black Rock, which is situated 430km from the water treatment plant.

The Vaal Gamagara Water Supply Scheme is currently operating beyond the design capacity of 20 million kℓ/annum. However, the upgrading of the scheme is underway. Construction commenced in November 2016 with the 86km pipeline section between Roscoe (Olifantshoek cross on the N14) to Black Rock. This section is the major constraint in the system due to its age and size, hence construction commenced at this point.

Pelladrift Water Supply Scheme

Raw water is sourced from the Orange River and treated at the treatment works located on the banks of the river. This plant has been upgraded to double

its capacity from 12Mℓ/day.to 25Mℓ/day in order to accommodate the water demands of the new Gamsberg Mine. An additional pipeline (parallel to the existing line) was constructed during the 2017/2018 financial year to supply water directly to the Gamsberg Mine.

Namakwa Regional Bulk Water Supply Scheme

Water is abstracted from the Orange River about 110km north of Springbok in the Namakwa District Municipality. The scheme has reached the end of its operational lifespan and a project to refurbish the infrastructure is being implemented. Construction work commenced in September 2013 and progress to date stands at 44%. The scheme met the expected consumer demand during the 2017/18 financial year.

SUPPLY AREAS

Potable water in the Region is supplied to the following areas:

- **Pelladrift Water Supply Scheme**
  - Poffader;
  - Pella;
  - Aggeneys township;
  - Gamsberg Mine; and
  - Black Mountain Mine within the Khâi-Ma Local Municipality.
- **Namakwa Water Supply Scheme**
  - Nama Khoi Local Municipality;
  - De Beers Mine; and
  - Small industries within the jurisdiction of the above mentioned municipality.
- **Vaal Gamagara Water Supply Scheme**
  - Dikgatlong Local Municipality;
  - Tsantsabane Local Municipality;
  - Gamagara Local Municipality;
  - Joe Morolong Local Municipality;
  - Industries;
  - Government institutions; and
  - Farmer and mines in the operational area.

PRODUCTION VOLUMES

The Region's water supply schemes performed according to the targets set for the 2017/2018 financial year. Performance levels with regards to raw water purchases and volumes produced during the review period, are indicated in Tables 1 and 2.

As indicated in Tables 1 and 2, the three schemes in the Northern Cape Region produced a total of 29.16 million kℓ of water during the 2017/2018 financial year, while total water sales amounted to 26.87 million kℓ.

Table 1: Raw Water Purchases

Year	Vaal Gamagara Volume (kℓ)	Namakwa Volume (kℓ)	Pelladrift Volume (kℓ)	Total Volume (kℓ)
2017/2018	20,100,344	4,011,816	5,046,054	29,158,214
2016/2017	21,116,643	4,264,694	5,083,266	30,464,603

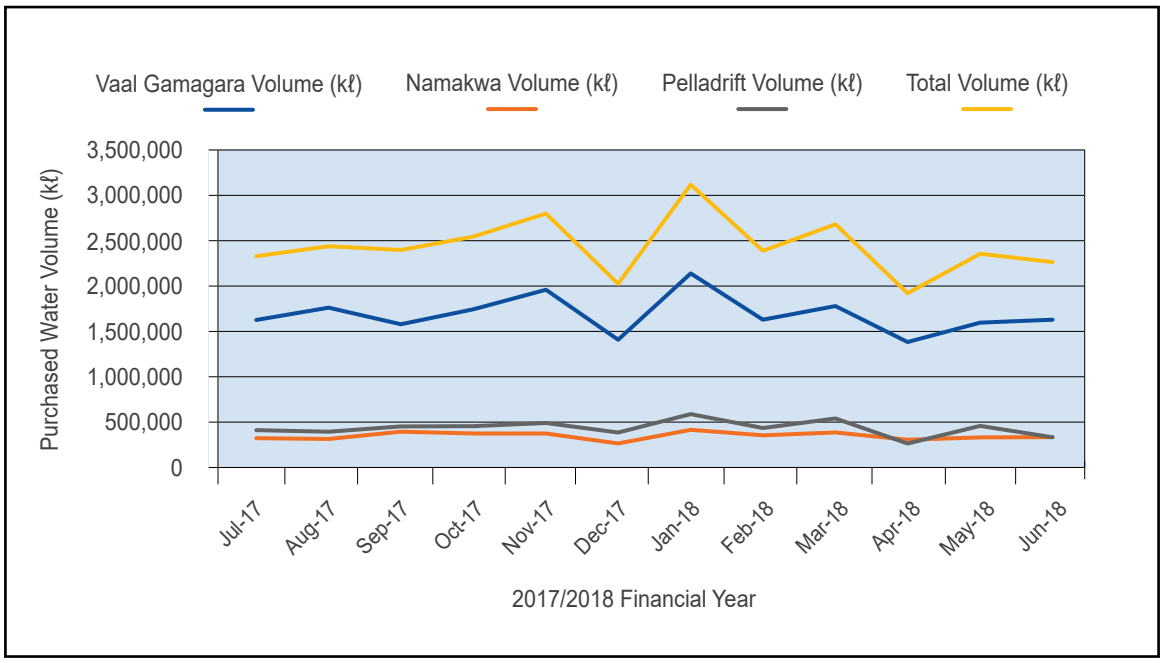
The total raw water purchases of the Region have decreased by 3.16% from the previous financial year to the 2017/2018 financial year, due to a reduction in the water supplied by the dewatering operations at the mines, as well as a decrease in water demand from major customers in the Vaal Gamagara and Namakwa areas.

Table 2: Volume of Water Produced (Sold)

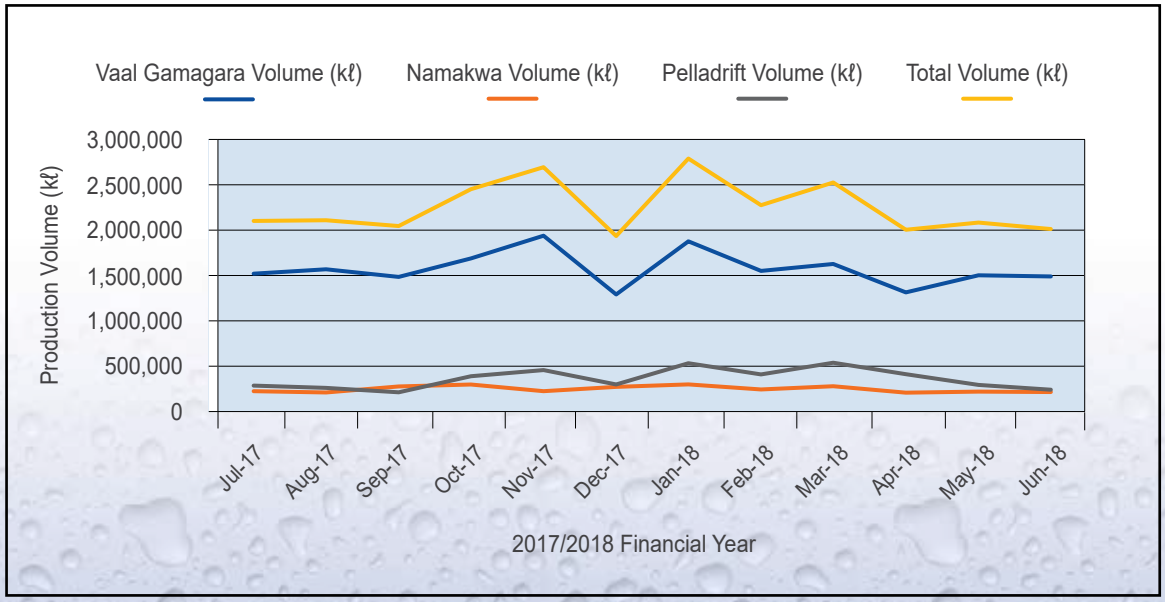
Year	Vaal Gamagara Volume (kℓ)	Namakwa Volume (kℓ)	Pelladrift Volume (kℓ)	Total Volume (kℓ)
2017/2018	18,874,450	3,311,554	5,229,279	27,485,283
2016/2017	20,059,418	2,346,922	4,792,493	27,198,833

The volume of water produced (sold) by the Region has increased by 1.05% from the previous financial year to the 2017/2018 financial year, due to an increase in demand from the customers. Month-by-month trends in water purchases and production are depicted in Graphs 1-2.

Graph 1: Monthly Trends in Bulk Water Purchased



Graph 2: Monthly Trends in Potable Water Production



INFRASTRUCTURE MAINTENANCE AND REFURBISHMENT

Planned maintenance programmes were carried out on an on-going basis according to a planned maintenance schedule, including daily, weekly, monthly and annual inspections. The following maintenance and refurbishment activities took place during the 2017/2018 financial year as reflected in Table 3:

Table 3: Maintenance and Refurbishment Activities

Year	Maintenance/ Refurbishment	Expenditure (R)	Increase in Expenditure (R)	Variance (%)
2017/2018	Maintenance	8,599,608	2,558,287	22.93%
2016/2017	Maintenance	11,157,895	2,680,891	19.37%

The decrease in maintenance expenditure in the 2017/2018 financial year was due to a decline in major maintenance activities. The Pelladrift Scheme had been upgraded and consequently less maintenance work was carried out, while most of the maintenance work on the pumps will be performed in the next financial year.

Pelladrift Water Supply Scheme

The upgrading of the Pelladrift Water Treatment Works commenced in March 2017 and a new scheme was constructed parallel to the existing infrastructure. The main objective of the upgrading project was to double the capacity of the existing water scheme in order to meet the demand of the new Gamsberg Mine. The upgrading of the plant was completed by March 2018 and is currently in the commissioning phase.

Planned Maintenance:

Planned maintenance at the scheme is carried out as per the annual plan. The following maintenance work was done during the 2017/2018 financial year:

- Painting of high lift pump station and chemical building floors;
- Repairing of leak at Pump No. 4 at Pelladrift High Lift Pump Station;
- Repairing of float ball valve at balancing reservoir in Pelladrift;
- Repairing of sampling tap at Pofadder take-off;
- Performing of vibration analysis and oil sampling at the pumps; and
- Repairing of chemical dosing pumps at low lift pump station.

Unplanned Maintenance:

- Replacing of water meter at Horseshoe reservoir;
- Repairing of leaks on rusted scour pipe take-off;
- Repairing of burst pipes and leaks at Pelladrift raising main;
- Repairing of cooling units at staff houses;
- Replacing of chlorine scale unit for the cylinders;
- Repairing of telecommunication station at Pelladrift; and
- Repairing of non-return valve at high lift pump station.

Namakwa Regional Bulk Water Supply Scheme

The Namakwa Regional Bulk Water Supply Scheme is currently still under construction. The contractor is busy with Phase 2 of the project, which entails the construction of a pipeline and pump stations between the Orange River and the Eenriet reservoir. Progress is restrained due to logistical challenges experienced on-site. However, the contractor is maintaining construction activities with the available materials. The contractor also assists with some maintenance activities, such as grading of the gravel road between the N7 turn-off to Henkries and the Orange River Pump Station, and the transportation of heavy materials.

The following maintenance activities were carried out during 2017/2018 financial year:

Planned Maintenance:

- Replacing of domestic water supply pumps at Henkries Water Treatment Works;
- Servicing of transformers at pump stations, treatment works and houses;
- Replacing of contactors at Okiep Pump Station;
- Installing of lights at Vaalhoek reservoir;
- Replacing of solar panel regulator at Kumsu Mountain for two-way radio transmitter;
- Replacing of leaking cooling water pipes at Doornwater Pump Station;
- Replacing of damaged drive end bearing at Pump No.3 at Henkries High Lift Pump Station;
- Replacing of Pump No. 3 at Henkries High Lift Pump Station;
- Installing and commissioning of Pump No.5 at Henkriesmond Pump Station;
- Installing of Pump No. 3 at Henkries Plant;
- Replacing of overflow sluice gate at sedimentation dam of Henkriesmond Pump Station;
- Replacing of supply cable of the motor of Pump No. 3 at Okiep; and
- Replacing of two high voltage fuses and re-terminating the supply cables for Pump No. 2 at Doornwater.

Unplanned Maintenance:

- Repairing of burst pipes on the Concordia raising pipeline;
- Repairing of leaks at Garragoup pipeline;
- Replacing of Garragoup Pump Station following electrical fire damage;
- Repairing of Pump No. 1 at Henkries High Lift Pump Station;
- Replacing of Pump No. 3 at Henkries High Lift Pump Station with a refurbished pump;
- Repairing of burst pipe at Doornwater Pump Station;
- Clearing of flooded chambers in Springbok; and
- Replacing of faulty geysers at staff houses in Henkries.

Vaal Gamagara Water Supply Scheme

The refurbishment and upgrading of Phase 1 of the Vaal Gamagara Supply Scheme commenced in November 2016, starting with the Roscoe to Black Rock pipeline section (80km). Construction is on-going and the pipeline is being replaced and upgraded. Phase 2 of the project is in the planning and design stage.

Planned Maintenance:

- Manufacturing of water pipeline reducers and flanges for air valves on the SWEP line;
- Servicing of pumps and valves at Trewill Pump Station;
- Replacing of Pump No. 1 at Glossom Pump Station;
- Doing maintenance on the motors at High Lift Kneukel and Trewill Pump Stations;
- Installing of soft starter for Pump No. 3 at Sishen Pump Station;
- Connecting of Bio-filter 2 at Vaal Gamagara Wastewater Plant;
- Repairing of needle valve at Kathu;
- Repairing of guard houses at Mamatwan, Sishen and Kathu Pump Stations;
- Servicing of overhead crane at Kneukel, Trewill and Beeshoek Pump Stations;
- Inspecting of cathodic protection at Postmansburg, Lime Acres and Groenwater; and
- Installing of plunger valve at Trewill Pump Station.

Unplanned Maintenance:

- Repairing of communication failure at Glossom reservoir;
- Repairing of leaks on Roscoe line;
- Repairing of communication failure at Clifton;
- Repairing of submersible pump at Vaal Gamagara Plant;
- Resetting of PLC and pumps at Trewill Pump Station;
- Repairing of leak at Sariel's Farm and Roscoe;
- Repairing of power and communication failure at Beeshoek Pump Station;
- Attending to communication failure at Koopmansfontein;
- Repairing of leak at PRV 116 at Kathu;
- Replacing of faulty plunger valve at Kneukel Pump Station;
- Repairing of leak at Silver Stream; and
- Repairing of leak at Kneukel Pump Station.

POTABLE WATER QUALITY

Pelladrift Water Supply Scheme

Tables 4.1 and 4.2 depict the overall water quality results for the Pelladrift distribution network during the last quarter of the 2017/2018 financial year. The Pelladrift Water Treatment Works did not comply with final turbidity as per SANS 241:2015, due to the unavailability of a filtration system. The clarifier is used to settle the flocs formed during the flocculation process. The balancing reservoir also serves to settle turbid particles. It is planned that a filtration system will be incorporated in the next phase of expansion at the treatment works.

Table 4.1: Water Quality Results – Pelladrift (Final Water)

Based on SANS 241:2015			
Determinand	**Unit**	**Specification**	**Compliance**
Physical and Organoleptic Requirements			
pH	pH	≥5 to ≤9.5	100
Turbidity	NTU	<1	0
Microbiological Safety Requirements			
E. coli	MPN/100ml	Not detected	100
Operational Water Quality Alert Levels			
Total Coliforms	MPN/100ml	≤ 10	100
Average Free Chlorine	mg/l	≤5	1.7

Table 4.2: Water Quality Results (Pelladrift Supply Systems)

Supply Systems for Pelladrift	Compliance Levels (%) – SANS 241:2015			
	Physical Organoleptic: (95%)	Chemical Health: (95%)	Operational Limits: (95%)	Microbiological Health: (97%)
Pella Off-take	75	100	67	100
Poffader Off-take	75	100	67	100
Swartkoppies Off-take	75	100	67	100
Horseshoe Reservoir	75	100	67	100

NAMAKWA REGIONAL BULK WATER SUPPLY SCHEME

Tables 5.1 and 5.2 indicate the overall water quality results for the Henkries distribution network during the 2017/2018 financial year. The organisation's water quality target is a compliance rate of 97%. Concerning the test results for Physical and Organoleptic determinands, pH complied 100% with set requirements, while turbidity achieved a compliance rate of 96%, which complies with the water quality standards. *E. coli* complied 100% with the requirements of the SANS 241:2015 standard.

The water supply system has a chlorine booster station at the Okiep Pump Station to boost the dosage of chlorine to the areas of Nababeep, Concordia and Carolusberg, which used to experience residual chlorine depletion in the past. All take-off points complied with minimum residual chlorine levels throughout the year under review.

Table 5.1: Water Quality Results – Henkries (Final Water)

Based on SANS 241:2015			
Determinand	**Unit**	**Specification**	**Compliance**
Physical and Organoleptic Requirements			
pH	pH	≥5 to ≤9.5	100
Turbidity	NTU	<1	100
Microbiological Safety Requirements			
E.coli	MPN/100ml	Not detected	100
Operational Water Quality Alert Levels			
Total Coliforms	MPN/100ml	≤ 10	100
Average Free Chlorine	mg/l	≤5	3.6

Table 5.2: Water Quality Results (Namakwa Supply Systems)

Supply Systems for Namakwa	Compliance Levels (%) – SANS 241:2015			
	Physical Organoleptic: (95%)	Chemical Health: (95%)	Operational Limits: (95%)	Microbiological Health: (97%)
Carolusburg	100	100	100	100
Springbok	100	100	100	100
Bulletrap	100	100	100	100
Steinkopf	100	100	100	100
Okiep	100	100	100	100
Nababeep	100	100	100	100
Concordia	100	100	100	100

VAAL GAMAGARA WATER SUPPLY SCHEME

Tables 6.1 and 6.2 indicate the water quality results of the Vaal Gamagara distribution network for the 2017/2018 financial year. Water quality complied with the set SANS 241:2015 standards. The organisation's water quality target is a compliance rate of 97%. Concerning the test results of the Physical and Organoleptic determinands, pH complied 99.9% with set requirements, while turbidity achieved a compliance rate of 99.9% (which complies with the water quality standards). The plant optimisation measures implemented were effective as confirmed by operational monitoring.

Chlorine gas is dosed at various points along the pipeline route to ensure microbiological compliance and improve the quality of ground water. The average residual chlorine attained was 3.1mg/l, and as a result the Microbiological Safety Requirements for *E.coli* and the Operational Water Quality Total Coliforms achieved a 99.9% compliance rate as per the requirements of the SANS 241:2015 standard.

Table 6.1: Water Quality Results – Vaal Gamagara (Final Water)

Based on SANS 241:2015			
Determinand	**Unit**	**Specification**	**Compliance**
Physical and Organoleptic Requirements			
pH	pH	5.0-9.5	99.99
Turbidity	NTU	<1.0	99.99
Microbiological Safety Requirements			
E.coli	MPN/100ml	Not detected	99.99
Operational Water Quality Alert Levels			
Total Coliforms	MPN/100ml	10	99.99
Average Free Chlorine	mg/l	≤ 5	3.2

Table 6.2: Water Quality Results (Vaal Gamagara Supply Systems)

Supply Systems for Vaal Gamagara	Compliance Levels (%) – SANS 241:2015			
	Physical Organoleptic: (95%)	Chemical Health: (95%)	Operational Limits: (95%)	Microbiological Health: (97%)
Dikgatlong	99.9	99.4	99.3	99.9
Olifantshoek	99.9	99.9	99.3	99.9
Kathu	99.9	99.9	99.9	99.9
Hotazel	99.9	98.4	99.5	99.2
Postmasburg	99.9	99.9	99.0	99.9

CONCLUSION

During the 2017/2018 financial year, the Northern Cape Region excelled at providing a reliable supply of potable water of high quality to designated communities and clients in the Northern Cape Province.

SCIENTIFIC SERVICES

CONTENTS:

Mr. D.F. Traut
Scientific Services Executive

INTRODUCTION

The mission of the Scientific Services Department is to provide accurate, reliable, professional and economically viable laboratory services in terms of ISO/IEC 17025(2017) requirements to internal and external clients within agreed time frames. In doing so, our Balkfontein and Vaal Gamagara Quality Control Laboratories are playing a critical role in serving our customers and fellow employees by successfully addressing research, process optimisation and quality control imperatives.

Sedibeng Water's main laboratory at Balkfontein in the Free State Province is a South African National Accreditation System (SANAS) accredited facility staffed by professionally qualified personnel equipped to analyse all chemical, hydrobiological and bacteriological determinands. A new laboratory at Vaal Gamagara in the Northern Cape Province was completed in April 2016. The main laboratory at Balkfontein oversees the operation and development of this facility to ensure that SANAS accreditation for the new facility is obtained as soon as possible.

GOALS FOR THE 2017/2018 FINANCIAL YEAR

Scientific Services strives to improve each year by setting new goals. The goals relevant to the year under review included the following:

- To maintain the SANAS accreditation status of the main laboratory at Balkfontein in compliance with ISO/IEC 17025 standards to ensure the integrity of results;
- To implement and accredit new methods in compliance with ISO/IEC 17025 standards;
- To enhance customer satisfaction and the approval of other interested parties;
- To professionally perform quality testing services to produce accurate, reliable and consistent results;
- To maintain and continually improve on the effectiveness of the Management System;
- To ensure that all laboratory personnel are well trained and competent to execute the specific tasks or jobs assigned to them;
- To increase our business and improve on income generation;

- To review current testing methods and ensure that back-up methods are accredited;
- To successfully participate in Proficiency Testing Schemes for all test methods; and
- To attend to water quality non-compliance by assisting the operations departments.

SURVEILLANCE ACCREDITATION AUDIT

During the 2017/2018 financial year, no surveillance accreditation audit by the South African National Accreditation System (SANAS) took place. The next audit has been scheduled for August 2018 in order to ensure our Balkfontein Laboratory is still compliant with international and national standards, the Accreditation for Conformity Assessment, Calibration and Good Laboratory Practice Act (Act No. 19 of 2006) and our own Quality Management System.

TEST METHODS IMPLEMENTED AND ACCREDITED

During the 2017/2018 financial year, Scientific Services planned to have 18 test methods implemented and accredited. The Chemistry Section received a Gallery-Plus instrument in January 2018, and test methods related to the use of this technology were developed during the financial year concerned. The Chemistry Section also expanded its assortment of instruments, i.e. a new pH meter, conductivity meter and turbidity meter for use in the Wet Chemistry Laboratory. This expansion will increase productivity in this laboratory, since it will allow two staff members to simultaneously test for pH, electrical conductivity and turbidity. The required instrument for colour analysis was received from the new Vaal Gamagara Laboratory for calibration. The reagents needed to operate the instrument were purchased in March 2018.

TRAINING EFFORTS, SUITABILITY AND EFFECTIVENESS

Staff attended the following courses during the 2017/2018 financial year:

- An ISO/IEC 17025: 2017 Laboratory QMS: Implementation Course; and
- A Statistical Method Validation Course.

The Chemistry Section strives to have at least two competent staff members consigned to each test method. This goal has been achieved except for the Gallery-Plus and Total Organic Carbon (TOC) test methods. This is due to the fact that the Gallery-Plus and TOC test methods have only recently been validated. Table 1 indicates all chemistry personnel and their test method competencies.

Table 1: Test Method Competencies of the Chemistry Personnel

Name	Test Method / Instrument / Sub-section					
	Wet Laboratory	Sewage	ICP-OES	TOC	Aquakem	Gallery-Plus
M. Malungana	Competent	Competent	Competent	Not required	Competent	Not required
N. Sikhwayi	Competent	Competent	Competent	NYC*	Competent	Competent
M. Tlale	Competent	Competent	Competent	Competent	Competent	Competent
F. Mafolo	Competent	Competent	NYC*	Competent	NYC*	NYC*
M. Ludick	Competent	Competent	NYC*			
M. Mongale	NYC*	NYC*	Competent	NYC*		
S. Ndaba	Competent	Competent	Not Applicable			
B. Moruri	Competent	NYC*	Competent	NYC*		
K. Sehume	NYC*	NYC*	NYC*	NYC*	Competent	NYC*
R. Tsotetsi	NYC*	NYC*	Competent	NYC*	NYC*	Competent
L. Mahatlane	NYC*	NYC*	NYC*	NYC*	NYC*	NYC*

* NYC = Not Yet Competent

PROFICIENCY TESTING SCHEMES

SABS and ERA Proficiency Testing Schemes

The Chemistry Section participates in two different Proficiency Testing Schemes (PTS), namely the South African Bureau of Standards (SABS) (nationally) and the Environment Resource Associates (ERA) (internationally). During the 2017/2018 financial year, the Balkfontein Laboratory had a total number of two PTS outliers. A significant improvement in PTS results were recorded during the review period. Tables 2 and 3 provide summaries of the chemistry and microbiology PTS results.

Table 2: PTS Results of the Chemistry Section

Proficiency Testing Scheme Outliers	2016/2017	2017/2018
pH	0	0
Electrical Conductivity	0	0
Total Dissolved Solids	0	0
Magnesium	0	0
Sodium	0	0
Potassium	0	0
Calcium	0	0
Fluoride	2	0
Chloride	0	0
Nitrate	0	0
Sulphate	0	0
Orthophosphate	0	0
Chemical Oxygen Demand	0	0
Dissolved Organic Carbon	0	0
Oxygen Absorbed	0	0
Zinc	0	0
Colour	0	0
Aluminium	0	0
Barium	0	0
Boron	0	0
Cadmium	0	0
Chromium	0	0
Copper	1	0
Lead	0	0
Iron	0	0
Manganese	0	0
Ammonia	3	0
Total Alkalinity	1	0
Turbidity	0	0
Total Suspended Solids (sample was not homogenous)	2	2
Cobalt	0	0
Nickel	0	0
Arsenic	0	0
Selenium	0	0
Molybdenum	0	0
Antimony	0	0
Vanadium	0	0

Table 2: PTS Results of the Chemistry Section (Continued)

Mercury	0	0
Phenols	0	0
Recoverable Cyanide	0	0
Nitrite	0	0
Total Failures	**9**	**2**
Total Amount of Results Submitted	**481**	**523**
Percentage Accuracy	**98.1%**	**99.6%**

Table 3: PTS Results of the Microbiology Section

PTS Outliers	2016 - 2017	2017-2018
E. coli	0	3
Total Coliforms	0	0
Heterotrophic Plate Count	0	1
Total Plate Count	1	Method not validated
E. coli	1	Method not validated
Enterobacteriaceae	1	Method not validated
Salmonella spp.	0	-
S. aureus	0	-
Total Failures	**3**	**4**
Total Amount of Results Submitted	**44**	**33**
Percentage Accuracy	**93%**	**87%**

Inter-laboratory Comparison

The Balkfontein Laboratory participates in the Inter-laboratory Comparison Scheme that is being presented by Rand Water. Participation in inter-laboratory studies allows for an evaluation of the analytical performance of a laboratory by comparison with the results of other laboratories. As can be seen in Table 4, the Balkfontein Laboratory participated from July 2017 - June 2018 in four rounds of the scheme, and no outliers on all analyses conducted, could be identified.

Table 4: Inter-laboratory Comparison Outliers

PTS Outliers	2016 - 2017	2017 - 2018
Somatic Coliphages	0	0
Total Failures	**0**	**0**
Total Amount of Results Submitted	**4**	**4**

MAINTENANCE AND IMPROVEMENT ON THE EFFECTIVENESS OF THE MANAGEMENT SYSTEM

The Scientific Services Department reviews its test methods annually as and when the need arises. As can be derived from Table 5, all chemistry test methods were indeed reviewed and updated during the 2017/2018 financial year. New test methods for Gallery-Plus were also documented.

Table 5: Revision of Test Methods

Method Number	Method Name	Reviewed	Changed	Obsolete
AL 01	Determination of pH at 25^{0}C	Yes	Yes	No
AL 02	Determination of Turbidity	Yes	Yes	No
AL 03	Determination of Electrical Conductivity at 25^{0}C	Yes	Yes	No

Table 5: Revision of Test Methods (Continued)

AL 09	Determination of Total Dissolved Solids at 180^{0}C	Yes	Yes	No
SL 01	Determination of Chemical Oxygen Demand by DR2700 spectrophotometer	Yes	Yes	No
SL 02	Determination of ammonia by DR2700 spectrophotometer	Yes	Yes	No
SL 03	Determination of orthophosphate by DR2700 spectrophotometer	Yes	Yes	No
SL 05	Determination of Total Suspended Solids by Gravimetric method	Yes	Yes	No
SL 05a	Determination of Total Suspended Solids by DR2700 spectrophotometer	Yes	Yes	No
SL 06	Determination of Oxygen Absorbed	Yes	Yes	No
SL 07	Determination of Total Alkalinity	Yes	Yes	No
IL 05	Determination of Fe, Mn, Zn, Al, Cd, Cr, Ni, Co, Pb, Ba, B and Cu by ICP-OES	Yes	Yes	No
IL 06	Determination of Ca, Mg, Na and K by ICP-OES	Yes	Yes	No
IL 07	Determination of Chloride by Aquakem	Yes	Yes	No
IL 08	Determination of Nitrate and Nitrite by Aquakem	Yes	Yes	No
IL 09	Determination of Sulphate by Aquakem	Yes	Yes	No
IL 10	Determination of Fluoride by Aquakem	Yes	Yes	No
IL 11	Determination of Orthophosphate by Aquakem	Yes	Yes	No
IL 12	Determination of Ammonia by Aquakem	Yes	Yes	No
IL 13	Determination of Recoverable Cyanide by Aquakem	Yes	Yes	No
IL 14	Determination of Molybdenum and Vanadium by ICP-OES	Yes	Yes	No
IL 15	Determination of Chemical Oxygen Demand by Aquakem	Yes	Yes	No
IL 16	Determination of As, Se and Sb by ICP-OES	Yes	Yes	No
IL 17	Determination of Phenol by Aquakem	Yes	Yes	No
IL 18	Determination of Mercury by ICP-OES	Yes	Yes	No
IL 19	Determination of Total Organic Carbon	Yes	Yes	No

Table 6 indicates the newly documented test methods for Gallery-Plus.

Table 6: Test Methods for Gallery-Plus

Method Number	Method Name	Current Status	Effective Date
IL 20	Determination of Chloride by Gallery-Plus	Completed	01/07/2018
IL 21	Determination of Sulphate by Gallery-Plus	Completed	01/07/2018
IL 22	Determination of Fluoride by Gallery-Plus	Completed	01/07/2018
IL 23	Determination of Nitrate and Nitrite by Gallery-Plus	Completed	01/07/2018
IL 24	Determination of Ammonia by Gallery-Plus	Completed	01/07/2018
IL 25	Determination of Orthophosphate by Gallery-Plus	Completed	01/07/2018
IL 26	Determination of Recoverable Cyanide by Gallery-Plus	Completed	01/07/2018
IL 27	Determination of Phenol by Gallery-Plus	Completed	01/07/2018

All chemistry Standing Operating Procedures (SOPs) were reviewed and updated during the 2017/2018 financial year. A new SOP was also documented, namely SOP C19 (Analysis by Gallery-Plus). Table 7 contains a list of all the reviewed SOPs.

Table 7: Standing Operating Procedures Reviewed

SOP Number	SOP Name	Reviewed	Changed	Obsolete
SOP C 01	Verification of Glassware	Yes	Yes	No
SOP C 03a	Method Validation	Yes	No changes	No
SOP C06	Maintenance of Equipment	Yes	Yes	No
SOP C10	Analysis by Aquakem	Yes	No changes	No
SOP C11	Uncertainty of Measurement	Yes	No changes	No
SOP C12	Operation and Verification of Digital Burettes and Dispensers	Yes	No changes	No
SOP C15	Quality Control Charts	Yes	No changes	No
SOP C16	Training and Competency - Chemistry	Yes	Yes	No
SOP C18	Stock Control - Chemistry	Yes	No changes	No
SOP C19	Analysis by Gallery-Plus	New SOP		

SUITABILITY OF POLICIES AND PROCEDURES

Quality Policy

The Quality Policy Statement was changed in June 2018 when documenting the Quality Manual took place to align the characteristics of the policy with the ISO 17025:2017 version. The only change affected was the incorporation of a commitment to impartiality by Laboratory Management.

Standard Operating Procedures (SOPs)

During the 2017/2018 financial year, the Balkfontein Laboratory reviewed all Quality SOPs in May 2018 according to a planned schedule incorporating ISO 17025:2017 requirements. A total number of 20 Quality SOPs were changed, one was created and none was made obsolete.

Quality Manual

Policies and procedures that were not suitable anymore, were changed or made obsolete throughout the review period, and are reflected in the Quality Manual.

INTERNAL AND EXTERNAL AUDITS

Total Number of Internal Audits

The 2017-2018 audit schedule was developed in the previous Management Review. Vertical, witnessing and systems auditing for all methods and technical clauses resumed in August 2017, and ended in April 2018. All internal audits were conducted as planned, while the Balkfontein Laboratory also conducted five unscheduled audits in the review period.

External Audits Conducted

One external audit was conducted during the 2017/2018 financial year. This audit was done in the Microbiology Section by Mi-Chem Dynamics in January 2018. The audit scope covered vertical and witnessing auditing of all accredited test methods in the Microbiology Section.

Analyses of Audit Results

During these audits, deviations were noted as non-conformances and registered in order to correct problems and prevent recurrences. Table 8 presents a comparison between the 2016 and 2018 external audit results.

Table 8: Comparison between External Audit Results (2016/2018)

Period	Total Number of Methods / Causes Audited	External Audits		
		Major	Minor	Total
February 2016	Microbiology methods only	12	09	21
January 2018	Microbiology methods only	05	07	12

ASSESSMENT BY EXTERNAL BODIES

Current Schedule of Accreditation

The Balkfontein Laboratory's current Schedule of Accreditation (Issue no. 25) was received in June 2018, after the resignation of an Analytical Chemist took place. The Schedule of Accreditation is a true reflection of what methods the laboratory is accredited for, with an expiry date of January 2022. All methods have more than one Technical Signatory. The Total Dissolved Solids (AL 09) method was removed from the Schedule of Accreditation – the reason being the said resignation of the Analytical Chemist as Technical Signatory (last working day on 30 April 2018). The laboratory is planning to re-instate this method during its August 2018 surveillance assessment. Three staff members will be assessed as Technical Signatories for this method.

Major Changes at SANAS

The ISO 17025:2017 standard was released in December 2017. All accredited facilities have been given three years to convert from the ISO 17025:2005 to the ISO 17025:2017 version. The new version incorporates Clauses 4-8, while the previous version only included Clauses 4-5. This has major implications for our Quality Management System as a whole. Therefore, the laboratory management and technical personnel have to ensure strict compliance and proper implementation of the new version. Currently, it is not clear whether the assessment scheduled for August 2018 will be conducted using the ISO 17025:2005 or the ISO 17025:2017 version. Nonetheless, the Balkfontein Laboratory has made significant progress (90%) in addressing the new version of the standard.

SANAS Assessments

Assessments conducted by SANAS are based on an 18 month cycle, while re-assessments are conducted every 5 years. The Balkfontein Laboratory was re-assessed from 18-19 October 2016, and is now subject to surveillance assessment in August 2018.

EXTENSION OF SCOPE

The Balkfontein Laboratory sets goals at the beginning of each financial year. These goals include accrediting new methods (as has already been indicated). Table 9 reveals those methods the laboratory plan to accredit in August 2018. This includes the assessment of personnel as Technical Signatories.

Table 9: Extension of Scope, Re-instatement and Assessment of Personnel

Method Name	Method Number	New / Re-instatement	Technical Signatory to be Assessed
Determination of Total Organic Carbon	IL 19	New	2
Determination of Chloride by means of Gallery-Plus	IL 20	New	3
Determination of Sulphate by means of Gallery-Plus	IL 21	New	3
Determination of Fluoride by means of Gallery-Plus	IL 22	New	3
Determination of Nitrite and Nitrate by means of Gallery-Plus	IL 23	New	3
Determination of Ammonia by means of Gallery-Plus	IL 24	New	3
Determination of Orthophosphate by means of Gallery-Plus	IL 25	New	3
Determination of Recoverable Cyanide by means of Gallery-Plus	IL 26	New	3
Determination of Phenol by means of Gallery-Plus	IL 27	New	3
Total Dissolved Solids	AL 09	Re-instating	3
pH, Electrical Conductivity and Turbidity Meters	AL 01, AL 02	Back-up additional meters	Existing and new TS for existing meters

CONCLUSION

During the 2017/2018 financial year, the Department of Scientific Services contributed to the success of Sedibeng Water by rendering key services that mainly centre around the performing of chemical and bacteriological analyses associated with the production of potable water, wastewater treatment, environmental management and process optimisation.

2017/2018 POTABLE WATER QUALITY COMPLIANCE TABLES

Potable water quality compliance results for the 2017/2018 financial year are depicted in Tables 10-14.

Table 10	Compliance of Potable Water in the Free State Region (based on SANS 241: 2015)				
Determinand	**Risk**	**Unit**	**Standard Limits**	**Virginia Plant**	**Balkfontein Plant**
Microbiological determinands					
E. coli or faecal coliforms	Acute health – 1	Count per 100 mL	Not detected	>99.99%	>99.99%
Cytopathogenic viruses	Acute health – 2	Count per 10 L	Not detected	>99.99%	>99.99%
Protozoan parasites					
Cryptosporidium species	Acute health – 2	Count per 10 L	Not detected	>99.99%	>99.99%
Giardia species	Acute health – 2	Count per 10 L	Not detected	>99.99%	>99.99%
Total coliforms	Operational	Count per 100 mL	≤ 10	>99.99%	>99.99%
Heterotrophic plate count	Operational	Count per mL	≤ 1 000	>99.99%	>99.99%
Somatic coliphages	Operational	Count per 10 mL	Not detected	>99.99%	>99.99%
Physical and aesthetic determinands					
Free Chlorine	Chronic health	mg/L	≤ 5	>99.9%	>99.99%
Colour	Aesthetic	mg/L Pt-Co	≤ 15	98,20%	>99.9%
Conductivity at 25°C	Aesthetic	mS/m	≤ 170	>99.9%	>99.9%
Odour or taste	Aesthetic	–	Inoffensive	Inoffensive	Inoffensive
Total dissolved solids	Aesthetic	mg/L	≤ 1 200	n/a	n/a
Turbidity	Operational	NTU	≤ 1	94,40%	>99.9%
	Aesthetic	NTU	≤ 5	>99.9%	>99.9%
pH at 25°C	Operational	pH units	≥ 5 to ≤ 9,7	>99.9%	>99.9%
Chemical determinands — macro-determinands					
Nitrate as N	Acute health – 1	mg/L	≤ 11	>99.9%	>99.9%
Nitrite as N	Acute health – 1	mg/L	≤ 0,9	>99.9%	>99.9%
Sulfate as SO_4^{2-}	Acute health – 1	mg/L	≤ 500	>99.9%	>99.9%
Fluoride as F^-	Chronic health	mg/L	≤ 1,5	>99.9%	>99.9%
Ammonia as N	Aesthetic	mg/L	≤ 1,5	>99.9%	>99.9%
Chloride as Cl^-	Aesthetic	mg/L	≤ 300	>99.9%	>99.9%
Sodium as Na	Aesthetic	mg/L	≤ 200	>99.9%	>99.9%
Zinc as Zn	Aesthetic	mg/L	≤ 5	>99.9%	>99.9%
Chemical determinands — micro-determinands					
Antimony as Sb	Chronic health	µg/L	≤ 20	>99.9%	>99.9%
Arsenic as As	Chronic health	µg/L	≤ 10	>99.9%	>99.9%
Cadmium as Cd	Chronic health	µg/L	≤ 3	>99.9%	>99.9%
Total Chromium as Cr	Chronic health	µg/L	≤ 50	>99.9%	>99.9%
Cobalt as Co	Chronic health	µg/L	≤ 500	>99.9%	>99.9%
Copper as Cu	Chronic health	µg/L	≤ 2 000	>99.9%	>99.9%
Cyanide (recoverable) as CN^-	Acute health – 1	µg/L	≤ 70	>99.9%	>99.9%
Iron as Fe	Chronic health	µg/L	≤ 2 000	>99.9%	98,20%
Lead as Pb	Chronic health	µg/L	≤ 10	>99.9%	>99.9%
Manganese as Mn	Chronic health	µg/L	≤ 500	>99.9%	>99.9%
Mercury as Hg	Chronic health	µg/L	≤ 6	>99.9%	>99.9%
Nickel as Ni	Chronic health	µg/L	≤ 70	>99.9%	>99.9%
Selenium as Se	Chronic health	µg/L	≤ 10	>99.9%	>99.9%
Uranium as U	Chronic health	µg/L	≤ 15	>99.9%	>99.9%
Vanadium as V	Chronic health	µg/L	≤ 200	>99.9%	>99.9%
Aluminium as Al	Operational	µg/L	≤ 300	>99.9%	>99.9%
Chemical determinands — organic determinands					
Total organic carbon as C	Chronic health	mg/L	≤ 10	>99.9%	>99.9%
Trihalomethanes:					
Chloroform	Chronic health	mg/L	≤ 0,3	>99.9%	>99.9%
Bromoform	Chronic health	mg/L	≤ 0,1	>99.9%	>99.9%
Dibromochloromethane	Chronic health	mg/L	≤ 0,1	>99.9%	>99.9%
Bromodichloromethane	Chronic health	mg/L	≤ 0,06	>99.9%	>99.9%
Microcystin as LR	Chronic health	µg/L	≤ 1	>99.9%	>99.9%
Phenols	Aesthetic	µg/L	≤ 10	>99.9%	>99.9%

Table 11a	Compliance of Potable Water in the North West Region: Dr. Ruth S. Mompati District Municiaplity (based on SANS 241: 2015)				
Determinand	**Risk**	**Unit**	**Standard Limits**	**Pampierstad Plant**	**Pudimoe Plant**
Microbiological determinands					
E. coli or faecal coliforms	Acute health – 1	Count per 100 mL	Not detected	>99.99%	>99.99%
Cytopathogenic viruses	Acute health – 2	Count per 10 L	Not detected	-	-
Protozoan parasites					
Cryptosporidium species	Acute health – 2	Count per 10 L	Not detected	-	-
Giardia species	Acute health – 2	Count per 10 L	Not detected	-	-
Total coliforms	Operational	Count per 100 mL	≤ 10	>99.99%	99,10%
Heterotrophic plate count	Operational	Count per mL	≤ 1 000	>99.99%	>99.99%
Somatic coliphages	Operational	Count per 10 mL	Not detected	>99.99%	>99.99%
Physical and aesthetic determinands					
Free Chlorine	Chronic health	mg/L	≤ 5	>99.9%	>99.9%
Colour	Aesthetic	mg/L Pt-Co	≤ 15	94,40%	>99.9%
Conductivity at 25°C	Aesthetic	mS/m	≤ 170	>99.9%	>99.9%
Odour or taste	Aesthetic	–	Inoffensive	Inoffensive	Inoffensive
Turbidity	Operational	NTU	≤ 1	90,70%	95,40%
	Aesthetic	NTU	≤ 5	>99.9%	>99.9%
pH at 25°C	Operational	pH units	≥ 5 to ≤ 9,7	>99.9%	>99.9%
Chemical determinands — macro-determinands					
Nitrate as N	Acute health – 1	mg/L	≤ 11	>99.9%	>99.9%
Nitrite as N	Acute health – 1	mg/L	≤ 0,9	>99.9%	>99.9%
Sulfate as SO_4^{2-}	Acute health – 1	mg/L	≤ 500	>99.9%	>99.9%
Fluoride as F^-	Chronic health	mg/L	≤ 1,5	>99.9%	>99.9%
Ammonia as N	Aesthetic	mg/L	≤ 1,5	>99.9%	>99.9%
Chloride as Cl^-	Aesthetic	mg/L	≤ 300	>99.9%	>99.9%
Sodium as Na	Aesthetic	mg/L	≤ 200	>99.9%	>99.9%
Zinc as Zn	Aesthetic	mg/L	≤ 5	>99.9%	>99.9%
Chemical determinands — micro-determinands					
Antimony as Sb	Chronic health	µg/L	≤ 20	>99.9%	>99.9%
Arsenic as As	Chronic health	µg/L	≤ 10	>99.9%	>99.9%
Cadmium as Cd	Chronic health	µg/L	≤ 3	>99.9%	>99.9%
Total Chromium as Cr	Chronic health	µg/L	≤ 50	>99.9%	>99.9%
Cobalt as Co	Chronic health	µg/L	≤ 500	>99.9%	>99.9%
Copper as Cu	Chronic health	µg/L	≤ 2 000	>99.9%	>99.9%
Cyanide (recoverable) as CN^-	Acute health – 1	µg/L	≤ 70	>99.9%	>99.9%
Iron as Fe	Chronic health	µg/L	≤ 2 000	96,30%	98,20%
Lead as Pb	Chronic health	µg/L	≤ 10	>99.9%	>99.9%
Manganese as Mn	Chronic health	µg/L	≤ 500	>99.9%	>99.9%
Mercury as Hg	Chronic health	µg/L	≤ 6	>99.9%	>99.9%
Nickel as Ni	Chronic health	µg/L	≤ 70	>99.9%	>99.9%
Selenium as Se	Chronic health	µg/L	≤ 10	>99.9%	>99.9%
Uranium as U	Chronic health	µg/L	≤ 15	>99.9%	>99.9%
Vanadium as V	Chronic health	µg/L	≤ 200	>99.9%	>99.9%
Aluminium as Al	Operational	µg/L	≤ 300	98,20%	99,10%
Chemical determinands — organic determinands					
Total organic carbon as C	Chronic health	mg/L	≤ 10	96,30%	97,20%
Trihalomethanes:					
Chloroform	Chronic health	mg/L	≤ 0,3	>99.9%	>99.9%
Bromoform	Chronic health	mg/L	≤ 0,1	>99.9%	>99.9%
Dibromochloromethane	Chronic health	mg/L	≤ 0,1	>99.9%	>99.9%
Bromodichloromethane	Chronic health	mg/L	≤ 0,06	>99.9%	>99.9%
Microcystin as LR	Chronic health	µg/L	≤ 1	>99.9%	>99.9%
Phenols	Aesthetic	µg/L	≤ 10	>99.9%	>99.9%

Table 11b	Compliance of Potable Water in the North West Region: Dr. Ruth S. Mompati District Municipality (based on SANS 241: 2015)				
Determinand	**Risk**	**Unit**	**Standard Limits**	**Bogosing Plant**	**Kgomotso Plant**
Microbiological determinands					
E. coli or faecal coliforms	Acute health – 1	Count per 100 mL	Not detected	>99.99%	>99.99%
Cytopathogenic viruses	Acute health – 2	Count per 10 L	Not detected	-	-
Protozoan parasites					
Cryptosporidium species	Acute health – 2	Count per 10 L	Not detected	-	-
Giardia species	Acute health – 2	Count per 10 L	Not detected	-	-
Total coliforms	Operational	Count per 100 mL	≤ 10	>99.99%	>99.99%
Heterotrophic plate count	Operational	Count per mL	≤ 1 000	94,40%	>99.99%
Somatic coliphages	Operational	Count per 10 mL	Not detected	>99.99%	>99.99%
Physical and aesthetic determinands					
Free Chlorine	Chronic health	mg/L	≤ 5	>99.99%	>99.99%
Colour	Aesthetic	mg/L Pt-Co	≤ 15	16,70%	90,70%
Conductivity at 25°C	Aesthetic	mS/m	≤ 170	>99.9%	>99.9%
Odour or taste	Aesthetic	-	Inoffensive	Inoffensive	Inoffensive
Turbidity	Operational	NTU	≤ 1	14,80%	79,60%
	Aesthetic	NTU	≤ 5	27,80%	>99.9%
pH at 25°C	Operational	pH units	≥ 5 to ≤ 9,7	>99.9%	>99.9%
Chemical determinands — macro-determinands					
Nitrate as N	Acute health – 1	mg/L	≤ 11	>99.9%	>99.9%
Nitrite as N	Acute health – 1	mg/L	≤ 0,9	>99.9%	>99.9%
Sulfate as SO_4^{2-}	Acute health – 1	mg/L	≤ 500	>99.9%	>99.9%
Fluoride as F^-	Chronic health	mg/L	≤ 1,5	>99.9%	>99.9%
Ammonia as N	Aesthetic	mg/L	≤ 1,5	>99.9%	>99.9%
Chloride as Cl^-	Aesthetic	mg/L	≤ 300	>99.9%	>99.9%
Sodium as Na	Aesthetic	mg/L	≤ 200	>99.9%	>99.9%
Zinc as Zn	Aesthetic	mg/L	≤ 5	>99.9%	>99.9%
Chemical determinands — micro-determinands					
Antimony as Sb	Chronic health	µg/L	≤ 20	>99.9%	>99.9%
Arsenic as As	Chronic health	µg/L	≤ 10	>99.9%	>99.9%
Cadmium as Cd	Chronic health	µg/L	≤ 3	>99.9%	>99.9%
Total Chromium as Cr	Chronic health	µg/L	≤ 50	>99.9%	>99.9%
Cobalt as Co	Chronic health	µg/L	≤ 500	>99.9%	>99.9%
Copper as Cu	Chronic health	µg/L	≤ 2 000	>99.9%	>99.9%
Cyanide (recoverable) as CN^-	Acute health – 1	µg/L	≤ 70	>99.9%	>99.9%
Iron as Fe	Chronic health	µg/L	≤ 2 000	24,10%	>99.9%
Lead as Pb	Chronic health	µg/L	≤ 10	>99.9%	>99.9%
Manganese as Mn	Chronic health	µg/L	≤ 500	>99.9%	>99.9%
Mercury as Hg	Chronic health	µg/L	≤ 6	>99.9%	>99.9%
Nickel as Ni	Chronic health	µg/L	≤ 70	>99.9%	>99.9%
Selenium as Se	Chronic health	µg/L	≤ 10	>99.9%	>99.9%
Uranium as U	Chronic health	µg/L	≤ 15	>99.9%	>99.9%
Vanadium as V	Chronic health	µg/L	≤ 200	>99.9%	>99.9%
Aluminium as Al	Operational	µg/L	≤ 300	18,50%	98,20%
Chemical determinands — organic determinands					
Total organic carbon as C	Chronic health	mg/L	≤ 10	96,30%	96,30%
Trihalomethanes:					
Chloroform	Chronic health	mg/L	≤ 0,3	>99.9%	>99.9%
Bromoform	Chronic health	mg/L	≤ 0,1	>99.9%	>99.9%
Dibromochloromethane	Chronic health	mg/L	≤ 0,1	>99.9%	>99.9%
Bromodichloromethane	Chronic health	mg/L	≤ 0,06	>99.9%	>99.9%
Microcystin as LR	Chronic health	µg/L	≤ 1	>99.9%	>99.9%
Phenols	Aesthetic	µg/L	≤ 10	>99.9%	>99.9%

Table 12a	Compliance of Potable Water in the North West Region: Ngaka Modiri Molema District Municipality (based on SANS 241: 2015)				
Determinand	**Risk**	**Unit**	**Standard Limits**	**Mmabatho Plant**	**Mahikeng Plant**
Microbiological determinands					
E. coli or faecal coliforms	Acute health – 1	Count per 100 mL	Not detected	>99.99%	98,2%
Cytopathogenic viruses	Acute health – 2	Count per 10 L	Not detected	-	-
Protozoan parasites					
Cryptosporidium species	Acute health – 2	Count per 10 L	Not detected	-	-
Giardia species	Acute health – 2	Count per 10 L	Not detected	-	-
Total coliforms	Operational	Count per 100 mL	≤ 10	>99.99%	96,30%
Heterotrophic plate count	Operational	Count per mL	≤ 1 000	>99.99%	>99.99%
Somatic coliphages	Operational	Count per 10 mL	Not detected	-	-
Physical and aesthetic determinands					
Free Chlorine	Chronic health	mg/L	≤ 5	>99.9%	>99.9%
Colour	Aesthetic	mg/L Pt-Co	≤ 15	>99.9%	>99.9%
Conductivity at 25°C	Aesthetic	mS/m	≤ 170	>99.9%	>99.9%
Odour or taste	Aesthetic	-	Inoffensive	Offensive	Inoffensive
Turbidity	Operational	NTU	≤ 1	98,2%	>99.9%
	Aesthetic	NTU	≤ 5	>99.9%	>99.9%
pH at 25°C	Operational	pH units	≥ 5 to ≤ 9,7	>99.9%	>99.9%
Chemical determinands — macro-determinands					
Nitrate as N	Acute health – 1	mg/L	≤ 11	>99.9%	>99.9%
Nitrite as N	Acute health – 1	mg/L	≤ 0,9	>99.9%	>99.9%
Sulfate as SO_4^{2-}	Acute health – 1	mg/L	≤ 500	>99.9%	>99.9%
Fluoride as F^-	Chronic health	mg/L	≤ 1,5	>99.9%	>99.9%
Ammonia as N	Aesthetic	mg/L	≤ 1,5	>99.9%	>99.9%
Chloride as Cl^-	Aesthetic	mg/L	≤ 300	>99.9%	>99.9%
Sodium as Na	Aesthetic	mg/L	≤ 200	>99.9%	>99.9%
Zinc as Zn	Aesthetic	mg/L	≤ 5	>99.9%	>99.9%
Chemical determinands — micro-determinands					
Antimony as Sb	Chronic health	µg/L	≤ 20	>99.9%	>99.9%
Arsenic as As	Chronic health	µg/L	≤ 10	>99.9%	>99.9%
Cadmium as Cd	Chronic health	µg/L	≤ 3	>99.9%	>99.9%
Total Chromium as Cr	Chronic health	µg/L	≤ 50	>99.9%	>99.9%
Cobalt as Co	Chronic health	µg/L	≤ 500	>99.9%	>99.9%
Copper as Cu	Chronic health	µg/L	≤ 2 000	>99.9%	>99.9%
Cyanide (recoverable) as CN^-	Acute health – 1	µg/L	≤ 70	>99.9%	>99.9%
Iron as Fe	Chronic health	µg/L	≤ 2 000	>99.9%	>99.9%
Lead as Pb	Chronic health	µg/L	≤ 10	>99.9%	>99.9%
Manganese as Mn	Chronic health	µg/L	≤ 500	>99.9%	>99.9%
Mercury as Hg	Chronic health	µg/L	≤ 6	>99.9%	>99.9%
Nickel as Ni	Chronic health	µg/L	≤ 70	>99.9%	>99.9%
Selenium as Se	Chronic health	µg/L	≤ 10	>99.9%	>99.9%
Uranium as U	Chronic health	µg/L	≤ 15	-	-
Vanadium as V	Chronic health	µg/L	≤ 200	>99.9%	>99.9%
Aluminium as Al	Operational	µg/L	≤ 300	>99.9%	>99.9%
Chemical determinands — organic determinands					
Total organic carbon as C	Chronic health	mg/L	≤ 10	96,30%	96,30%
Trihalomethanes:					
Chloroform	Chronic health	mg/L	≤ 0,3	-	-
Bromoform	Chronic health	mg/L	≤ 0,1	-	-
Dibromochloromethane	Chronic health	mg/L	≤ 0,1	-	-
Bromodichloromethane	Chronic health	mg/L	≤ 0,06	-	-
Microcystin as LR	Chronic health	µg/L	≤ 1	-	-
Phenols	Aesthetic	µg/L	≤ 10	-	-

Table 12b	Compliance of Potable Water in the North West Region: Ngaka Modiri Molema District Municipality (based on SANS 241: 2015)					
Determinand	**Risk**	**Unit**	**Standard Limits**	**Dinokana Plant**	**Motswedi Plant**	**Itsoseng Plant**
Microbiological determinands						
E. coli or faecal coliforms	Acute health – 1	Count per 100 mL	Not detected	98,10%	>99.9%	>99.9%
Cytopathogenic viruses	Acute health – 2	Count per 10 L	Not detected	-	-	-
Protozoan parasites						
Cryptosporidium species	Acute health – 2	Count per 10 L	Not detected	-	-	-
Giardia species	Acute health – 2	Count per 10 L	Not detected	-	-	-
Total coliforms	Operational	Count per 100 mL	≤ 10	98,10%	>99.99%	>99.99%
Heterotrophic plate count	Operational	Count per mL	≤ 1 000	98,10%	96,1%	>99.99%
Somatic coliphages	Operational	Count per 10 mL	Not detected	-	-	-
Physical and aesthetic determinands						
Free Chlorine	Chronic health	mg/L	≤ 5	>99.9%	>99.9%	>99.9%
Colour	Aesthetic	mg/L Pt-Co	≤ 15	90,40%	72,20%	>99.9%
Conductivity at 25°C	Aesthetic	mS/m	≤ 170	>99.9%	>99.9%	>99.9%
Odour or taste	Aesthetic	-	Inoffensive	Inoffensive	Inoffensive	Inoffensive
Turbidity	Operational	NTU	≤ 1	83,6%	66,7%	>99.9%
	Aesthetic	NTU	≤ 5	>99.9%	98,2%	>99.9%
pH at 25°C	Operational	pH units	≥ 5 to ≤ 9,7	>99.9%	>99.9%	>99.9%
Chemical determinands — macro-determinands						
Nitrate as N	Acute health – 1	mg/L	≤ 11	>99.9%	>99.9%	>99.9%
Nitrite as N	Acute health – 1	mg/L	≤ 0,9	>99.9%	>99.9%	>99.9%
Sulfate as SO_4^{2-}	Acute health – 1	mg/L	≤ 500	>99.9%	>99.9%	>99.9%
Fluoride as F^-	Chronic health	mg/L	≤ 1,5	>99.9%	>99.9%	>99.9%
Ammonia as N	Aesthetic	mg/L	≤ 1,5	>99.9%	>99.9%	>99.9%
Chloride as Cl^-	Aesthetic	mg/L	≤ 300	>99.9%	>99.9%	>99.9%
Sodium as Na	Aesthetic	mg/L	≤ 200	>99.9%	>99.9%	>99.9%
Zinc as Zn	Aesthetic	mg/L	≤ 5	>99.9%	>99.9%	>99.9%
Chemical determinands — micro-determinands						
Antimony as Sb	Chronic health	µg/L	≤ 20	>99.9%	>99.9%	>99.9%
Arsenic as As	Chronic health	µg/L	≤ 10	>99.9%	>99.9%	>99.9%
Cadmium as Cd	Chronic health	µg/L	≤ 3	>99.9%	>99.9%	>99.9%
Total Chromium as Cr	Chronic health	µg/L	≤ 50	>99.9%	>99.9%	>99.9%
Cobalt as Co	Chronic health	µg/L	≤ 500	>99.9%	>99.9%	>99.9%
Copper as Cu	Chronic health	µg/L	≤ 2 000	>99.9%	>99.9%	>99.9%
Cyanide (recoverable) as CN^-	Acute health – 1	µg/L	≤ 70	>99.9%	>99.9%	>99.9%
Iron as Fe	Chronic health	µg/L	≤ 2 000	>99.9%	83,3%	>99.9%
Lead as Pb	Chronic health	µg/L	≤ 10	>99.9%	>99.9%	>99.9%
Manganese as Mn	Chronic health	µg/L	≤ 500	>99.9%	>99.9%	>99.9%
Mercury as Hg	Chronic health	µg/L	≤ 6	>99.9%	>99.9%	>99.9%
Nickel as Ni	Chronic health	µg/L	≤ 70	>99.9%	>99.9%	>99.9%
Selenium as Se	Chronic health	µg/L	≤ 10	>99.9%	>99.9%	>99.9%
Uranium as U	Chronic health	µg/L	≤ 15	-	-	-
Vanadium as V	Chronic health	µg/L	≤ 200	>99.9%	>99.9%	>99.9%
Aluminium as Al	Operational	µg/L	≤ 300	>99.9%	81,5%	>99.9%
Chemical determinands — organic determinands						
Total organic carbon as C	Chronic health	mg/L	≤ 10	>99.9%	>99.9%	96,30%
Trihalomethanes:						
Chloroform	Chronic health	mg/L	≤ 0,3	-	-	-
Bromoform	Chronic health	mg/L	≤ 0,1	-	-	-
Dibromochloromethane	Chronic health	mg/L	≤ 0,1	-	-	-
Bromodichloromethane	Chronic health	mg/L	≤ 0,06	-	-	-
Microcystin as LR	Chronic health	µg/L	≤ 1	-	-	-
Phenols	Aesthetic	µg/L	≤ 10	-	-	-

Table 13	Compliance of Potable Water in the North West Region: Lekwa-Teemane Local Municipality (based on SANS 241: 2015)				
Determinand	**Risk**	**Unit**	**Standard Limits**	**Bloemhof Plant**	**Christiana Plant**
Microbiological determinands					
E. coli or faecal coliforms	Acute health – 1	Count per 100 mL	Not detected	98,20%	>99.99%
Cytopathogenic viruses	Acute health – 2	Count per 10 L	Not detected	>99.99%	>99.99%
Protozoan parasites					
Cryptosporidium species	Acute health – 2	Count per 10 L	Not detected	>99.99%	>99.99%
Giardia species	Acute health – 2	Count per 10 L	Not detected	>99.99%	>99.99%
Total coliforms	Operational	Count per 100 mL	≤ 10	>99.99%	>99.99%
Heterotrophic plate count	Operational	Count per mL	≤ 1 000	>99.99%	98,20%
Somatic coliphages	Operational	Count per 10 mL	Not detected	>99.99%	>99.99%
Physical and aesthetic determinands					
Free Chlorine	Chronic health	mg/L	≤ 5	>99.9%	>99.9%
Colour	Aesthetic	mg/L Pt-Co	≤ 15	>99.9%	>99.9%
Conductivity at 25°C	Aesthetic	mS/m	≤ 170	>99.9%	>99.9%
Odour or taste	Aesthetic	-	Inoffensive	Inoffensive	Inoffensive
Turbidity	Operational	NTU	≤ 1	96,3%	87,0%
	Aesthetic	NTU	≤ 5	>99.9%	>99.9%
pH at 25°C	Operational	pH units	≥ 5 to ≤ 9,7	>99.9%	>99.9%
Chemical determinands — macro-determinands					
Nitrate as N	Acute health – 1	mg/L	≤ 11	>99.9%	>99.9%
Nitrite as N	Acute health – 1	mg/L	≤ 0,9	>99.9%	>99.9%
Sulfate as SO_4^{2-}	Acute health – 1	mg/L	≤ 500	>99.9%	>99.9%
Fluoride as F^-	Chronic health	mg/L	≤ 1,5	>99.9%	>99.9%
Ammonia as N	Aesthetic	mg/L	≤ 1,5	>99.9%	>99.9%
Chloride as Cl^-	Aesthetic	mg/L	≤ 300	>99.9%	>99.9%
Sodium as Na	Aesthetic	mg/L	≤ 200	>99.9%	>99.9%
Zinc as Zn	Aesthetic	mg/L	≤ 5	>99.9%	>99.9%
Chemical determinands — micro-determinands					
Antimony as Sb	Chronic health	µg/L	≤ 20	>99.9%	>99.9%
Arsenic as As	Chronic health	µg/L	≤ 10	>99.9%	>99.9%
Cadmium as Cd	Chronic health	µg/L	≤ 3	>99.9%	>99.9%
Total Chromium as Cr	Chronic health	µg/L	≤ 50	>99.9%	>99.9%
Cobalt as Co	Chronic health	µg/L	≤ 500	>99.9%	>99.9%
Copper as Cu	Chronic health	µg/L	≤ 2 000	>99.9%	>99.9%
Cyanide (recoverable) as CN^-	Acute health – 1	µg/L	≤ 70	>99.9%	>99.9%
Iron as Fe	Chronic health	µg/L	≤ 2 000	98,2%	>99.9%
Lead as Pb	Chronic health	µg/L	≤ 10	>99.9%	>99.9%
Manganese as Mn	Chronic health	µg/L	≤ 500	>99.9%	>99.9%
Mercury as Hg	Chronic health	µg/L	≤ 6	>99.9%	>99.9%
Nickel as Ni	Chronic health	µg/L	≤ 70	>99.9%	>99.9%
Selenium as Se	Chronic health	µg/L	≤ 10	>99.9%	>99.9%
Uranium as U	Chronic health	µg/L	≤ 15	>99.9%	>99.9%
Vanadium as V	Chronic health	µg/L	≤ 200	>99.9%	>99.9%
Aluminium as Al	Operational	µg/L	≤ 300	98,20%	74,00%
Chemical determinands — organic determinands					
Total organic carbon as C	Chronic health	mg/L	≤ 10	>99.9%	>99.9%
Trihalomethanes:					
Chloroform	Chronic health	mg/L	≤ 0,3	>99.9%	>99.9%
Bromoform	Chronic health	mg/L	≤ 0,1	>99.9%	>99.9%
Dibromochloromethane	Chronic health	mg/L	≤ 0,1	>99.9%	>99.9%
Bromodichloromethane	Chronic health	mg/L	≤ 0,06	>99.9%	>99.9%
Microcystin as LR	Chronic health	µg/L	≤ 1	>99.9%	>99.9%
Phenols	Aesthetic	µg/L	≤ 10	>99.9%	>99.9%

Table 14	Compliance of Potable Water in the Northern Cape Region (based on SANS 241: 2015)					
Determinand	**Risk**	**Unit**	**Standard Limits**	**Henkries Plant**	**Pelladrift Plant**	**Vaal Gamagara Plant**
Microbiological determinands						
E. coli or faecal coliforms	Acute health – 1	Count per 100 mL	Not detected	>99.9%	>99.9%	>99.9%
Cytopathogenic viruses	Acute health – 2	Count per 10 L	Not detected	-	-	-
Protozoan parasites						
Cryptosporidium species	Acute health – 2	Count per 10 L	Not detected	-	-	-
Giardia species	Acute health – 2	Count per 10 L	Not detected	-	-	-
Total coliforms	Operational	Count per 100 mL	≤ 10	>99.99%	>99.99%	>99.99%
Heterotrophic plate count	Operational	Count per mL	≤ 1 000	>99.99%	>99.99%	>99.99%
Somatic coliphages	Operational	Count per 10 mL	Not detected	>99.99%	>99.99%	>99.99%
Physical and aesthetic determinands						
Free Chlorine	Chronic health	mg/L	≤ 5	>99.9%	>99.9%	>99.9%
Colour	Aesthetic	mg/L Pt-Co	≤ 15	>99.9%	>99.9%	94,40%
Conductivity at 25°C	Aesthetic	mS/m	≤ 170	>99.9%	>99.9%	>99.9%
Odour or taste	Aesthetic	-	Inoffensive	Inoffensive	Inoffensive	Inoffensive
Total dissolved solids	Aesthetic	mg/L	≤ 1 200	-	-	-
Turbidity	Operational	NTU	≤ 1	>99.9%	74,60%	98,20%
	Aesthetic	NTU	≤ 5	>99.9%	96,20%	>99.9%
pH at 25°C	Operational	pH units	≥ 5 to ≤ 9,7	>99.9%	>99.9%	>99.9%
Chemical determinands — macro-determinands						
Nitrate as N	Acute health – 1	mg/L	≤ 11	>99.9%	>99.9%	>99.9%
Nitrite as N	Acute health – 1	mg/L	≤ 0,9	>99.9%	>99.9%	>99.9%
Sulfate as SO_4^{2-}	Acute health – 1	mg/L	≤ 500	>99.9%	>99.9%	>99.9%
Fluoride as F^-	Chronic health	mg/L	≤ 1,5	>99.9%	>99.9%	>99.9%
Ammonia as N	Aesthetic	mg/L	≤ 1,5	>99.9%	>99.9%	>99.9%
Chloride as Cl^-	Aesthetic	mg/L	≤ 300	>99.9%	>99.9%	>99.9%
Sodium as Na	Aesthetic	mg/L	≤ 200	>99.9%	>99.9%	>99.9%
Zinc as Zn	Aesthetic	mg/L	≤ 5	>99.9%	>99.9%	>99.9%
Chemical determinands — micro-determinands						
Antimony as Sb	Chronic health	µg/L	≤ 20	>99.9%	>99.9%	>99.9%
Arsenic as As	Chronic health	µg/L	≤ 10	>99.9%	>99.9%	>99.9%
Cadmium as Cd	Chronic health	µg/L	≤ 3	>99.9%	>99.9%	>99.9%
Total Chromium as Cr	Chronic health	µg/L	≤ 50	>99.9%	>99.9%	>99.9%
Cobalt as Co	Chronic health	µg/L	≤ 500	>99.9%	>99.9%	>99.9%
Copper as Cu	Chronic health	µg/L	≤ 2 000	>99.9%	>99.9%	>99.9%
Cyanide (recoverable) as CN^-	Acute health – 1	µg/L	≤ 70	>99.9%	>99.9%	>99.9%
Iron as Fe	Chronic health	µg/L	≤ 2 000	>99.9%	>99.9%	>99.9%
Lead as Pb	Chronic health	µg/L	≤ 10	>99.9%	>99.9%	>99.9%
Manganese as Mn	Chronic health	µg/L	≤ 500	>99.9%	>99.9%	>99.9%
Mercury as Hg	Chronic health	µg/L	≤ 6	>99.9%	>99.9%	>99.9%
Nickel as Ni	Chronic health	µg/L	≤ 70	>99.9%	>99.9%	>99.9%
Selenium as Se	Chronic health	µg/L	≤ 10	>99.9%	>99.9%	>99.9%
Uranium as U	Chronic health	µg/L	≤ 15	>99.9%	>99.9%	>99.9%
Vanadium as V	Chronic health	µg/L	≤ 200	>99.9%	>99.9%	>99.9%
Aluminium as Al	Operational	µg/L	≤ 300	>99.9%	>99.9%	>99.9%
Chemical determinands — organic determinands						
Total organic carbon as C	Chronic health	mg/L	≤ 10	>99.9%	>99.9%	94,40%
Trihalomethanes:						
Chloroform	Chronic health	mg/L	≤ 0,3	>99.9%	>99.9%	>99.9%
Bromoform	Chronic health	mg/L	≤ 0,1	>99.9%	>99.9%	>99.9%
Dibromochloromethane	Chronic health	mg/L	≤ 0,1	>99.9%	>99.9%	>99.9%
Bromodichloromethane	Chronic health	mg/L	≤ 0,06	>99.9%	>99.9%	>99.9%
Microcystin as LR	Chronic health	µg/L	≤ 1	>99.9%	>99.9%	>99.9%
Phenols	Aesthetic	µg/L	≤ 10	>99.9%	>99.9%	>99.9%

TECHNICAL SUPPORT & SAFETY HEALTH AND ENVIRONMENT

CONTENTS:

Mr. N.E. Ratshitanga
Technical Support & Safety, Health and Environment Executive

INTRODUCTION

The aim of Sedibeng Water's Safety, Health and Environment (SHE) Programme is to ensure continuous compliance to set requirements with regards to safety, health and environmental concerns in the workplace. The programme likewise illustrates the organisation's unequivocal devotion to sustainable growth and development, and balancing social, economic and environmental imperatives in the process. This balance warrants fulfilment of long-term business goals, while it also upholds the wellbeing of both employees and customers.

Mutual commitment by Management and the employees of Sedibeng Water safeguards the successful implementation of our SHE Programme. This commitment manifests in equal liability and a joint obligation and responsibility to render reliable and sustainable services to the customers that we serve. In addition, the SHE Programme, which is based on risk management systems, is integrated with the organisation's operational strategy in order to diminish the likelihood of the occurrence of SHE incidents and to minimise the severity thereof. In the process, effective communication and the empowerment of employees through training and development, ensure that Sedibeng Water excels in attaining the set targets of its key strategic objectives.

DISABLING INJURY FREQUENCY RATES

The 2017/2018 financial year has been excellent regarding the overall performance of Sedibeng Water. The organisational strategic objective regarding injury incidents is targeting a Disabling Injury Frequency Rate (DIFR) of two (2). However, to excel beyond this organisational target, the Safety, Health and Environment (SHE) Department has set the stringent objective of maintaining a DIFR of less than one (1) in all operational areas. The primary objective of the SHE Programme is to prevent and minimise incidents which may adversely affect the environment and assets (including human assets), while the secondary objective is to achieve NOSA Five Star Grading. To attain this objective, the organisation not only has to achieve an overall effort score of more than 90%, but also needs to maintain a DIFR of less than one (1) in the respective workplaces. At operational level, the target is to achieve zero (0) disabling injury (DI), as well as the NOSA Five Star Grading. More importantly, Management and the employees of Sedibeng Water have always been working hard at focusing

resources towards the pursuit of the underlying key performance areas, namely, a lower DIFR and a higher external NOSA Audit Grading.

INJURY STATISTICS

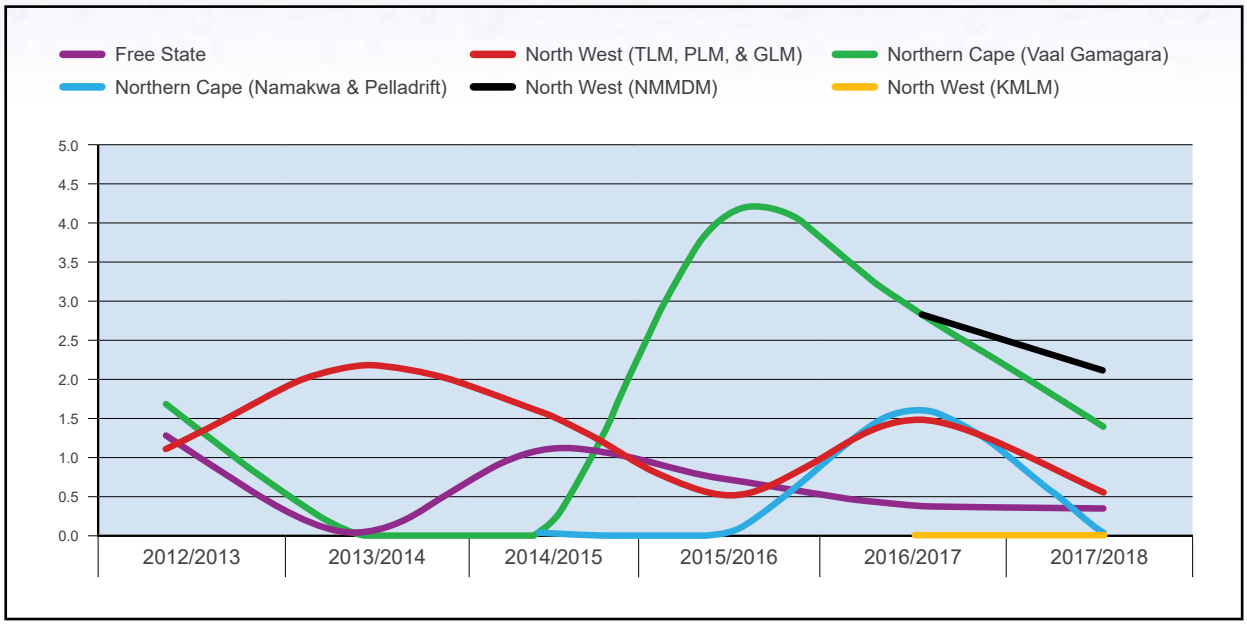
The Free State Region completed the 2017/2018 financial year with a Disabling Injury Frequency Rate (DIFR) of 0.32, which marks the achievement of the strategic objective target of a DIFR of not more than 2. The North West Region (Dr. Ruth Segomotsi Mompati District Municipality, Ga-Segonyana Local Municipality and Phokwane Local Municipality) completed the year under review with a DIFR of 0.53, which also accomplished the set strategic objective target.

The other part of the North West Region covering the Ngaka Modiri Molema District Municipality, concluded the financial year with a DIFR of 2.12, which did not meet the set target of 2 or less. This area was recently incorporated into Sedibeng Water, where the Health, Safety and Environmental (HSE) Programme is still at the inception stage. The Northern Cape Region (Vaal Gamagara) achieved a DIFR of 1.38, which meets the strategic objective target of 2 or less. Vaal Gamagara had one (1) Disabling Injury at the end of the financial year. This adversely affected the DIFR due to the number of employees in the area (less than 60 employees), and hence, less man-hours concerned. The other areas of the Northern Cape Region (Namakwa and Pelladrift) closed the year with no disabling injuries and a DIFR of 0.00, which is an achievement of the strategic objective target set by the organisation. The calculated overall organisational DIFR at the end of the 2017/2018 financial year was 0.81, which met the strategic objective target. Table 1 and Graph 1 show the performance trends over the 2012/2013 to 2017/2018 financial years.

Table 1: DIFR (Disabling Injury Statistics)

Operational Area	Disabling Injury Frequency Rate (DIFR)					
	2012/2013	2013/2014	2014/2015	2015/2016	2016/2017	2017/2018
Free State (Matjabeng LM, Nala LM & Maquassi Hills LM)	1.3	0.0	1.1	0.7	0.36	0.32
North West (Taung LM, Pokwane LM & Ga-Segonyana LM)	1.1	2.2	1.6	0.5	1.5	0.53
North West (Kagisano-Molopo LM)	-	-	-	-	0.00	0.00
North West (Ngaka Modiri Molema DM)	-	-	-	-	2.89	2.12
Northern Cape (Vaal Gamagara)	1.7	0.0	0.0	4.2	2.92	1.39
Northern Cape (Namakwa & Pelladrift)	-	-	0.0	0.0	1.62	0.00

Graph 1: DIFR Trends



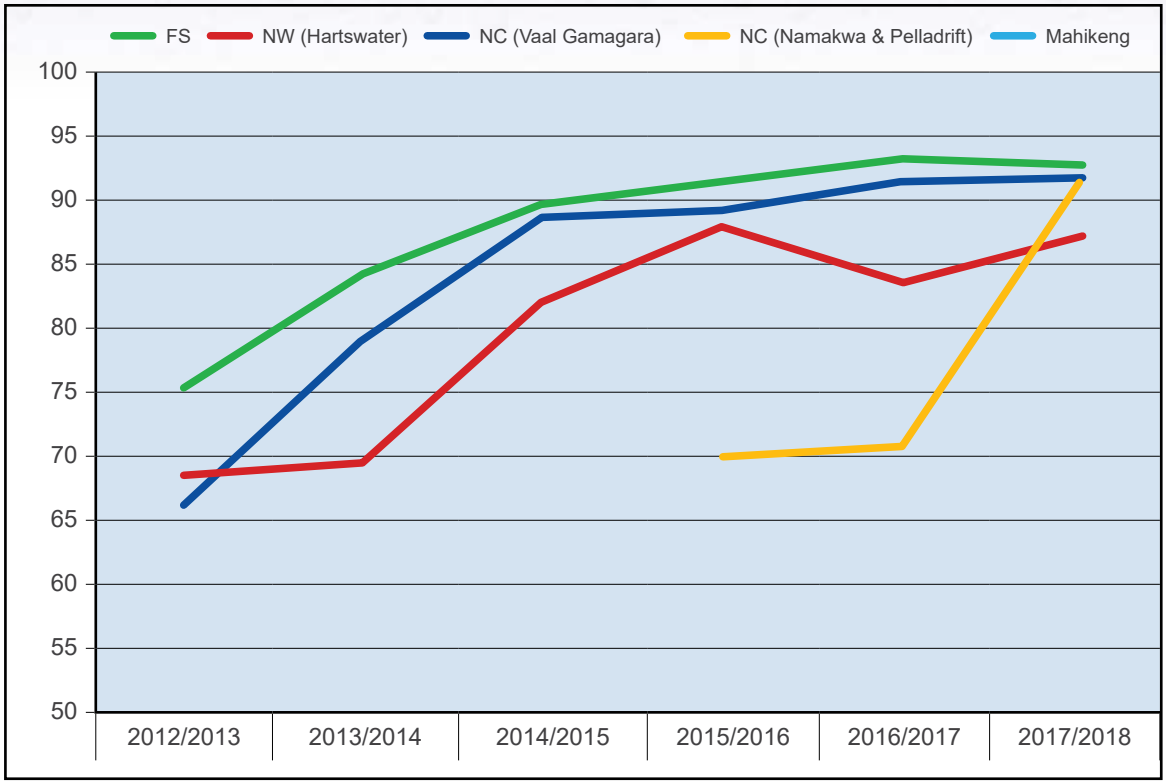
EXTERNAL AUDIT RESULTS

During the year under review, Sedibeng Water was audited by NOSA using the CMB 253N system. The NOSA grading audits for the Northern Cape area of Namakwa and Pelladrift and the North West area of the Ngaka Modiri Molema District Municipality were conducted in September and October 2017. The Northern Cape area of Namakwa and Pelladrift achieved a five (5) star grading. Due to a high DIFR, the North West area of Ngaka Modiri Molema District Municipality achieved a two (2) star grading, that is despite having achieved an overall four (4) star effort score of 86.78%. NOSA also performed a gap audit for Ganyesa (Kagisano-Molopo Local Municipality) in preparation of the grading audit to be conducted in the next financial year. NOSA likewise conducted grading audits in the other areas of the Free State, Northern Cape (Vaal Gamagara) and North West (Dr. Ruth Segomotsi Mompati District Municipality, Phokwane Local Municipality and Ga-Segonyana Local Municipality) in the months of April and May of 2018. The Free State Region achieved a five (5) star grading for the second consecutive year, while the North West Region maintained its four (4) star grading. The Northern Cape Region (Vaal Gamagara) achieved a five (5) star grading. The results of the audits in comparison to the previous financial years, are displayed in Table 2 and Graph 2.

Table 2: NOSA CMB 253N Audit

Region/Area	2013/2014		2014/2015		2015/2016		2016/2017		2017/2018	
	Score (%)	NOSA Grading	Score (%)	NOSA Grading	Score (%)	NOSA Grading	Score (%)	NOSA Grading	Score (%)	NOSA Grading
Free State	84.00	4 Stars	89.36	4 Stars	90.80	4 Stars	92.67	5 Stars	92.47	5 Stars
Northern Cape (Vaal Gamagara)	78.84	4 Stars	88.38	4 Stars	88.80	4 Stars	91.08	3 Stars	91.43	5 Stars
North West (Hartswater, Taung & Mothibistad)	69.29	3 Stars	81.70	4 Stars	88.00	4 Stars	83.34	4 Stars	87.01	4 Stars
Northern Cape (Namakwa & Pelladrift)	-	-	-	-	69.78	3 Stars	70.56	3 Stars	91.55	5 Stars
North West (Mahikeng)	-	-	-	-	-	-	-	-	86.78	2 Stars
North West (Ganyesa)	-	-	-	-	-	-	-	-	-	-

Graph 2: NOSA Audit Score Trends



At the end of the 2017/2018 financial year, the regions or areas of operation have either shown upturn trends or maintained the same trends as in the previous financial year. These trends can mainly be attributed to the successful implementation of the basic SHE Plan based on continuous improvement approaches. The SHE Plan is implemented at grassroots level and it includes amongst other things, the following:

- The strict enforcement of the Incident Reporting and Investigation System, whereby all incidents, including disabling injuries, non-disabling injuries (medical and first-aid cases), environmental incidents, vehicle and property damages, and near misses are reported within 24 hours. All incidents are investigated to identify the root causes and to identify appropriate corrective and preventative measures. Management is involved in the investigation of all serious incidents to convey the message to employees that such incidents will not be tolerated. As part of awareness and preventative measures, serious incidents are recalled during SHE Committee Meetings and SHE Talks.

- Risk assessments are incorporated in the organisation's operations. Risk assessments form part of the operational plans and procedures, and therefore have to be reviewed and updated regularly.

- Fully functional SHE structures have been put in place at all levels in the organisation.

- An annual training matrix is developed and implemented to ensure that all employees are trained and retrained as planned and/or as necessary.

- An effective Communication and Awareness Programme has been developed and implemented, which includes, amongst other things, monthly SHE Committee Meetings, monthly SHE Talks, Green Area Talks, videos, posters and publications.

- A SHE Executive Committee has been established, which jointly with the Executive Risk Management Committee, sits on a quarterly basis to review the SHE Programme and the risk matrix.

- Management, together with the SHE representatives, conduct two (2) Internal SHE Audits per annum in all work areas.

- SHE Officers, together with the responsible supervisors of particular work areas, conduct monthly inspections.

- Annual external audits (NOSA CMB 253N Integrated System Audit) are conducted.

- Biennial opinion inspections or surveys are conducted by specialists of occupational health, safety and environmental related matters. Opinion surveys cover stressors and/or hazards, such as temperature, lighting or illumination, noise, ventilation, ergonomics, dust, hazardous chemical substances, fire risks, glass doors, etc.

- Detailed Corrective Action Plans are developed, implemented and monitored for all audits, inspections and/or surveys.

- As part of continuous improvement, members of the SHE Committees (supervisors and SHE representatives) participated in a benchmark exercise, whereby they visited other organisations to adopt best practices.

The towns of Bloemhof and Christiana (that form part of the Dr. Ruth Segomotsi Mompati District Municipality in Lekwa Teemane Local Municipality) have in the recent past been incorporated into Sedibeng Water's operational area. The SHE Department is currently working with operations and maintenance teams in the implementation of the SHE Programme to meet Sedibeng Water standards. These newly acquired areas will undergo a NOSA Gap Audit in September/October 2018 in preparation of the grading audit in the next financial year.

TRAINING PROGRAMME

The Management Team of Sedibeng Water has always committed itself to the training and development of employees. Training is considered so vital that it forms part of the organisation's key strategic objectives. In the beginning of the 2017/2018 financial year, the SHE Department developed an annual training matrix as a tool for the successful implementation and monitoring of the Training Programme. The matrix was populated by information derived from a training needs analysis to close the gaps that were identified in the legal, operational and system improvement requirements. Based on the annual training matrix, the following seventeen (17) courses were successfully conducted in the different workplaces during the financial year concerned:

- Scaffolding Erection and Inspection;
- First Aid Level I;
- First Aid Level II;
- Convey Dangerous Goods by Road;
- Manitou Telescopic Machine Operation;
- Basic Fire Fighting;
- Advanced Fire Fighting;
- Overhead Crane;
- Counterbalance Truck;
- Tractor Load Backhoe (TLB);
- Safe Handling of Chlorine;
- Hoist and Winch;
- Procedures and Job Observations;
- Truck-mounted Crane;
- Advance/Defensive Driving;
- Animal Behaviour; and
- Samtrac.

OCCUPATIONAL HYGIENE PROGRAMME

The required Occupational Hygiene Surveys are conducted biennially. At the end of the financial year, all operational areas of Sedibeng Water were complying with the requirements of the Occupational Hygiene Surveys. The purpose of these surveys is to ensure that all work areas comply with recommended exposure limits and that Management understands the health risks that employees could be exposed to. The surveys included the measurement of noise and vibration levels, illumination intensity, thermal and cold stresses, ergonomic assessments, ventilation, dust, welding fumes, hazardous chemical substances such as chlorine, any hazardous physical aspects such as glass doors, fire risks, environmental pollution, etc. Action plans to rectify the identified deviations and to implement the recommendations from the survey reports were developed, implemented and monitored. The following surveys were conducted with regards to work areas:

- Noise;
- Illumination;
- Ergonomics;
- Ventilation and Air Quality;
- Hazardous Chemical Substances (chemicals, dust, welding fumes, etc.);
- Pollution (air, ground and water);
- Safety Glass; and
- Assessments for Effectiveness of Extraction of Fumes in the Laboratories.

OCCUPATIONAL HEALTH MANAGEMENT PROGRAMME

This programme aims at monitoring the health status of employees throughout their employment period to determine their medical fitness and to identify any adverse health effects that might be caused by occupational risks. Employees undergo the following three distinct medical surveillances:

- **Entry Medicals** which are conducted during the recruitment stage to determine the candidate's fitness in relation to the job requirements, and to identify and record any existing medical conditions.
- **Periodic Medicals** which are conducted at a predetermined frequency based on job requirements and/or risk exposure levels. In addition to medical surveillance, employees who are being exposed to biological hazards due to their areas of work (such as those working at the sewage treatment plants and the laboratories) undergo scheduled immunisation.
- **Exit Medicals** which are conducted at the termination of an employment contract to identify any gaps relating to an employee's medical condition at recruitment and at termination of the employment contract.

The above medical surveillances are conducted by registered Occupational Health Practitioners in all areas of operation. All identified medical conditions resulting from illness or injuries during the period of employment are registered for claims with the Department of Labour in terms of the Compensation for Occupational Injuries and Diseases Act (COIDA).

Table 3 displays medical surveillances that were done as part of the Occupational Health Programme in the 2017/2018 financial year.

Table 3: Medical Surveillances Conducted in the 2017/2018 Financial Year

Region	Pre-employment (Baseline)	Periodic (Scheduled)	Exit	Immunisation
Free State	49	71	15	33
Northern Cape	9	124	5	5
North West (Hartswater)	21	99	4	0
North West (Mahikeng)	5	160	7	0
Total for the Organisation	**84**	**454**	**31**	**38**

In addition to the above legally required medical surveillances, Sedibeng Water also makes it compulsory for all its managers (from middle management to the executive) to undergo annual medical check-ups. Due to their busy schedules, managers often do not find the time to go for regular medical check-ups on their own, while they could be exposed to high stress levels relating to the nature of their jobs. As a result, they may be susceptible to stress related illnesses without them being aware of it. In the 2017/2018 financial year, all managers complied with this organisational requirement.

ENVIRONMENTAL MANAGEMENT PROGRAMME

Environmental impact and aspect assessments had been conducted in the Northern Cape Region and the Free State Region. An environmental pollution study was also completed in the North West Region, where there is potential for soil pollution from diesel and oil at boreholes. Corrective action plans were developed to address all the environmental deviations that had been identified.

In compliance with the NOSA CMB 253N guideline, Resource Conservation Plans had been developed and implemented throughout the organisation. These plans are aimed at managing the use of natural resources, such as energy (electricity and fuel) and water consumption. The implementation of a Resource Conservation Plan is monitored and reported on monthly. Waste management continues to be a nucleus in the Environmental Management Programme. Hazardous waste in the form of used oil, oil rags, expired chemicals and fluorescent tubes, are collected and disposed of by registered waste management companies. Certificates of safe collection and safe disposal are issued in this regard. Hazardous biological waste generated in the laboratories is also collected regularly by a contracted service provider. Waste separation, with the intention of implementing the Recycling Programme, has also been introduced in all the regions.

Sedibeng Water has never experienced any serious environmental incident. An environmental incident is defined as any event that has a localised effect that causes environmental damage beyond the organisation's operational boundaries, or that has a substantially adverse effect on the community. At Sedibeng Water, the identified high risk substance is chlorine that is used in plants to disinfect water. As part of emergency preparedness, the organisation has developed a Chlorine Emergency Plan, which still has to undergo consultation with the municipalities and all other relevant authorities.

Sedibeng Water has implemented a Waste Separation and Recycling Programme in its operational areas where there are recycling companies. The programme focuses on the four (4) waste types, namely paper, plastic, glass and printer cartridges. Recycling helps to reduce the organisation's carbon footprint and emissions. Sedibeng Water's carbon footprint is also managed by monitoring the monthly energy (electricity and fuel) consumption.

WELLBEING OF EMPLOYEES

The Management of Sedibeng Water has continued to show commitment to the wellbeing of employees. The organisation's Employees Wellness Programme includes the following main elements:

- Disease Management Programme;
- Employees Assistance Programme (EAP); and
- Employees Recreational Programme.

Disease Management Programme

This is a comprehensive programme that covers medical examinations, the monitoring of identified cases, awareness and accessibility of necessary medication. The HIV and AIDS Programme forms part of Sedibeng Water's strategic intent, and it was established back in 2003 in support of the National HIV/AIDS Strategy Plan and South African Business Coalition on HIV and AIDS. The programme has been successful and is improving ever since its establishment. The programme includes, amongst other things, the following:

- The establishment and training of HIV and AIDS support structures (peer educators) in all areas of operation;
- The establishment of HIV and AIDS Committees in all areas of operation;
- As part of the programme's strategic objectives, the following targets have been achieved in 2017/2018:
  - Undertaking at least four (4) HIV and AIDS awareness campaigns per year; and
  - Undertaking at least two (2) HIV Counselling and Testing (HCT) sessions in all areas of operation per year; and
- Developing and implementing a comprehensive Disease Management Programme, which gives access to antiretroviral drugs to those employees and their beneficiaries who are in need of such medication.

Through experience of related cases at work, Management decided to extend the Disease Management Programme to incorporate assessment and awareness of the following common chronic conditions:

- High/low blood pressure;
- Diabetes; and
- Cholesterol.

Employees are also assessed for the following health conditions:

- Body mass index;
- TB symptomatic; and
- Sexually transmitted infection symptomatic.

Employees Assistance Programme

Sedibeng Water has contracted an external service provider to manage its Employees Assistance Programme in order to maximise enrolment into the programme by employees without compromising confidentiality. The overall objective of the programme is to increase employees' productivity and effectiveness.

Employees Recreational Programme

Chronic illnesses (such as diabetes, hypertension and cholesterol) are becoming a national concern. The reason for the increase in chronic cases has been identified as changes in lifestyle leading to obesity and stress. Sedibeng Water took cognisance of these problems and introduced the Employees Recreational Programme that includes regularly scheduled activities, such as netball, soccer, fun run/walk, etc. Employees in different regions participate in internal and external sport tournaments. In addition to sport, the organisation is in the process of establishing gymnasia for employees in the different regions. The first gymnasium was established at Vaal Gamagara in the Northern Cape Region in the 2013/2014 financial year. During the 2015/2016 financial year, the organisation opened a gymnasium at Balkfontein in the Free State Region. The objective is to establish gymnasia in all major workplaces in the regions, once the venues have been identified and modified to meet the set requirements.

INCENTIVE PROGRAMME

The NOSA CMB 253N system requires the organisation to have competitions relating to best achievements in the implementation of the SHE Programme, and also to reward the winners. In order to comply with these requirements, Sedibeng Water initiated a SHE Representatives Competition to recognise the best performers in executing the duties of a SHE Representative. Based on the set criteria for the competition, monthly winners are selected from each SHE Committee and rewarded at regional levels as the "SHE Rep of the Month" and the "SHE Rep of the Year". The best performer in the regional category of the "SHE Rep of the Year" is crowned as the "Organisational SHE Rep of the Year". Based on the trends observed, the SHE Programme has shown overall good performance in the 2017/2018 financial year. This improvement is underpinned by the devotion and effort of employees at all levels in the organisation and is also resulting from, amongst other things, the following:

- Support given by Management;
- Teamwork by employees;
- Commitment and effort shown by Management and employees;
- The positive attitude of both the Management and employees towards the SHE Programme; and
- Management's planning that enables the successful implementation and continuous improvement of the SHE Programme.

CONCLUSION

The Safety, Health and Environment Programme made a significant contribution towards the success of Sedibeng Water during the 2017/2018 financial year by ensuring continuous compliance to set requirements with regards to safety, health and environmental concerns in the workplace.

Based on the upturn in performance trends during the review period, it can be projected that Sedibeng Water is heading for even better SHE performance results in future.

NEW BUSINESS DEVELOPMENT

CONTENTS:

Mr. I.M. Hasenjager
Acting Chief Operations Officer and New Business Development Executive

INTRODUCTION

In pursuit of realising water services delivery to communities in its operational area, Sedibeng Water offers various water related services, expertise and partnerships to local government structures and other stakeholders. Essential services delivered, cover technical, water and wastewater management, operations and maintenance, and water quality management services. In rendering these services, Sedibeng Water enters into contractual agreements with clients and these agreements depend on the form of service provided.

Such agreements could incorporate:

- Strategic support;
- Bulk water provision;
- Total water service provision;
- Training and development;
- Analytical services; and
- Acting as Implementing Agent for the Department of Water and Sanitation.

The New Business Development Department dedicated its attention during the 2017/2018 financial year mostly to the upgrading and expanding of the infrastructure of existing water schemes operated by Sedibeng Water in the Northern Cape Province. Due to the aging of infrastructure and the growing water demand from the mining sector with new mines opening and existing mines expanding, new challenges arose in this operational area. In addition, a simultaneous increase in water demand by municipalities in the area, negatively affected the growth of the mining industry and the economy of the Province. In order to address this situation, the refurbishment and upgrading of three schemes continued during the review period. These are:

PELLADRIFT WATER SCHEME

Background

The Pelladrift Water Board was a Water Board established in terms of the Water Services Act (Act No. 108 of 1997). The infrastructure concerned was constructed and previously owned by Anglo Operations Limited, who invested in the asset base for 30 years in order to sustain mining activity at the Black Mountain Mine, and also to provide water services to local communities in this remote area of the Northern Cape Province.

After the formation of the Pelladrift Water Board,

Anglo Operations Limited transferred these assets to the Pelladrift Water Board. The Black Mountain Mine was recently sold by Anglo Operations Limited to Vedanta Resources plc. The main purpose of the Pelladrift Water Board was the provision of sustainable water services to the Black Mountain Mine and surrounding areas. Water is abstracted at Pelladrift on the Orange River, where after it is purified and supplied to the mine and the towns of Aggeneys and Pofadder, the Pella Mission Station and some farms along the distribution routes. The primary non-mining customer of the Pelladrift Water Board was the Khâi-Ma Local Municipality, which is also the local Water Service Authority in the area. The Black Mountain Mine currently utilises approximately 86% of the entire water supply. The total population that benefits from this scheme (including staff at the Black Mountain Mine) is approximately 8 500 people.

Sedibeng Water received a directive from the Minister of Water and Sanitation, Mrs. Nomvula Mokonyane, to take over the Pelladrift Water Board as from 1 November 2014. The Pelladrift Water Treatment Plant (currently supplying water to the towns of Aggeneys, Pella and Pofadder) comprises a bridge and abstraction tower in the Orange River, from where the water is pumped to the purification plant 800m away on the river bank. At the plant, the water is sanitised, clarified and pumped to the Horseshoe Reservoir, from where it gravitates to Aggeneys, Pella and Pofadder.

The challenge Sedibeng Water faces at Pelladrift is that the current plant is designed to deliver only 12.5Mℓ/day, which is no longer sufficient to comply with the rising demand. Especially during summer and peak seasons, water demand continuously exceeds the design capacity of the plant on a daily basis. In light of the fact that the Black Mountain Mine is currently in the process of opening the long awaited Gamsberg Mine, a huge capital injection in the Northern Cape Province and in South Africa, the existing plant and infrastructure have to be upgraded in order to meet the envisaged increased demand of 15Mℓ/day.

The project is a turn-key project implemented by Black Mountain Mining to improve the capacity of the scheme to 20Mℓ/day. Black Mountain Mining's responsibilities are to design and construct the plant. The project is fully funded by Black Mountain Mining, who also bears the construction risks of the new plant. Water supply to the current customers will not be disrupted during the construction of the new plant. The duration of the construction period is 17 months.

Scope of Work

The scope of work includes:

- Low Lift pump station and supply line to water treatment works;
- Valve system to control water supply to two flash mixers;
- Dosing systems;
- Chlorination system;
- Clarifier 15 MLD;
- Balancing reservoir (2Mℓ) and booster reservoir (0.5Mℓ);
- High lift pump station, rising mains (30km) and booster pump station;
- Power supply to booster station; and
- Horseshoe Reservoir (2Mℓ).

The project commenced on 1 March 2017 and was completed on 30 June 2018.

Illustration 1: Pelladrift Water Scheme

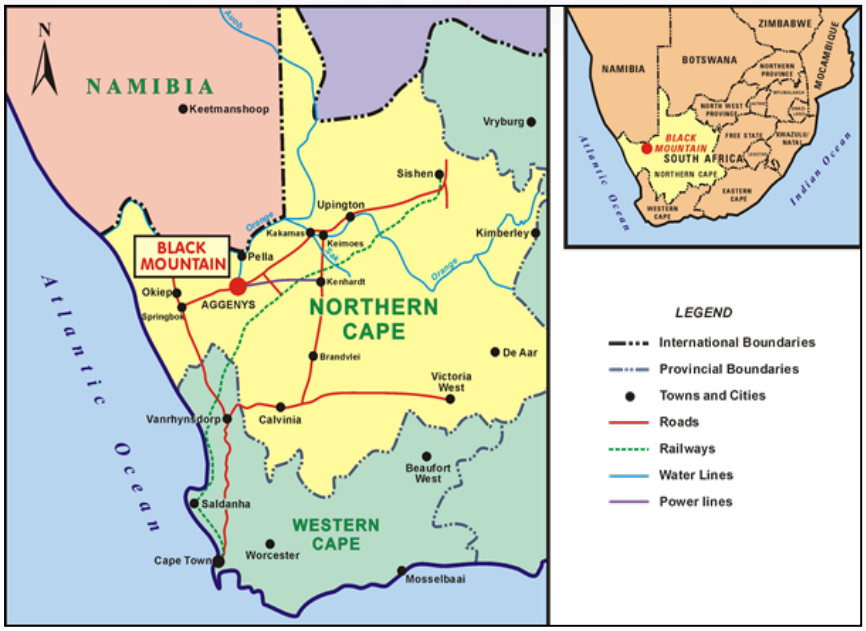
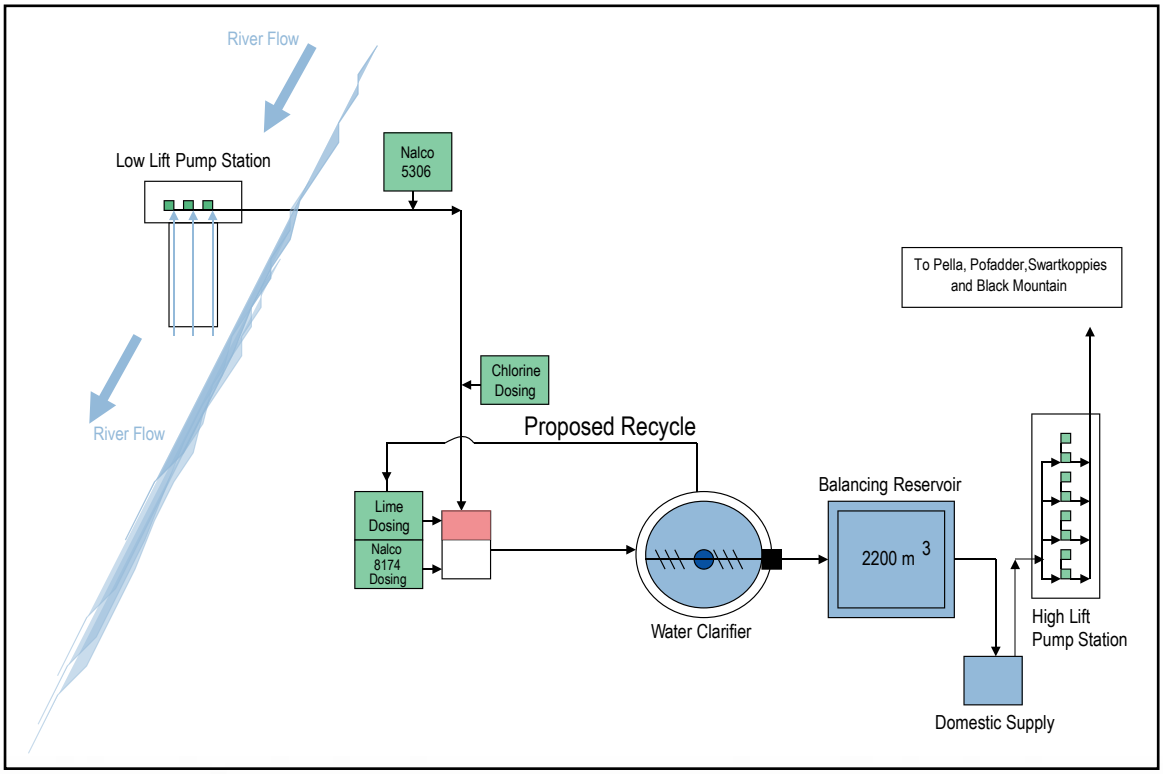
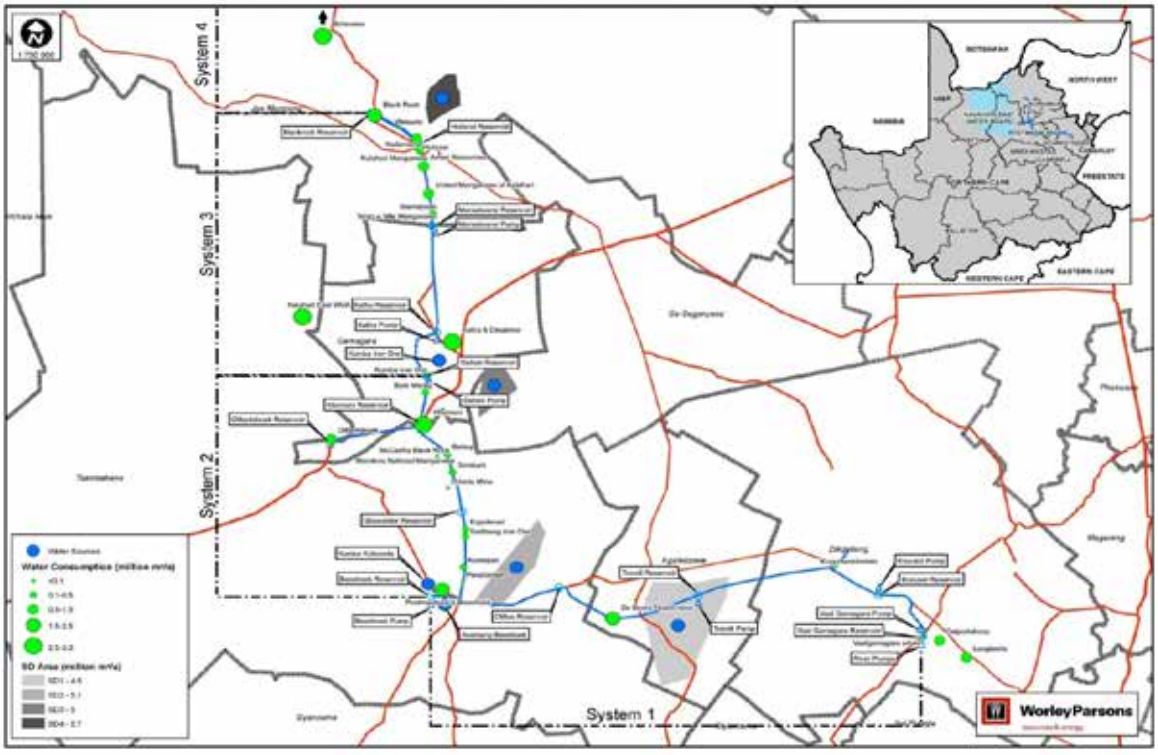


Illustration 2: Pelladrift Purification Plant



VAAL GAMAGARA WATER SCHEME

Illustration 3: Main Components of the Vaal Gamagara Water Scheme



Background

The Vaal Gamagara Scheme was completed in the late 1960s and is more than 45 years old. The purpose of the scheme is to supply water from the Vaal River to the arid areas of the Gamagara valley near Postmasburg, and north thereof to the diamond mines at Lime Acres, and the iron ore and manganese mines at Beeshoek, Sishen, Mamatwan, Hotazel and Black Rock. Several local authorities (of which Delportshoop, Postmasburg, Olifantshoek, Kathu and Hotazel are the largest) also receive bulk water supply from the scheme.

A later addition to the scheme had been the Kalahari East Water User Association, which was completed in 1992 to supply domestic and stock water to an area of approximately 1 412 000ha that includes more than 250 farms. The Vaal Gamagara Scheme consists of:

- Purification works (13.27 million m³/annum capacity);
- Several pump stations;
- 11 reservoirs; and
- 370km of pipes that deliver water to users.

The pipeline has the capacity to convey and import a maximum of 19 million m³/annum into the area. Water from the Vaal River (13.27 million m³/annum) is augmented by dewatering facilities at the Kolomela, Beeshoek and Sishen mines. (Dewatering activities are aimed at lowering the ground water table to ensure safe mining conditions.)

Municipal Beneficiaries

Apart from serving mines, industry and the agricultural sector, the project also extends across three districts and five local municipalities, including:

- John Taolo Gaetsewe District Municipality;
- Gamagara Local Municipality;
- Joe Morolong Local Municipality;
- ZF Mgcawu District Municipality (formerly known as Siyanda District Municipality);
- Mier Local Municipality;
- Tsantsabane Local Municipality;
- Frances Baard District Municipality; and
- Dikgatlong Local Municipality.

Phases in the Upgrading Process

The upgrading of the Vaal Gamagara Water Scheme will be done in the following two phases:

Phase 1:

This phase consists of:

- Replacing the existing pipeline with a 1 100mm and 900mm pipeline from Roscoe to the South West Expansion Project (7.8km);
- Replacing the existing pipeline with a 700 and 800mm pipeline from Kathu to Hotazel, and a 600mm pipeline to Black Rock (82.6km); and
- Developing of SD 4 well site and the bulk supply to 22 villages.

Kgalagadi Pipeline JV was appointed as contractor and Phase 1 is now in construction. Site handover took place on 4 October 2016 and construction started at the end of November 2016.

The Scope of Work for Phase 1: Project 1 (Pipeline from Roscoe to Black Rock)

Pipeline 1A:
This new DN900 and DN1100 pipeline, which is currently under construction, stretches from Roscoe to Khumani (7.8km in length).

Pipeline 1B:
This new DN700 pipeline, which is currently under construction, stretches from the SWEP by-pass to a new Pressure Reducing Valve (PRV) station at the Kathu Reservoir (5.6km in length). However, the length of the pipeline has since been reduced to 0.38km due to design changes.

Pipeline 2:
This new DN700 and DN800 pipeline, which is currently under construction, stretches from a new Pressure Reducing Valve (PRV) station at the Kathu Reservoir to the Hotazel Reservoir (54.5km in length).

Pipeline 3:
This new DN600 pipeline, which is currently under construction, stretches from the Hotazel Reservoir to Blackrock (11km in length), and include the installation of a DN400 pipeline (2.3km in length) in parallel with an existing DN560 pipeline.

Currently the project is 43% complete with an expected completion date of 26 June 2020.

Phase 2:

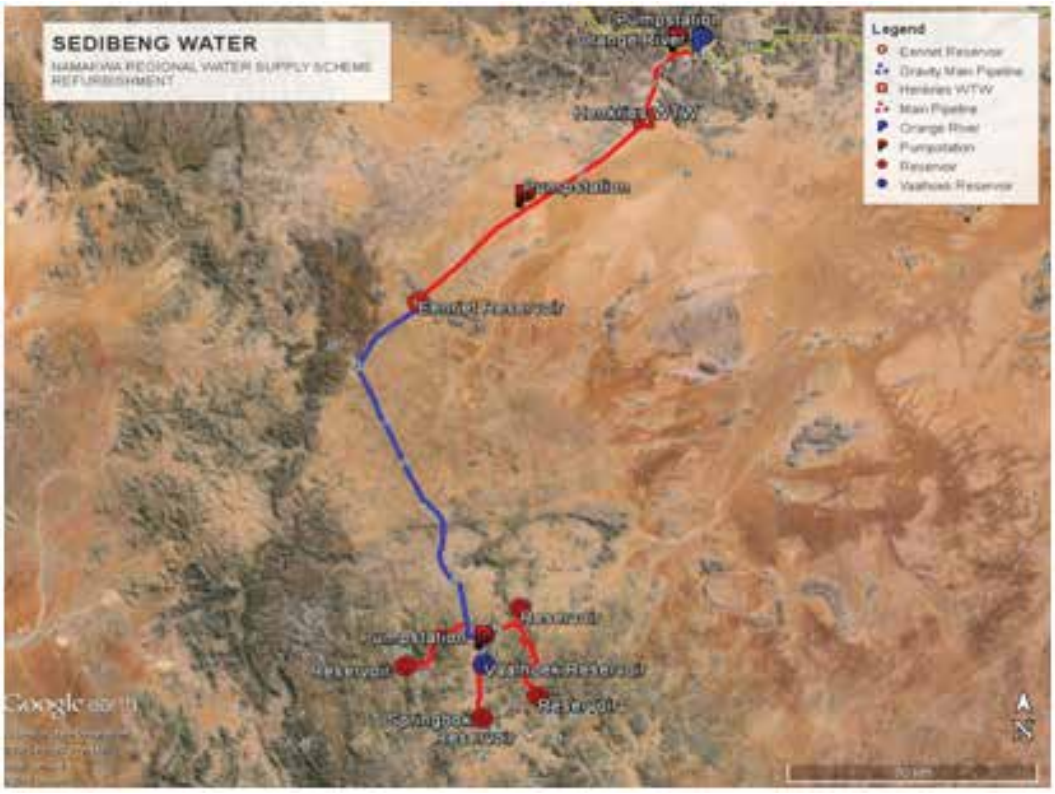
Phase 2 will consist of:

- Replacing the pipeline from Clifton to Roscoe;
- Development of SD2 well site;
- Replacing the pipeline between Beeshoek and Glouchester;
- Refurbishing rising main from water treatment works to Clifton;
- Upgrading of reservoirs;
- Upgrading the Trewill Pump Station and sump;
- Developing of SD 1 well site;
- Replacing the third rising main;
- Upgrading and refurbishing the Vaal Gamagara Water Treatment Works and pump stations; and
- Upgrading the Kneukel Pump Station and sump.

Proplan has been appointed as the consultants for Phase 2, and is currently working on the designs. Phase 2 has been divided into ten sub-projects and construction is expected to be completed by 2027.

NAMAKWA REGIONAL WATER SUPPLY SCHEME

Illustration 4: Main Components of the Namakwa Regional Water Supply Scheme



General Condition of the Existing Supply System

The primary problems of the existing system are aging infrastructure and the lack of extensive maintenance over a long period of time. The main supply system is now in excess of 30 years old and has reached the end of its economic life cycle. Before copper mining activities ceased in 1998, maintenance was primarily conducted by staff of the Okiep Copper Company, as it was in their interest to do so. Since the closure of the copper mines, the Namakwa Water Board has had neither the capacity in terms of personnel, nor the financial resources to maintain the system to the required standard. A water supply crisis consequently developed mainly due to the continuous failure of the gravity main between the Eenriet Reservoir and Okiep. Failures occurred primarily as a result of the delamination of the pipe's concrete lining over the past 10 years and the consequent accelerated corrosion of the steel pipe wall. The highest pressure occurred in the section between the Bulletrap turn-off and Rooiwinkel. The pipe structure was no longer able to cope with the stress involved.

Project Scope and Time Frames

The project is divided into three phases, namely:

Phase 1

Project 1:

- Construction of emergency by-pass pipelines;
- Henkries Housing Project; and
- Upgrading of gravel access roads to reservoirs and pump stations.

Project 2:

- Construction of the gravity main pipeline between Eenriet Reservoir and Vaalhoek Reservoir;
- Upgrading of the raw water pump station at the Orange River, including the replacement of raw water pumps with new pumps on a trolley system;
- Upgrading the sand filters at the Henkries Water Treatment Plant;
- Refurbishment of the Eenriet Reservoir; and
- Refurbishment of the Vaalhoek Reservoir.

Phase 1 was completed in the 2015/2016 financial year. The one year retention period ended in June 2017.

Phase 2

Project 3:

- Gravity main and canal from the Orange River to the Henkriesmond pre-sedimentation facility;
- Henkriesmond pre-sedimentation facility, pump station and rising main;
- Henkries Water Treatment Works, clear water pump station and rising main; and
- Doornwater booster pump station and rising main.

Project 3 commenced in July 2016 and the expected completion date is 30 June 2020.

Project 4:

- Okiep Pump Station and Reservoir;
- Okiep-Concordia rising main and Concordia Reservoir;
- Okiep-Carolusberg rising main and Carolusberg Reservoir;
- New Rooiwinkel-Nababeep gravity main and reservoir; and
- Vaalhoek-Springbok gravity main and Springbok Reservoir.

Project 5:

- Refurbishment of the clear water gravity main from Nababeep to Kleinzee; and
- Construction of a new reservoir in Okiep.

CONCLUSION

Through its New Business Development Department, Sedibeng Water enhanced efficient water services delivery during the 2017/2018 financial year. This included the provision of various water related services, operational expertise and partnerships to local government structures and other stakeholders, as well as acting as Implementing Agent for the Department of Water and Sanitation in carrying out infrastructure projects in the Northern Cape Province.

FINANCIALS

- STATEMENT OF THE BOARD'S RESPONSIBILITY
- AUDIT AND RISK COMMITTEE'S REPORT
- ENVIRONMENTAL PROTECTION AND MANAGEMENT
- ANNUAL PERFORMANCE REPORT
- INDEPENDENT AUDITOR'S REPORT
- STATEMENT OF FINANCIAL POSITION
- STATEMENT OF COMPREHENSIVE INCOME
- STATEMENT OF CHANGES IN EQUITY
- STATEMENT OF CASH FLOWS
- SIGNIFICANT ACCOUNTING POLICIES
- NOTES TO THE FINANCIAL STATEMENTS

STATEMENT OF THE BOARD'S RESPONSIBILITY

In accordance with the Water Services Act (Act No. 108 of 1997) and the Public Finance Management Act (Act No. 1 of 1999), as amended, the Board is required to prepare annual financial statements that comply with Statements of South African Generally Accepted Accounting Practice.

The Board is responsible for ensuring that complete, accurate and reliable accounting records form the basis for preparing consolidated annual financial statements. The consolidated financial statements include judgments and estimates that are reasonable and prudent, made by Management, reviewed and accepted by the Board. The Board also ensures that accounting policies are appropriate to the operation's circumstances. In order to achieve this objective, the Board relies on the systems of internal control set up and maintained by Management.

The financial statements have been prepared in accordance with South African Statements of Generally Accepted Accounting Practice (SA GAAP) and in the manner required by the other enabling legislation. The financial statements are based upon appropriate policies consistently applied and supported by reasonable and prudent judgments and estimates.

External Auditors are responsible to report on the fair presentation of these financial statements. The External Auditors were given unrestricted access to all financial related data and have audited the consolidated financial statements. The Board believes that all representations made to the independent auditors during their audit are valid and appropriate.

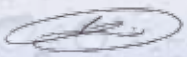
Independent internal auditors assist the Board in their task of providing that internal controls are adequate and operate as intended throughout the financial year under review. The Board is also responsible for such internal controls as the Directors determine necessary to enable the preparation of financial statements that are free from material misstatements, whether due to fraud or error.

These controls are designed to provide reasonable, but not absolute assurance as to the reliability of the financial statements and to adequately safeguard, verify and maintain accountability of assets and to prevent and detect misstatements and loss. Nothing has come to the attention of the Board to indicate that any material breakdown in the functioning of these controls, procedures and systems has occurred during the year under review.

The Board Members acknowledge that they are ultimately responsible for the system of internal financial control and place considerable importance on maintaining a strong control environment. To enable the managers to meet these responsibilities, the Board sets standards for internal control aimed at reducing the risk of error or loss in a cost-effective manner. The standards include the proper delegation of responsibilities within a clearly defined framework, effective accounting procedures and adequate segregation of duties to ensure an acceptable level of risk.

Sedibeng Water and all employees are required to maintain the highest ethical standards in ensuring Sedibeng Water's activities are conducted in a manner that in all reasonable circumstances is above reproach.

The Board is of the opinion that the financial Statements and the Annual Performance Report fairly present the financial position of Sedibeng Water as at 30 June 2018, and the results of its operations and cash flows for the year ended except for the areas of qualification stated in the audit opinion. Material facts or circumstances between the accounting date and the reporting date have been disclosed in the annual financial statements. The financial statements, which appear on pages 134-194, have been approved by the Board on 1 November 2018 and signed on the Board Members' behalf.



M.D. Dikoko
Chairperson of the Board

AUDIT AND RISK COMMITTEE'S REPORT

The Audit and Risk Committee hereby tables its report for the financial year ended 30 June 2018.

AUDIT AND RISK COMMITTEE STRUCTURE AND MEMBERSHIP

During the 2017/2018 financial year, the Audit and Risk Committee consisted of the following members:

- Mr. M.M. Mthombeni - Chairperson;
- Dr. P.E. Molokwane; and
- Mr. C.D. Mboweni.

There were no changes to the membership of the committee throughout the financial year.

RESPONSIBILITIES OF THE AUDIT AND RISK COMMITTEE

The Audit and Risk Committee reports that it has complied with its responsibilities arising from Section 38(1)(a)(ii) of the Public Finance Management Act (Act No. 1 of 1999), and Treasury Regulation 3.1.13. The Audit and Risk Committee also reports that it has adopted appropriate formal terms of reference as its Audit and Risk Committee Charter, as required by Treasury Regulation 3.1.9. The committee has during the year under review regulated its affairs in compliance with this Charter and has discharged all its responsibilities as contained therein, and the related accounting policies and practices.

It is the responsibility of the Audit and Risk Committee to, inter alia:

- Monitor and review the effectiveness of the Internal Audit function and its findings and reports;
- Approve the Annual Internal Audit Plan and budget;
- Evaluate the independence and performance of the Internal Audit function;
- Review policies and procedures for risk management and fraud prevention;
- Monitor compliance with legislation, Sedibeng Water policies and Code of Conduct;
- Review and monitor performance against predetermined objectives;
- Review the integrity of the annual financial report and associated reports (by ensuring that its content is reliable and recommending it to the Board for approval); and
- Review and monitor Sedibeng Water's risk management processes.

Internal and external auditors have unrestricted access to the Audit and Risk Committee and its Chairperson, the Executive Management and the Chairperson of the Board, ensuring that auditors are able to maintain their independence. Both the internal and external auditors report at Audit and Risk Committee meetings on a quarterly basis. The Audit and Risk Committee also meets at least once per year with both internal and external auditors separately, without other invitees being present

AUDIT AND RISK COMMITTEE MEETINGS

The Audit and Risk Committee held quarterly meetings for each of the four quarters of the 2017/2018 financial year, as well as two special meetings (see Table 1):

Table 1: Meetings of the Audit and Risk Committee

MEMBER	MEETINGS						ATTENDANCE
	1	2	3	4	5	6	
M.M. Mthombeni	✓	✓	✓	✓	✓	✓	100%
P.E. Molokwane	✓	✓	✓	✓	✓	✓	100%
C.D. Mboweni	✓	✓	✓	✓	✓	✓	100%

The committee members achieved a combined 100% attendance rate during the financial year under review.

STAKEHOLDER ENGAGEMENT/S

In executing its responsibilities, the Audit and Risk Committee has been able to engage with the following stakeholders:

- The Board and Management of Sedibeng Water;
- The Internal Audit Unit at Sedibeng Water;
- The external auditors (Auditor-General of South Africa);
- the Audit Committee of the Department of Water and Sanitation; and
- All other relevant stakeholders.

INTERNAL AUDIT

The Internal Control, Information Technology and Risk Management systems of Sedibeng Water are monitored by the Internal Audit function, which reports its findings to Executive Management and the Audit and Risk Committee on a quarterly basis. The Audit and Risk Committee determines the purpose, authority and responsibility of the Internal Audit function in an Internal Audit Charter.

Sedibeng Water's Internal Audit function operates in accordance with the International Standards for the Professional Practice of Internal Auditing as prescribed by the Institute of Internal Auditors. The Audit and Risk Committee approves the Annual Internal Audit Assurance Plan presented by Internal Audit and monitors progress against the plan on a quarterly basis.

No material changes were made to the structure and operation of the Internal Audit function in the 2017/2018 financial year.

RISK MANAGEMENT

Sedibeng Water is maturing in the process of managing risks that are relevant to the business. There is a Risk Register in place and an Executive Risk Management Committee was established by Management, which meets on a quarterly basis to review and consider reports from various Regional and Departmental Risk Management Committees. The top ten (10) risks for Sedibeng Water are monitored by the Executive Risk Management Committee and the Audit and Risk Committee on a quarterly basis. Special attention is paid to remedial actions and residual risk exposures. This is over and above the efforts of the Regional Risk Management Committees. Special focus is also required in view of emerging risks and other risks that are emanating from regions and corporate departments that make it into the company's top 10 risks.

IN-YEAR MANAGEMENT AND QUARTERLY REPORTS

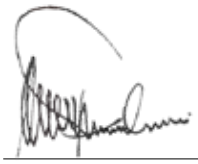
Management has delivered quarterly financial reports (as required by the Public Finance Management Act) at all Audit and Risk Committee meetings for review and/or consideration by the committee.

EVALUATION OF FINANCIAL STATEMENTS AND PERFORMANCE INFORMATION

The Audit and Risk Committee reviewed the audited Annual Financial Statements prepared by Management, and recommended these statements to the Board for approval. The Audit and Risk Committee also evaluated the audited Annual Performance Report, and recommended the report to the Board for approval. The Chairperson of the Audit and Risk Committee is likewise involved in monitoring the external audit process that is performed by the Auditor-General of South Africa.

REPORT OF THE EXTERNAL AUDITORS

The External Auditors have completed their audit on the Annual Financial Statements, the Audit and Risk Committee agrees that the audited Annual Financial Statements should be accepted and read together with the Report of the External Auditors as presented on pages 126-133. The Committee further reviewed the Performance Information Report and Compliance findings in the External Auditors' report together with the management letter. In order to respond to the points in the management letter and audit report, Management has developed an action plan to address the issues raised. The committee has requested management to submit quarterly progress reports to keep the committee updated on how audit findings are being addressed.



Mr. M.M. Mthombeni
Chairperson of the Audit and Risk Committee:
Sedibeng Water

30 October 2018

ENVIRONMENTAL PROTECTION AND MANAGEMENT

The National Environment Management Act (Act No. 107 of 1998) defines waste as any matter, in any state of matter, gaseous or liquid or solid or any combination thereof, originating from residential or commercial or industrial or agricultural sources. The Act stipulates requirements regarding the management or disposal of various forms of waste in an effort to protect the environment.

Sedibeng Water values the importance of protecting the environment and as such, has developed and implemented its Environmental Management Programme that exceeds the minimum requirements of the Act. This programme is in line with the NOSA CMB 253N Integrated System, which enforces compliance in terms of pollution risk control, waste management and environmental monitoring. The NOSA CMB 253N Integrated System further encourages organisations to exceed the minimum requirements of the Act by developing and implementing resource conservation plans.

To meet the requirements of the NOSA CMB253N System regarding pollution risk management, environmental impact assessments were conducted in the Free State Region and the Northern Cape Region. Similarly, environmental pollution control was conducted in the North West Region. All three regions implemented corrective actions to combat the identified environmental deviations.

WASTE MANAGEMENT

The classification of waste is central to the waste management process. At Sedibeng Water, waste generated by our operations is classified as either hazardous or non-hazardous, based on the risk assessments that are conducted. These risk assessments determine the handling and disposal of such waste.

HAZARDOUS WASTE

This type of waste requires special handling and disposal. At Sedibeng Water, hazardous waste includes fluorescence tubes, chemicals and biological waste. The disposal of hazardous waste is contracted to specialised service providers who are licensed to dispose of such waste at special landfills or to deform it in the prescribed and authorised manner. Certificates of safe collection and safe disposal are issued in this regard.

NON-HAZARDOUS WASTE

Most of the waste that is generated at Sedibeng Water is of a non-hazardous nature, which includes general waste such as paper, garden refuse, building rubble and other general household waste. Employees responsible for cleaning the grounds collect and dispose of general waste at the municipal landfills or at authorised internal disposal sites in the case of garden refuse and building rubble. Non-hazardous waste also includes scrap, such as metals, glass, etc.

Furthermore, waste (whether hazardous or non-hazardous) is categorised as recyclable or non-recyclable. As part of the waste management process, waste is separated at its source and put into marked bins, or colour-coded bins based on whether it is hazardous or non-hazardous, and recyclable or reusable. Where possible, we attempt to reduce waste generation by using alternative processes or to replace hazardous materials with less or non-hazardous materials.

AUTHORISATION/LICENCES

Sedibeng Water's operations at Balkfontein in the Free State has been issued with a licence by the Department of Water and Sanitation to dispose of

sludge on-site. Other regions were encouraged to follow the same process of applying for authorisation in terms of Section 21(g) of the National Water Act (Act No. 36 of 1998).

WASTE AND POLLUTION MINIMISATION

Our success in waste management is founded on the principle of waste and pollution minimisation. Recycling is regarded as the nucleus in this process of waste and pollution minimisation. Therefore, waste that is identified as recyclable or reusable is collected by service providers in the recycling business for free, or at reduced prices. The recycling and reusing of waste have long-term environmental benefits in that they directly and indirectly impact on the reduction of the carbon footprint.

Scrap materials that are suitable for household use, such as old metal pipes that may be used for fencing, are sold to employees. Where it is possible, Sedibeng Water reduces the waste that is generated by our operations.

In the North West Region, oil and fuel spills at the diesel driven borehole pumps were identified as our major pollution concern. However, the plan is to replace all the diesel driven pumps with electric pumps, once Eskom has sufficient capacity to supply electricity for this purpose. Due to the remote location of the boreholes, we are currently unable to make use of solar energy due to vandalism and theft of solar panels and batteries.

ENERGY AND RESOURCE CONSERVATION

The NOSA CMB 253N Integrated System enforces best practices of energy and resource conservation for proactive environmental protection and sustainability. At Sedibeng Water, Resource Conservation Plans have been developed and are being implemented throughout the organisation. These plans are aimed at the responsible use of natural resources, such as energy (electricity and fuel) and water.

Thus far, the implementation of these plans has been successful in controlling and reducing the use of natural resources, as well as in the reduction of the carbon footprint.

ANNUAL PERFORMANCE REPORT
30 JUNE 2018

INTRODUCTION

Sedibeng Water is a Water Board established as an organ of state in terms of the Water Services Act (Act No. 108 of 1997). The Minister of Water and Sanitation is the Executive Authority, and as an organ of state the organisation is categorised as a public entity, subject to regulations by the Minister of Finance in terms of the Public Finance Management Act (Act No. 129 of 1999). Sedibeng Water is a Schedule 3B public entity and its core function is to provide water services to its clients, mainly in the form of bulk water, wastewater treatment, retail water services, the operation and maintenance of water infrastructure; and as an Implementing Agent for the Department of Water and Sanitation in respect of capital infrastructure projects. Sedibeng Water's area of operations includes three provinces, namely, the Free State, North West and Northern Cape Provinces. This area was extended by the incorporation of the former Botshelo Water, which provides water services in the Ngaka Modiri Molema and Dr. Ruth Segomotsi Mompati District Municipalities. Major customers are municipalities and mines. The nature of the business, as well as external and internal factors (business drivers) set the direction for organisational strategic planning.

The vision of Sedibeng Water is "excellence in water services provision". In other words, the organisation aims to take a leading position in providing potable water services. In order to achieve this vision, the following strategic performance objectives and priorities, further supported by goals or outcomes, have been developed and implemented since the 2017/2018 financial year to set the strategic direction for the entity's performance in the upcoming 5 to 10 years:

- **Strategic Objective No.1:** Appropriate treatment of wastewater and supply of potable water by focussing on effective infrastructure maintenance, efficient treatment processes, availability or sufficient provision of resources, adequate infrastructure capacity, water demand management and resource protection through efficient and safe use of natural resources, loss control and efficient use of energy;

- **Strategic Objective No. 2:** Ensure viability and sustainability through effective internal management processes to address critical areas of debt collection and cost-recovery, budget/cost control and management, cash flow management, internal control and asset management;

- **Strategic Objective No. 3:** Creating an environment that is conducive to the growth and retention of skills by focusing on an employment equity profile, human capital development, and competitive remuneration, conditions of services, effective safety, health and environment programmes, as well as compliance to internal and external guidelines.

- **Strategic Objective No. 4:** Provide effective and efficient communications by implementing programmes that bring our business closer to our customers through corporate social investment, water value chain awareness and public engagement, partnership with the three spheres of government in growth and development initiatives, and fostering sound relationships with all stakeholders; and

- **Strategic Objective No. 5:** Ensure compliance to foster integrated management systems and statutory reporting, and promote best practices.

Table 1: Performance Against the Shareholder Compact for July 2017 - June 2018

	Performance Objectives	Performance Area/Projects	Performance Indicator		Actual Prior Year 30 June 2017	Performance Target for the Year 30 June 2018	Results	Variances	Reasons for Variances and Recovery Plans
1	**Bulk potable water quality compliance**	Water quality standards met	Test results, SANS 241	% compliance	98%	98%	SEDIBENG WATER: Overall: 98.2% Breakdown: -Bacteriological: 99.8% -Chemical : 99.3% -Aesthetic : 97.1% -Operational : 96.5%	1.8% 1.3% -0.9% -1.5%	Target achieved. Results are also in line with SANS 241:2015 reporting requirements.
2	**Manage avoidable water losses**	Reduced levels of unaccounted for water (UAW)	Water lost as a % of total water produced	%	4.5%	≤8%	7.7%	0.3%	Target achieved. Sedibeng Water experienced lower water losses during the year under review.
3	**Reliability of supply**	No unplanned interruptions to supply exceeding 24 hours	% number of days' supply disrupted divided by total number of possible supply days	%	0	<24 hours	0	0	Target achieved. No water disruptions were recorded in the various areas of operation from the bulk water reservoirs.
4	**Increased access to services**	Contribution to national objectives of extending services	CAPEX spend/ projects	%	365%	90%	80%	-10%	Target not achieved. Internal Projects did not get the funding and the entity received the funds late for the Vaal Gamagara and Namakwa pipelines.
5	**Financial reporting compliance**		Annual external audit	Qualified / unqualified	Qualified report	Unqualified audit report	Qualified Audit Opinion	N/A	Target not achieved. An action plan of qualifying audit findings will be compiled and followed-up in the 2018/2019 financial year.
6	**Improve key financial ratios**		Current ratio	Ratio	1.5	1.5	1.5	0	Target achieved.
			Gross profit margin (primary activity)	%	68%	66%	66%	0	Target achieved.
			Gross profit margin (secondary activity)	%	90.2%	90%	95%	5%	Target exceeded. This is due to additional plants operated during the year under review and management fees received from implementing capital projects on behalf of the Department of Water and Sanitation
			Net profit margin (primary activity)	%	9.9%	9%	7%	2%	Target not achieved, due to provision for doubtful debts for the year. However, the core business operations are self-sustainable.
			Net profit margin (secondary activity)	%	15.1%	5%	8%	3%	Target exceeded. This is due to additional plants operated during the year under review and management fees received from implementing capital projects on behalf of the Department of Water and Sanitation

Table 1: Performance Against the Shareholder Compact for July 2017 - June 2018

	Performance Objectives	Performance Area/Projects	Performance Indicator		Actual Prior Year 30 June 2017	Performance Target for the Year 30 June 2018	Results	Variances	Reasons for Variances and Recovery Plans
			Debt/Equity	Ratio	0.043	0.077	0.037	0.040	Target achieved. Reduction on long-term borrowings due to repayments has a direct impact on the lower ratio and is positive for the organisation.
			Return on assets %	%	8.92%	1.2%	5.8%	4.6%	Target exceeded. Required returns are generated from the assets due to efficiencies in the organisation.
			Debtors days #	Number	807	635	822	187	Target not achieved, The organisation is implementing water supply restrictions to the non-paying municipalities who have responded positively during the July 2018 collection. The organisation will continue to restrict the water supply until the debt is fully paid.
			Repairs and maintenance as % of PPE and Investment Property (Carrying Value)	%	1.7%	1.7%	2%	0.3%	Target achieved. This reflects the implementation of the maintenance plan.
			Staff remuneration as % of total operating expenditure	%	24%	24.2%	26%	-1.8%	Target not achieved. This is due to the filling of critical positions in the North West (Mahikeng) and Free State Regions.
7	**Increase BBBEE expenditure in relation to operational projects**		Spending	% achieved	98%	95%	87%	-8%	Target not achieved. Most of the smaller suppliers submit incomplete documentation when quoting on requests and therefore, end up not qualifying. The organisation is planning to run a support programme for these small suppliers.
				# New entrants	114	70	83	13	Target exceeded. This is a result of new supplier registrations during the year under review.
8	**Manage costs within the approved budget**		Financial reports	% increase	-9.17%	5%	18%	13%	Target exceeded. The organisation has saved on fixed costs incurred.
9	**Capital expenditure programme**		Overall project expenditure within R target	Spending	337,213m	431,151m	381,819m	-49,332 m	Target not achieved. Internal Projects did not get the funding and the entity received the funds late for the Vaal Gamagara and Namakwa pipelines.
10	**Engagements in secondary activities**		% of total turnover	%	23%	15%	21%	6%	Target achieved. This means that at least 78% of the activities of the organisation relates to Section 29 of the Water Services Act that forms the core business of Sedibeng Water.

Table 1: Performance Against the Shareholder Compact for July 2017 - June 2018

	Performance Objectives	Performance Area/Projects	Performance Indicator		Actual Prior Year 30 June 2017	Performance Target for the Year 30 June 2018	Results	Variances	Reasons for Variances and Recovery Plans
11	**Bulk supply agreements concluded with municipalities/ other customers**	Statutory and service level agreements in place	Municipalities/ other customers with bulk supply agreements	%	100%	100%	95% Breakdown: Municipalities - 100% Mines - 91%	-5%	Target partially achieved. However, all the fifteen (15) contracts with municipalities signed at year end. There are only two (2) contracts with mines (out of 23 contracts) that are in the finalisation process of being signed. However, these mines continue to honor their accounts.
12	**Implementation of Ministerial Directives**	New Ministerial Directives issued are implemented on time	Progress against implementation plan	%	71%	100%	0%	0%	No new directives have been received in the 2017/18 financial year
13	**Support rural Development**	Total number of identified rural municipalities supported	Signed contracts, MOUs etc.	Number	6	2	10	8	Target exceeded. Sedibeng Water supported 10 rural municipalities.
14	**Achieve statutory reporting compliance**	All statutory reports submitted on time	Submission dates met	%	100%	100%	64%	-36%	Target not achieved, Out of the total of 14 reports, five (5) reports were submitted late (Performance Information Report, SIP 18 report, Borrowing Limits, ENE Database and financial report to National Treasury).
15	**Staff levels**	Optimal staff retention	Staff turnover	%	0.97%	1.8%	4.44%	-2.64%	Target not achieved. There were 37 terminations that occurred in the organisation during the 2017/2018 financial year. Employees cited personal reasons for leaving the organisation.
16	**Training and skills development**	Skills and capacity building	Learnerships	Number	2	60	0	60	Target not achieved. The planned Learnership Programmes for certain training areas (Electrical, Welding and Wastewater Treatment) could not be initiated because the discretionary grant application for this purpose was declined by EWSETA. The HRD office is in the process of realigning its budget to assess the possibility of implementing the Learnerships in the new financial year.
			Bursaries: employees	Number	71	30	81	51	Target achieved. The organisation is committed to developing its employees.
			Graduate Programmes	Number	11	20	22	2	Target achieved. Recruitment and appointment of Trainees/Interns for Graduate Programme is dependent on the need raised and the available capacity from the line functions. Presently we have 22 Trainees/ Interns with four (4) appointed in the period under review.

Table 1: Performance Against the Shareholder Compact for July 2017 - June 2018

	Performance Objectives	Performance Area/Projects	Performance Indicator		Actual Prior Year 30 June 2017	Performance Target for the Year 30 June 2018	Results	Variances	Reasons for Variances and Recovery Plans
17	**Jobs created**	Permanent and contract (direct)	Total number	Number	73	53	86	33	Target exceeded. The organisation had to fill vacant positions in the approved new organisational structure.
		Temporary (indirect)	Total number	Number	769	450	234	-216	Target not achieved. The Department of Water and Sanitation appointed Sedibeng Water as Implementing Agent for capital projects on its behalf. No new directives were received in the year under review.
18	**Board effectiveness**	Improved performance of fiduciary duties/ governance	Board Member attendance of all Board/ committee meetings	%	90%	100%	95.5%	-4.5%	Target not achieved. In three (3) out of 11 meetings no full attendance materialised due to other commitments.
			Decision making: % number resolutions taken by the Board vs number of resolutions implemented	%	100%	100%	100%	0%	Target achieved. All the resolutions by the Board have been implemented by the organisation.
19	**Effective internal controls and risk**	Internal audit findings dealt with	Internal audit reports	Number of repeated findings	0	0	0	0	Target achieved. This was due to the improvement of internal controls.
				Number of unresolved findings	11	0	7	-7	Target not achieved. The audit findings have been submitted for audit purposes.
20	**Good governance**	Improved controls and risk mitigation	Breaches of materiality and significance framework	Number	0	0	0	0	Target achieved. No breaches to the materiality and significant framework have been identified
21	**Corporate social responsibility initiatives**	Good corporate citizenship	Number of initiatives undertaken	Number	12 initiatives with NGOs & 85 once-off sponsorships	14	13 initiatives with NGOs & 33 once-off sponsorships	32	Target achieved, The organisation has a defined Corporate Social Investment Programme which is aimed at improving the lives of the people in its areas of operation.

CONCLUSION AND RECOMMENDATIONS

The overall performance for Sedibeng Water is satisfactory. Notwithstanding, the high outstanding debt and non-payment of accounts by some municipalities (the Matjhabeng Local Municipality, Nama-Koi Local Municipality and Ngaka Modiri District Municipality), is a cause for concern. This has affected our financial performance (financial ratios) and the debt recovery targets. The non-achievement of the BBBEE target is likewise an area of concern. The Board and Executive Management are working with the stakeholders concerned to ensure that all performance targets are achieved.

INDEPENDENT AUDITOR'S REPORT
BY AUDITOR-GENERAL OF SOUTH AFRICA

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS

Qualifled Opinion

1. I have audited the financial statements of Sedibeng Water as set out on pages 134 - 194, which comprise the statement of financial position as at 30 June 2018, the statement of profit or loss and other comprehensive income, statement of changes in equity and statement of cash flows as well as the notes to the financial statements, including a summary of significant accounting policies.

2. In my opinion, except for the possible effects of the matters described in the basis for qualified opinion section of my report, the financial statements present fairly, in all material respects, the financial position of Sedibeng Water as at 30 June 2018, and its financial performance and cash flows for the year then ended in accordance with South African Generally Accepted Accounting Practice (SA statements of GAAP) and the requirements of the Public Finance Management Act of South Africa, 1999 (Act No.1 of 1999) (PFMA).

Basis for qualified opinion

Operating profit

3. I was unable to obtain sufficient appropriate audit evidence regarding the following items which had a cumulative effect on operating profit:

   - Revenue of R7 million as included in note 18 to the financial statements,
   - Other operating income of R14 million as included in note 20 to the financial statements.

Irregular expenditure

5. The entity did not include the required information on irregular expenditure in the notes to the financial statements, as required by section 55(2)(b)(i) of the PFMA. Payments made in contravention of the supply chain management requirements were not adequately and completely disclosed, resulting in irregular expenditure being understated by R21 million (2017: R139 million).

6. In addition, the entity also did not evaluate the population for similar instances of non-compliance based on the factors communicated. Consequently, I was unable to determine the full extent of the irregular expenditure as it was impractical to do so due to management not re-visiting the population to quantify the extent of the irregular expenditure.

Prior period error

7. The entity did not disclose prior period errors in note 40 to the financial statements, as required by IAS 8(AC 103) Accounting policies, changes in accounting estimate and errors. The nature and the amount of the correction for the commitment, were not disclosed.

8. The entity capitalised capital expenditure incurred in the prior year to the current year capital work in progress balance. Consequently, the prior period error disclosure note as described in note 40 to the financial statements is understated by R14 million and the opening balance of the capital work in progress balance as described in note 3 is understated by R14 million.

9. In addition, the entity restated the corresponding amount of Value Added Tax as described in note 40 to the financial statements. However, the restatement was understated by R40 million. Consequently, the prior period error disclosure notes as described in note 40 to the financial statements is understated by R40 million.

Trade and other receivables

10. I was unable to obtain sufficient appropriate

audit evidence about the trade and other receivable balance reflected as R3,5 billion in note 9 to the financial statements. This is due to the debtors' balance, which includes R50 million for which I was not provided with supporting audit evidence. Consequently, I was unable to determine whether any adjustment relating to trade and other receivables stated at R3, 5 billion in the financial statements was necessary.

Context for the opinion

11. I conducted my audit in accordance with the International Standards on Auditing (ISAs). My responsibilities under those standards are further described in the auditor-general's responsibilities for the audit of the financial statements section of this auditor's report.

12. I am independent of the entity in accordance with the International Ethics Standards Board for Accountants' Code of ethics for professional accountants (IESBA code) and the ethical requirements that are relevant to my audit in South Africa. I have fulfilled my other ethical responsibilities in accordance with these requirements and the IESBA code.

13. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my qualified opinion.

Emphasis of matter

14. I draw attention to the matters below. My opinion is not modified in respect of these matters.

Uncertainty relating to the future outcome of exceptional litigation

15. With reference to note 30 to the financial statements, the entity is the defendant in a claim lawsuit. The ultimate outcome of the matter cannot presently be determined and no provision for any liability that may result has been made in the financial statements.

Restatement of corresponding figures:

16. As disclosed in note 40 to the financial statements, the corresponding figures for 30 June 2017 were restated as a result of an error in the financial statements of the entity at, and for the year ended, 30 June 2018.

Responsibilities of the Accounting Authority for the financial statements

17. The accounting authority is responsible for the preparation and fair presentation of the financial statements in accordance with SA GAAP and the requirements of the PFMA, and for such internal control as the accounting authority determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

18. In preparing the financial statements, the accounting authority is responsible for assessing the Sedibeng Water's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting unless the accounting authority either intends to liquidate the entity or to cease operations, or has no realistic alternative but to do so.

Auditor-general's responsibilities for the audit of the financial statements

19. My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

20. A further description of my responsibilities for the audit of the financial statements is included in the annexure to this auditor's report.

REPORT ON THE AUDIT OF THE ANNUAL PERFORMANCE REPORT

Introduction and scope

21. In accordance with the Public Audit Act of South Africa, 2004 (Act No. 25 of 2004) (PAA) and the general notice issued in terms thereof, I have a responsibility to report material findings on the reported performance information against predetermined objectives for selected objectives presented in the annual performance report. I performed procedures to identify findings but not to gather evidence to express assurance.

22. My procedures address the reported performance information, which must be based on the approved performance planning documents of the entity. I have not evaluated the completeness and appropriateness of the performance indicators included in the planning documents. My procedures also did not extend to any disclosures or assertions relating to planned performance strategies and information in respect of future periods that may be included as part of the reported performance information. Accordingly, my findings do not extend to these matters.

23. I evaluated the usefulness and reliability of the reported performance information in accordance with the criteria developed from the performance management and reporting framework, as defined in the general notice, for the following selected objectives presented in the annual performance report of the entity for the year ended 30 June 2018:

Objectives	Pages in the Annual Performance Report
Objective 1 – Bulk potable water quality compliance	121
Objective 2 – Manage avoidable water losses	121
Objective 3 – Reliability of supply	121
Objective 4 – Increased access to services	121
Objective 10 – Engagements in secondary activities	122
Objective 11 – Bulk supply agreements concluded with municipalities/ other customers	123
Objective 12 – Implementation of ministerial directives	123
Objective 13 – Support rural development	123
Objective 17 – Jobs created (temporary-indirect)	124

24. I performed procedures to determine whether the reported performance information was properly presented and whether performance was consistent with the approved performance planning documents. I performed further procedures to determine whether the indicators and related targets were measurable and relevant, and assessed the reliability of the reported performance information to determine whether it was valid, accurate and complete.

25. The material findings in respect of the usefulness and reliability of the selected objectives are as follows:

Objective 1 – Bulk potable water quality compliance

26. I did not raise any material findings on the usefulness and reliability of the reported performance information for the following objective - bulk portable water quality compliance.

Objective 2 – Manage avoidable water losses

27. I did not raise any material findings on the usefulness and reliability of the reported performance information for the following objective - manage avoidable water losses.

Objective 3 – Reliability of supply

28. I did not raise any material findings on the usefulness and reliability of the reported performance information for the following objective - reliability of supply.

Objective 4 – Increased access to services

CAPEX spend / projects

29. The source information for achieving the planned indicator was not clearly defined. In addition, the planned target of 90% for CAPEX for this indicator was not specific in clearly identifying the nature and required level of performance and did not specify the period or deadline for delivery.

Objective 10 – Engagements in secondary activities

30. I did not raise any material findings on the usefulness and reliability of the reported performance information for the following objective - engagements in secondary activities.

Objective 11 – Bulk supply agreements concluded with municipalities/other customers

Municipalities/other customers with bulk supply agreements

31. The planned target of 100% bulk supply agreements signed with municipalities/other customers for this indicator was not specific in clearly identifying the nature and required level of performance and was not measurable.

Objective 12 – Implementation of ministerial directives

32. I did not raise any material findings on the usefulness and reliability of the reported performance information for the following objective - implementation of ministerial directives.

Objective 13 – Support rural development

Signed contracts, MOUs, etc.

33. The planned target of two signed contracts, MOUs, etc. for this indicator was not specific in clearly identifying the nature and required level of performance and was not measurable.

34. The reported achievement of ten for the target on signed contracts, MOUs, etc. is not reliable as the entity did not have an adequate performance management system to maintain records to enable reliable reporting on achievement of targets. As a result, I was unable to obtain sufficient appropriate audit evidence for the reported achievement. Based on the supporting evidence that was provided, the achievement was zero, but I was unable to further confirm the reported achievement by alternative means. Consequently, I was unable to determine whether any further adjustments were required to the reported achievement.

Objective 17 – Jobs created

Total number of indirect jobs

35. The planned target of 450 jobs created for this indicator was not specific in clearly identifying the nature and required level of performance and did not specify the period for delivery.

36. The reported achievement of 239 for the target of 450 jobs created is not reliable as the entity did not have an adequate performance management system to maintain records to enable reliable reporting on achievement of targets. As a result, I was unable to obtain sufficient appropriate audit evidence in some instances while in other cases the supporting evidence provided did not agree to the reported achievement. I was unable to further confirm the reported achievement by alternative means. Consequently, I was unable to determine whether any further adjustments were required to the reported achievement.

Other matters

37. I draw attention to the matters below:

Achievement of planned targets

38. Refer to the annual performance report on

pages 120-125 for information on the achievement of planned targets for the year. This information should be considered in the context of the material findings on the usefulness and reliability of the reported performance information in paragraphs 21 to 36 of this report.

Adjustment of material misstatements

39. I identified material misstatements in the annual performance report submitted for auditing. These material misstatements were on the reported performance information of objective 4 - increased access to services, objective 10 - engagement in secondary activities and objective 21 - jobs created. As management subsequently corrected only some of the misstatements, I raised material findings on the usefulness and reliability of the reported performance information. Those that were not corrected are reported above.

REPORT ON THE AUDIT OF COMPLIANCE WITH LEGISLATION

Introduction and scope

40. In accordance with the PAA and the general notice issued in terms thereof, I have a responsibility to report material findings on the compliance of the entity with specific matters in key legislation. I performed procedures to identify findings but not to gather evidence to express assurance.

41. The material findings on compliance with specific matters in key legislations are as follows:

Procurement and contract management

42. Some of the goods, works or service were not procured through a procurement process which is fair, equitable, transparent and competitive, as required by section 51(1)(a)(iii) of the PFMA. Similar non-compliance was also reported in the prior year. This non-compliance was also identified in the procurement processes for the Vaal Gamagara pipeline project.

43. Some of the contracts were awarded to bidders that did not score the highest points in the evaluation process, as required by section 2(1)(f) of Preferential Procurement Policy Framework Act and Preferential Procurement Regulations. Similar non-compliance was also reported in the prior year.

44. The preference point system was not applied in some of the procurement of goods and services above R30 000 as required by section 2(a) of the PPPFA. Similar non-compliance was also reported in the prior year.

45. Some of the construction contracts were awarded to contractors that were not registered with the Construction Industry Development Board and/or did not qualify for the contract in accordance with section 18(1) of the CIDB Act and CIDB regulations 17 and/or 25(7A). Similar non-compliance was also reported in the prior year.

46. In some instances, persons in service of the entity who had a private or business interest in quotations awarded by the entity participated in the process relating to that contract in contravention of PFMA section 50(3)(b). Similar non-compliance was also reported in the prior year.

Consequence management

47. I was unable to obtain sufficient appropriate audit evidence that disciplinary steps were taken against officials who had incurred irregular expenditure as required by section 51(1)(e)(iii) of the PFMA. This was due to proper and complete records that were not maintained as evidence to support the investigations into irregular expenditure.

48. Disciplinary steps were not taken against some of the officials who had incurred and permitted irregular expenditure, as required by section 51(1) (e) (iii) of the PFMA.

Expenditure management

49. Effective and appropriate steps were not taken to prevent irregular expenditure, as required by section 51(1)(b)(ii) of the PFMA. As reported in the basis for the qualified opinion the full extent of the irregular expenditure could not be quantified. The majority of the irregular expenditure disclosed in the financial statements was caused by competitive bidding processes not being followed.

50. Effective steps were not taken to prevent fruitless and wasteful expenditure amounting to R597 000, as disclosed in note 38 to the annual financial statements, as required by section 51(1)(b)(ii) of the PFMA. The majority of the fruitless and wasteful expenditure was caused by late payment of suppliers invoices.

Annual financial statements and annual performance report

51. The financial statements submitted for auditing were not prepared in accordance with the prescribed financial reporting framework and supported by full and proper records, as required by section 55(1) (a) and (b) of the PFMA.

52. Material misstatements of commitments, cash flow statement and fruitless and wasteful expenditure identified by the auditors in the submitted financial statements were corrected and the supporting records were provided subsequently, but the uncorrected material misstatements and supporting records that could not be provided resulted in the financial statements receiving a qualified opinion.

OTHER INFORMATION

53. The accounting authority is responsible for the other information. The other information comprises the information included in the annual report. The other information does not include the financial statements, the auditor's report and those selected objectives presented in the annual performance report that have been specifically reported in this auditor's report.

54. My opinion on the financial statements and findings on the reported performance information and compliance with legislation do not cover the other information and I do not express an audit opinion or any form of assurance conclusion thereon.

55. In connection with my audit, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements and the selected objectives presented in the annual performance report, or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

56. I did not receive the other information prior to the date of this auditor's report. After I receive and read this information, and if I conclude that there is a material misstatement, I am required to communicate the matter to those charged with governance and request that the other information be corrected. If the other information is not corrected, I may have to retract this auditor's report and re-issue an amended report as appropriate. However, if it is corrected this will not be necessary.

INTERNAL CONTROL DEFICIENCIES

57. I considered internal control relevant to my audit of the financial statements, reported performance information and compliance with applicable legislation. However, my objective was not to express any form of assurance on it. The matters reported below are limited to the significant internal control deficiencies that resulted in the basis for the qualified opinion, the findings on the annual performance report and the findings on compliance with legislation included in this report.

Leadership

58. The accounting authority did not exercise adequate oversight responsibility regarding financial and performance reporting, and compliance with laws and regulations.

59. There was ineffective monitoring of action plans to address internal control deficiencies raised by both internal and external auditors.

60. The accounting authority did not enforce compliance with laws and regulations to ensure that incidents of irregular expenditure are condoned after investigations are completed and disciplinary steps are taken against those found liable to incurring or permitting irregular expenditure.

61. There is instability in the position of Chief Executive.

Financial and performance management

62. Senior management have been slow in addressing internal and external audit findings, implementation of key controls and addressing risk areas on performance information, compliance with laws and regulations and financial statements which resulted in uncorrected material misstatements.

63. Senior management did not implement proper record keeping controls to ensure that complete and accurate information is accessible and available to support financial and performance reporting.

Governance

64. The audit committee did not hold management accountable for the development of an adequate action plan which deals with the root causes identified in prior years by internal and external auditors.

65. The audit committee did not hold management accountable to respond and address internal audit findings raised during the financial year.

Pretoria
12 November 2018

Auditor-General

AUDITOR-GENERAL SOUTH AFRICA
Auditing to build public confidence

ANNEXURE: AUDITOR-GENERAL'S RESPONSIBILITY FOR THE AUDIT

1. As part of an audit in accordance with the ISAs, I exercise professional judgement and maintain professional scepticism throughout my audit of the financial statements, and the procedures performed on reported performance information for selected objectives and on the entity's compliance with respect to the selected subject matters.

Financial statements

2. In addition to my responsibility for the audit of the financial statements as described in this auditor's report, I also:

- Identify and assess the risks of material misstatement of the financial statements whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control;

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the accounting authority;

- Conclude on the appropriateness of the board of directors, which constitutes the accounting authority's use of the going concern basis of accounting in the preparation of the financial statements. I also conclude, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on Sedibeng Water's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements about the material uncertainty or, if such disclosures are inadequate, to modify the opinion on the financial statements. My conclusions are based on the information available to me at the date of this auditor's report. However, future events or conditions may cause an entity to cease continuing as a going concern; and

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

Communication with those charged with governance

3. I communicate with the accounting authority regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

4. I also confirm to the accounting authority that I have complied with relevant ethical requirements regarding independence, and communicate all relationships and other matters that may reasonably be thought to have a bearing on my independence and, where applicable, related safeguards.

STATEMENT OF FINANCIAL POSITION
AS AT 30 JUNE 2018

	Note(s)	2018 R'000	2017 R'000
ASSETS			
Non-current Assets			
Property, Plant and Equipment	3	3 067 137	2 855 749
Investment Property	4	9 050	11 400
Biological Assets	5	579	473
Intangible Assets	6	7 243	7 725
Financial Assets	7	257 650	227 089
Total Non-Current Assets		**3 341 658**	**3 102 435**
Current Assets			
Inventories	8	22 353	22 097
Trade and Other Receivables	9	3 534 671	2 863 124
Cash and Cash Equivalents	10	360 229	387 229
Total Current Assets		**3 917 253**	**3 272 449**
Total Assets		**7 258 911**	**6 374 884**
EQUITY AND LIABILITIES			
Equity			
Reserves		2 308 972	2 308 972
Retained Income		1 516 621	1 452 368
Total Equity		**3 825 593**	**3 761 340**
Liabilities			
Non-current Liabilities			
Interest-Bearing Borrowings	11	34 264	31 038
Finance Lease Liabilities	12	5 547	14 633
Retirement Benefit Obligation	14	94 725	94 720
Deferred Income	15	724 119	290 961
Long Service Award Liability	16	28 215	27 039
Total Non-Current Liabilities		**886 871**	**458 391**
Current Liabilities			
Trade and Other Payables	17	2 526 333	2 120 320
Interest-Bearing Borrowings	11	12 771	28 849
Finance Lease Liabilities	12	7 343	5 984
Total Current Liabilities		**2 546 447**	**2 155 153**
Total Equity and Liabilities		**7 258 911**	**6 374 884**

STATEMENT OF COMPREHENSIVE INCOME
FOR THE YEAR ENDED 30 JUNE 2018

	Note(s)	2018 R'000	2017 R'000
Revenue	18	1 410 951	1 294 515
Cost of Sales	19	(831 916)	(789 639)
Gross Profit		**579 035**	**504 876**
Other Operating Income	20	49 174	77 180
Other Operating Expenses		(620 948)	(567 192)
Operating Profit	21	**7 261**	**14 864**
Investment Income	22	55 797	67 018
Finance Costs	23	(5 119)	(6 887)
Fair Value of Adjustments	24	(2 245)	1 482
Profit for the Year		**55 694**	**76 477**
Other Comprehensive Income		**8 559**	**3 684**
Remeasurement of Retirement Benefit Obligation		7 795	4 888
Remeasurement of Long Service Awards		764	(1 204)
Total Comprehensive Income for the Year	25	**64 253**	**80 162**

STATEMENT OF CHANGES IN EQUITY

FOR THE YEAR ENDED 30 JUNE 2018

	Sinking Fund	Revaluation Surplus	Other Reserves	Total Reserves	Retained Income	Total Equity
	R'000	R'000	R'000	R'000	R'000	R'000
Previously Reported Balance at 01 July 2016	**208 135**	**-**	**2 720 600**	**2 928 735**	**953 378**	**3 882 113**
Prior Year Adjustment	(208 135)	2 507 316	(2 720 600)	(421 418)	418 827	(2 591)
Remapping of Accounts to Retained Earnings	-	-	(132 380)	(132 380)	132 380	-
Remapping Revaluation Surplus to a Separate Line		2 507 316	2 507 316	-		-
- Discontinue - Reserve Accounting	(208 135)	-	(80 904)	(289 039)	289 039	-
- Inter-Companies	-	-	-	-	(597)	(597)
- Pipelines	-	-	-	-	(1 994)	(1 994)
Restated Balance at 01 July 2016	**-**	**2 507 316**	**-**	**2 507 316**	**1 372 205**	**3 879 522**
Profit for the Year	-	-	-	-	76 477	76 477
Other Comprehensive Income	-	-	-	-	3 684	3 684
Total Comprehensive Income for the Year	**-**	**-**	**-**	**-**	**80 162**	**80 162**
Other Movements	**-**	**(198 343)**	**-**	**(198 343)**	**-**	**(198 343)**
Transfer Between Reserves	26 805	-	310	27 115	(27 115)	-
Discontinue - Reserve Accounting	(26 805)	-	(310)	(27 115)	27 115	-
Re-Mapping of Revaluation Surplus	-	1 851	-	1 851	-	1 851
Correction of the Debtor's Imbalance	-	(21 176)	-	(21 176)	-	(21 176)
Revaluation of Infrastructure Assets	-	(179 018)	-	(179 018)	-	(179 018)
Balance at 1 July 2017	**-**	**2 308 972**	**-**	**2 308 972**	**1 452 368**	**3 761 340**
Profit for the Year					55 694	55 694
Other Comprehensive Income	-		-	-	8 559	8 559
Total Comprehensive Income of the Year	**-**		**-**	**-**	**64 253**	**64 253**
Balance at 30 June 2018	**-**	**2 308 972**	**-**	**2 308 972**	**1 516 621**	**3 825 593**

STATEMENT OF CASH FLOWS
FOR THE YEAR ENDED 30 JUNE 2018

	Note(s)	2018 R'000	2017 R'000
Cash Flows from Operating Activities			
Cash Receipts from Customers		784 372	718 004
Cash Paid to Suppliers and Employees		(444 470)	(492 727)
Cash Generated from Operations	28	**339 902**	**225 277**
Investment Income	22	55 797	39 591
Finance Costs	23	(5 119)	(6 887)
Net Cash from Operating Activities		**390 579**	**257 981**
Cash Flows from Investing Activities			
Purchase of Property, Plant and Equipment	3	(389 399)	(285 726)
Purchase of Intangible Assets	6	(765)	(4 871)
Purchase of Financial Assets	7	(1 716)	(2 656)
Net Cash from Investing Activities		**(391 880)**	**(293 253)**
Cash Flows from Financing Activities			
Repayment of Interest-bearing Borrowings	11	(17 659)	(17 726)
Finance Lease Payments	12	(8 038)	(25 298)
Net Cashflows from Financing Activities		**(25 698)**	**(43 024)**
Total Cash Movement for the Year		**(26,999)**	**(78 295)**
Cash and Cash Equivalents at the Beginning of Year		387 229	465 524
Cash and Cash Equivalents at the End of Year	10	**360 229**	**387 229**

SIGNIFICANT ACCOUNTING POLICIES
FOR THE YEAR ENDED 30 JUNE 2018

1 PRESENTATION OF ANNUAL FINANCIAL STATEMENTS

The annual financial statements of Sedibeng Water, an organisation domiciled in South Africa for the year ended 30 June 2018, comprises of five (5) regional areas, namely North West, Free State, Northern Cape, Mahikeng and Namakwa. These financials also include the income and expenses for Cafeteria as it is a regional component within the organisation. The annual financial statements were authorised for issue by the Accounting Authority on 31 August 2018.

1.1 Statement of Compliance

The annual financial statements have been prepared in accordance with South African Statements of Generally Accepted Accounting Practice (the GAAP Reporting Framework), the Water Services Act, Act 108 of 1997, and the Public Finance Management Act, Act 1 of 1999 as amended.

1.2 Basis of Preparation

The financial statements are presented in South African Rand and rounded to the nearest thousand. The financial statements are prepared on the historical cost basis, unless otherwise stated.

The principal accounting policies applied in the preparation of these financial statements are set out below. These policies are consistent with the previous period and have been consistently applied to all the years presented, unless otherwise stated.

1.3 Critical Accounting Estimates and Assumptions

The preparation of annual financial statements in conformity with the GAAP Reporting Framework requires management to make judgments, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, income and expenses.

The estimates and associated assumptions are based on historical experience and various other factors, including making assumptions concerning future events that are believed to be reasonable under the circumstances. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are accounted for prospectively.

In the process of applying the accounting policies as set out below, management has made the following judgments that have a significant risk of causing material adjustment to the amounts recognized in the financial statements.

Useful Lives and Residual Values

The useful lives and residual values of property, plant and equipment as well as the useful lives of the intangibles are reviewed at each reporting date. The useful lives are estimated, by management, based on historic analysis and other available information. The residual values are estimated based on useful lives as well as other available information.

Provisions and Contingent Liabilities

Various estimates and assumptions have been applied by management in arriving at the carrying value of provisions that are recognised in terms of the relevant accounting policy. Management further relies on input from the entity's lawyers in assessing the probability of items of a contingent nature.

1 PRESENTATION OF ANNUAL FINANCIAL STATEMENTS (CONTINUED)

Trade and Other Receivables

The entity follows the guidance of AC 133 (IAS39) to determine when trade and other receivables are impaired. The entity assesses its trade receivables for impairment at each reporting date. In determining whether an impairment loss should be recorded in the income statement, the entity makes judgments as to whether there is observable data indicating a measurable decrease in the estimated future cash flows from a financial asset.

Available-for-sale Financial Assets

The entity follows the guidance of AC 133 (IAS39) to determine when on available-for-sale financial asset is impaired. In making this judgment, the entity evaluates, among other factors, the duration and extent to which the fair value of an investment is less than its cost; and the financial health of and near-term business outlook for the investee, including factors such as industry and sector performance, changes in technology and operational and financing cash flow.

Allowance for Slow Moving, Damaged and Obsolete Stock

An allowance to write down stock to the lower of cost or net realisable value was made. The provision for the write down is included in the inventory note (note 8).

Fair Value Estimation

The fair value of financial instruments traded in active markets (such as trading and available-for-sale securities) is based on active market prices at the reporting date.

The fair value of financial instruments that are not traded on the active market (for example, over-the counter derivatives) is determined by using valuation techniques. The entity uses a variety of methods and makes assumptions that are based on market conditions existing at each reporting date. Quoted market prices or dealer quotes for similar instruments are used for long-term debt. Other techniques, such as estimated discounted cash flows, are used to determine fair value for the remaining financial instruments. The fair value of interest role swaps is calculated as the present value of the estimated future cash flows.

The carrying value less impairment provision of trade receivables and payables are assumed to approximate their fair values. The fair value of financial liabilities for disclosure purposes is estimated by discounting the future contractual cash flows at the current market interest rate that is available to the entity for similar financial instruments.

Pension and Other Benefits

The present value of the obligations depends on a number of factors that are determined on an actuarial basis using a number of assumptions. The assumptions used in determining the net cost (income) for health care benefits include the discount rate. Any changes in these assumptions will impact the carrying amount of the obligations.

The entity determines the appropriate discount rate at the end of each year. This is the interest rate that should be used to determine the present value of estimated future cash outflows expected to be required to settle the health care obligations. In determining the appropriate discount rate, the entity considers the interest rates of medium term government bonds that have terms to maturity approximating the terms of the related health care obligation.

1 PRESENTATION OF ANNUAL FINANCIAL STATEMENTS (CONTINUED)

Other key assumptions for pension obligations are based in part on current market conditions. Additional information is disclosed in the notes to the financial statements. If the discount rate used differs from Management's estimates, the carrying amount of health care obligations would also differ.

Actuarial gains and losses are recognised through profit and loss in the period in which they were earned/ incurred.

1.4 Revenue

Revenue is recognised to the extent that it is probable that economic benefits will flow to the entity and the revenue can be reliably measured. Revenue is measured at the fair value of the consideration received/ receivable excluding discounts, rebates, and other sales taxes or duties.

Revenue from the sale of goods shall be recognised when all the following conditions have been satisfied:

a) the entity has transferred to the buyer the significant risks and rewards of ownership of the goods;
b) the entity retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;
c) the amount of revenue can be measured reliably;
d) it is probable that the economic benefits associated with the transaction will flow to the entity; and
e) the costs incurred or to be incurred in respect of the transaction can be measured reliably.

Water Sales and Fixed Contribution:

Water sales comprise primarily the net invoiced value of water sales per kilolitre, exclusive of value added tax, as approved bythe Department of Water and Sanitation.

Equitable Shares and Service Delivery Claims:

This income is derived from sale of water to customers and is received from Water Services Authorities in the North West Region for services rendered in terms of Section 30 (2) (d) of the Water Services Act, 1997. The Water Board acts as a Water Services Provider and receives this income for services rendered.

The income comprises the net invoiced value of these services, exclusive of value added tax, at budgeted amounts as approved by the Water Services Authorities.

Sewage Income:

This income is derived from sewage treatment services provided in the North West Region in terms of Section 30 (2) (d) of the Water Services Act, 1997.

The income is recognised at the net invoiced value, exclusive of value added tax and at budgeted amounts as approved by the Water Services Authorities.

Investment Income:

Investment income comprises interest received or receivable on loans, trade receivables and funds invested. Interest is recorded in the statement of comprehensive income as investment income when it is probable that economic benefits associated with the transaction will flow to the entity, using the Effective Interest Rate method over the period to maturity.

1 PRESENTATION OF ANNUAL FINANCIAL STATEMENTS (CONTINUED)

Other Income:
Other income earned by the entity is recognised net of discounts and value added tax and comprises of the following:

Rental Income:
Rental income is derived from rental of houses owned by the entity to its employees and other tenants. This income is recognised on an accrual basis based on individually agreed upon rates per contract.

Miscellaneous income comprises of:
a) Refurbishment income;
b) Connection fees and lab analysis income;
c) Telephone and electricity income;
d) Sale of scrap; and
e) Commission insurance.

1.5 Cost of Sales
The cost of raw water purchases and contribution to the water research fund are considered to be cost of sales.

1.6 Employee Benefits
BenefitsThe entity operates both defined contribution (Pension and Provident Fund) and defined benefit plans (Post-retirementhealthcare benefits), the assets of which are held in separate trustee-administered funds. The plans are funded by payments from the entity and employees, taking account of the recommendations of independent qualified actuaries. The entitlement to the post-retirement healthcare benefits is usually based on the employee remaining in service up to retirement age.

A defined contribution plan is a plan under which the entity pays fixed contributions into a separate entity. The entity has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods. A defined benefit plan is a plan that is not a defined contribution plan. Typically defined benefit plans define an amount of benefit that an employee will receive on retirement, usually dependent on one or more factors such as age, years of service and compensation.

The liability recognised in the balance sheet in respect of defined benefit plans is the present value of the defined benefit obligation at the end of the reporting period, together with adjustments for unrecognised past-service costs. The defined benefit obligation, the related current service cost, and where applicable, the past service cost is calculated annually by independent actuaries using the Projected Unit Credit method.

The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of medium-term government bonds that have terms to maturity approximating to the terms of the related pension obligation. Actuarial gains and losses are recognised in the statement of comprehensive income in the year in which they arise.Past-service costs are recognised immediately in income, unless the changes to the plan are conditional on the employees remaining in service for a specified period of time (the vesting period). In this case, the past-service costs are amortised on a straight-line basis over the vesting period.

1 PRESENTATION OF ANNUAL FINANCIAL STATEMENTS (CONTINUED)

Payments to defined contribution retirement benefit plans are charged to the statement of comprehensive income in the year to which they relate.

1.7 Funds and Reserves

Funds and Reserves comprise of the following funds:

Insurance Fund
Any surplus funds, which are not immediately required for a specific purpose may, at the discretion of the entity, be transferred to an Insurance Fund.

This makes it possible for the entity to reduce its insurance portfolio in order to ensure that, in the long run, all their insurance needs are provided for by the fund.

Capital Fund
The fund is available for use/to be used for future capital expenditure projects.

Other Funds
The funds were transferred from the Department of Water and Sanitation and comprises of the net value of assets for each scheme at the date of the transfer.

Sinking Fund
The interest-bearing borrowings are redeemed on maturity by means of the Sinking Fund.Contributions that are made to the reserve comprise the interest of held-to-maturity investments.

Non-distributable Reserve
The reserve originated from the revaluation of certain items of property, plant and equipment in the Free State and Northern Cape Regions.

1.8 Property, Plant and Equipment
The cost of an item of property, plant and equipment is recognised as an asset when
a) it is probable that future economic benefits associated with the item will flow to the company; and
b) the cost of the item can be measured reliably.

Initial Measurement
Costs include costs incurred initially to acquire or construct an item of property, plant and equipment and costs incurred subsequently to add to, replace part of, or service it. If a replacement cost is recognised in the carrying amount of an item of property, plant and equipment, the carrying amount of the replaced part is derecognised.

Subsequent Measurement
Property, plant and equipment is carried at the revalued amount, being the fair value at the date of revaluation less any subsequent accumulated depreciation and subsequent accumulated impairment losses.

1 PRESENTATION OF ANNUAL FINANCIAL STATEMENTS (CONTINUED)

When an item of property, plant and equipment is revalued, any accumulated depreciation at the date of the revaluation is restated proportionately with the change in the gross carrying amount of the asset so that the carrying amount of the asset after revaluation equals its revalued amount. The gain or loss arising from the derecognition of an item of property, plant and equipment is included in profit or loss when the item is derecognised. The gain or loss arising from the derecognition of an item of property, plant and equipment is determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item.

Depreciation commences when an asset is available for its intended use. Depreciation is charged so as to write off the cost or revalued amounts of assets, other than land, to their residual value over their estimated useful lives, using the straight-line method, on the following basis:

The useful lives of items of property, plant and equipment have been assessed as follows:

Item	Estimated Useful Life
Plant and equipment	3 - 80 years
Computer equipment	3 years
Electricity distribution	25 - 50 years
Engineering and technical equipment	5 - 6 years
Equipment	11 years
Office equipment and furniture	5 - 6 years
Gymnasium equipment	10 years
Buildings	40 - 80 years
Pipelines and reservoirs	63 - 70 years
Precipitation and dosing	150 years
Capital work in progress	No depreciation
Vehicles	4 - 9 years

Change in the estimated useful life are accounted for by changing the depreciation period or method, as appropriate, and are treated as changes in accounting estimates. Property, plant and equipment is re-valued once every five years by professional valuers.

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of the financial year.

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater that it's estimated recoverable amount. Gains and losses on disposals are determined by comparing the proceeds with the carrying amount.

When revalued assets are sold, the amounts included in the non-distributable reserve are transferred to accumulated surplus.

1 PRESENTATION OF ANNUAL FINANCIAL STATEMENTS (CONTINUED)

1.9 Intangible Assets

Recognition
Intangible assets are recognised on the entity's statement of financial position when:
- it is probable that the expected future economic benefits that are attributable to the asset will flow to the entity; and
- the cost of the asset can be measured reliably.

Measurement
Intangible assets are measured at cost, less accumulated amortisation and impairment losses. Intangible assets with an indefinite useful life are measured at cost, less impairment losses.

Subsequent expenditure on intangible assets is recognised as an expense when incurred unless it forms part of the cost of an intangible asset that meets the recognition criteria.

Amortisation
Amortisation is charged to the statement of comprehensive income, over the estimated useful lives of intangible assets using the straight-line method unless such lives are indefinite. Intangible assets with indefinite useful lives are tested for impairment at each financial position date.

The estimated useful lives are as follows:

Item	Estimated Useful Life
Computer software	3 years
Servitudes	No amortisation

The amortisation period and the amortisation method for intangible assets are reviewed every period-end.

1.10 Investment Property

PropertyInvestment property is property (land or a building—or part of a building—or both) held (by the owner or by the lessee under a finance lease) to earn rentals or for capital appreciation or both, rather than for:

a) use in the production or supply of goods or services or for administrative purposes; or
b) sale in the ordinary course of business.

Investment property is recognised as an asset when, and only when, it is probable that the future economic benefits that are associated with the investment property will flow to the enterprise, and the cost of the investment property can be measured reliably.

A professional valuator shall be engaged every five years to determine the market values. For the remaining four financial periods, fair value will be assessed by Management with the relevant income, expenses and capitalisation rates obtained from the professional valuator. When the fair value of a revalued asset differs materially from its carrying amount, a professional valuation is obtained. If the fair value cannot be reliably determined on a continuous basis, the investment property is to bemeasured using the cost model.

1 PRESENTATION OF ANNUAL FINANCIAL STATEMENTS (CONTINUED)

Initial Measurement

Investment property is initially measured at cost, including transaction costs. Such cost should not include start-up costs, abnormal waste, or initial operating losses incurred before the investment property achieves the planned level of occupancy.

Subsequent Measurement

Costs include costs incurred initially and costs incurred subsequently to add to, or to replace a part of, or service a property. If a replacement part is recognised in the carrying amount of the investment property, the carrying amount of the replaced part is derecognised. All fixed property held to earn rentals is classified as investment property.

Cost Model

The entity measures the investment property using the Cost model in accordance to IAS 16 (AC123). Investment property is carried at cost less accumulated depreciation and any accumulated impairment losses. Depreciation is provided to write down the cost, less estimated residual value on a straight-line basis over the useful life of the property, which is as follows:

Item	Estimated Useful Life
Indefinite buildings	40 - 80 years

Transfers to or from Investment Property Classification

Transfers to, or from, investment property should only be made when there is a change in use, evidenced by one or more ofthe following:

a) Commencement of owner-occupation (transfer from investment property to owner-occupied property);
b) End of owner-occupation (transfer from owner-occupied property to investment property);
c) Commencement of an operating lease to another party (transfer from inventories to investment property) ; and
d) End of construction or development (transfer from property in the course of construction/development to investment property.

Disposal

An investment property should be derecognised on disposal or when the investment property is permanently withdrawn from use and no future economic benefits are expected from its disposal. The gain or loss on disposal should be calculated as the difference between the net disposal proceeds and the carrying amount of the asset and should be recognised as income or expense in the income statement.

1.11 Biological Assets

The biological assets include cows and bulls held for the purposes of grazing where the mowers cannot reach.

An entity shall recognise a biological asset or agricultural produce when, and only when:
- the entity controls the asset as a result of past events;
- it is probable that future economic benefits associated with the asset will flow to the entity; and
- the fair value or cost of the asset can be measured reliably.

1 PRESENTATION OF ANNUAL FINANCIAL STATEMENTS (CONTINUED)

Biological assets are measured at their fair value less costs to sell.

The fair value of livestock is determined based on market prices of livestock of similar age, breed, and genetic merit.

A gain or loss arising on initial recognition of agricultural produce at fair value less costs to sell is included in profit or loss for the period in which it arises.

Where market determined prices or values are not available, the present value of the expected net cash inflows from the asset, discounted at a current market-determined rate is used to determine fair value.

Where fair value cannot be measured reliably, biological assets are measured at cost less any accumulated depreciation and any accumulated impairment losses.

1.12 Impairment of Non-financial Assets

At each financial position date, the entity reviews the carrying amounts of its tangible and finite life intangible assets to determine whether there is any indication that those assets may be impaired. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any).

Where it is not possible to estimate the recoverable amount for an individual asset, the recoverable amount is determined for the cash-generating unit to which the asset belongs. Intangible assets with an indefinite useful life are tested for impairment annually.

If the recoverable amount of an asset (cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (cash-generating unit) is reduced to its recoverable amount. Impairment losses are immediately recognised as an expense, unless the relevant asset is carried at a revalued amount under another standard in which case the impairment loss is treated as a revaluation decrease under the standard.

The recoverable amount is the higher of the asset's fair value less cost to sell and value in use.

Where an impairment loss subsequently reverses, the carrying amount of the asset (cash-generating unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (cash - generating unit) in prior years.A reversal of an impairment loss is recognised as income immediately, unless the relevant asset is carried at a revalued amount under another standard, in which case the reversal of the impairment loss is treated as a revaluation increase under that other standard.

1.13 Financial Instruments

Financial assets are recognised when the company becomes a party to the contractual provisions of the respective instrument.Such assets consist of cash, equity instruments, a contractual right to receive cash or another financial asset, or a contractual right to exchange financial instruments with another entity on potentially favourable terms. Financial assets are derecognised when the right to receive cash flows from

1 PRESENTATION OF ANNUAL FINANCIAL STATEMENTS (CONTINUED)

the asset have expired or have been transferred and the company has transferred substantially all risks and rewards of ownership.

Financial liabilities are recognised when there is an obligation to transfer benefits and that obligation is a contractual liability to deliver cash or another financial asset or to exchange financial instruments with another entity on potentially unfavourable terms. Financial liabilities are derecognised when they are extinguished, that is discharged, cancelled or expired.

The entity classifies its financial assets and liabilities into the following categories:

- Loans and receivables;
- Available for sale;
- Financial liabilities measured at amortised cost; and
- Held-to-maturity investments.

The classification depends on the purpose for which the financial assets were acquired. Management determines the classification of its financial assets at initial recognition. Classification is re-assessed on an annual basis, except for derivatives and financial assets designated as at fair value through profit or loss, which shall not be classified out of the fair value through profit or loss category.

Initial Recognition and Measurement
Financial instruments are recognised initially when the entity becomes a party to the contractual provisions of the instruments.

The entity classifies financial instruments, or their component parts, on initial recognition as a financial asset, a financial liability or an equity instrument in accordance with the substance of the contractual arrangement. For financial instruments which are not at fair value through profit or loss, transaction costs are included in the initial measurement of the instrument. Transaction costs on financial instruments at fair value through profit or loss are recognised in profit or loss.

Subsequent Measurement
Financial instruments at fair value through profit or loss are subsequently measured at fair value, with gains and losses arising from changes in fair value being included in profit or loss for the period.

Net gains or losses on the financial instruments at fair value through profit or loss
Loans and receivables are subsequently measured at amortised cost, using the effective interest method, less accumulated impairment losses.

Available-for-sale financial assets are subsequently measured at fair value
Gains and losses arising from changes in fair value are recognised in other comprehensive income and accumulated in equity until the asset is disposed of or determined to be impaired. Interest on available-for-sale

1 PRESENTATION OF ANNUAL FINANCIAL STATEMENTS (CONTINUED)

financial assets calculated using the effective interest method is recognised in profit or loss as part of other income.

Financial liabilities at amortised cost are subsequently measured at amortised cost, using the effective interest method.

Derecognition
Financial assets are derecognised when the rights to receive cash flows from the investments have expired or have been transferred and the entity has transferred substantially all risks and rewards of ownership.

Financial liabilities (or a part of a financial liability) are derecognised when it is extinguished - i.e. when the obligation specified in the contract is discharged or cancelled or expires.

Impairment of Financial Assets
At each reporting date the entity assesses all financial assets, other than those at fair value through profit or loss, to determine whether there is objective evidence that a financial asset or entity of financial assets has been impaired.

For amounts due to the entity, significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy and default of payments are all considered indicators of impairment.

Impairment losses are recognised in profit or loss
Fair value is based on active market prices, adjusted, if necessary, for any differences in the nature, location or condition of the specific asset. If this information is not available, the company uses alternative valuation methods. Impairment losses are reversed when an increase in the financial asset's recoverable amount can be related objectively to an event occurring after the impairment was recognised, subject to the restriction that the carrying amount of the financial asset at the date that the impairment is reversed shall not exceed what the carrying amount would have been had the impairment not been recognised.

Where financial assets are impaired through use of an allowance account, the amount of the loss is recognised in profit or loss within operating expenses. When such assets are written off, the write off is made against the relevant allowance account.Subsequent recoveries of amounts previously written off are credited against operating expenses.

(a) Loans and Receivables
Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They are included in current assets, except for maturities greater than 12 months after statement of financial position date. These are classified as non-current assets.The entity's loans and receivables comprise 'trade and other receivables' and 'cash and cash equivalents' in the statement of financial position.

1 PRESENTATION OF ANNUAL FINANCIAL STATEMENTS (CONTINUED)

(b) Held-to-maturity Financial Assets

Held-to-maturity financial assets are non-derivative financial assets with fixed or determinable payments and fixed maturities that the entity's management has the positive intention and ability to hold to maturity. If the Entity were to sell other than an insignificant amount of held-to-maturity financial assets, the whole category would be tainted and reclassified as available for sale. Held-to-maturity financial assets are included in non-current assets, except for those with maturities less than 12 months from the financial position date, which are classified as current assets.

Recognition and Measurement

Regular purchases and sales of financial assets are recognised on the trade-date, the date on which the entity commits to purchase or sell the asset. Investments are initially recognised at fair value plus transaction costs. Financial assets are derecognised when the rights to receive cash flows from the investments have expired or have been transferred and the entity has transferred substantially all risks and rewards of ownership. Available-for- sale financial assets are subsequently carried at fair value.

Loans and Receivables are Carried at Amortised Cost Using the Effective Interest Method

Changes in the fair value of monetary and non-monetary securities classified as available-for-sale are recognised in other comprehensive income.

Interest on available-for-sale securities and held-to-maturity financial assets calculated using the effective interest method is recognised in the statement of comprehensive income as part of finance income.

Impairment of Financial Assets

The company assesses at each balance sheet date whether there is objective evidence that a financial asset or entity of financial assets is impaired.

(a) Assets carried at amortised cost

The entity assesses at the end of each reporting period whether there is objective evidence that a financial asset or entity of financial assets is impaired. A financial asset or an entity of financial assets is impaired and impairment losses are incurred only if there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset (a ' loss event') and that a loss event (or events) has an impact on the estimated future cash flows of the financial asset or entity of financial assets that can be reliably estimated.

The entity first assesses whether objective evidence of impairment exists. Where in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised, the reversal of the previously recognised impairment loss is recognised in the statement of comprehensive income. Impairment testing of trade receivables.

Impairment testing of Trade Receivables

The criteria that the entity uses to determine that there is objective evidence of an impairment loss include:

a) Significant financial difficulty of the issuer or obligor;
b) A breach of contract, such as a default or delinquency in interest or principal payments;
c) It becomes probable that the borrower will enter bankruptcy or other financial reorganisation;
d) The disappearance of an active market for that financial asset because of financial difficulties; or

1 PRESENTATION OF ANNUAL FINANCIAL STATEMENTS (CONTINUED)

e) Observable data indicating that there is a measurable decrease in the estimated future cash flows from a portfolio of financial assets since the initial recognition of those assets, although the decrease cannot yet be identified with the individual financial assets in the portfolio, including:
(i) adverse changes in the payment status of borrowers in the portfolio; and
(ii) national or local economic conditions that correlate with defaults on the assets in the portfolio.

1.14 Offsetting Financial Instruments

Where a legally enforceable right exists to set off recognised amounts of financial assets and liabilities and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously, which are in determinable monetary amounts, the relevant financial assets and liabilities are offset. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the company or counterparty.

1.15 Inventories

Inventories comprise of spares and consumables used in purification and maintenance as well as water purchased, but not yet sold at the end of the financial period.

Inventories are stated at the lower of cost and net realisable value. Cost is determined by the average cost method. Net realisable value represents the estimated selling price in the ordinary course of business less any costs of completion and selling expenses. Obsolete and slow moving stock is identified and written off from time to time.

1.16 Trade and Other Receivables

Trade receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment. A provision for impairment of trade receivables is established when there is objective evidence that the entity will not be able to collect all amounts due according to the original terms of the agreement. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganisation, and default or delinquency in payments (to the extent that there is no payment agreement with the Water Services Authority) are considered indicators that the trade receivables are impaired.

1.17 Cash and Cash Equivalents

Cash and cash equivalents includes cash in hand, deposits held at call accounts with banks, other short-term highly liquid investments with original maturities of three months or less and bank overdrafts. Bank overdrafts are shown within borrowings in current liabilities on the statement of financial position.

1.18 Trade and Other Payables

Trade and other payables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method.

1.19 Borrowings

Borrowings are recognised initially at fair value, or net of transaction costs incurred. Borrowings are subsequently stated at amortised cost; any difference between the proceeds (net of transaction costs) and the redemption value is recognised in the statement of comprehensive income over the period of the borrowings using the effective interest method.

1 PRESENTATION OF ANNUAL FINANCIAL STATEMENTS (CONTINUED)

Borrowings are classified as current liabilities unless the entity has an unconditional right to defer settlement of the liability for at least 12 months after the statement of financial position date.

1.20 Provisions

Provisions are recognised when: the entity has a present legal or constructive obligation as a result of past events; it is probable that an outflow of resources will be required to settle the obligation; and the amount has been reliably estimated. Restructuring provisions comprise lease termination penalties and employee termination payments. Provisions are not recognised for future operating losses.

Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pretax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to passage of time is recognised as interest expense.

A contingent liability is a possible obligation that arises from post events and whose existence will only be confirmed by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity or a present obligation that arises from a post event but is not recognised because it is not probable that on outflow of resources embodying economic benefit will be required to settle the obligation or the amount cannot be measured with sufficient reliability.Contingencies are disclosed in note 26.

1.21 Government Grants

Government grants are recognised when there is reasonable assurance that:

- the company will comply with the conditions attaching to them; and
- the grants will be received.

Government grants are recognised as income over the periods necessary to match them with the related costs that they are intended to compensate.

A government grant that becomes receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the entity with no future related costs is recognised as income of the period in which it becomes receivable.

1.22 Other Employee Benefits

(a) Termination Benefits

Termination benefits are payable when employment is terminated by the entity before the normal retirement date, or whenever an employee accepts voluntary redundancy in exchange for these benefits. The entity recognises termination benefits when it is demonstrably committed to a termination when the entity has a detailed formal plan to terminate the employment of current employees without possibility of withdrawal. In the case of an offer made to encourage voluntary redundancy, the termination benefits are measured based on

1 PRESENTATION OF ANNUAL FINANCIAL STATEMENTS (CONTINUED)

the number of employees expected to accept the offer. Benefits falling due more than 12 months after the end of the reporting period are discounted to their present value.

(b) Performance / Incentive Payments, Bonus Plans and Leave Liabilities

The entity recognises a provision where contractually obliged or where there is a past practice that has created a constructive obligation. The entity recognises a liability and an expense for 13th cheque bonuses and accrued leave balances. Annual incentive bonus payments are also made based on a percentage of total salary for each employee.

(c) Long Service Awards

The entity pays its employees a long-service benefit after each five year period of continuous service. The benefit is paid in the month the employee reaches the milestone. The method of accounting and frequency of valuation are similar to those under the defined benefit schemes. The actuarial valuation to determine the liability is performed annually.

1.23 Leases

A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership. A lease is classified as an operating lease if it does not transfer substantially all the risks and rewards incidental to ownership.

Finance Leases – Lessee

Finance leases are recognised as assets and liabilities in the statement of financial position at amounts equal to the fair value of the leased property or, if lower, the present value of the minimum lease payments. The corresponding liability to the lessor is included in the statement of financial position as a finance lease obligation.

The lease payments are apportioned between the finance charge and reduction of the outstanding liability. The finance charge is allocated to each period during the lease term so as to produce a constant periodic rate on the remaining balance of the liability.

Operating Leases - Lessor

Operating lease income is recognised as an income on a straight-line basis over the lease term.

Initial direct costs incurred in negotiating and arranging operating leases are added to the carrying amount of the leased asset and recognised as an expense over the lease term on the same basis as the lease income.

Income for leases is disclosed under revenue in profit or loss.

Operating Leases – Lessee

Operating lease payments are recognised as an expense on a straight-line basis over the lease term. The difference between the amounts recognised as an expense and the contractual payments are recognised as an operating lease asset. This liability is not discounted.

Any contingent rents are expensed in the period they are incurred.

SIGNIFICANT ACCOUNTING POLICIES
FOR THE YEAR ENDED 30 JUNE 2018 (CONTINUED)

1 PRESENTATION OF ANNUAL FINANCIAL STATEMENTS (CONTINUED)

1.24 Irregular Expenditure

Irregular expenditure as defined in section 1 of the PFMA is expenditure other than unauthorised expenditure, incurred incontravention of or that is not in accordance with a requirement of any applicable legislation, including:

(a) This Act; or

(b) The State Tender entity Act, 1968 (Act No. 86 of 1968), or any regulations made in terms of the Act; or

(c) Any provincial legislation providing for procurement procedures in that provincial government.

Irregular expenditure is accounted for as expenditure, and where recovered, it is subsequently accounted for as revenue in the statement of financial performance.

National Treasury practice note no.4 of 2008/2009 which was issued in terms of sections 76(1) to 76(4) of the PFMA requires the following (effective from 1 April 2008).

Irregular expenditure that was incurred and identified during the current financial period and which was condoned before year end and/or before finalisation of the financial statements must also be recorded appropriately in the irregular expenditure register. Insuch an instance, no further action is also required with the exception of updating the note to the financial statements.

Where irregular expenditure was incurred in the previous financial year and is only condoned in the following financial year, the register and the disclosure note to the financial statements must be updated with the amount condoned.

1.25 Fruitless and Wasteful Expenditure

Fruitless expenditure means expenditure which was made in vain and would have been avoided had reasonable care been exercised.

All expenditure relating to fruitless and wasteful expenditure is recognised as an expense in the statement of financial performance in the year that the expenditure was incurred. The expenditure is classified in accordance with the nature of the expense, and where recovered, it is subsequently accounted for as revenue in the statement of financial performance.

1.26 Cash Flow Statement

The cash flow statements of the entity have been prepared based on the direct method.

2 STANDARDS, INTERPRETATIONS AND AMENDMENTS TO PUBLISHED STANDARDS

2.1 Standards and Interpretations Effective and Adopted in the Current Financial Year

No standards or interpretation relevant to Sedibeng Water became effective for the current financial year.

2.2 Standards and Interpretations Early Adopted

The entity has not early adopted any standard.

2.3 Standards and Interpretations Not Yet Effective

Sedibeng Water has historically applied Statement of Generally Accepted Accounting Practice (GAAP) as issued by the Accounting Standard Board (ASB). The statements of GAAP were withdrawn by ASB from December 2012.

ASB allowed Government Business Entities (GBEs) (issued at 1 April 2012), as an interim measure, to continue to apply Statements of GAAP until the ASB has undertaken more extensive research to identify the most appropriate framework.

Statements of GAAP are withdrawn from International Financial Reporting Standards (IFRSs), International Accounting Standards (IASs), Interpretations issued by the International Financial Reporting Interpretations Committee (IFRICs and SICs).Directive 5, as issued by ASB, outlines which of these pronouncements constituted the Statements of GAAP (called the “GAAP Reporting Framework”) at 1 April 2012.

Statements of GAAP as at 1 April 2012 comprise the IFRS's, IAS's, IFRIC's and SIC's, and any amendments thereto, issued by the International ASB or IFRIC up until May 2011.

3 PROPERTY, PLANT AND EQUIPMENT

	2018			2017		
	Cost	Accumulated Depreciation	Carrying Value	Cost	Accumulated Depreciation	Carrying Value
	R'000	R'000	R'000	R'000	R'000	R'000
Land, buildings and improvements	184 431	(11 929)	172 502	183 401	(5 967)	177 433
Plant, machinery and equipment	94 852	(35 047)	59 805	97 886	(29 957)	67 928
Vehicles	82 352	(72 696)	9 657	83 077	(52 693)	30 384
Precipitation and dosing	73 083	(2 193)	70 891	73 083	(1 084)	71 998
Pipelines and reservoirs	2 216 895	(262 559)	1 954 337	2 216 895	(127 018)	2 089 879
Capital - Work in progress	799 945	-	799 945	418 126	-	418 126
Total	**3 451 559**	**(384 423)**	**3 067 137**	**3 072 469**	**(216 719)**	**2 855 749**

Reconciliation of Property, Plant and Equipment - 2018

	Opening Cost	Additions	Additions at Deemed Cost	Write-Off	Depreciation	Total
	R'000	R'000	R'000	R'000	R'000	R'000
Land, buildings and improvements	177 433	1 030	9	-	(5 971)	172 502
Plant, machinery and equipment	67 928	4 614	2 649	(2 653)	(12 733)	59 805
Vehicles	30 384	1 936	149	(413)	(22 400)	9 657
Precipitation and dosing	71 998	-	-	-	(1 108)	70 891
Pipelines and reservoirs	2 089 879	-	-	-	(135 541)	1 954 337
Capital - Work in progress	418 126	381 819	-	-	-	799 945
Total	**2 855 749**	**389 399**	**2 808**	**(3 066)**	**(177 754)**	**3 067 137**

Reconciliation of Property, Plant and Equipment - 2017

	Opening Cost R'000	Additions R'000	Disposals R'000	Prior Period Error R'000	Depreciation R'000	Total R'000
Land, buildings and improvements	171 246	47	-	12 107	(5 966)	177 433
Plant, machinery and equipment	109 202	2 954	-	(35 236)	(8 991)	67 928
Vehicles	48 881	2 333	-	-	(20 830)	30 384
Precipitation and dosing	73 383	-	-	84	(1 469)	71 998
Pipelines and reservoirs	2 368 527	4 342		(155 967)	(127 023)	2 089 879
Capital - Work in progress	142 076	276 050	-	-	-	418 126
Total	**2 913 315**	**285 726**	**-**	**(179 012)**	**(164 279)**	**2 855 749**

Property, Plant and Equipment encumbered as security

The are assets which have been encumbered as security for the secured long-term borrowings in Note 11 and 12. The assets are vehicles with book value of 2018: R 13 35 840 (2017: R 23 196 969). The cost price of fully depreciated assets that are still in use is 2018: R 280 534 (2017: R 563 258)

4 INVESTMENT PROPERTY

	2018			2017		
	Cost/ Valuation R'000	Accumulated Depreciation R'000	Carrying Value R'000	Cost/ Valuation R'000	Accumulated Depreciation R'000	Carrying Value R'000
Investment property	9 050	-	9 050	11 400	-	11 400
	9 050	**-**	**9 050**	**11 400**	**-**	**11 400**

Reconciliation of Investment Property - 2018

	Opening Cost R'000	Fair Value Adjustments R'000	Total R'000
Investment property	11 400	(2 350)	9 050
	11 400	**(2 350)**	**9 050**

Reconciliation of Investment Property - 2017

	Opening Cost R'000	Fair Value Adjustments R'000	Total R'000
Investment property	10 150	1 250	11 400
	10 150	**1 250**	**11 400**

Amounts Recognised in Profit and Loss for the Year	2018	2017
Rental income	**1 855**	**1 510**

The valuation of the investment property was conducted by the qualified property valuators firm called DDP Valuation and Advisory Services with address as P.O.Box 40408, Moreleta Park, 0044.

5 BIOLOGICAL ASSETS

	2018			2017		
	Cost R'000	Accumulated Depreciation R'000	Carrying Value R'000	Cost R'000	Accumulated Depreciation R'000	Carrying Value R'000
Cattle	579	-	579	473	-	473
	579	**-**	**579**	**473**	**-**	**473**

RECONCILIATION OF BIOLOGICAL ASSETS - 30 JUNE 2018

	Opening Cost R'000	Fair Value Adjustments R'000	Total R'000
Biological Assets	473	105	579
Total	**473**	**105**	**579**

RECONCILIATION OF BIOLOGICAL ASSETS - 30 JUNE 2017

	Opening Cost R'000	Fair Value Adjustments R'000	Carrying Value R'000
Biological Assets	241	232	473
Total	**241**	**232**	**473**

Number of Each Biological Asset

Description	2018	2017
Bulls	7	8
Cows	27	30
Oxen	16	6
Calves and heifers	23	12
Total	**73**	**56**

Biological Assets are measured at fair value less the estimated point of sale cost. The fair value of the livestock is determined based on the market price of livestock of a similar age, breed and genetic merit.

6 INTANGIBLE ASSETS

	2018			2017		
	Cost R'000	Accumulated Amortisation R'000	Carrying Value R'000	Cost R'000	Accumulated Amortisation R'000	Carrying Value R'000
Computer software	4 449	(2,876)	1,573	3 684	(1 628)	2 056
Servitudes	1 088	-	1 088	1 088	-	1 088
Project - EDMS	4 581	-	4 581	4 581	-	4 581
Total	**10 118**	**(2,876)**	**7,243**	**9 353**	**(1 628)**	**7 725**

6 INTANGIBLE ASSETS (CONTINUED)

Reconciliation of Intangible Assets - 2018

	Opening Cost R'000	Additions R'000	Disposals R'000	Revaluations R'000	Amortisation R'000	Total R'000
Computer software	2 056	765	-	-	(1,247)	1,574
Servitudes	1,088	-	-	-	-	1 088
Project - EDMS	4 581	-	-	-	-	4 581
Total	**7 725**	**765**	**-**	**-**	**(1,247)**	**7,243**

Reconciliation of Intangible Assets - 2018

	Opening Cost R'000	Additions R'000	Disposals R'000	Revaluations R'000	Amortisation R'000	Total R'000
Computer software	2 825	290	-	-	(1 059)	2 056
Servitudes	1 088	-	-	-	-	1 088
Project - EDMS	-	4 581	-	-	-	4 581
Total	**3 913**	**4 871**	**-**	**-**	**(1 059)**	**7 725**

7 FINANCIAL ASSETS

	Other Financial Assets R'000	Sinking Fund R'000	Insurance Fund R'000	Personnel Investment R'000	Total R'000
Year Ended 30/06/2018					
Opening Balances	34 062	184 963	6 443	1 621	227 089
Additions	6 698	21,868	1 347	648	30 561
	40 760	**206,831**	**7 790**	**2,269**	**257 650**
Year Ended 30/6/2017					
Net book value	31 634	158 905	5 467	1 311	197 317
Additions	2 428	26 058	976	310	29 772
	34 062	**184 963**	**6 443**	**1 621**	**227 089**

The Held-to-Maturity investments are utilised to redeem interest-bearing borrowings on due dates.

		2018 R'000	2017 R'000	2016 R'000	2015 R'000
Name of Institution	**Nature of Business**				
Investec	Bank	70 155	48 325	42 459	36 902
Sanlam	Bank	81 679	-	-	-

The long-term financial assets (coupons) are held by Sanlam South Africa and Investec. Both financial institutions' credit rating by FITCH is AA.

	2018 R'000	2017 R'000
8 INVENTORIES		
Consumables Stores (Cost)	21 549	21 296
Water inventory	2 228	1 890
	23 778	**23 186**
Inventories (write-downs)	(1 425)	(1 089)
	22 353	**22 097**

Inventories are carried consistently to previous years as stated in the accounting policy 1.15.

9 TRADE AND OTHER RECEIVABLES		
Trade receivables	3 615 886	3 030 731
Accrued Income	9 126	-
VAT refundable	116 954	58 542
Other receivables	623 017	581 359
Provision for doubtful debts	(830 312)	(806 826)
	3 534 671	**2 863 124**
Trade and Other Receivables Impaired		
Fully impaired	830 312	806 826
Reconciliation of Provision for Impairment of Trade and Other Receivables:		
Opening balance	806 826	761,826
Bad debt provision for the current year	23 486	45,000
Closing balance	**830 312**	**806 826**

As at 30 June 2018, trade and other receivables of 2018: R830 312 000 (2017: R806 826 000; 2016: R761 825 000) were impaired and provided for. These individually impaired receivables mainly relate to municipalities and end-consumers who are in difficult economic situations.

10 CASH AND CASH EQUIVALENTS

	2018 R'000	2017 R'000
Cash and cash equivalents consist of:		
Cash on hand	73	81
Cash at bank	299 016	332 689
32 day notice	61 140	54 459
	360 229	**387 229**

11 INTEREST-BEARING BORROWINGS

Development Bank of South Africa The loan bears interest at 15.08% and is repayable in installments of R5,513,060 over a period of 18 years commencing on 01/10/2001. The final installment is payable on 30/09/2018. The loans are secured by financial assets with a book value of R 51.5 million (2017: R48.3 million) as set out in Note 7.	4 477	12 464
Sishen Iron Ore Company The loan bears interest at prime minus 2.50% and is repayable in monthly installments of R 702,422 over a period of 10 years .commencing on 31/01/2015 with the last payment on 31/12/2024. The loan is not secured.	42 558	47 423
	47 035	**59 887**
Non-current Liabilities		
Interest-bearing borrowings	34 264	31 038
	34 264	**31 038**
Current Liabilities		
Interest-bearing borrowings	12 771	28 849
	12 771	**28 849**
Totals	**34 264**	**31 038**
Settlement of Interest-Bearing Borrowings		
Payable less than a year	12 771	28 849
Payable between 1 - 5 years	12 121	11 679
Payable over 5 years	22 144	19 359
	47 035	**59 887**

12 FINANCE LEASE LIABILITIES

ABSA BANK	12,890	20 617
	12,890	**20 617**
Non-Current Liabilities		
Finance Lease Liabilities	5,547	14 633
	5,547	**14 633**
Current Liabilities		
Finance Lease Liabilities	7,343	5 984
	7,343	**5 984**
Minimum Lease Payments Due		
Within a year	7,343	5 984
In the second to fifth year inclusive	5,547	14 633
	12,890	**20 617**

It is entity policy to lease certain motor vehicles and equipment under finance leases.

Interest rates are fixed at the contract date. All leases have fixed repayments and no arrangements have been entered into for contingent rent.

The entity's obligations under finance leases are secured by the lessor's charge over the leased assets. Refer Note 3.

13 DEFINED CONTRIBUTION PLANS

The Board has made provision for pension and provident schemes relating to retirement benefit obligations covering all employees substantially.

The funds are governed by the Pension Funds Act, 1956 (Act No. 24 of 1956).

Provident Fund
The provident fund is regulated by the Pension Fund Act of 1956. All permanent employees are compulsory members of the fund. Contributions are paid by the employer at a rate of 8.5% of pensionable remuneration of all members plus cost of administration.

Pension Fund
The pension fund is regulated by the Pension Fund Act of 1956. All permanent employees are compulsory members of the fund. Employees make 8.5% of the contribution. The employer covers the cost of assured benefits, as well as fees for basic administration, consultation and actuarial services.

The plans are funded and interim actuarial valuations are performed regularly with statutory valuations conducted every three (3) years.

14 RETIREMENT BENEFIT OBLIGATION

	2018 R'000	2017 R'000
Present value of the defined benefit obligation - wholly unfunded	**94 725**	**94 720**
	94 725	**94 720**

Employees and continuation and widow(er) members ('CAWMs') of Sedibeng participate on the Community Medical Aid Scheme ('Commed'), Discovery Health Medical Scheme ('Discovery') or Hosmed Medical Scheme ('Hosmed').

Movements for the Year:

Opening balance	94 720	91 403
Re-measurement	(7 795)	(4 888)
Net expense recognised	7 800	8 205
Closing Balance	**94 725**	**94 720**

Net Expense Recognised in Profit or Loss:

Service Costs	2 199	2 462
Interest Costs	9 302	8 839
Contributions	(3 701)	(3 096)
	7 800	**8 205**

Key Assumptions Used:

Assumptions used on last valuation as at 30 June 2018:

Discount rates used	9.91%	10.04%
Expected rate of return on assets	8.15%	8.83%
Expected rate of return on reimbursement rights	6.65%	7.33%
Salary inflation rate	7.65%	8.33%

14 RETIREMENT BENEFIT OBLIGATION (CONTINUED)

Mortality Assumption:

The longevity of members in retirement is an important assumption, dictating the expected length of time over which benefits are paid. The effect of using heavier or lighter mortality assumptions post-employment is shown below:

Assumption	Variation	Change in Past-service Contractual Liability	Change in Service Cost Plus Interest Cost
Post-employment Mortality Rates	PA (90)	-3.8%	-3.9%
	PA (90)-2	+3.9%	+3.9%

The following pre- and post-retirement mortality rates was assumed:

Age	Female	Male
Pre-retirement	SA85-90 (light) with a three-year age reduction	SA85-90 (light)
Post-retirement	PA (90)-1 (females)	PA (90)-1 (males)

Sensitivity Analysis for Health Care Cost Inflation

The effect of a 3% increase and decrease in the health care cost inflation assumption on the contractual liability and the annual expenses is shown below:

Assumption	Variation	Change in Past-service Contractual Liability	Change in Service Cost Plus Interest Cost
Health Care Cost Inflation	+1%	+13.4%	+14.6%
	-1%	-11.3%	-12.3%

Amounts for the current and previous four years are as follows:

	2018 R'000	2017 R'000	2016 R'000	2015 R'000
Defined Benefit Obligation	94 720	89 832	90 790	84 635
Actuarial Gain (Loss) Recognised	5	4 888	613	(137)
	94 725	**94 720**	**91 403**	**84 498**

The projected annual expense including the cost of post-employment contributions payable by the employer for the 2018 financial year is R3,7 million.

15. DEFERRED INCOME

	2018 R'000	2017 R'000
Advance Payments Received for Projects	**724 119**	**290 961**

The payments were received from the Department of Water and Sanitation for the construction of pipelines in the Northern Cape and Namakwa Region. The construction of the respective assets has not been completed. The spending of the money as received has been allocated to Work-in-Progress.

16. LONG SERVICE AWARDS LIABILITY

	2018 R'000	2017 R'000
Long Service Award Liability		
Present value of the obligation	**28 215**	**27 039**
Movements for the Year:		
Opening Balance	**27 039**	**24 188**
Re-measurement	(764)	1 204
Net expense recognised	1 940	1 647
Closing Balance	**28 215**	**27 039**
Net Expense Recognised in Profit or Loss:		
Service Costs	3 168	2 877
Interest Costs	2 163	1 940
Contributions	(3 391)	(3 170)
Closing Balance	**1 940**	**1 647**

Valuation Assumptions and Methodology:
The long service award liabilities have been valued using the Projected Unit Credit discounted cashflow method. This method was used to determine the past-service liabilities at the valuation date and projected annual expense in the year following the valuation date.

16 LONG SERVICE AWARDS LIABILITY (CONTINUED)

Key Assumptions Used:	2018	2017	2016
Assumptions used on the valuation performed as at 30 June 2018:			
Consumer Price Inflation (CPI)	5.85%	6.89%	6.81%
Salary Inflation	6.85%	7.85%	7.81%
Discount rate	8.73%	8.66%	8.63%

The discounted mean term of Sedibeng Water's liability is approximately 6.1 years. The discount rate and CPI have therefore been based on the 6.1 year yield from the South African Zero Coupon Government Bond yield curve as at 30 June 2018, as published by the Bond Exchange of South Africa.The discount rate was set equal to the nominal yield.

The CPI assumption was derived by taking the difference between the nominal yield and real yield. Salary inflation was set at 2% above CPI. for the purpose of this valuation, the real discount rate is either the discount rate (8.73% p.a.) or the discount rate net of salary inflation (1.76% p.a.), depending on the type of award. These two variables have the greatest effect on the liability as even relatively small changes to these assumptions have a relatively large impact on the liabilities. The market values of the bond interest yields are available via subscription.

The following mortality rates were assumed:

Gender	Mortality
Male	SA85-90 (light)
Female	SA85-90 (light) with a three-year age deduction

17 TRADE AND OTHER PAYABLES

	2018 R'000	2017 R'000
Trade Payables	2 089 073	1 730 501
VAT	-	-
Other Payables	399 085	353 447
Special Projects	-	2 471
Accrued Leave Pay	30 991	27 580
Accrued Bonus	7 184	6 321
	2 526 333	**2 120 320**

The Board considers that the carrying amount of trade and other payables approximates to their fair value.

	2018 R'000	2017 R'000
18 REVENUE		
Water Sales	768 001	711 321
Water Sales - Fixed Contribution	356 931	340 235
Equitable Share and Service Delivery Claim	257 399	213 839
Sewage Income	28 620	29 121
Total Revenue	**1 410 951**	**1 294 515**
19 COST OF SALES		
Raw Materials	392 739	365 738
Labour Costs	218 002	206 083
Electricity	173,396	168 240
Purification Costs	47,779	49 578
	831 916	**789 639**
20 OTHER INCOME		
Bad Debts Recovered	2 466	-
Project Income	10 104	48 132
Refurbishment Income	2	-
Interest Income on Accounts Receivable Balances	914	600
Miscellaneous	35 687	28 449
	49 174	**77 180**

Miscellaneous Income includes Sanitation and Refuse Removal, Sale of Tender Document, Bus Service, Electricity Sales, Rental Income Insurance Claims, Purification Income, New Connection Fee, Fuel and Stock Sales and Personal Sale for Telephone etc.

	2018 R'000	2017 R'000

21 OPERATING PROFIT

Operating profit for the year is stated after accounting for the following:

Operating Lease Charges		
Premises		
• Contractual Amounts	595	773
Motor vehicles		
• Contractual Amounts	2,025	1 928
	2,620	**2 701**
Depreciation and Amortisation	179 007	164,275
Employee Costs	159 472	127 337
Bad Debts	23 487	45 000
Security	39,747	30 011
Repairs and Maintenance	66 319	72 315
Purification Costs	47,779	49 578
Electricity	173,396	168 240

	2018 R'000	2017 R'000
22 INVESTMENT INCOME		
Interest from Investments	55 797	67 018
	55 797	**67 018**
23 FINANCE COSTS		
Interest Paid	5 119	6 887
	5 119	**6 887**
24 FAIR VALUE ADJUSTMENTS		
Fair Value Adjustments	(2 245)	1 482
	(2 245)	**1 482**
25 CONSOLIDATED PROFIT		
Free State	49 239	72 596
North West	18 672	20 572
Northern Cape	530	1 333
Namakwa	(16 561)	(17 121)
Mahikeng	12 538	3 127
Cafeteria	(166)	(345)
	64 253	**80 162**

26 TAX

In terms of Section 10 (1)(t)(ix) of the Income Tax Act No.58 of 1962 (read in conjunction with the definition of a Water Services Provider in Section 1), Sedibeng Water is exempt from income tax.

	2018 R'000	2017 R'000
27 AUDIT FEES		
External Audit Fees	8 271	5 648
	8 271	**5 648**
28 CASH GENERATED FROM OPERATIONS		
Net Profit for the Year	64 253	80 162
Adjusted for:		
Depreciation and Amortisation	177,379	164,275
Fair Value Adjustments	(6 314)	(5 166)
Bad Debts	(23 487)	(45 000)
Inventory Adjustments	1,937	3 859
Amortisation of Intangible Assets	1,247	1 058
Interest Received	(55 797)	(39 591)
Finance Costs	5 119	6 887
Recognition of Post-Employment Liability	1 181	6 168
Movements in Provisions	44 913	99 121
Movement in Leave Accrual	3 411	4 248
Movement in Bonus Accrual	863	437
Accruals Reversal	(5 325)	(7 547)
Movement in Accrued Income	(9 126)	-
Revaluation Reserve Remapping		1 851
Changes in Working Capital:		
Inventories	(592)	(416)
Trade and Other Receivables	-	-
Trade and Other Payables	(293 294)	(268 336)
Deferred Income	433 159	223 268
Total Changes in Working Capital	**339 902**	**225 277**
29 COMMITMENTS		
Already contracted for but not provided for:		
- Property, Plant and Equipment	**920 239**	**1 397 448**

This capital expenditure is funded mainly from internally generated funds and the Department of Water and Sanitation (DWS).

30 CONTINGENCIES

Contingent Liabilities

Legal Matters
Sedibeng Water / Matjhabeng Local Municipality

The Matjhabeng Local Municipality has disputed the inclusion of loan repayments and insurance expense in the tariff schedule, the impact of these has been calculated at R300 million as at 30 June 2018. The matter has been referred for arbitration.

Legal proceedings have been instituted against Sedibeng Water and the organisation's legal advisors have advised that they believe Sedibeng Water has reasonable defences and that the probability of loss is minimal. Management's estimate of the organisation's maximum exposure is R6,4 million.

Contingent Asset

Sedibeng Water re-instated water purchases, which resulted to a Value Added Tax (VAT) input claim of R75 million and disclosed herein as a contingent asset. During the current year, invoices relating to raw water purchases were obtained from the Department of Water and Sanitation. The necessary claim will be lodged with the Receiver of Revenue (SARS).

31 RELATED PARTIES

Ultimate Holding Company National Department of Water and Sanitation

Sedibeng Water is 100% controlled by the government of South Africa represented by the Department of Water and Sanitation and constitutes a Schedule 3 B public entity in terms of the Public Finance Management Act. Sedibeng Water purchases Raw Water from DWS. The related party disclosure is required in terms of AC 126: *Related Party Disclosures*.

The related parties of Sedibeng Water consist mainly of directors and key management personnel of Sedibeng Water. Refer to Note 33 for specific details.

Related party transactions

	2018 R'000	2017 R'000
Purchases of Raw water	392 739	365 738
Year-End Payable	(2 069 710)	(1 721 133)
Project Income	(10 104)	(48 132)
Year-End Receivables	235 379	361 646

32 DIRECTORS' EMOLUMENTS

Executive

	Emoluments	Bonuses	Performance Payments	Expense Claims	Other	Total
	R'000	R'000	R'000	R'000	R'000	R'000
YEAR ENDED 30 JUNE 2018						
R.T. Takalani	2 526	165	-	71	94	2 855
M. Shasha	2 087	100	646	158	413	3 344
D.F. Traut	1 463	92	442	206	155	2 358
G.M. Dippenaar	1 538	98	485	175	75	2 371
I.M. Hasenjager	1 652	-	565	467	150	2 834
T.N. Molobye	1 626	118	521	185	1 210	3 659
N.A. Theys	1 458	84	501	210	210	2 463
N.E. Ratshitanga	1 525	91	519	176	68	2 379
M.M. Lebitso	1 841	110	490	82	57	2 580
O.M. Masia	1 367	85	440	283	70	2 246
D. Khumalo	1 450	89	514	32	39	2 124
T. Nteo	1 445	90	522	217	412	2 687
TJ Busakwe	1 313	83	294	43	626	2 358
M.Mokubung*	1 832	-	-	129	24	1 985
Total	**23 062**	**1 207**	**5 937**	**2 433**	**3 603**	**36 242**

* Mr. M. Mokubung was appointed on 1 July 2017.

YEAR ENDED 30 JUNE 2017						
R.T. Takalani	2 526	165	932	403	613	4 638
M. Shasha	1 907	100	605	147	102	2 860
D.F. Traut	1 372	84	459	171	357	2 442
G.M. Dippenaar	1 442	92	497	212	56	2 299
I.M. Hasenjager	1 548	-	536	357	136	2 577
T.N. Molobye	1 530	-	541	277	210	2 558
N.A. Theys	1 367	78	470	247	171	2 332
N.E. Ratshitanga	1 430	85	481	248	71	2 315
M.M. Lebitso	1 454	85	464	269	67	2 339
O.M. Masia	1 282	80	429	303	51	2 144
D. Khumalo	1 362	82	464	57	33	1 999
T. Nteo	1 347	83	452	233	72	2 187
Total	**18 566**	**934**	**6 330**	**2 922**	**1 939**	**30 690**

32 DIRECTORS' EMOLUMENTS (CONTINUED)

Non-executive

	Remuneration R'000	Expense Claims R'000	Total R'000
YEAR ENDED 30 JUNE 2018			
Board Members			
M. Dikoko (Chairperson)	1 527	181	1 708
E. Gaborone	390	72	463
C. Mboweni	472	117	589
M. Mthombeni	635	127	762
P. Molokwane	688	68	756
K. Sereko	451	130	581
Total	**4 163**	**696**	**4 859**
YEAR ENDED 30 JUNE 2017			
Board Members			
M. Dikoko (Chairperson)	1 763	207	1 970
M. Ramataboe	383	35	418
E. Gaborone	459	78	537
G. Ramakarane	381	51	432
C. Mboweni	509	120	629
M. Mthombeni	430	59	489
P. Molokwane	491	48	539
S. Kholong	327	26	353
K. Sereko	374	54	428
Total	**5 117**	**678**	**5 795**

33 COMPARATIVES FIGURES

The comparative figures have in certain instances been restated as disclosed to accommodate new disclosure requirements.

34 CATEGORIES OF FINANCIAL INSTRUMENTS

	Note(s)	Financial Liabilities at Armotised cost R'000	Financial Assets at Amortised Cost R'000	Financial Assets at Fair Value through Profitor Loss R'000	Equity and Non-financial Assets and Liabilities R'000	Total R'000
Categories of Financial Instruments - 30 June 2018						
ASSETS						
Non-current Assets						
Property, Plant and Equipment	3	-	-	-	3 067 137	3 067 137
Investment property	4	-	-	-	9 050	9 050
Biological Assets	3	-	-	-	579	579
Intangible Assets	6	-	-	-	7,243	7,243
Financial Assets	7	-	-	257 650	-	257 650
Total Non-current Assets		**-**	**-**	**257 650**	**3 084 009**	**3 341 658**
Current Assets						
Inventories	8	-	-	-	22 353	22 353
Trade and Other Receivables	9	-	3 534 669	-	-	3 534 669
Cash and Cash Equivalents	10	-	-	360 229	-	360 229
Total Current Assets		**-**	**3 534 669**	**360 229**	**-**	**3 917 251**
Total Assets		**-**	**3 534 669**	**617 879**	**3 084 009**	**7 258 911**

34 CATEGORIES OF FINANCIAL INSTRUMENTS (CONTINUED)

	Note(s)	Financial Liabilities at Armotised cost R'000	Financial Assets at Amortised Cost R'000	Financial Assets at Fair Value through Profit or Loss R'000	Equity and Non-financial Assets and Liabilities R'000	Total R'000
Categories of Financial Instruments - 2018 (continued)						
EQUITY AND LIABILITIES						
Equity						
Reserves		-	-	-	2 308 972	2 308 972
Retained Income		-	-	-	1 516 621	1 516 621
Total Equity		**-**	**-**	**-**	**3 825 593**	**3 825 593**
Liabilities						
Non-current Liabilities						
Interest-bearing Borrowings	11	34 264	-		-	34 264
Finance Lease Liabilities	12	5 547	-		-	5,547
Retirement Benefit Obligation	14	-	-		94 725	94 725
Deferred Income		-	-		724 119	724 119
Long Service Awards Liability	15	-	-		28 215	28 215
Total Non-current Liabilities		**39 811**	**-**	**-**	**847 059**	**886 871**
Current Liabilities						
Trade and Other Payables	17	-	2 526 333		-	2 526 333
Interest-bearing Borrowings	11	-	12 771		-	12 771
Finance Lease Liabilities	12	-	7 343		-	7,343
Total Current Liabilities		**-**	**2 546 447**	**-**	**-**	**2 546 447**
Total Equity and Liabilities		**-**	**2 586 258**	**-**	**4 672 652**	**7 258 911**

34 CATEGORIES OF FINANCIAL INSTRUMENTS (CONTINUED)

	Note(s)	Financial Liabilities at Armotised cost R'000	Financial Assets at Amortised Cost R'000	Financial Assets at Fair Value through Profit or Loss R'000	Equity and Non-financial Assets and Liabilities R'000	Total R'000
Categories of Financial Instruments - 2017						
ASSETS						
Non-current Assets						
Property, Plant and Equipment	5	-	-	-	2 855 749	2 855 749
Investment Property	4	-	-	-	11 400	11 400
Biological Assets	3	-	-	-	473	473
Intangible Assets	6	-	-	-	7 725	7 725
Financial Assets	7	-	-	227 089		227 089
Total Non-current Assets		**-**	**-**	**227 089**	**2 875 347**	**3 102 435**
Current Assets						
Inventories	8	-	-	-	22 097	22 097
Trade and Other Receivables	9	-	2 796 161	-	-	2 796 161
Cash and Cash Equivalents	10	-	-	387 229	-	387 229
Total Current Assets		**-**	**2 796 161**	**387 229**	**-**	**3 205 486**
Total Assets		**-**	**2 796 161**	**614 317**	**2 873 696**	**6 306 272**

34 CATEGORIES OF FINANCIAL INSTRUMENTS (CONTINUED)

	Note(s)	Financial Liabilities at Armotised cost R'000	Financial Assets at Amortised Cost R'000	Financial Assets at Fair Value through Profit or Loss R'000	Equity and Non-financial Assets and Liabilities R'000	Total R'000
Categories of Financial Instruments - 2017 (continued)						
EQUITY AND LIABILITIES						
Equity						
Reserves		-	-	-	2 308 972	2 308 972
Retained Income		-	-	-	1 458 289	1 458 289
Total Equity		**-**	**-**	**-**	**3 767 261**	**3 767 261**
Liabilities						
Non-current Liabilities						
Interest-Bearing Borrowings	11	31 038	-	-	-	31 038
Finance Lease Liabilities	12	14 633	-	-	-	14 633
Retirement Benefit Obligation	14	-	-	-	94 720	94 720
Deferred Income		-	-	-	265 050	265 050
Long Service Award Liability	15	-	-	-	27 039	27 039
Total Non-current Liabilities		**45 671**	**-**	**-**	**386 809**	**432 480**
Current Liabilities						
Trade and Other Payables	11	2 070 959	-	-	-	2 070 959
Interest-bearing Borrowings	11	28 849	-	-	-	28 849
Finance Lease Liabilities		5 984	-	-	-	5 984
Provisions	16	-	-	-	739	739
Total Current Liabilities		**2 105 792**	**-**	**-**	**739**	**2 106 531**
Total Equity and Liabilities		**2 151 463**	**-**	**-**	**4 154 809**	**6 306 273**

35 RISK MANAGEMENT

Capital Risk Management

The entity's main objective when managing the capital risk is to ensure that the entity has the ability to continue as a going concern in the foreseeable future and maintain optimal capital structure. The Capital Investments are financed through section 5B of the DoRA Act, including external borrowings, together with cash generated from operations. The entity uses internal gearing ratio, which is approved by the Board. This internal ratio establishes levels of debt that the entity should not exceed other than for relatively short periods of time.

Capital investments are financed from within without external borrowings in order to maintain the capital structure. The organisation monitors capital on the basis of gearing ratio which reflects the strength of the statement of financial position.

There have been no changes to what the entity manages as capital, the strategy for capital maintenance or externally imposed capital requirements from the previous year.

The gearing ratios at 30 June 2018 and 30 June 2017 respectively were as follows:

	2018 R'000	2017 R'000
Gearing Ratio	23%	11%

Liquidity Risk

Liquidity risk is the risk that the entity will not be able to meet its financial obligations as they fall due.

The entity's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities, when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the entity's reputation.

Adequate reserves, liquid resources and unutilised borrowing facilities are also maintained.

Cash Flow and Fair Value Interest Rate Risk

The entity is exposed to interest rate risks in South Africa. The entity does not make use of interest rate derivatives. The entity's interest rate risk arises from long term investments and borrowings.

The entity manages its interest rate by maintaining an appropriate mix between fixed and floating interest rate borrowings and investments.

35 RISK MANAGEMENT (CONTINUED)

Fair Values

The entity's financial instruments consist mainly of cash and cash equivalents, trade receivables, investments, trade payables and interest bearing borrowings.

No financial asset was carried at an amount in excess of its fair value and fair values could be reliably measured for all financial assets that are available-for-sale.

The following methods and assumptions are used to determine the fair value of each class of financial instruments:

Cash and Cash Equivalents

The carrying amount of cash and cash equivalents approximates fair value due to the relatively short-term maturity of these financial assets and financial liabilities.

Trade Receivables

The carrying amount of trade receivables, net of provision for impairment, is approximately the fair value due to the relatively short term maturity of this financial asset.

Investments

The fair value of debt securities is determined using a discounted cash flow method. Other investments, such as long term cash and cash equivalent balances are carried at face value in the statement of financial position. The carrying value of these financial assets approximate their fair value due to the instruments being exposed to variable market-related interest rates.

Trade Payables

The carrying amount of trade payables approximates fair value due to the relatively short-term maturity of the financial liability.

Interest-bearing Borrowings

The fair value of interest-bearing borrowings is determined using a discounted cash flow method. The fair value of interest bearing borrowings with variable interest rates approximates their carrying amounts.

Credit Risk

Financial assets, which potentially subject the entity to the risk of non-performance by counter-parties and thereby subject the entity to concentrations of credit risk, consist mainly of cash and cash equivalents, deposits with financial institutions and trade receivables. Credit risk is controlled through the application of credit approvals, limits and monitoring procedures. Where necessary, the entity obtains appropriate collateral to mitigate risk.

35 RISK MANAGEMENT (CONTINUED)

The entity limits its treasury counter-party exposure by only dealing with well-established financial institutions with high credit ratings. The entity's exposure and the credit ratings of its treasury counter-parties are continuously monitored and the aggregate value of transactions concluded is spread amongst approved counter-parties. The entity does not expect any treasury counter-parties to fail to meet their obligations, given their high credit rating.

Credit risk with respect to trade receivables is limited due to the large number of customers comprising the entity's customer base and their dispersion across different industries and geographical areas. However, a large portion of the entity's customers comprise of municipalities and rural area end-user consumers, who are in difficult economic situations. Accordingly, the Board does not consider there to be any concentration of credit risk, which has not been adequately provided for. Trade receivables are presented net of provision for impairment.

Currency Risk
The entity is not exposed to currency risk.

The entity reviews its foreign currency exposure, including commitments on an ongoing basis. The company expects its foreign exchange contracts to hedge foreign exchange exposure.

Price Risk
The entity is exposed to equity securities price risk because of investments held by the entity and classified on the statement of financial position as available for sale or held-to-maturity. To manage its price risk arising from investments, the Board diversifies its portfolio.

None of the financial assets that are fully performing has been renegotiated in the last year.

The entity is not exposed to commodity price risk.

36 GOING CONCERN

The annual financial statements have been prepared on the basis of accounting policies applicable to a going concern. This basis presumes that funds will be available to finance future operations and that the realisation of assets and settlement of liabilities, contingent obligations and commitments will occur in the ordinary course of business.

37 EVENTS AFTER REPORTING PERIOD

There are no events after reporting period.

	2018 R'000	2017 R'000
38 FRUITLESS AND WASTEFUL EXPENDITURE		
Fruitless and Wasteful Expenditure Incurred:		
Opening Balance	563	-
Current Year Movements	597	703
Condoned by the Board	-	-140
	1 160	**563**

The expenditure had its origin due to the late payment of certain suppliers. The amount has not been condoned.

39 IRREGULAR EXPENDITURE		
Irregular expenditure incurred:		
Restated Opening Balance	154 205	10 900
Current Year Movements	94 916	143 305
Condoned by Board	(19 448)	-
	229 673	**154 205**

The irregular expenditure occurred from non-compliance with the procurement processes. The transactions have not been condoned by the Accounting Authority pending the normal process to investigate such.

40 PRIOR PERIOD ERRORS

During the prior year financial statements preparation the following errors had occurred:

1. Property, Plant and Equipment vs Revaluation Surplus and Other Operating Expenses

The calculation for the fair value adjustment which was opening balances for assets had errors which occurred. New calculations were since obtained and the effect of the new figures were recorded into the accounts. The depreciation effect of the correction was also taken into account as follows:

	2017 R'000	2016 R'000
EFFECT IN THE STATEMENT OF PROFIT OR LOSS		
Effect in Profit or Loss		
Decrease in Other Operating Expenses	13 654	-
Net Effect in Profit or Loss	**13 654**	**-**

40 PRIOR PERIOD ERRORS (CONTINUED)

	2017 R'000	2016 R'000
EFFECT IN STATEMENT OF FINANCIAL POSITION		
Effect in Assets		
Decrease in Property, Plant and Equipment	165 364	-
Net Effect in Total Assets	**165 364**	**-**
Effect in Equity		
Decrease in Revaluation Surplus	(179 018)	-
Increase in Retained Income	13 654	-
Net Effect in Total Equity	**(165 364)**	**-**

2. Trade and Other Receivables vs Revaluation Surplus

In the prior year, an amount of R 21 million relating to capitalised assets was incorrectly included in Trade and Other Receivables instead of Revaluation Surplus. This error was overstating assets and reserves. The error was corrected by moving the amount to Revaluation Surplus account.

The effect of the correction is as follows:

EFFECT IN THE STATEMENT OF PROFIT OR LOSS		
Effect in Profit or Loss		
There was no effect of this error in profit or loss.		
EFFECT IN STATEMENT OF FINANCIAL POSITION		
Effect in Assets		
Decrease in Trade and Other Receivables	(21 176)	-
Net Effect in Total Assets	**(21 176)**	**-**
Effect in Equity		
Decrease in Revaluation Surplus	(21 176)	-
Net Effect in Total Equity	**(21 176)**	**-**

3. Receivables vs Payables - Re-classification

There was a re-classification journal processed in the prior year. This was reclassification from Receivables to Payables. The amounts that were within this re-classification have errors which were raised in the prior year audit. These entries were not accounted for correctly which lead to the audit findings. To correct the error, we processed entries amounting to R66 million within the Receivables account.

40 PRIOR PERIOD ERRORS (CONTINUED)

The effect of the correction of this error is as follows:

	2017 R'000	2016 R'000
EFFECT IN THE STATEMENT OF PROFIT OR LOSS		
Effect in Profit or Loss		
There was no effect of this error in profit or loss.		
EFFECT IN STATEMENT OF FINANCIAL POSITION		
Effect in Assets		
Decrease in Trade and Other Receivables	(16 346)	-
Net Effect in Total Assets	**(16 346)**	**-**
Effect in Liabilities		
Decrease in Trade and Other Payables	16 346	-
Net Effect in Total Liabilities	**16 346**	**-**

4. Receivables vs Payables – Re-mapping

On examination of prior year account allocation to account balances, it was discovered that Payables with a balance of R 3.6 million was incorrectly included under Receivables instead of Payables. This account is a liability as it recognises the monies invested by the entity on behalf of its employees. The error was corrected by allocating this account to Payables through mapping. No physical journal was done for this error.

The effect of the correction of this error is as follows:

EFFECT IN THE STATEMENT OF PROFIT OR LOSS		
Effect in Profit or Loss		
There was no effect of this error in profit or loss.		
EFFECT IN STATEMENT OF FINANCIAL POSITION		
Effect in Assets		
Decrease in Trade and Other Receivables	(3 660)	-
Net Effect in Total Assets	**(3 660)**	**-**
Effect in Liabilities		
Decrease in Trade and Other Payables	3 660	-
Net Effect in Total Liabilities	**3 660**	**-**

40 PRIOR PERIOD ERRORS (CONTINUED)

5. Reserves vs Retained Income vs Investment Income and Other Operating Expenses

Accounting policy note no. 1.13 states that financial instrument at fair value through profit or loss are subsequently measured at fair value, with gains and losses arising from changes in fair value being included in profit or loss for the period. In the prior prior year, the entity has applied reserve accounting for the measuring the interest and bank charges on the investments.

There were accounts which were included in Reserves instead of Retained Income. These accounts relate to retained income accounts. Therefore, Revaluation Surplus was overstated with Retained Income understated by R 132 million.

The errors were corrected by recognising the interest and bank charges through the income statement and accumulated surplus on the year affected as far as its practical to correct and remapping the accounts to Retained Income.

The effect of the correction is as follows:

	2017 R'000	2016 R'000
EFFECT IN THE STATEMENT OF PROFIT OR LOSS		
Effect in Profit or Loss		
Increase in Investment Income	311	-
Increase in Other Operating Expenses	(2)	-
Net Effect in Profit or Loss	**309**	**-**
EFFECT IN THE STATEMENT OF FINANCIAL POSITION		
Effect in Equity		
Increase in Retained Income	309	80 904
Decrease in Other Reserves	(309)	(80 904)
Net Effect in Total Equity	**-**	**-**
Effect in Equity		
Increase in Retained Income	26 805	208 135
Decrease in Sinking Fund Reserve	(26 805)	(208 135)
Net Effect in Total Equity	**-**	**-**
Effect in Equity		
Increase in Retained Income	132 380	-
Decrease in Other Reserves	(132 380)	-
Net Effect in Total Equity	**-**	**-**

40 PRIOR PERIOD ERRORS (CONTINUED)

6. Revaluation Surplus vs Other Operating Expenses

In the prior year, R 1.8 million that related to Revaluation Surplus was included under Repairs and Maintenance.

The error was corrected by re-mapping the account to Revaluation Surplus without processing any journal. The effect of the remapping done, is as follows:

	2017 R'000	2016 R'000
EFFECT IN THE STATEMENT OF PROFIT OR LOSS		
Effect in Profit or Loss		
Increase in Other Operating Expenses	(1 851)	-
Net Effect in Profit or Loss	**(1 851)**	**-**
EFFECT IN STATEMENT OF FINANCIAL POSITION		
Effect in Equity		
Increase in Revaluation Surplus	1 851	-
Decrease in Retained Income	(1 851)	-
Net Effect in Total Equity	**-**	**-**

7. Reversal of Own Revenue

Based on past practice, it was discovered that the entity bills revenue for its own meter readings on a monthly basis. This process is done through raising an invoice to itself which recognises revenue as if a sale was made.

The error was corrected through reversing the invoices raised to the entity using a credit note. The effect of this error is as follows:

EFFECT IN THE STATEMENT OF PROFIT OR LOSS		
Effect in Profit or Loss		
Decrease in Revenue	(65)	-
Net Effect in Profit or Loss	**(65)**	**-**
EFFECT IN STATEMENT OF FINANCIAL POSITION		
Effect in Liabilities		
Decrease in Inter-company Debtors	74	
Decrease in VAT Output	(9)	-
Net Effect in Total Liabilities	**(65)**	**-**

40 PRIOR PERIOD ERRORS (CONTINUED)

	2017 R'000	2016 R'000
Effect in Equity		
Decrease in Retained Income	(65)	-
Net Effect in Total Equity	**(65)**	**-**

8. Cash Sales vs Trade and Other Payables

In the prior year, it was discovered that Cash Sales amounting to R 4 million were incorrectly recognised under Unallocated Payments in Payables instead of Recognising Sales. This resulted in overstating of Payables and understating of Revenue by the amount. The error was corrected by recognising the sales.

The effect of the correction of the error is as follows:

EFFECT IN THE STATEMENT OF PROFIT OR LOSS		
Effect in Profit or Loss		
Increase in Revenue	3 125	-
Net Effect in Profit or Loss	**3 125**	**-**
EFFECT IN STATEMENT OF FINANCIAL POSITION		
Effect in Liabilities		
Decrease in Trade and Other Payables	3 125	-
Net Effect in Liabilities	**3 125**	**-**
Effect in Equity		
Increase in Retained Income	(3 125)	-
Net Effect in Total Equity	**(3 125)**	**-**

9. Cost of Sales vs Trade and Other Payables

Based on the review of the Raw Water Purchases account in Cost of Sales, it was discovered that it was understated by R 17 million. Furthermore, ESKOM debit orders were not recognised as expense amounting to R 3.5 million (R 1.6 million in 2017 and R 1.9 million in 2016) resulting in an understatement of Cost of Sales and understatement of Payables.

The effect of the correcting of the error is as follows:

EFFECT IN THE STATEMENT OF PROFIT OR LOSS		
Effect in Profit or Loss		
Increase in Cost of Sales	(19 043)	-
Net Effect in Profit or Loss	**(19 043)**	**-**

40 PRIOR PERIOD ERRORS (CONTINUED)

	2017 R'000	2016 R'000
EFFECT IN STATEMENT OF FINANCIAL POSITION		
Effect in Liabilities		
Increase in Trade and Other Payables	(19 043)	1 994
Net Effect in Total Liabilities	**(19 043)**	**1 994**
Effect in Equity		
Decrease in Retained Income	19 043	(1 994)
Net Effect in Total Equity	**19 043**	**(1 994)**

10. Cost of Sales and Other Operating Expenses vs Trade and Other Payables

Based on the audit findings raised during the audit, it was discovered that the accrual listing was over-stated as it included duplicated expenses. This resulted in an overstatement in Expenses and Payables. The accrual listing was since reversed and a new accrual listing was provided for to restate the accruals.

The effect of the correcting of the error is as follows:

EFFECT IN THE STATEMENT OF PROFIT OR LOSS		
Effect in Profit or Loss		
Decrease in Cost of Sales	432	-
Decrease in Other Operating Expenses	1 537	-
Net Effect in Profit or Loss	**1 969**	**-**
EFFECT IN STATEMENT OF FINANCIAL POSITION		
Effect in Liabilities		
Decrease in Trade and Other Payables	1 969	-
Net Effect in Total Liabilities	**1 969**	**-**
Effect in Equity		
Increase in Retained Income	(1 969)	-
Net Effect in Total Equity	**(1 969)**	**-**

11. Other Operating Income vs Other Operating Expenses

On analysis of the Trial Balance Mapping of income accounts mapped under expenses and expense accounts mapped under income, it was found that there was a mismatch between Other Operating Income Mapping and Other Operating Expenses, whereby Other Operating Income and Other Operating Expenses were both understated by R 2.2 million where the mapping of the accounts were inappropriate - thereby, distorting the actual amounts that should have been presented. These accounts were since re-mapped to their respective account groups to reflect the balances correctly.

40 PRIOR PERIOD ERRORS (CONTINUED)

The effect of the correction of the error is as follows:

	2017 R'000	2016 R'000
EFFECT IN STATEMENT OF PROFIT OR LOSS		
Effect in Profit or Loss		
Increase in Other Operating Income	2 247	-
Increase in Other Operating Expenses	(2 247)	-
Net Effect in Profit or Loss	**-**	**-**

EFFECT IN STATEMENT OF FINANCIAL POSITION

There was no effect of this prior period error in the statement of financial position.

12. Clearing of Long Outstanding Accounts

On analysis of accounts in the trial balances, old accounts were identified. These accounts were brought into the books when Sedibeng Water took over other existing water boards. These amounts remained in the balances of accounts payable and accounts receivables for a period of more than 3 years and could not be substantiated. A decision was taken to write these off to the income statement as part of prior period error.

The effect of the correcting of the error is as follows:

EFFECT IN STATEMENT OF PROFIT OR LOSS		
Effect in Profit or Loss		
Increase in Other Operating Income	133	-
Increase in Other Operating Expenses	(2 001)	-
Net Effect in Profit or Loss	**(1 868)**	**-**
EFFECT IN STATEMENT OF FINANCIAL POSITION		
Effect in Liabilities		
Increase in Trade and Other Payables	(1 868)	-
Net Effect in Total Liabilities	**(1 868)**	**-**
Effect in Equity		
Decrease in Retained Income	1 868	-
Net Effect in Total Equity	**1 868**	**-**

13. Trade and Other Payables (Inter-companies) vs Retained Income

The Inter-companies balances for 30 June 2016 had an imbalance. This amount caused Inter-companies not to balance to RNIL as they should.

40 PRIOR PERIOD ERRORS (CONTINUED)

The imbalance was then corrected and the effect is as follows:

	2017 R'000	2016 R'000
EFFECT IN THE STATEMENT OF PROFIT OR LOSS		
Effect in Profit or Loss		
There is no profit or loss effect as a result of the correction of this error.		
EFFECT IN STATEMENT OF FINANCIAL POSITION		
Effect in Liabilities		
Increase in Trade and Other Payables	-	597
Net Effect in Total Liabilities	**-**	**597**
Effect in Equity		
Decrease in Retained Income	-	(597)
Net Effect in Total Equity	**-**	**(597)**

14. Fair Value Adjustment vs Other Operating Expenses (Employee Cost)

The remeasurements on the defined benefit liability (Retirement Benefit Obligation and Long Service Award Liability) was included under Profit and Loss instead of Other Comprehensive Income. IAS 19 paragraph 120 (c) states that: " An entity shall recognise the components of defined benefit cost that the component, remeasurements of the net defined benefit liability in other comprehensive income." Furthermore, the total remeasurement for the Retirement Benefit Obligation was incorrectly recorded as a positive instead of a negative. This resulted in the fair value adjustments being distorted into an expense instead of income.

The error was since corrected retrospectively by opening new accounts with the 456 account codes to record the remeasurements as per the valuation reports.

The effect of the journals processed, is as follows:

EFFECT IN STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME		
Effect in Profit or Loss		
Increase in Fair Value Adjustment	6 092	-
Increase in Employee Costs	(9 776)	-
Net Effect in Profit or Loss	**(3 684)**	**-**
Effect in Other Comprehensive Income		
Increase in Remeasurements	3 684	-
Net Effect in Other Comprehensive Income	3 684	-
Net Effect in Total Comprehensive Income	**-**	**-**

40 PRIOR PERIOD ERRORS (CONTINUED)

	2017 R'000	2016 R'000
EFFECT IN STATEMENT OF FINANCIAL POSITION		
There was no effect of this prior period error in the statement of financial position.		

15. Employee Cost vs Other Operating Expenses

During the prior year the long service awards was included in Other Operating Expenses instead of Employee Costs. There were other accounts which were included in other expenses for compensation commissioner and claims. This error was understating Employee Costs and over stating Other Operating Expenses.

The error was corrected by remapping the all the affected accounts in Employee Costs. There was no journal that was processed in the system to this effect.

EFFECT IN THE STATEMENT OF PROFIT OR LOSS		
Effect in Profit or Loss		
Increase in Other Operating Expenses (Employee Costs)	(673)	-
Decrease in Other Operating Expenses (General Expenses)	673	-
Net Effect in Total Liabilities	**-**	**-**

EFFECT IN STATEMENT OF FINANCIAL POSITION		
There was no effect of this prior period error in the statement of financial position.		

16. Provisions vs Trade and Other Payables

The accrual for water purchases for Mahikeng was mapped under provisions (separate line) on the face of the Statement of Financial Position instead of being grouped with accruals under Trade and Other Payables. A reclassification entry has since been done to move the balances to Trade and Other Payables. No journal was processed to this effect - A re-mapping was done from provision to Trade and Other Payables to correct the error.

The effect of the correction of the error is as follows:

EFFECT IN THE STATEMENT OF PROFIT OR LOSS		
Effect in Profit or Loss		
There was no effect of this error in profit or loss.		

EFFECT IN STATEMENT OF FINANCIAL POSITION		
Effect in Liabilities		
Increase in Trade and Other Payables	(739)	-
Decrease in Provisions	739	-
Net Effect in Total Liabilities	**-**	**-**

40 PRIOR PERIOD ERRORS (CONTINUED)

17. Amount Previously Reported on Opening Retained Income

On analysis of the statement of Changes in Equity, it was noted that the amount recorded as opening Retained Income did not agree to the trial balance.

The amount previously reported on 2017 annual report	**954 159**
ADD: Prior period error adjustments affecting retained income	418 827
Therefore, the balance reported after the adjustment (R 954 159 + R 418 827)	**1 372 986**
COMPARE with: The amount per Trial Balance on the system	**1 372 205**
Mis-match on the reported figures in the annual report (R 1372 986 - R 1 372 205)	**(781)**
Therefore, the error was corrected by reporting the previosly reported figure as (R 954 159 - R 781)	**953 378**

The correction of this error only affects the statement of changes in equity opening balances.

18. Other Operating Income vs Other Operating Expenses

During the prior year the administration and management fee income from O & M was included in Other Operating Expenses instead of Other Operating Income. This error was overstating Other Operating Expenses and understating Other Operating Income. The error was corrected by re-mapping the affected account to Revenue with no actual journal being processed into the system as this error related to mapping not neccesarily the amount reflected as audited.

The effect of the correction of this error is as follows:

	2017 R'000	2016 R'000
EFFECT IN STATEMENT OF PROFIT OR LOSS		
Effect in Profit or Loss		
Increase in Other Operating Income	9 517	-
Increase in Other Operating Income	(9 517)	-
Net Effect in Profit or Loss	**-**	**-**

EFFECT IN STATEMENT OF FINANCIAL POSITION

There was no effect of this prior period error in the statement of financial position.

19. Restatement of disclosure items

In the prior year, it was noted the disclosures were not complete. We have revisited the population for the disclosures and have thus included the completed amounts in this years prior year disclosure.

40 PRIOR PERIOD ERRORS (CONTINUED)

	2017 R'000	2016 R'000
Herewith are the following disclosures with restated opening balalances restatement amounts:		
Irregular Expenditure	9 078	-

20. Employee Costs vs Cost of Sales

In the prior year, it was noted that accounts for Employee Costs relating to Shared Services were included as part of Cost of Sales in error. This error was overstating the Cost of Sales and understating Employee Costs. The error was corrected by mapping the Shared Services accounts under Employee Cost.

The effect of the correction of the error is as follows:

EFFECT IN STATEMENT OF PROFIT OR LOSS		
Effect in Profit or Loss		
Decrease in Cost of Sales	1 963	-
Increase in Other Operating Expenses	(1 963)	-
Net Effect in Total Liabilities	**-**	**-**

EFFECT IN STATEMENT OF FINANCIAL POSITION

There was no effect of this prior period error in the statement of financial position.

21. Change in the Grant from the Department of Water and Sanitation (DWS) in respect of Capital Projects: Namakwa and Vaal Gamagara

During the previous financial year, the Department of Water and Sanitation changed the grant funding.

EFFECT IN STATEMENT OF PROFIT OR LOSS		
Effect in Profit or Loss		
Decrease in Project Income	22 729	-
Decrease in Project Expenses - Capitalised to Work in Progress	(18 023)	-
Net Effect in Profit or Loss	**4 706**	**-**
EFFECT IN STATEMENT OF FINANCIAL POSITION		
Effect in Assets and Liabilities		
Increase in Work in Progress	1 649	-
Increase in Accounts Receivable	16 963	-
Increase in Accounts Payables	(23 318)	-
	(4 706)	**-**

NOTES

HEAD OFFICE
Protea Street, Balkfontein, Bothaville, 9660
Private Bag X5, Bothaville, 9660, South Africa
Tel: +27 56 515 0200 / Fax: +27 56 515 0369
GPS Co-ordinates: S27° 24.103' E26° 30.299'

REGIONAL & DISTRICT OFFICES

VIRGINIA (FREE STATE REGION)
P.O. Box 518, Virginia, 9430 / GPS Co-ordinates: S28° 05.561' E26° 50.804'
Tel: +27 74 142 0073, +27 74 159 6091 or +27 57 237 2300 / Fax: +27 57 237 2340

HARTSWATER (NORTH WEST REGION)
Private Bag X2, Hartswater, 8570 / GPS Co-ordinates: S27° 45.412' E24° 47.522'
Tel: +27 53 474 0103/0142 / Fax: +27 53 474 0334

MOTHIBISTAD (NORTH WEST REGION)
P.O. Box 386, Mothibistad, 8474 / GPS Co-ordinates: S27° 24.552' E23° 28.960'
Tel: +27 53 773 1009 / Fax: +27 53 773 1221

TAUNG (NORTH WEST REGION)
P.O. Box 2073, Taung Station, 8580 / GPS Co-ordinates: S27° 24.771' E24° 42.698'
Taung Cash point: Tel: +27 53 994 1582 / Fax: +27 53 994 2538
Taung District office: +27 87 285 4540
Pudumong Cashier Office: 072 104 1508
Pampierstad Cashier Office: 053 996 2707

MMABATHO (NORTH WEST REGION)
P.O. Box 4500, Mmabatho, 2735 / GPS Co-ordinates: S25° 50.161' E25° 36.556'
Tel: +27 18 392 3941/3 or +27 18 392 2047/50 / Fax: +27 18 392 2827

GANYESA (NORTH WEST REGION)
Private Bag X523, Ganyesa, 8613 / GPS Co-ordinates: S26° 36.043' E24° 11.336'
Tel: +27 87 285 5238 / Fax: +27 87 285 5238

LEHURUTSHE (NORTH WEST REGION)
P.O. Box 58, Mahikeng, 2745 / GPS Co-ordinates: S25° 29.996' E25° 59.366'
Tel: +27 18 363 3342 or +27 18 363 4102/ Fax: +27 18 363 3338

MONTSHIOA (NORTH WEST REGION)
P.O. Box 58, Montshioa, Mahikeng, 2745 / GPS Co-ordinates: S25° 50.966' E25° 37.761'
Tel: +27 18 384 2951/3 or +27 18 384 5612 / Fax: +27 18 392 2827

VAAL GAMAGARA (NORTHERN CAPE REGION)
Private Bag X1, Delportshoop, 8377 / GPS Co-ordinates: S28° 24.404' E24° 16.078'
Tel: +27 53 562 9300 / Fax: +27 53 562 9330

NAMAKWA - SPRINGBOK (NORTHERN CAPE REGION)
Private Bag X39, Springbok, 8240 / GPS Co-ordinates: S29° 35.579' E17° 53.196'
Tel: +27 27 744 1210, +27 27 744 1716, +27 27 744 1546 or +27 27 744 1564 /
Fax: +27 27 744 1541

NAMAKWA - PELLADRIFT (NORTHERN CAPE REGION)
Private Bag X39, Springbok, 8240 / GPS Co-ordinates: S28° 58' 11.0'' E19° 08' 56.6''
Tel: +27 27 744 1716, +27 27 744 1546 or +27 27 744 1564 / Fax: +27 27 744 1541

www.sedibengwater.co.za
E-mail: ceosec@sedibengwater.co.za

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