

2017

Annual Report



RAND WATER

*"Broadening Access to Quality Water
and Sanitation Services"*

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List of Abbreviations

Adv	Advocate	GSS	Group Shared Services	SABS	South African Bureau of Standards
AADD	Annual Average Daily Demand	HCT	HIV Counselling and Testing	SAGIC	South African Green Industries Council
ACFE	Association of Certified Fraud Examiners	I&AP	Interested and Affected Parties	SAICE	South African Institute of Civil Engineers
AMCU	Association of Mine workers and Construction Union	IIA	Institute of Internal Audit	SALGA	South African Local Government Association
AMD	Acid Mine Drainage	IIWSS	Interim/Intermediate Water Supply Programme Strategy	SAMWU	South African Municipal Workers Union
BER	Bureau of Economic Research	IRR	Institutional Reform and Realignment Masterplan	SANAS	South African National Accreditation System
BWD	Bulk Water Distribution	ISO	International Organisation for Standardization	SANS	South African National Standards
CCS	Corporate Contracting Strategy	IUCMA	Inkomati-Usuthu CMA	SCP	Strategic Customer Partnerships
CoGTA	Department of Cooperative Governance and Traditional Affairs	IWA	International Water Association	SED	Socio Economic Development
CoM	City of Mbombela	MCC	Motor Control Centres	SHEQ	Safety, Health, Environment and Quality
COO	Chief Operating Officer	MGFS	Manager Group Forensic Services	SIP	Strategic Infrastructure Projects
COSO	Committee of Sponsoring Organisations	MI	Megalitres	SLE	Service Level Evaluations
CSI	Corporate Social Investment	ML/d	Megalitres per day	SMME	Small, Medium and Micro-sized Enterprise
CSIR	Council for Scientific and Industrial Research	MBU	Mini business Units	SoNA	State of the Nation Address
CVM	Customer value Management	MoU	Memorandum of Understanding	SRSS	Sedibeng Regional Sewer Scheme
DEA	Department of Environmental Affairs	MRS	Media Relations Strategy	TCTA	Trans Caledon Tunnel Authority
DIFR	Disability Injury Frequency Rate	MWSC	Mulonga Water Utility	UASA	The Union,formerly named United Association of South Africa
DoA	Delegation of Authority	NDP	National Development Plan	UNISA	University of South Africa
DWS	Department of Water and Sanitation	NEHAWU	National Education, Health and Allied Workers Union	WCDM	Water Conservation and Demand Management
EAMS	Enterprise Asset Management System	NOM	Natural organic matter	WHO	World Health Organisation
EAP	Environmental Assessment Practitioner	NPC	Non Profit Company	WISA	Water Institute of Southern Africa
EBITDA	Earnings Before Interest Tax Depreciation and Amortisation	NPO	Non Profit Organisation	WMA	Water Management Area
ED	Enterprise Development	NWA	National Water Act	WOL	War on Leaks
EIA	Environmental Impact Assessment	NWRIA	National Water Regional Infrastructure Agency	WTR	Water Treatment Residue
EMS	Environmental Management Services	ODD	Organisational Development and Design	WTT	Water Technology Training
EWSETA	Energy and Water Sector Education and Training Authority	OHS	Occupational Health and Safety Act	WTW	Water Treatment Works
FSAICE	Fellow of the South Africa Institute of Civil Engineers	PFMA	Public Finance Management Act	WUAAAC	Water Use Application Authorization Admission Committee
GDARD	Gauteng Department of Agriculture and Rural Development	PIC	Portfolio Integrating Committee	WUEI	Water use efficiency index
GFS	Group Forensic Services	PICC	Presidential Infrastructure Coordinating Council	WUL	Water Use License
GGE	Group Governance Executive	PPP	Public Participation Process	WULA	Water Use License Applications
GGP	Group Governance Portfolio	Prof	Professor	WWET	Water Wise Education Team
GIA	Group Internal Audit	QAR	Quality Assurance Review	WWTW	Wastewater Treatment Works
GLS	Group Legal Services	QMS	Quality Management Standard		
		RoR	Record of Recommendation		
		RWA	Rand Water Academy		
		RWF	Rand Water Foundation		
		RWS	Rand Water Services		
		RWU	Regional Water Utility		

FOREWORD BY THE HONOURABLE MINISTER OF WATER AND SANITATION



Minister NP Mokonyane MP

Dear members of the Water and Sanitation community,,

I am pleased to present this Integrated Annual Report for Rand Water. This gives me an invaluable opportunity to engage with the stakeholders within the economic hub of the country and the rest of the country and to re-emphasise messages that we have been sending over this past financial year. The past year has been dominated by erratic weather patterns which have had a direct consequence on the ability of this water board to supply water to the citizens of Gauteng, parts of North West, the Free State and Mpumalanga provinces. Both the El Niño and La Niña have created extreme rainfall and temperature patterns which led to the uncomfortable position of imposing water restrictions on 9th August 2016.

I was satisfied that the dramatic change in rainfall led to the removal of these water restrictions in March 2017. As the custodian of water resource, I remain concerned with poor water conservation demonstrated by citizens of the affected regions. The majority of local municipalities failed to adhere on a continuous basis to the water restrictions that the Department was forced to impose. I remind all citizens that South Africa is a water stressed country. Therefore, I urge all citizens to change their behaviour both in conserving and consuming water.

I am, however, encouraged by the collaboration and continuous engagement that all parties continue to demonstrate in Water Conservation and Demand Management (WCDM). The engagements, at a provincial level through the promotion of a stakeholder forum for the affected area, provides me with greater comfort that provincial government and the water sector can play a leading role in alleviating these challenges and promoting water as a source of economic growth and development.

As a way of mitigating the Non Revenue Water, the War on Leaks (WoL) Programme, which was launched by the President in 2015 continued to produce impressive results. I am happy to inform the nation that this programme has produced over 10 000 graduates during its first phase. While there have been some glitches, it is a programme that I am happy to market to other sectors of the economy. By the end of the coming financial year, more than 15 000 graduates from this programme will be adding value to the economy of South Africa. I take this opportunity to thank Rand Water for the wonderful work they have done as an implementing agent on behalf of the Department.

The relationship between my Department and water boards, such as Rand Water, has enabled the country to improve on its water and sanitation services delivery. This impressive partnership has helped the water sector in meeting some of the key goals that have been mandated by the Presidency through the Presidential Outcomes. These have now been increased from 12 to 14 and the water family is proud of its contribution to these Outcomes.

This partnership between my Department and Rand Water has continued to be demonstrated on the African continent. In spite of limited resources, South Africa continues to recognise the challenges that the African continent faces. Working with the Department for International Relations and Cooperation, I tasked Rand Water to work with the Government of Namibia to assist in their drought relief efforts and engage with the National Water Utility of Namibia. I commend Rand Water for the positive feedback. The programme was undertaken in partnership with UN Habitat and the Global Water Operator's Partnerships Alliance. This collaboration between government departments and state owned entities can be used as a model for project implementation in other sectors as well.

I am aware that water and sanitation services continue to be a challenge in this country. However, I am satisfied that through some of the excellent work that has been undertaken by my department through its Back to Basics programme, some of these problems have been alleviated. This partnership with Rand Water has helped to timeously identify critical challenges and implement lasting solutions.

I would like to take this opportunity to express my gratitude for the leadership that the Board of Rand Water has provided to Rand Water. The continuous engagement with the Chairperson of Rand Water has helped to maintain momentum in our efforts and this has provided continuity for the water sector. Lastly I thank the Executives and employees of Rand Water for their wonderful effort and commitment during this financial year. I would encourage the organisation, as demonstrated by the excellent results in this Integrated Annual Report, to remain focused and committed. The economy and the country stand to benefit greatly from these wonderful efforts.



MRS N P MOKONYANE
MINISTER OF WATER AND SANITATION
 DATE: 28.10.17

REPORT BY THE CHAIRPERSON



It gives me great pleasure to present to our Stakeholders, this annual report, which details comprehensively the performance of Rand Water for the financial year ended June 2017. This integrated report contains financial and non-financial information and we hope you will find it useful and informative.

The theme of this report is "Broadening access to quality bulk water and sanitation services".

Access to basic water services is a right enshrined within the Constitution of the Republic of South Africa, and is one of the prerequisites for life and for living with dignity. Within the broader institutional arrangements for water provision in South Africa, we are cognizant of the fact that the realization of this right, cannot be achieved without effective and efficient bulk water services as a key part of the value chain. As a bulk water service provider, we are keenly aware of and alive to the important contribution that we make as a water utility to the realization of the constitutional rights, and to the economic activity within our area of supply.

The performance information being presented in this report, shows that the corporate performance targets and indicators have largely been met and, in some instances, exceeded. This is particularly pleasing to us as a Board, especially because the environment and context was one of low growth, drought conditions and an unfavorable economic climate. The achievements detailed herein, indicate that some resilience was built into our strategy and plans and that prudent management and controls over a long period have paid off. This, together with the ability to timeously respond to changing conditions and make adjustments to strategy and plans, when this was required, enabled the organization to weather some of the storms of the last year.

The services we provide rely on the appropriate infrastructure being in place, at the right time, and on its integrity. It is therefore important that the infrastructure is operated and maintained properly. These continue to be matters that the Board pays attention to, to ensure that they find expression in the planning, budgeting and the implementation of the plans. We trust that the information contained in this report will inform the reader about activities executed in this regard during the year under review. The "Bulk Water Services Portfolio" section of

this report should make for particularly useful reading for more information on the renewal and augmentation of our infrastructure.

The planning, integrity and operation of our infrastructure also relies on the right skills being in place and this is something that the Board prides itself on. Endeavors related to the support, development and retention of a good cohort of staff, that enables the organization to keep meeting its performance goals, are encouraged and monitored by the Board. Information contained in the Human Resource Strategy section of this report outlines the various strategies and programmes pursued, as well as the related achievements. The strategy encompasses all elements of the development and support of staff, in order to ensure a high-performance culture and high employee engagement and productivity, all of which is critical for a successful and effective organisation.

Efforts to consolidate the work that begun when the Shareholder expanded Rand Water's area of service to include the Mpumalanga province, continued in the year under review. Engagements with the Shareholder and with municipalities in the Mpumalanga area of supply continue, in order to firm up the role that Rand Water can play and to conclude on the institutional arrangements that will enable and fit the purpose of the role defined for Rand Water. The issue of transfer of bulk infrastructure assets remains a challenge that is still being negotiated with the Department. The need for the expansion of services and the increase of potable water access, will continue to inform these engagements and the conclusions reached.

We exist for our Stakeholders. A series of engagements with our Stakeholders have been undertaken during the reporting period this was guided by a Stakeholder Relations Policy and Guideline approved by the Board.

The information gathered during these roadshows provided much needed input to inform our strategy enhancement and relevance. This approach supported the goals of broadening access to water services. These are encapsulated in the National Development Plan and are aligned with the objectives of the Millennium Development Goals.

As indicated in more detail in the “Commitment to Corporate Governance” section of this report, the Board adopted the King IV report on Good Corporate Governance. Good Corporate Governance remained high on the agenda of the Board; as did the question of how to enhance the oversight role of the Board as Accounting Authority. In current climate of well publicized board room struggles and governance failures, we continually ask ourselves questions about improving on the practical implementation of the principles expressed in documents like the King IV code, and in our own governance related documents, in order to ensure that the right ethical environment exists not only in the boardroom but in the entire organisation. Clearly, adoption of the right documentation, standards and codes, is not in itself a guarantee of good corporate governance or ethical behavior, and so the board continues to play an important role in modeling the right practices, setting the right tone and supporting the right ethical culture.

Sustainability is an important goal that is being pursued by Rand Water and that guides how we interact with the environment, communities and stakeholders; informs the choice of technologies and is central to financial decision making. We look for ways to become more economically sustainable by balancing systems and user needs on one hand, and available capital on the other. We also wrestle with the challenge of getting the critical balance between what customers pay for water, with the true cost of delivery of the services we provide. I truly believe that through the implementation of technology driven innovative solutions, Rand Water will continue to advance its goals of achieving sustainability, and this has become an integral part of our strategic direction. We believe that technological advancements and innovative solutions and practices, will improve our resilience and sustainability as an organization operating in a changing environment.

As a Board that is concerned with sustainability, we are gravely concerned with the growing challenge of some of our municipal customers failing, or being unable, to service their accounts and with the number of defaulting customers. This poses a risk for Rand Water’s sustainability and for its ability to continue investing sufficiently and timeously in infrastructure, to meet growth and future needs, as well as maintain the existing infrastructure. Efforts to bring all concerned parties, decision makers and stakeholders together to find solutions for this challenge in specific municipalities continue. The Board has also mandated management to improve on and tighten our credit management policies, as well as pursue all available legal remedies.

In conclusion, I want to take this opportunity to express my gratitude to the Chief Executive, his Executive Team and the entire staff for the results achieved in difficult economic conditions. I would not be able to fulfill my role, without the support and cooperation of my colleagues on the Board, and I am most appreciative of their individual and collective contribution.

On behalf of the Board I express our gratitude to National Parliament’s Portfolio Committee on Water and Sanitation for their oversight role. I also express our gratitude to the Shareholder, the Honourable Minister of Water and Sanitation, Ms. Nomvula Mokonyane, for the guidance provided during the year under review.

We cannot rest until the Constitutional imperative of “Access to quality Water and Sanitation services for all” in our service area has been achieved. Although much has been achieved in terms of increasing access, we dare not lose focus as much still lies ahead.



Tshidi Hashatse
Chairperson of the Board



RAND WATER BOARD MEMBERS



Adv Faith Hashatse

First appointed to the Board of Rand Water as from 1st April 2009, currently serving as Chairperson of the Board of Rand Water

Academic qualifications: Bachelor of Journalism and Media Studies, LLB, LLM.

Advocate Hashatse has over 25 years' working experience during which time she has worked in various sectors including Telecommunications Regulation, Higher Education Management, Local Government Executive Leadership, and in the areas of Fundamental Human Rights and Gender Equity. She has over 16 years' experience and involvement as a Non-Executive Director in several institutions and companies; in sectors that include water utilities, economic and small business development, tourism promotion and national park management. She currently works as a Consultant with a particular focus on Organisational Change, Organisational Efficiency and Governance.



Ms Sophie Molokoane-Machika

Member of the Board of Rand Water as from 12th June 2012. Re-appointed as Deputy Chairperson effective 1st April 2014

Academic qualifications: BBA Degree Majoring in Public Sector Management, BBA Honours Degree Majoring in Public Sector Management Final year of Masters in Management. Diploma in Public Sector Management; Bachelor of Business Administration; Certificate in Public Administration, Housing Management, Community Education Method and Cost Estimates; Certificate in Strategic Management; Certificate in Community Management Development, Policy Formulation, Project Management; Certificate in Core Councillor Train the Trainer Programme; Certificate in Transport Management; Certificate Programme in Management Development for Municipal Financial Management.

Ms Molokoane-Machika is the former Executive Mayor of the Madibeng Local Municipality and has 17 years of experience in local government including serving as the National Deputy Chairperson of the South African Local Government Association ("SALGA"). She was appointed by the Department of Cooperative Governance and Traditional Affairs ("CoGTA") to train Councillors. She was a member of Board of Directors of Invest Northwest and is currently a member of North West Development Cooperation Board of director and Deputy Chairperson of St Joseph Catholic Church.



Ms Busiswa Cwengile Bam

Member of the Board of Rand Water as from 1st April 2014

Academic qualifications: BA Personnel Management, BA Honours (Sociology), Management Advancement Programme (MAP), Project Management Diploma.

Ms Busiswa Cwengile Bam is the owner and managing director of Buchule HR Services, a black owned company offering Human Capital Management Solutions. She served on the Board of Ithala Development Finance Corporation (IDFC) and was Chairperson of the IDFC Human Resources and Remuneration Committee. She served as Manager: Training and Development at the International Convention Centre Durban; Manager: Skills Development and Acting Academy

Manager at Ports Academy of South Africa. She has extensive experience in Human Capital Management garnered in the private and public sectors.



Mr Dawood Coovadia JP

Member of the Board of Rand Water as from 1st April 2005

Academic and Professional qualifications: BCompt (Hons), BCompt, CA (SA), RA, BA(SA), CMC, FIMC, FIAC, FCIS, FIIASA, PIA (SA), F Inst D, Comm of Oaths.

Mr Dawood Coovadia is a Chartered Accountant in private practice under, COOVADIA ASSOCIATES. He is also an Internal Auditor, Risk Analyst, Corporate Governance and Management Consultant. Mr Coovadia has over 30 years' experience in Finance, Auditing, Taxation and Strategy. Apart from his professional practice he serves on various boards in the public sector as a non-executive director and he is the Chairman of several Audit and Risk Committees, also in the public sector.

RAND WATER BOARD MEMBERS



Ms Lakela Kaunda

Member of the Board of Rand Water as from 1st April 2014

Academic qualifications: Masters Degree (MPhil) in South African Politics and Political Economy, Bachelor of Arts Honours in Politics, Bachelor of Journalism and Media Studies, Diploma in World Politics.

Ms Kaunda, member of the Rand Water Board since 1st April 2014, is the Chief Operations Officer in the Presidency, Republic of South Africa.

She is a seasoned executive with more than 20 years experience in government and the media. She has worked as a journalist, government communicator, political manager and political strategist.

Ms Kaunda holds a Masters degree (MPhil) in South African Politics and Political Economy from the University of Port Elizabeth, a BA Honours in Politics from Unisa, a Bachelor of Journalism and Media Studies from Rhodes University and a Diploma in World Politics, London School of Economics and Political Science.

She is the former Deputy Director-General and Head of the Private Office of the President of the Republic, Mr Jacob Zuma. Her journalistic career has included serving as Editor of the Evening Post in Port Elizabeth, having been the first woman to be appointed as editor of a daily newspaper in South Africa in 1999. During this period she also served as chairperson of the South African National Editors Forum (SANEF).

Ms Kaunda's public sector expertise includes serving as spokesperson of the Deputy President of the Republic (2000-2005), head of communications and later special advisor on communications to the Minister of Social Development (2005-2008) as director of communications for the Department of Communications (1996-1998), and as public relations officer to the MEC for Economic Affairs in KZN (1995-6).

She is also a former member of the Board of Ubank.



Ms Rene Aloise Kenosi

Member of the Board of Rand Water as from 17th February 2016

Academic qualifications: BCompt, BCompt (Hons), Postgraduate Diploma in Accounting, CA (SA), Certificate in Internal Audit Quality Assurance Review.

Ms Rene Kenosi is a Chartered Accountant and currently holds directorships and shareholding in private companies. She has experience in Commercial Forensic Investigations, Advisory Services and Management Consulting, Internal Audit, Risk Management and Training. Apart from her professional practice she serves on various governance structures within the public sector.



Mr Lefadi Lucas Makibinyane

Lefadi Lucas Makibinyane was initially appointed on the Rand Water Board on the 1st April 2009 for his first Board Term. He was further reappointed for his second term on the Board from the 1st April 2013

Academic Qualifications: Masters of Business Leadership, Bachelor of Engineering (Honours) in Chemical Engineering and the Program of Development Management in Project Management; while professionally he is a registered Chartered Chemical Engineer, a member of the Institute of Chemical Engineers and a member of the Institute of Directors of South Africa.

Mr Makibinyane is an astute professional with over 25 years working experience gained in the various economic sectors including the mining, petrochemical, packaging, food & beverages, development financing, corporate & investment banking, export credit agency, infrastructure development, utilities (power, water and sanitation) and engineering.

He has an in depth governance experience and is currently the Chief Executive Officer of Amatola Water Board in the Eastern Cape while serving on the Boards of Rand Water, CIDB, and as the member of the Presidential BEE Advisory Council.



Ms Nomsa Georgina Judy Mbileni

Member of the Board of Rand Water as from 1st April 2014

Academic qualifications: Baccalaureus Procuratoris (B.Proc), Higher Diploma in Corporate Law.

Ms Mbileni is a Practicing Attorney under style N. Mbileni, J. Tohlang-Nkopane Incorporated. She is a Part-Time Commissioner at the CCMA and serves on the panel of arbitrators at the Education Labour Relations Council. She also served as a Non-Executive Director at Yokogawa SA (Pty) Ltd and Funda Community College. She acted as a Labour Court Judge in 2010. She is a former Deputy President of the Society for Part-Time Commissioner and Labour Law Practitioners of South Africa and is on the Panellist of the University of South Africa (UNISA) Panel of Disciplinary Hearings Chairpersons.

RAND WATER BOARD MEMBERS



Mr Isaac Mmushi

Member of the Board of Rand Water as from 1st April 2014

Academic qualifications: BSc Eng (Elect), MEng Management, Pr Eng., MSAIEE.

Mr Isaac Mmushi has years of experience in maintenance and operations, project design, construction, project and programme management of electrical network infrastructure. He has management and leadership experience in engineering environment and within the non-profit organization spanning over many years. He continues to be involved in some of the NPO on a governance level. Currently he is the CEO of Solar Management Services (Pty) Ltd, a private company that manages portfolio of independent power producer project companies.



Mr Ramateu Monyokolo

Member of the Board of Rand Water as from 17th February 2016

Academic qualifications: Management Advanced Program; Executive Development Program; Certificate in Community Leadership Development Program, Certificate in Managing Telecommunications Environment, Policy and Regulation; Certificate in Telecommunication Proficiency, Certificate of Competence in Business Risk Management, Certificate of Competence in Effective Director Program, Certificate of Competence in Multi Party Negotiations. He is currently studying Executive Coaching with the South African College of Applied Psychology (SACAP) Graduate School of Coaching and Leadership.

Short courses undertaken with Institute of Directors of Southern Africa (IoDSA); King IV on Corporate Governance Training, Value Creation and Executive Pay Workshop, Finance Insights for Non-Financial Directors, Public Sector King III, Being a Director Part I: Introduction to Corporate Governance and Being a Director Part IV: Increasing Board Effectiveness & Adding Value.

Mr Monyokolo serves as a Non-Executive Director of some companies including but not limited to The Innovation Hub Management Company (SOE), Thelle Mogoerane Regional Hospital and Renfield Sankofa Proprietary Limited, etc. His experience includes amongst others Business Process Reengineering, Executive Coaching, Change Management, Project Management, Industrial Relations, Stakeholder Management, Mediation, Multiparty Negotiations, Risk Management, Marketing, Retail Management and Community Development.



Prof. Frederick A. O. Otieno

Member of the Board of Rand Water as from 1st April 2005.
Re-appointment date: 1st April 2014

Academic qualifications: PhD (Civil), MBA, MSc, BSc (Civil) (Eng) (Hon), PrEng, FSAICE.

Prof FAO Otieno is a professional engineer in South Africa and the United Kingdom. A Fellow of the South Africa Institute of Civil Engineers and the Water Institute of Southern Africa, he is currently a Professor of Civil Engineering. He has worked as a Consulting Engineer, researcher and entrepreneur in Civil and Water Engineering and Environmental Management. Professor Otieno has served as president of WISA, and is a non-executive director, and a member of numerous organisations.



Mr Percy Sechemane

Chief Executive

Member of the Board of Rand Water as from 1st September 2008

Academic qualifications: BCom, MBA.

Dinizulu Kumalo Percival Sechemane (Percy) is Rand Water's Chief Executive. He is a former Chief Executive Officer of Landis & Gyr, a former Chief Operating Officer for the Regional Electricity Distributor – "RED ONE". He spent around eleven (11) years in Eskom, during that time he moved through the ranks and ultimately appointed as General Manager for Western Region and he also worked for the City of Cape Town.

He is currently a member of the National Planning Commission and leads the task team on water. He also serves as non-executive Board Member for the Vaal River City Tourism Promotion Company.

CHIEF EXECUTIVE'S REVIEW

Dear Rand Water Stakeholder

Maintaining performance

Rand Water has retained the escalating trajectory of producing strong operational and financial performances in the 2016/17 financial year. The inclined path enhanced the provisioning of a continuous, uninterrupted and reliable supply of world-class bulk potable water to our customers in Gauteng, as well as across our expanded areas of operations in parts of Limpopo, North West, Mpumalanga and the Northern Free State.

We remained steadfast on the delivery of our strategic objectives and key performance indicators (KPIs). These KPIs are central to our shareholder compact with the government and help provide organisational strategic direction of carrying out and implementing identified national government's imperatives.

In the year under review, we exceeded our targets on compliance with stringent water quality standards including targets related to minimisation of water losses and sustainability of service reliability. Rand Water has supplied an average of 4 414 (four thousand four hundred and fourteen) mega litres per day (ML/d) of potable water (2016: 4 684 ML/d) to customers mostly in the Johannesburg, Ekurhuleni and Tshwane Metropolitans (Metros) and other municipalities, mines and industries. Peak day demand was 4 728 ML.

Erratic weather patterns continued, leading to wide swings in dam levels and implementation of stringent water restrictions by the National Department of Water and Sanitation (DWS). The Vaal Dam, a part of the Vaal River System from which most of our raw water is extracted, plummeted to a low level of approximately 26.9% quarter full in October 2016. Following the heavy rains experienced in early March 2017, the Vaal Dam water level reached an acceptable capacity of 105% resulting in a total of two (2) sluice gates being opened.

In her report, the Chief Financial Officer details another year of robust financial performance for Rand Water. This was achieved against the backdrop of difficult business operating conditions related to persistent massive drought across South Africa and stepped-up water restrictions. Of paramount importance was financial problems faced by a number of smaller municipalities, which habitually led to some smaller municipalities defaulting on their outstanding debts. Our risk table outlines risks inherent to the business and corrective actions taken to mitigate them.

Investing for the future

We committed a total of R2.5 billion in new capital expenditure (capex) in the year under review (2016: R3.3 billion). This serves as part of a Capex Programme that is intended

to address expected exponential growth in demand for water in the Gauteng Province. The latter serves as the engine room for the South African economy. We recently reduced our forecast capex over the next few years following firm commitments by municipalities to more effective water demand management given the drought that engulfed our country. The revised budget is based on the assumption that the 15% reduction in volumes is the new sustained volume base, growing on an average of 1.75% per annum over the next five years.

Nevertheless, from an existing installed capacity of 5 300 megalitres per day (ML/d), in 2016/17 we added 200 ML/d of capacity, which means we are on track to add a total of 600 ML/d of capacity by the end of 2017/18 financial year. By 2030, Rand Water's capacity is projected to increase to some 6 600 ML/d, facilitated by strong cash flows and financing through the group's domestic medium-term note programme and other funding mechanisms.

As we undertake our core mandate we are critically aware of the limitations of a freeze on hiring staff, as well as challenges faced internally by the Department of Water and Sanitation in the year. However, we were able to increase our employee numbers by 2,6% in 2017.

Engaging stakeholders

Acknowledging our responsibilities with regards to the effective functioning of the South African economy, we understand the importance of engaging with stakeholders at all levels. This is particularly relevant given a number of changes in the sector, as well as the extension of our responsibilities in recent years to assist with water supply and wastewater projects in areas outside Gauteng. In 2016/17, we prioritised this engagement and our work with local communities to promote water conservation.

Outside our primary focus area of Gauteng, we continued carrying out activities related to directives from the Minister, the cost of which is recoverable from the government. This included the supply of bulk water to areas outside Gauteng, including replacing bulk

pipelines and reservoirs in Bushbuckridge, Mpumalanga. Ownership of the bulk water infrastructure in Mpumalanga generally resides with the relevant local municipality or the Department of Water and Sanitation. As a result, our accounting policies recognise the right of use of assets owned by the executive authority but utilised by the group to provide services to customers.

To reduce our risks, we curtailed secondary activities related to requests from some municipalities, particularly those that are unable to meet their debts. In January 2017, Bushbuckridge Local Municipality informed us that they no longer required Rand Water's 'implementing agency' services to establish and operate water reticulation systems to households. This led to the cancellation of a significant number of projects.

As part of work to deliver on the desired presidential outcomes, in the year we continued to engage with water authorities in a number of other African countries to improve the provision of water services on the continent. This is aligned with our vision to be a provider of sustainable, universally competitive water and sanitation solutions for Africa.

As an 'Implementing Agent' for the government's five-year 'War on Leaks' project, we have overseen a total intake of 10 000 young people to either be trained as plumbers or artisans or employed to advocate responsible water use in their communities. The project is an effort to conserve water, following a research that shows that South Africa loses more than a third of all its potable water, worth some R7 billion a year, to leaks.

Following my appointment as a commissioner of the National Planning Commission, in the year we continued to assist with driving national imperatives and implementing the National Development Plan (NDP). Steady progress was made on refocusing the centrality of water in ensuring the achievement of the Plan's goals. I am privileged to have chaired the Water Task Team that developed the draft National Water Security Framework to guide the implementation of the NDP through the Water Master Plan being developed by the Department of Water and Sanitation.

Reviewing the past ten years

In 2018 I will have been at the helm of Rand Water for 10 years. This gives me cause to consider the group's numerous achievements since 2007, after which we adopted a new strategy and designed a new vision for the utility which has provided quality bulk water to Gauteng for more than 100 years. The new strategy included the extension of the business to include both bulk water and bulk sanitation services. This was in line with the strategic objective of growth, as was the significant expansion in our area of operation.

In the past 10 years, revenue grew from some R4 billion a year with one revenue stream, to almost R12 billion a year with multiple revenue streams. From providing clean potable water to 11 million people in 2007, by 2017 this number had increased by 73% to 19 million. The volume of water supplied increased to 4 414 ML/d from 3 674 ML/d (an increase of 740 ML/d or 20%), while we limited the extent of water losses to 3.14% from 5%.

To aid this growth and refurbish the plant and pipeline network, we increased annual capital expenditure from R408 million to R2.5 billion. To facilitate the additional funding required, we successfully launched a R10 billion domestic medium-term note programme and established a treasury policy, as well as allied processes and structures. We extended our debt tenure and reduced our cost of funding from around 13% to 9.9%.

Alongside this, we centralised business functions to consolidate and reduce the cost of business administration and launched a cost-containment programme. This is in line with the strategic objective to maintain financial health and sustainability.

We established the Innovation Hub, which creates a centralised platform for leading and coordinating innovation across the group. Its flagship programme is the water treatment residue pilot project, promising savings of R498 million to Rand Water within 10 years. The establishment of the Innovation Hub supports the delivery of the strategic objective of achieving operational integrity and using best-fit technology.

Among our other strategic objectives are to achieve a high-performance culture and to positively engage the stakeholder base. In the past 10 years, we enhanced our stakeholder engagement, surveying employee engagement levels every year, conducting customer value management surveys (on which we achieved above-target scores) and engaging with various role players in our extended area of supply. We also enhanced governance, reviewing various policies, promoting ethical practices, consistently maintaining unqualified audits from the Auditor-General and achieving timeous submission of our Shareholder's Compact and our corporate business plan.

Our focus on people management also paid off, with our safety indicator the disabling injury frequency rate (DIFR) improving to 0.29 from 0.38 in 2007. We also established the Rand Water Academy to build capacity in the sector, rolled out a talent retention programme and clean the Balance Sheet by addressing the issue of our post-retirement medical aid liability.

As part of our efforts to align our work with the achievement of the desired presidential outcome to deliver 'an efficient, effective and development-oriented public service and an empowered, fair and inclusive citizenship', we increased our procurement expenditure with Black Economic Empowerment-compliant entities to 95% of all expenditure on operational projects in 2017 from 64% in 2007.

While it is clear that much has changed in the past 10 years, the standard of Rand Water's water quality has not; it continues to be rated among the best quality potable water in the world, and maintaining this remains our priority.

Looking ahead and appreciation

I would like to note my thanks to the directors of Rand Water for their support and guidance, and to our Shareholder, represented by the Honourable Minister Nomvula Mokonyane, for strategic oversight in 2016/17. Rand Water also appreciates the important role played by Parliament's Portfolio Committee on Water and Sanitation in a year of many challenges. My thanks also go to all our other stakeholders – including National Treasury, our employees, customers, funders, suppliers and the communities in which we operate.

When one looks at the key global impact challenges, it is quite evident that the availability of water at the appropriate quality for the application sought is becoming increasingly important. Building resilient Rand Water and catalyzing growth implies that Rand Water will no longer be able to rely on just one source of raw water for water treatment or look at treatment in a one-dimensional manner.

We will seek to disrupt our business model through innovative and game changing technologies and solutions to ensure that Rand Water remains resilient in the face of climate change and other challenges.

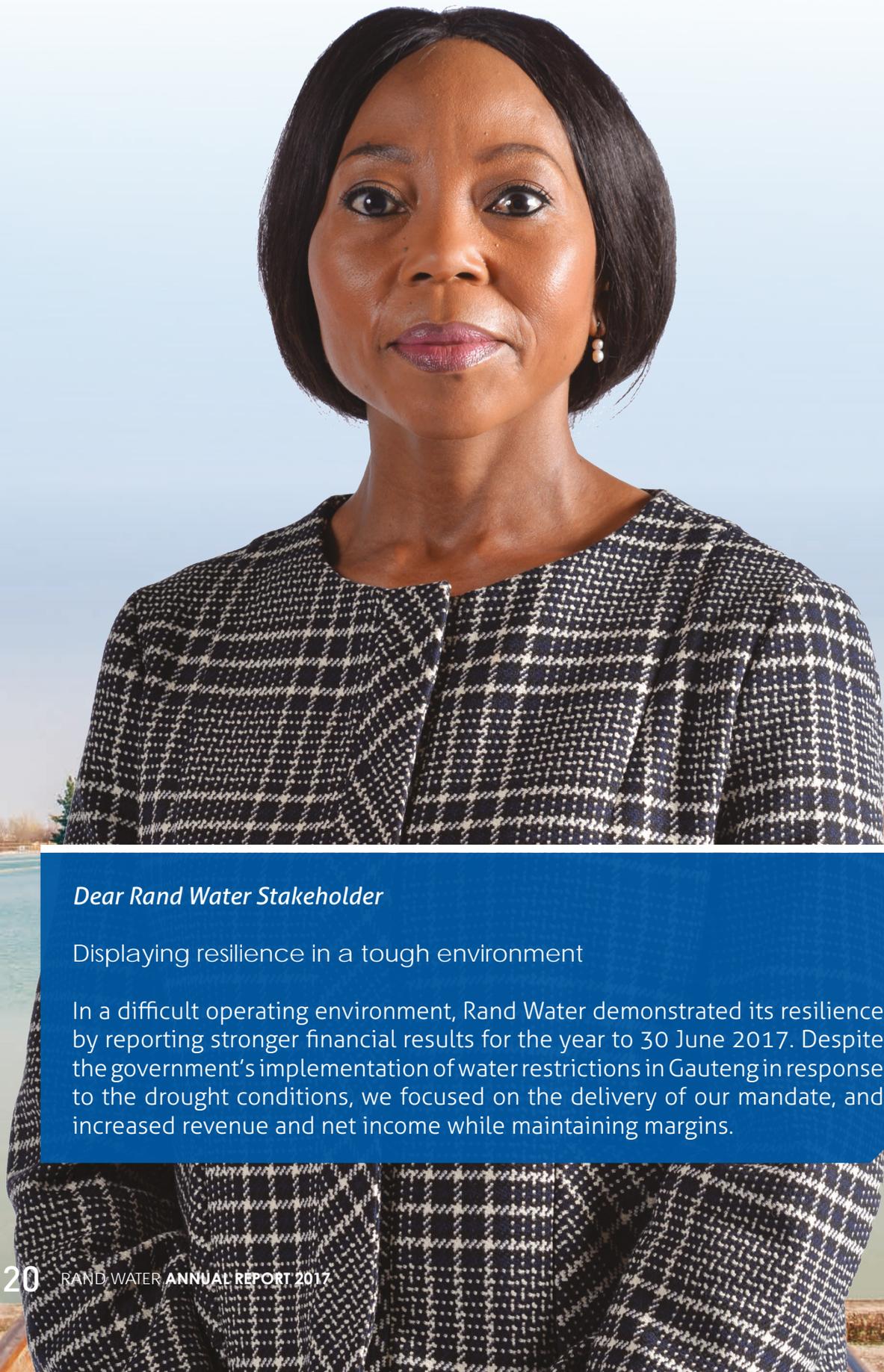
Building a resilient Rand Water and catalyzing growth can only take place through business model innovation and technological innovation. As collaboration is usually the key to innovation, Rand Water will aim to deepen its cooperation between the different players in the water industry such as its shareholder (Department of Water and Sanitation); academic institutions (Professorial Chairs), government owned organizations (Council for Scientific and Industrial Research, Water Research Commission, The Innovation Hub Management Company, Department of Science and Technology, Council for Geoscience, etc.) technology suppliers, utilities (e.g. Public Utility Board in Singapore), industrial water end-users and investors. We aim to promote a culture of innovation and continuously challenging the existing ways of doing things in order to create a more resilient and value-adding Rand Water.

The potential for Rand Water to continue to grow keeps me challenged and humbled to be part of the team leading its strategy and increasing access to world-class drinking water for all our people. Subsequently, we will continue to participate actively in the development of important legislative and regulatory reforms within the water sector, and ensure that we deliver on our strategy, including achieving growth and operational integrity with the use of best-fit technology, as well as securing a high-performance culture at Rand Water.



Percy Sechemane, BCom, MBA
CHIEF EXECUTIVE
Glenvista
12 October 2017

CHIEF FINANCIAL OFFICER'S REVIEW



Dear Rand Water Stakeholder

Displaying resilience in a tough environment

In a difficult operating environment, Rand Water demonstrated its resilience by reporting stronger financial results for the year to 30 June 2017. Despite the government's implementation of water restrictions in Gauteng in response to the drought conditions, we focused on the delivery of our mandate, and increased revenue and net income while maintaining margins.

In line with the Accounting Standards Board's directive on the selection of appropriate reporting frameworks by public entities, in the year we undertook such a selection process, and later adopted International Financial Reporting Standards (IFRS). The annual financial statements for the year to 30 June 2017 are therefore the first that we have prepared in accordance with IFRS. The comparative data for the year ended 30 June 2016 were also prepared in line with IFRS. Previously, we had followed South African Statements of Generally Accepted Accounting Practice.

Another significant development in the year was the change in our external auditors. The Auditor-General of South Africa directly oversaw the audit of Rand Water, as part of a pilot plan to do so across state-owned enterprises (SOEs) in pursuit of enhanced governance and controls. There was a particular focus on supply chain management.

Delivering on strategy, preserving performance

Maintaining financial health and sustainability, including promoting prudent financial management, is a group strategic objective. Rand Water has continued to perform well against most of our financial key performance indicators (KPIs) in the year.

Total revenue rose 8.2% to R11.98 billion (2016: R11.07 billion), supported by an 11.9% (2016: 13.5%) increase in the bulk water tariff, which is determined by the government and constitutes our charge to customers. Revenue was, however, negatively impacted by a 5.8% decline in the volume of water sold (2016: a 1% increase) resulting from the implementation by the government of restrictions on the use of potable water.

Higher revenue and lower operating expenses (excluding provisions for bad debts) helped lift net income by 18.3% to R2.4 billion. Our net income margin continued to expand, edging up to 19.82% (2016: 19.16%). This was mainly attributable in part to the relatively good quality of raw water that required a lower dosage of chemicals, our work to maximise the pumping of water at off-peak times to

limit energy costs, and various other cost-containment initiatives. Rand Water's return on assets increased to 9.84% (2016: 9.42%). Net cash from operating activities declined by 37% to R1.55 billion from a restated R2.48 billion, impacted by lower revenue.

We continued our work on new revenue streams and the implementation of activities related to directives from the Minister. We account for these as 'other operating income'. To reduce our risks, we curtailed secondary activities related to requests from municipalities, particularly those that are unable to meet their debts. Our work as government's implementing agent on the 'War on Leaks' programme contributed positively to the bottom line for the first time in the year under review.

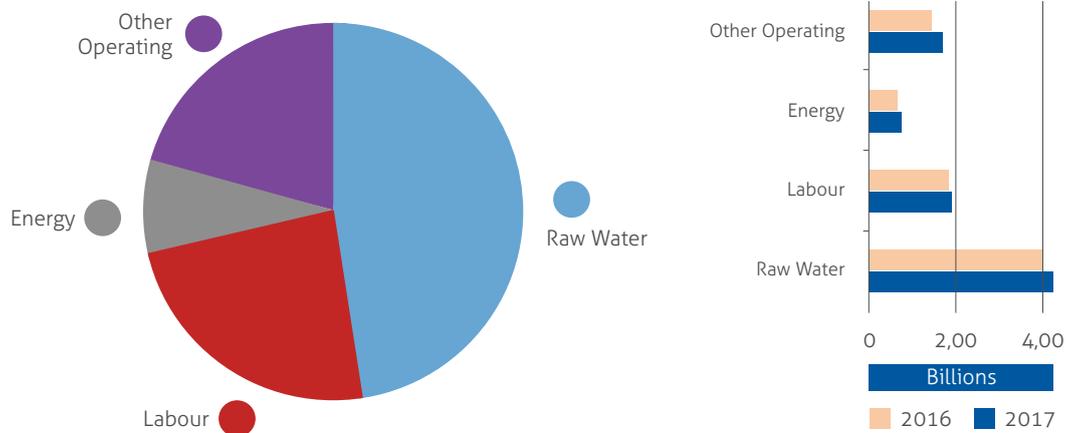
Limiting cost increases

Rand Water's policy is to recover all operational costs in the tariffs that are set by the government. In 2017, we limited input cost increases to 6.5% (2016: 6.6%) on the curtailment of some of our activities, as well as the lower volume of water we supplied. The price of raw water, which is determined by a government pricing strategy that links it to producer price inflation, increased 7.4% in the year.

Labour costs rose 8.4%. Employee numbers which had declined in recent years due to the Department of Water and Sanitation's moratorium on filling vacancies, increased by 2.6% to 3 425. The cost of energy, required to pump water to our customers and run our treatment plants, increased by just 3.6%, benefiting from the lower volumes supplied in the year.

Operating costs, were impacted by a R147 million doubtful debt provision raised as a result of the record of some of our municipal customers, most notably Emfuleni Local Municipality and Bushbuckridge Local Municipality, which defaulted on a debt settlement agreement it had reached with Rand Water. This also led to the implementation by Rand Water of water pressure reductions of 20% in municipalities.

OPERATING EXPENSES



Extending our capital programme

In line with our strategic objective to achieve growth, we need to ensure that Rand Water's infrastructure meets current and future demand. In pursuit of this, in recent years we have extended our capital investment programme, which is scheduled to deliver capacity for an additional 600 ML/day of water into the network by March 2019. However, given the operating environment in 2017 and forecasts for more muted water demand patterns in the medium term (resulting from effective water demand management), in 2017 we reduced our capital expenditure (capex) to R2.5 billion (2016: R3.3 billion). Among our most significant projects in the year was the R1.9 billion Station 5 augmentation scheme at the Zuikerbosch Pumping Station, on which we reached 32% completion by year end.

Our rolling five-year forecast for capex of R20 billion includes flexibility of 20-30% to re-prioritise projects. Of the total, some R12 billion is due to be spent on augmentation (extending our infrastructure) and the rest on what we refer to as renewal projects to replace existing bulk infrastructure.

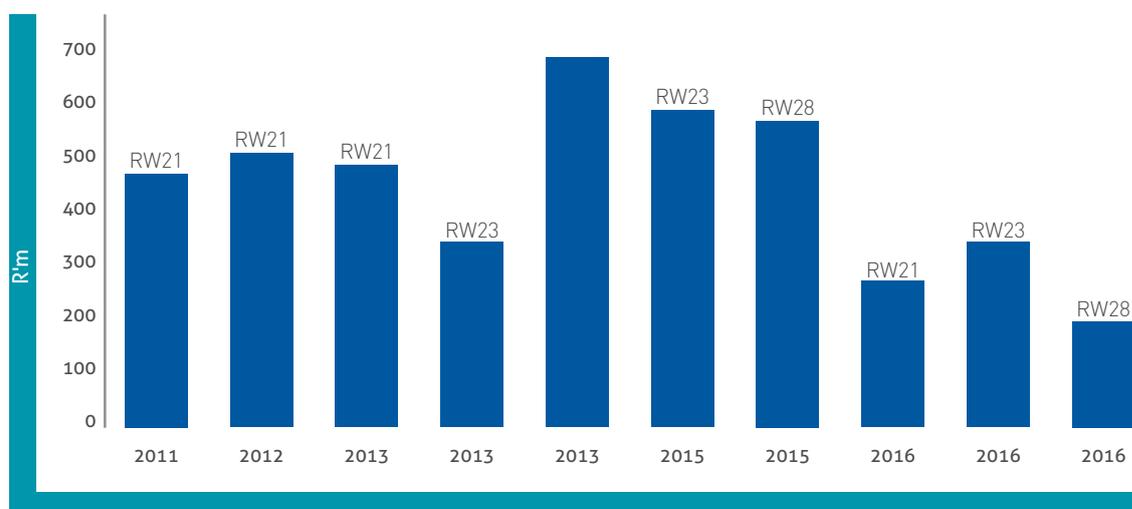
It is Rand Water's policy to fund rehabilitation and replacement projects from internally

generated funds (accumulated profits and cash reserves) after providing for the group's liquidity requirements. Through our R10 billion domestic medium-term note programme, we are able to fund the expansion of our network. However, in the year under review we had sufficient cash to fund our capex programme, and did not need to raise any new funding.

As at 30 June 2017, the group's total borrowings amounted to R4.4 billion (2016: R4.4 billion). At 33.%, the gearing ratio remained well below the threshold of 50% prescribed in the Shareholder's Compact. The interest cover and cash interest cover ratio were also significantly better than the targeted levels.

We have a funding strategy and plan in place to ensure that the group is able to successfully fund its capital expenditure programme without breaching the set financial parameters. The funding requirement for the 12 months to 30 June 2018 is R220 million. The group plans to utilise its domestic medium-term programme and bilateral long-dated loans from a mixture of development finance institutions and banking institutions to satisfy the funding requirement for the year without requiring any government guarantees.

TOTAL BOND ISSUANCE



Following the downgrade of South Africa's sovereign credit rating in the year, Standard & Poor's Ratings Services reduced Rand Water's long-term foreign currency rating to 'BB+' from 'BBB-'. It also reduced the long-term local currency rating to 'BBB-'.

In the year, we investigated other funding options to mitigate against the risk that investors may recall their funds should the country's sovereign credit rating be downgraded again, which could trigger a breach of our bond covenants. In particular, we engaged with local and international development finance institutions. This engagement continues.

Managing liquidity risk

The group's approach to managing liquidity risk is to ensure we will always have sufficient committed facilities to meet our liabilities when they fall due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the group's reputation. Hence, the group maintains a liquidity buffer of R859 million and has started contributing to a sinking fund for the ultimate redemption of our bond debt, RW21. This fund stands at R172 million. The liquidity buffer and redemption fund are made up of cash and cash equivalents of R805 million and investments in bonds of R458 million.

Furthermore, the group has a credit management policy that includes a KPI target of 34 days for debt collection. However, at year end eight of our municipal customers (all of which share our June year-end) defaulted, making payments a few days late and leading to the group missing its KPI target and reporting 45 days for debt collection.

Group Scheme (death and disability benefit)

Our employees belong to the Rand Water Group Scheme, underwritten by Old Mutual, providing death and disability cover while they are employed by Rand Water. Both of these benefits are structured as unapproved arrangements. Life cover is four times employee's annual earnings and the lump sum disability benefit is also four times annual earnings, limited to R15.2 million.

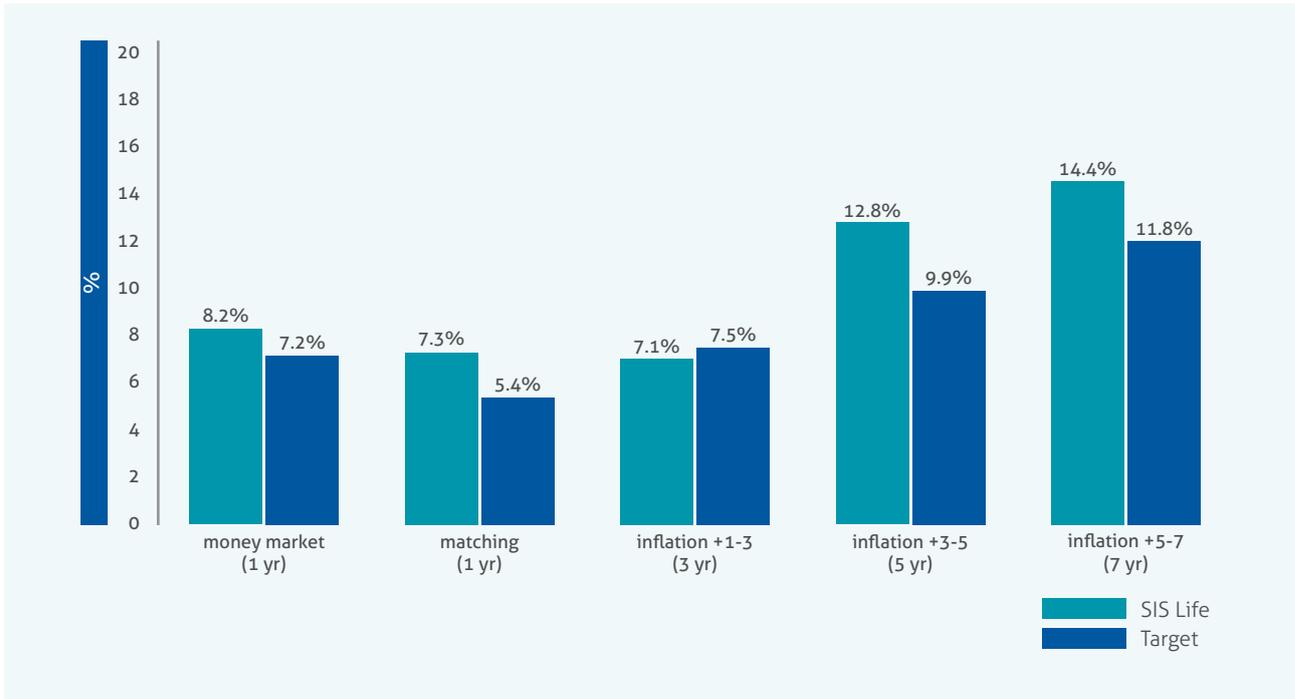
The Rand Water Provident Fund

The Rand Water Provident Fund is administered in terms of section 13B of the Pension Funds Act. Rand Water provides benefit administration, and financial services group Old Mutual Ltd provides investment administration services. Membership is limited to employees. The Fund is governed by a board of trustees, five of whom are elected by members and five of

whom are elected by Rand Water. In the year, the board of trustees held five meetings. In addition, one audit committee meeting and two investment committee meetings took place.

The Fund's objective is to provide retirement and other benefits for members, and benefits in the event of their death. There are three investment choices and three membership class options. Risk benefits are underwritten by Capital Alliance, Old Mutual and Infinite. The Fund's membership at year end was 3 310, and the Fund's value was R2.4 billion, up from R2.23 billion a year earlier. The default investment strategy for the Fund is inflation plus 3-5% over any five-year period.

This is how our different strategies performed over the year.



Mpumalanga Employees Provident Fund

In respect of our employees in Mpumalanga, Rand Water became a participating employer under the FundAtWorks Umbrella Fund on 1 April 2014. This Fund was administered by Momentum Life. Member contributions were 7% of salary while we contributed 7.62%, inclusive of costs. Effective 1 March 2017, these members opted to join Rand Water Provident Fund.

The Rand Water Medical Scheme

The Rand Water Medical Scheme is self-administered and membership is restricted to employees and former retired employees of the group and their dependents. The Scheme is governed by a board of trustees made up of five people elected by members, and five

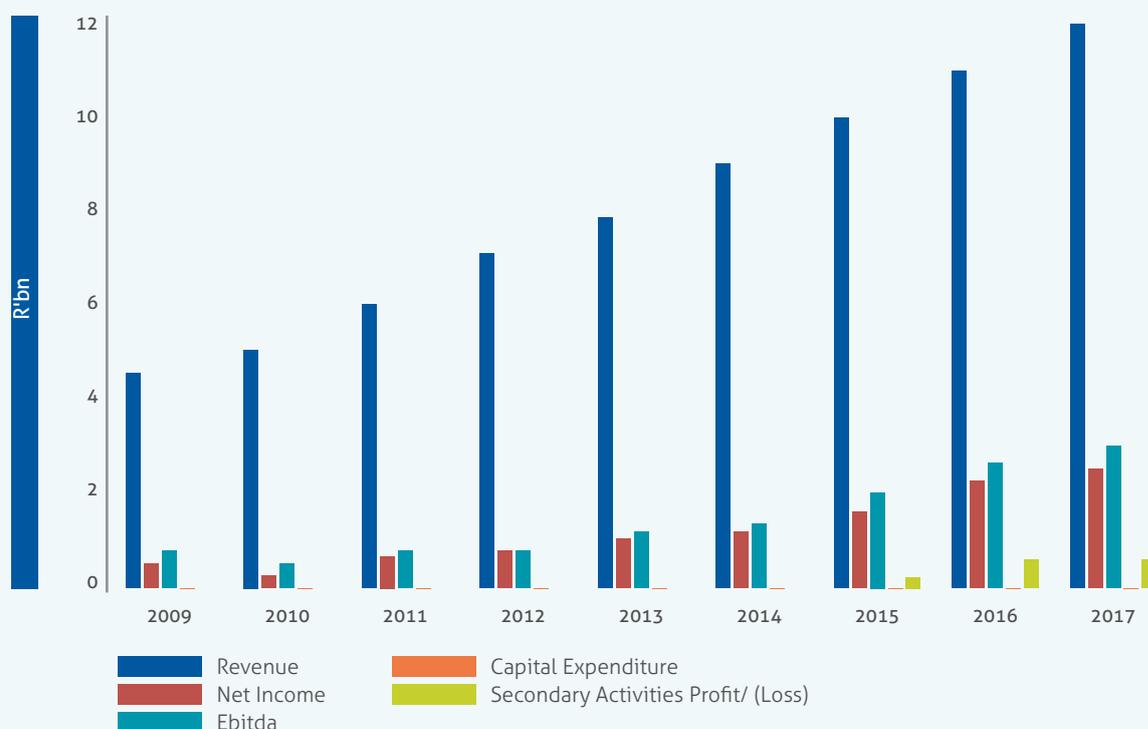
elected by Rand Water. In the year, the board held five meetings. Its audit and risk committee and pricing and investment committee held one meeting each. At year end, the Scheme's solvency ratio was 96.89%, compared to the statutory minimum of 25%. It covered 8 370 lives. The Scheme continues to monitor developments relating to the introduction of National Health Insurance in South Africa, as well as amendments to the Medical Schemes Act.

Looking back

As the Chief Executive prepares to mark ten years at the helm of Rand Water, it is important to note the financial performance trajectory of the organisation over that time. Between 2008/09 and 2016/17, revenue grew from R4.6 billion to almost R12 billion, earnings before interest, taxation, depreciation and amortisation (EBITDA) increased from R692

million to R2.8 billion and the EBITDA margin expanded from 22.0% to 23.4%. Net income increased from R582 million to R2.3 billion and the net income margin widened from 12.5% to 19.6%. In the past ten years, capex grew more than six times to R2.5 billion. The overall performance has been steady and upward trending resulting from strong growth in volumes of supply, cost containment initiatives and efficiency improvements.

REVENUE AND INCOME



Looking forward

In the year ahead, we will continue to focus on delivering on the strategic objectives for which we are accountable, chief among them being maintaining Rand Water's financial health and sustainability. Margins and returns remain key focus areas, as does cost containment.

With regards to labour costs, we recently signed a multi-year settlement arrangement with our labour unions, which includes average wage increases of 8.5% and 8% respectively in 2018 and 2019. We continue to work to limit increases in energy and chemical costs. We await the decision of the Minister of Water and Sanitation on our plan to invest in a hydropower project to reduce the cost of energy and enhance the security of supply to our pumping stations. Ahead of this, we will continue with our pilot project to consider alternatives to help reduce our reliance on Eskom and municipalities for energy.

Given the default by some of our municipal customers in recent months, in the year ahead we will seek legal recourse and implement further stringent measures to recoup monies owed to Rand Water by these municipalities.

Diversifying our sources of funds to finance our capital programme remains important. We expect a slight increase in our capex in the year ahead, but do not anticipate having to raise further funds from the debt capital market in the year however we might restructure some of the existing debt and do some bridge finance in the money market to address any cash flow mismatch that may arise.

**Matshidiso Nyembe, BCompt, BCom (Hon),
CTA, CA (SA)**
CHIEF FINANCIAL OFFICER
Glenvista
12 October 2017

MEMBERS OF THE PORTFOLIO INTEGRATING COMMITTEE



Mr Percy Sechemane

Chief Executive
Portfolio Integrating Committee member as from: 1st September 2008



Mr Vusi Kubheka

Group Strategy Executive
Portfolio Integrating Committee member as from: 1st July 2012

Responsibilities:

- Corporate Planning
- Corporate Research and Development
- Financial and Economic Planning
- Knowledge Management



Ms Wayida Mohamed

Strategic Human Resources Executive
Portfolio Integrating Committee member as from: 20th April 2009

Responsibilities:

- Compensation and Information
- Employee Relations
- Organisational Development and Design
- Talent Management
- Rand Water Academy



Mr Siphos Mosai

Chief Operating Officer
Portfolio Integrating Committee member as from: 1st April 2009

Responsibilities:

- Operations
- Scientific Services
- Strategic Asset Management
- Sector Growth and Development



Dr Fawcett Ngoatje

Group Shared Services Executive
Portfolio Integrating Committee member as from: 1st July 2008

Responsibilities

- Risk Advisory Services
- Corporate Communication
- IT
- Logistic Services
- Marketing and Stakeholder Relations
- Supply Chain Management
- International Water Cooperation



Ms Matshidiso Nyembe

Chief Financial Officer
Portfolio Integrating Committee member as from: 18th May 2009

Responsibilities:

- Funding
- Group Treasury
- Rand Water Medical Scheme
- Rand Water Provident Fund
- Financial Control
- Financial Planning



Ms NSN Sithole

Group Governance Executive
Portfolio Integrating Committee member as from: 1st September 2008

Responsibilities:

- Forensic Audit
- Internal Audit
- Legal Services
- Compliance and Regulatory Services
- Strategic Projects

RAND WATER STRATEGY

VISION

The vision of Rand Water, as stated in the Shareholder Compact, is the following: To be a provider of sustainable, universally competitive water and sanitation solutions for Africa.

MISSION

The mission of Rand Water is to consistently meet the expectations of our customers, partners and the government by strengthening our capacity to:

- Attract, develop and retain leading edge skills in water services
- Sustain a robust financial performance
- Develop and sustain globally competitive capabilities in core areas
- Enter into and sustain productive partnerships; and
- Develop, test and deploy cost-effective technologies

STRATEGIC OBJECTIVES

In order to attain its strategic intent, Rand Water set the following strategic objectives, which focus and direct business activities of the organisation over the planning period.

- Achieve Operational Integrity and Use Best Fit Technology
- Achieve a High Performance Culture
- Positively Engage Stakeholder Base
- Achieve Growth
- Maintain Financial Health & Sustainability

KEY PERFORMANCE AREAS

Each of the Rand Water strategic objectives are underpinned by specific goals, defined by key activities and targets. These are broadly categorized as follows:

Achieve Operational Integrity and Use Best Fit Technology

- To ensure compliance to all statutory and regulatory requirements
- To promote safety, health, environment and quality (SHEQ)
- To increase protection of Rand Water's assets and personnel
- To ensure continuous supply of water to customers
- To ensure the quality and reliability of Rand Water assets
- To effectively co-ordinate Rand Water's information and communication technology and knowledge management
- To maintain the quality of water
- To improve internal processes within the Rand Water Group

Achieve a High Performance Culture

- To build integrity within the organisation
- To build employee morale and satisfaction
- To build internal and external skills and capacity
- To retain staff through an attractive environment
- To transform Rand Water's employee profile to reflect demographics of area of supply
- To provide required assurance at board level
- To retain Rand Water's institutional knowledge
- To benchmark and be universally competitive through engagements with the international environment

Positively Engage Stakeholder Base

- To promote and implement initiatives that have a socio-economic development impact
- To reduce legal risk and thereby minimize the financial and reputational impact on Rand Water
- To improve awareness of Rand Water and relations with external stakeholders including the international environment
- To respond appropriately to Rand Water's environment
- To respond effectively to the needs of stakeholders

Achieve Growth

- To ensure that Rand Water infrastructure meets current and future demand
- To promote growth through new areas of supply
- To promote growth through new product streams

Maintain Financial Health & Sustainability

- To promote prudent financial management
- To achieve optimal investment portfolio performance
- To mitigate all financial risk for the Rand Water Group
- To ensure that assets are fully utilised
- To ensure that tariff is determined accurately from Rand Water's environment

COMMITMENT TO CORPORATE GOVERNANCE



Corporate governance is formally concerned with the organisational arrangements that have been put in place to provide an appropriate set of checks and balances within which the leadership of the organisation operate. The objective is to ensure that those to whom the stakeholders entrust the direction and success of the organisation act in the best interest of these stakeholders. It is about leading with integrity, responsibility, accountability and transparency.

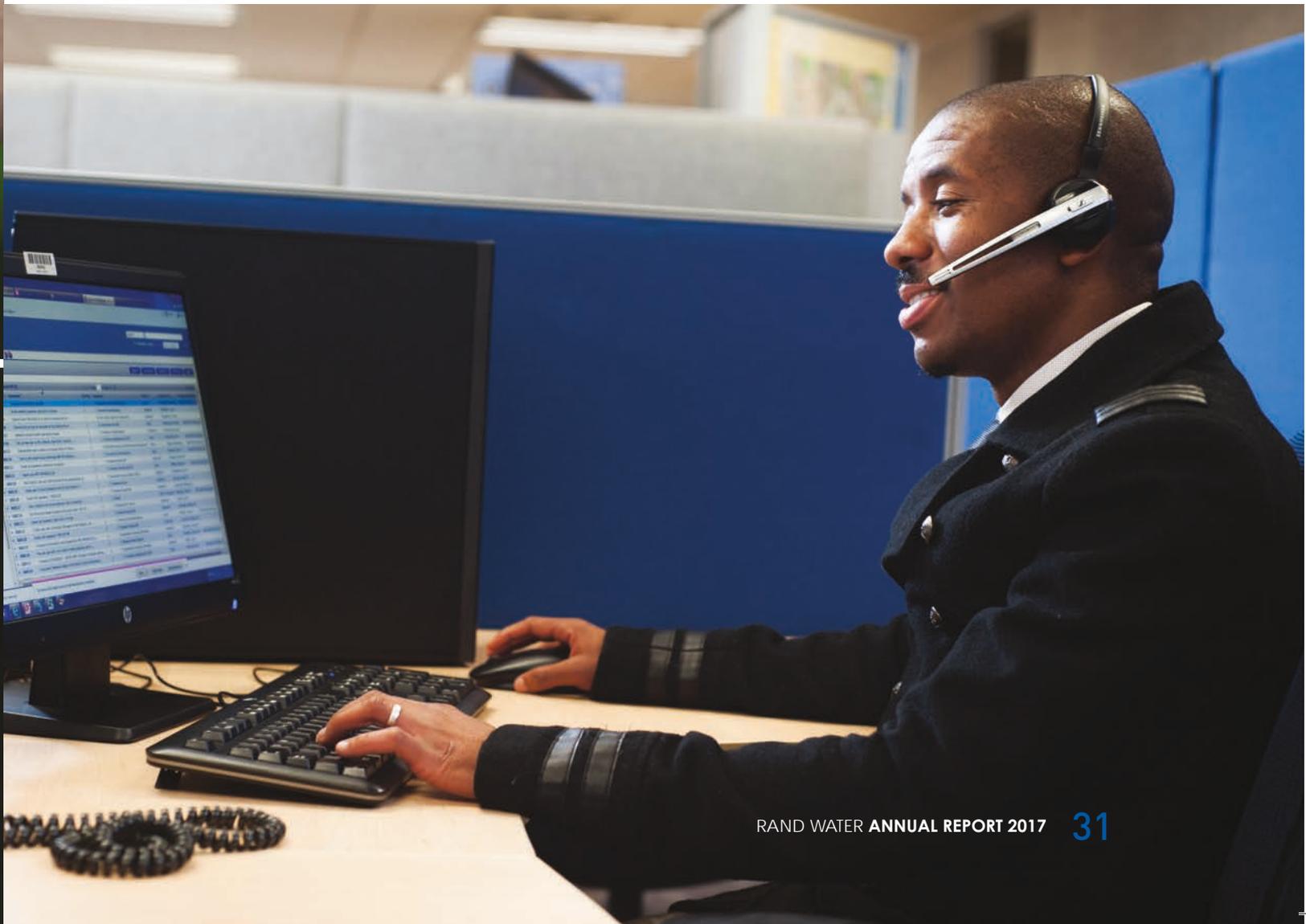
The Board of Rand Water acknowledges that corporate governance is essential for the efficient functioning of the Board and the overall business of Rand Water. Corporate governance is embedded in the operation, processes and culture of Rand Water. The principles of good governance are applied taking into consideration their significance to the growth and sustainability of the business as well as the achievement of the strategic objectives.

The Board is the focal point for, and the custodian of, the corporate governance framework which is an overarching policy that directs the functioning of all governance structures. The corporate governance framework clearly articulates the basic principles and operational processes for the application of good governance throughout the structures within the business. The provisions of the framework are upheld to ensure conformance across the organisation.

The Rand Water Board is supported by Board sub-committees. The Board is ultimately responsible and accountable for governance of the Group. This includes overseeing all business operations, strategy formulation, risk management, and compliance of the Group. All sub-committees that support the Board have specific responsibilities and written Terms of Reference which are reviewed annually. The Chairperson of each committee reports to the Board at every meeting.

ADOPTION OF THE KING IV REPORT

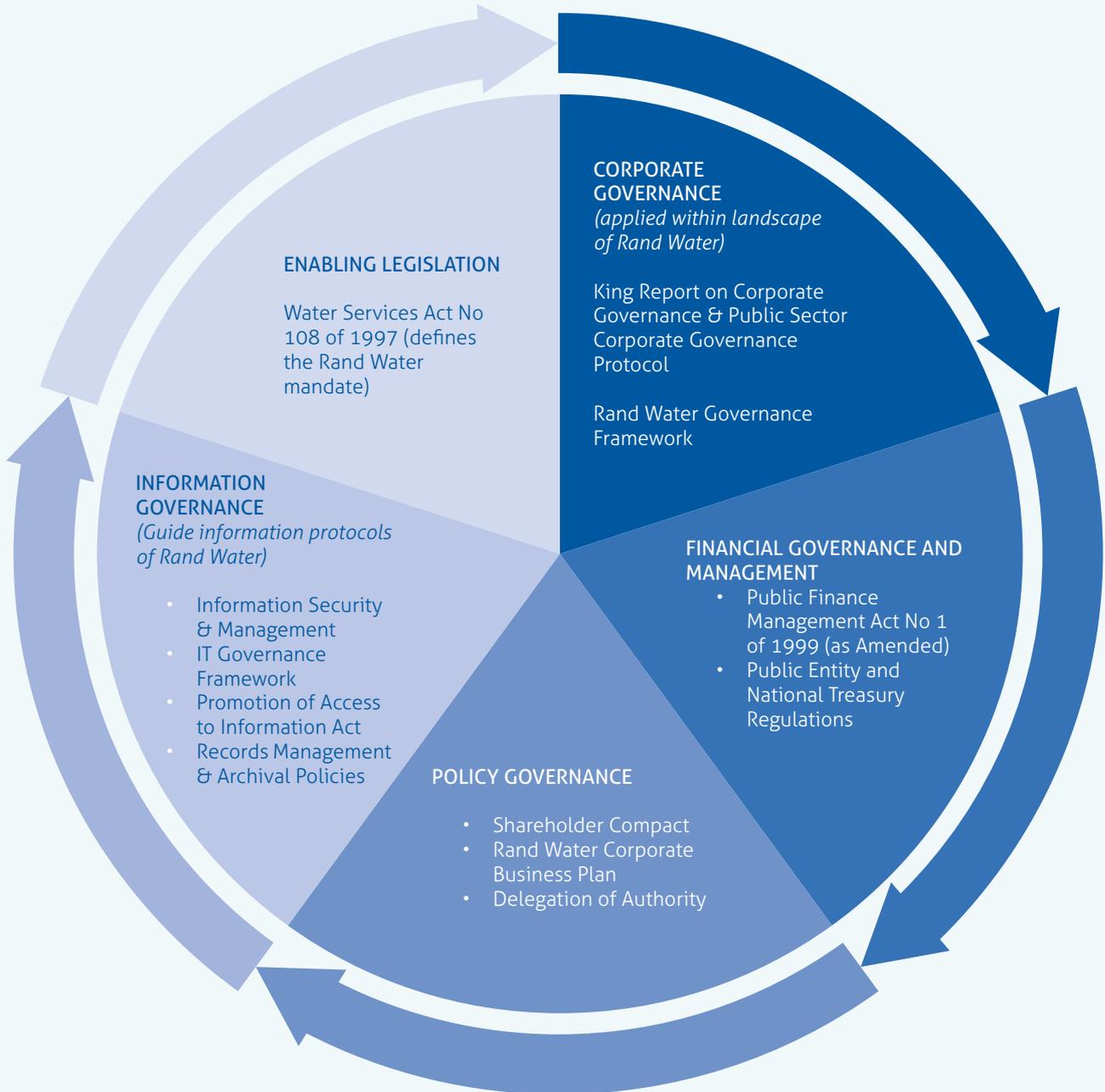
The Board self-assessed the impact of the new King IV Code on business processes and protocols within the organisation. The Board of Rand Water adopted the principles of the King IV report since their release in November 2016. The adoption of this report is indicative of a commitment to good corporate governance by the Board.



GOVERNANCE, LEGISLATIVE, AND REGULATORY FRAMEWORK

The Corporate Governance and Legislative Framework of Rand Water are informed by different legislative and regulatory requirements, rules and standards. Amongst others, these are summarised as follows:

DIFFERENT LEGISLATIVE AND REGULATORY REQUIREMENTS FOR THE FRAMEWORK



ACCOUNTABILITY OF THE BOARD

The Board is accountable to the Shareholder and all other stakeholders of Rand Water for the performance and sustainability of the business. The Board has decision-making authority on all matters of a strategic nature and is ultimately responsible for ensuring that the mandate of Rand Water is fulfilled in accordance with the direction given by the Shareholder.

The Board meets at least six (06) times a year to review progress in the execution of the strategy by the Chief Executive supported by the Executive. A Board Charter, which sets out the roles and responsibilities of the Board, was adopted during the year in review. A comprehensive review was done during the year to align the Board Charter to emerging international governance and regulatory requirements.

COMPOSITION OF THE BOARD

The Board of Rand Water is a unitary body. As at the year ended 30th June 2017, the Board comprised eleven (11) Independent Non-Executive Members, and the Chief Executive as the one (1) Executive Member.

The Board is appointed by the Honourable Minister of Water and Sanitation through a formal process as fully outlined in Schedule 1 of the Water Services Act, 1997.

The Chairperson of the Board is an independent Non-Executive Member and is supported by a Deputy Chairperson who is also independent.

BOARD TERM

The Honourable Minister of Water and Sanitation appoints Board members. In terms of the Water Service Act, a member of a water board may be appointed for a period of office determined by the Honourable Minister, which may not exceed four (04) years.

A member of a water board may be reappointed to serve on the board for a period limited to three (03) consecutive terms of office. In order to comply with the Water Service Act and for continuity, the tenure of the Board is balanced to accommodate the expiry of the term of office of Board members ensuring that institutional knowledge is retained.

The term of office of the current Board expires in March 2018.



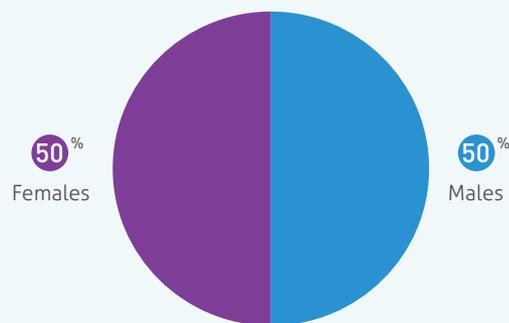
BOARD TENURE



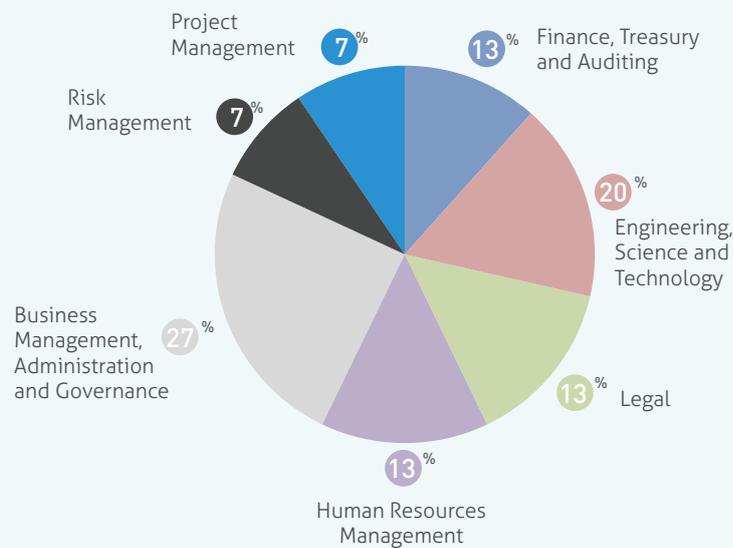
BOARD DEMOGRAPHICS

The composition of the Board recognises the benefits of diversity to attract a various range of expertise. Board skills diversity is an essential component in sustaining a competitive advantage for decision-making through value added per area of expertise required. A combination of business, geographic, and academic backgrounds enhance the composition of a truly diverse Board. Furthermore, the composition of the board is based on principles of transformation and gender representativeness reflective of the South African society.

RATIO OF MALES AND FEMALES



INDUSTRY / SECTOR EXPERIENCE (SKILLS MIX)



BOARD INDUCTION, TRAINING AND DEVELOPMENT

In order to enhance the effectiveness of the Board, Rand Water appraises newly appointed Board members of the business and their related duties and responsibilities as directors. Rand Water also gives them the opportunity to visit Rand Water's sites and operations. The development of industry and group knowledge is a continuous process, thus Board members are briefed on legal developments, and changes in the risk and general business environment on an on-going basis.

EVALUATION OF BOARD PERFORMANCE

Every year, the effectiveness and performance of the Board, its committees, subsidiaries entities, and individual directors are evaluated. This is performed in compliance to *Policy regarding Board practices and remuneration of Board members for entities reporting to the Honourable Minister of Water and Sanitation*. The Chairperson of the Board is mandated to agree on performance evaluation with Board members and assess their performance accordingly. All Board Members sign performance contracts in accordance with requirements from the Shareholder. There were no major concerns raised by any director in respect of the functioning of the Board or any of its committees. The Board adopted a method of alternating between a

quantitative review method which utilises evaluation questionnaires; and a qualitative review method which consists of one-on-one interview with each Board member.

During the year under review, the Board conducted a qualitative performance assessment of the effectiveness of the Board as a whole, effectiveness of sub-Committees, and contribution by each individual Board member. There were no major concerns raised by any Board members in respect of the functioning of the Board, its committees, or its subsidiaries and entities.

The results were discussed with each individual Board member, reported to the Board and subsequently to the Shareholder by the Chairperson.

SHAREHOLDER COMPACT

The Accounting Authority of Rand Water ("the Board") annually concludes a Shareholder Compact with the Executive Authority in compliance with Regulation 29 of the National Treasury Regulations. This regulates the relationship between the parties. In addition, the Shareholder Compact documents the key performance measures and indicators to be attained by Rand Water are agreed in advance. In this regard, the Board ensures that quarterly reports and the Integrated Annual Report are submitted to the Shareholder to provide information about performance against set targets.

DELEGATION OF AUTHORITY

The Delegation of Authority (DoA) defines the limits of authority designated to specified positions of responsibility as well as obligations that may be approved by individuals or committees within the protocol process. The Board, through the DoA, outlined the levels of materiality in relation to the business of Rand Water. The Board reserved specific powers for its decision-making and delegated to its committees and the Chief Executive. The Chief Executive was also granted the authority to sub-delegate to management and throughout the organisation. The DoA does not in any way divest the Board of its responsibilities, authority and duties. The Board annually reviews and approves the DoA and at any time when necessary during the year.

CHAIRPERSON AND CHIEF EXECUTIVE

The Chairperson is an independent Non-executive and is responsible for leading the Board. The Chief Executive is responsible for providing ethical leadership and ensuring operations are aligned with the strategy. The roles of the Chairperson and Chief Executive are independent and segregated.

The Chief Executive reports to the Board and is ultimately responsible for execution of the strategy adopted by the Board.

CHIEF EXECUTIVE AND EXECUTIVE MANAGEMENT

The Chief Executive is the only Executive Member of the Board and were vested with the decision making authority on all the internal governance structures. The Chief Executive is accountable to the Board. A team of executives support the Chief Executive to effectively execute the mandate of the entity and to oversee implementation of operational activities in line with the Rand Water strategy.

ETHICS, VALUES, AND LEADERSHIP COMMITMENT

King IV states that it is the responsibility of leadership to lead ethically and effectively. King IV further recommends that the Ethics of the Organisation should be governed in a way that supports the establishment of an ethical culture.

The Board of Rand Water is responsible for providing effective leadership based on an ethical foundation that promotes an ethical corporate culture. Rand Water's five values of Equity, Caring, Integrity, Spirit of partnership, and Excellence are embedded in all business operations. Rand Water promotes ethical behaviour through its systems and processes. This gives life to an ethical culture that is cultivated across the organisation, demonstrating its commitment to sound governance principles.

Consistent with its long history of integrity and good corporate citizenship, Board members and Rand Water employees are committed to conducting business in accordance with the highest ethical standards.

Through effective ethical leadership, the Board provides a blue print of ethical conduct at board level to be emulated throughout the organisation. The Rand Water Code of Ethics is an appropriate response to these requirements and offers detailed guidelines on ethical conduct adaptable to pertinent legislation, regulations, policies, and procedures.

The leadership of Rand Water supports the ethics management programmes, and believes that these will directly benefit customers, employees, and other stakeholders. They contribute to the long standing moral identity and moral reputation of the organisation.

The Group Audit Committee, as delegated by the Board, has a distinctive role in ensuring that the entity manages ethics effectively having been mandated by the Board to provide an oversight role in this regard.

In an organisational context, Rand Water currently has a decentralised ethics reporting framework wherein the different components of ethics are addressed within business areas. The key objective of the Ethics Reporting Framework is to assist Rand Water to have a structured way of reporting and monitoring ethics. This framework conforms to ethics standards, both locally and internationally.

CODE OF ETHICS

The Code of Ethics serves as a fundamental framework for ethical behaviour in Rand Water and its interactions with stakeholders. The Code of Ethics is utilised as an important reference document for employees when they are personally confronted with any aspect of an ethical nature. The code is also utilised to provide context and meaning to employees in their day to day activities within their respective functional areas. The revised Code of Ethics was approved by the Board in the period under review and outlines the ethical principles based on the organisation's core values and further sets out behavioural expectations of all employees, the Board, and all stakeholders.

Training on the Code of Ethics was successfully rolled out to employees in the Rand Water Group.

Rand Water currently has three certified ethics officers. The Group Audit Committee and Board receive regular updates on ethics related matters. The Code of Ethics is supported by the following guidelines:

- Guideline on Conflicts of Interest
- Guideline on accepting business courtesies
- Guideline on employees participating in other entities

STATEMENT OF COMPLIANCE

The Board acknowledges that compliance with legislative and regulatory requirements is paramount in all transactions and business dealings of the entity. The Board provides oversight on all protocols and processes within the business. Therefore compliance

responsibility is assigned to all employees in ensuring conformance to all applicable laws, standards, codes, rules, and regulations. In addition regular compliance reports are tabled to all relevant structures including the Board, for effective management and monitoring of these protocols and processes..

INFORMATION MANAGEMENT

Information is a critical asset to the operations of the business. The Board approved an Intellectual Policy and Procedure to manage its information. The management of information is delegated to the Chief Executive supported by two (02) Deputies. This is covered in Information Security policies; Records Management and Archival Policy; Promotion of Access to Information Act, 2000; the National Archives and Records Service of South Africa Act, 1996; and all other applicable policies and procedures. To protect information, in addition to systems that are already in place and the oversight role of the Board, all employees are required to sign confidentiality agreements to ensure commitment to the entity's agenda of information protection and preservation.

POLICY GOVERNANCE FRAMEWORK

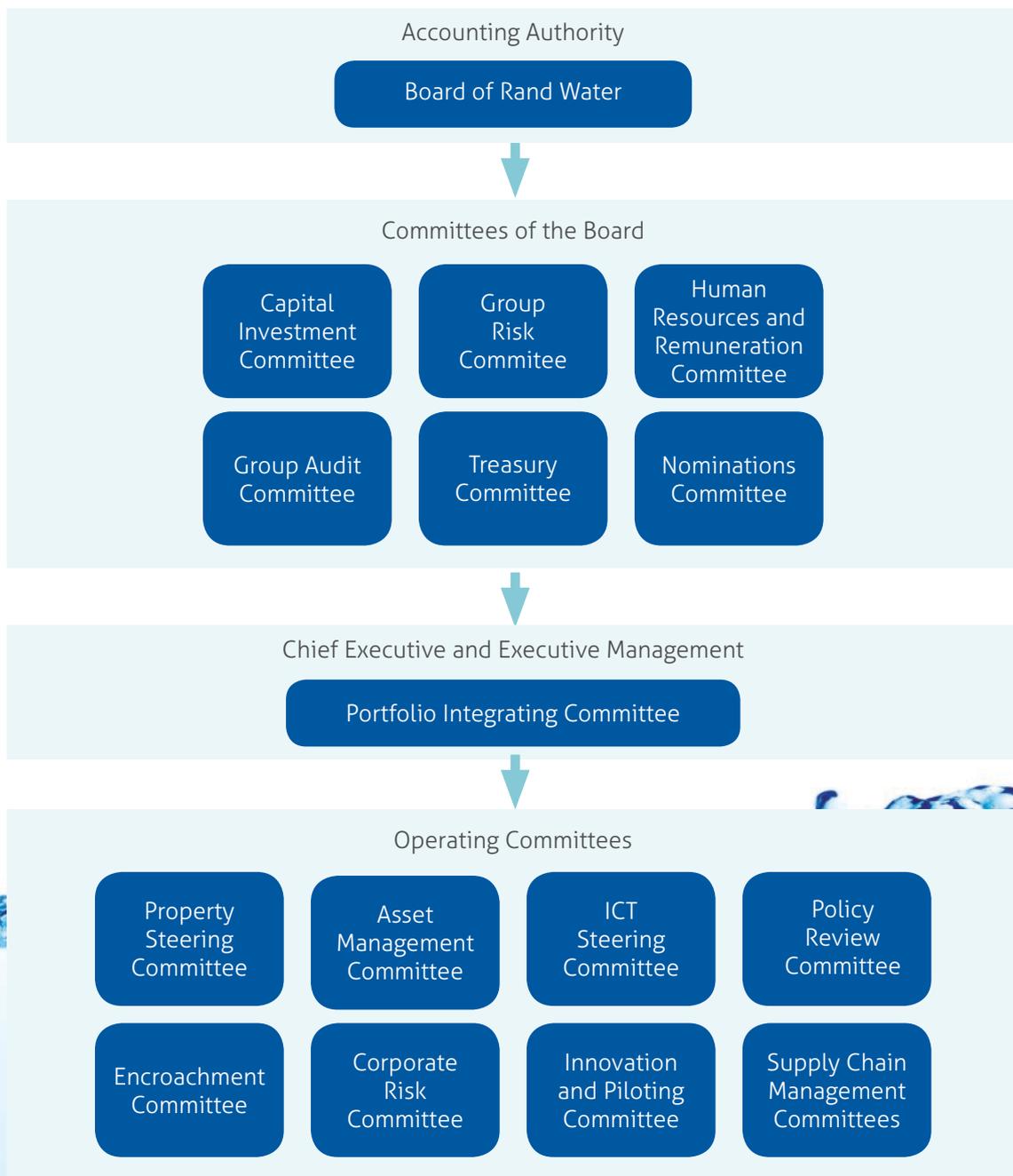
The review of Policies to ensure relevance is critical. The policies are reviewed and updated on an annual basis or as and when necessary. This ensures alignment to new business requirements, and updates in the legislative and regulatory environment. To this end, a Policy Review Committee was established to develop new Policies and revise existing Policies as and when necessary. These are submitted to the Accounting Authority for approval.

The Policy Governance Framework provides the structure for developing, implementing, maintaining, approval and review of policies, procedures, standards and guidelines. Policy documents are categorized into strategic and/or operational which are then approved in accordance with the protocol process within the governance structures.

RAND WATER GOVERNANCE STRUCTURES

As the Accounting Authority, the Board assigned roles and responsibilities to governance structures. This provides a mechanism to enable direction and accountability at all levels in the business. Good governance can only be achieved through governance structures that are directed and controlled by ethical and accountable leaders. In addition, the Chief Executive established an internal

governance structure to assist and support him in implementing the strategy and realising the objectives of the organisation in line with the mandate. In this regard, the Portfolio Integrating Committee (PIC) plays the role of the Executive Committee. The sub-committees of PIC have specific focus areas. Their roles and responsibilities are fully detailed in formal terms of reference.



ROLES, RESPONSIBILITIES, MEMBERSHIP AND ATTENDANCE OF THE BOARD

The roles, responsibilities, membership, and attendance of the Board and its committees are as follows:

	Summary of Roles and Responsibilities	Membership	Attendance
Main Board	<p>The Board's primary responsibilities are as follows:</p> <ul style="list-style-type: none"> • Focal point for corporate governance and custodian of corporate governance in the organisation. • Retaining full and effective control over Rand Water, and providing effective and ethical leadership based on integrity, transparency, accountability, and responsibility. • Giving strategic direction to Rand Water and in the process, regularly consider present and future strengths, weaknesses, opportunities and threats to Rand Water having regard to the dynamics of an ever-changing external environment. • Setting the risk tolerance level in accordance with the adopted strategy, overseeing the identification and evaluation of key risks as well as the risk management process. • Ensure that information technology governance is effectively overseen and that adequate information is provided by management to facilitate effective decision making. • Ensure that there is a robust system of internal controls on the effectiveness of which regular assurance is received through risk centric internal audits. • Instituting a robust policy and procedure for the management of conflicts of interest. 	Adv F Hashatse Chairperson	8/8
		Ms S Molokoane-Machika Deputy Chairperson	8/8
		Ms BC Bam	8/8
		Mr D Coovadia	8/8
		Ms L Kaunda	6/8
		Prof FAO Otieno	7/8
		Mr L Makibinyane	6/8
		Ms NGJ Mbileni	8/8
		Mr I Mmushi	7/8
		Ms RA Kenosi	8/8
Mr R Monyokolo (1)	8/8		
Mr DKP Sechemane Chief Executive	8/8		

Notes:

1. Appointed to the HR & Remco on 29th March 2017

ROLES, RESPONSIBILITIES, MEMBERSHIP AND ATTENDANCE OF THE BOARD

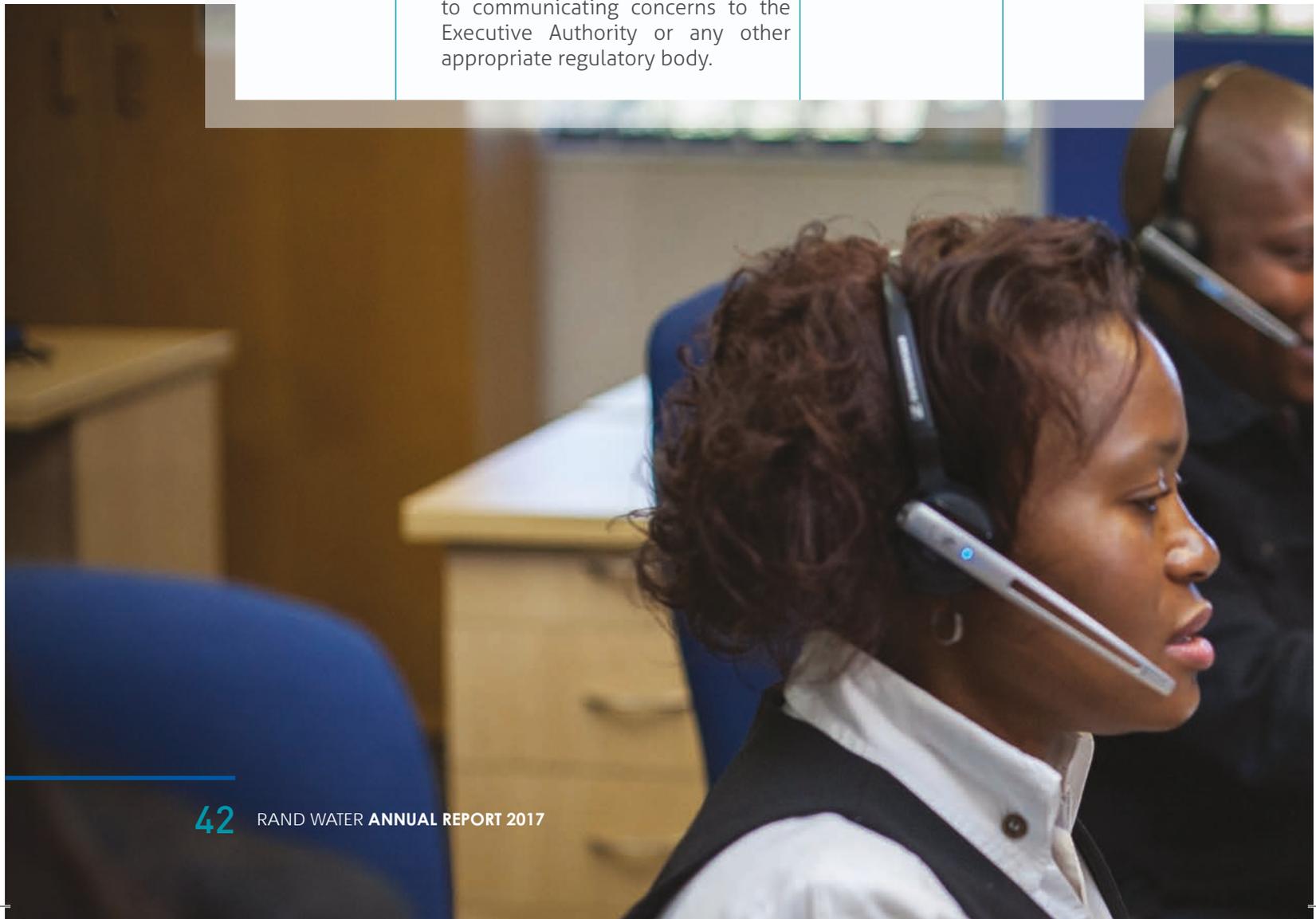
	Summary of Roles and Responsibilities	Membership	Attendance
Main Board	<ul style="list-style-type: none"> • Appoint a suitable person as Chief Executive ("the CE"), for a renewable period; • Determine the duties and conditions of service of the CE. • Determine the salary of the CE subject to the approval by the Honourable Minister. <ul style="list-style-type: none"> - Providing oversight to the Rand Water business in terms of: Defining levels of materiality, reserving specific powers to itself and delegating other matters, with the necessary written authority, to management. - Continually monitoring the exercise of delegated powers by management through understanding key performance areas and key performance indicators of Rand Water and considering reporting against these. - Regularly reviewing the Delegation of Authority Framework to assist effective decision making throughout Rand Water. - Monitoring and evaluating the implementation of strategies, policies, and management of performance criteria and the business plans having regard to its own reporting and performance responsibilities to the Executive Authority. 		

ROLES, RESPONSIBILITIES, MEMBERSHIP AND ATTENDANCE OF THE BOARD

	Summary of Roles and Responsibilities	Membership	Attendance
Main Board	<ul style="list-style-type: none"> - Safeguarding a comprehensive system of policies, procedures, and appropriate governance structures at management level. - Exercising objective judgment on the business affairs of Rand Water, independent from management, but with sufficient management information to enable a proper and objective assessment to be made. - Promoting a culture that supports entrepreneurship and innovation by enabling and rewarding such behaviour. - Instituting a system of executive remuneration that is equitable, responsible, and motivating. - Overseeing that succession planning in respect of senior executive positions within Rand Water is in place. • Establishing necessary structures to independently verify and safeguard the integrity of both financial and non-financial reporting. • When reviewing the annual financial statements to satisfy itself, based on objective criteria, that Rand Water will continue as a going concern in its next financial year. The conclusion should be reported in the annual financial statements for the benefit of stakeholders. 		

ROLES, RESPONSIBILITIES, MEMBERSHIP AND ATTENDANCE OF THE BOARD

	Summary of Roles and Responsibilities	Membership	Attendance
Main Board	<ul style="list-style-type: none"> • Taking the necessary steps to ensure that Rand Water acts and is seen to act as a responsible corporate citizen that protects the sustainability of the natural environment and makes a net positive impact in the community within which it operates. • Cultivating and promoting an ethical corporate culture. • Safeguarding compliance with all relevant policies, laws and regulations, audit and accounting principles, and Rand Water's Code of Ethics. • Taking necessary steps to ensure that internal and external disputes are resolved effectively and expeditiously. • Serving as the link between Rand Water and its stakeholders by identifying and engaging with such stakeholders in a meaningful way. • If deemed necessary or obliged, to communicating concerns to the Executive Authority or any other appropriate regulatory body. 		



ROLES, RESPONSIBILITIES, MEMBERSHIP AND ATTENDANCE OF THE BOARD

	Summary of Roles and Responsibilities	Membership	Attendance
Main Board	<ul style="list-style-type: none"> • Ensuring that Rand Water when exercising its powers and carrying out its duties achieves a balance between: <ul style="list-style-type: none"> - Striving to provide efficient, reliable and sustainable water services. - Optimally using available resources. - Striving to be financially viable. - Promoting the efficiency of water services authorities. - Taking cognisance of the needs of water services institutions, consumers and users. - Taking into account national and provincial policies, objects, and developments. • Acting in an equitable, transparent, and fair manner. • Executing any Ministerial directives and strategic initiatives from the Department of Water and Sanitation (DWS) to fulfil the mandate in that regard. • Complying with health and environmental policies. • Taking reasonable measures to promote water conservation and water demand management, including promoting public awareness of these matters. 		

ROLES, RESPONSIBILITIES, MEMBERSHIP AND ATTENDANCE OF THE BOARD

	Summary of Roles and Responsibilities	Membership	Attendance
Group Audit Committee	<ul style="list-style-type: none"> Group Audit Committee consists of five (5) independent non-executive members. One (1) of whom is a Board member of the Rand Water Foundation. Executives as well as other assurance providers attend the Committee meetings without any voting rights. A representative from the Office of the Auditor General of South Africa is a standing invitee to all Committee meetings. 	Mr L Makibinyane Mr D Coovadia Ms NGJ Mbileni Ms M Kabi RWF Board Member Ms RA Kenosi Chairperson	8/9 9/9 9/9 7/9 8/9
	<p>The Committee was established by the Board of Rand Water to assist it with meeting its responsibilities in compliance with Section 51 of PFMA and National Treasury Regulations. The Committee has an independent role with accountability to both the Board and the Shareholder.</p> <p>The Committee serves as an independent oversight and advisory body responsible, inter alia, for the financial reporting and financial information, risk management processes, internal financial control and compliance thereto, internal and external audit, performance monitoring and evaluation, ethics, sustainability and legislative and regulatory compliance.</p>		



ROLES, RESPONSIBILITIES, MEMBERSHIP AND ATTENDANCE OF THE BOARD

	Summary of Roles and Responsibilities	Membership	Attendance
Treasury Committee	<ul style="list-style-type: none"> The Committee consists of five (5) independent non-executive members. Executives attend the Committee meetings without any voting rights. <p>The Committee was established by the Board of Rand Water ("the Board") to oversee the operations of the treasury function including, guiding treasury policies, assisting with the overall treasury strategy and monitoring the risks concomitant to the treasury function with the powers and duties.</p> <p>The Committee assists the Board with asset and liability management at Rand Water by managing the inherent interest rate, foreign currency, commodity, and liquidity risks.</p> <p>Asset and Liability Management informs Rand Water's assets and liabilities management procedures, planning and implementation.</p> <p>The objective of Asset and Liability Management is to provide direction to achieve the following:</p> <ul style="list-style-type: none"> Establishment of an effective assets and liability management environment. Providing management with an integrated view of the Rand Water's balance sheet and financial risk management. Establishing roles and responsibilities for/of the various structures with regard to assets and liability management within the Rand Water. Providing Rand Water management with decision support when making major investment/funding decisions. 	Mr D Coovadia Chairperson	3/3
		Mr L Makibinyane	3/3
		Ms NGJ Mbileni	3/3
		Mr I Mmushi	2/3
		Ms R Kenosi	3/3

ROLES, RESPONSIBILITIES, MEMBERSHIP AND ATTENDANCE OF THE BOARD

	Summary of Roles and Responsibilities	Membership	Attendance
Capital Investment Committee	<ul style="list-style-type: none"> The Committee consists of six (6) independent non-executive members. The Executives attend the Committee meetings without any voting rights. 	Mr L Makibinyane Chairperson	4/5
		Mr I Mmushi	4/5
	Ms L Kaunda	3/5	
	The Capital Investment Committee was established by the Board of Rand Water ("the Board") to optimally control the major capital expenditure that falls within the scope of the "Primary Activities" and the activities that are not primary activities, but of a significant and material in nature as defined in the Water Service Act in order to achieve a high level of confidence of investors in Rand Water's credit worthiness.	Ms S Molokoane-Machika	5/5
		Prof FAO Otieno	4/5
		Mr R Monyokolo (1)	4/5
Human Resources and Remuneration Committee	<ul style="list-style-type: none"> The Committee consists of six (06) independent non-executive members. The Executives attend the committee meetings without any voting rights. 	Ms S Molokoane-Machika Chairperson	5/5
		Mr R Monyokolo (1)	3/5
	The Committee was established by the Board of Rand Water to assist the Board with the following:	Ms BC Bam	5/5
	<ul style="list-style-type: none"> Overseeing development of remuneration policies for non-executive members that create value for Rand Water over the long term and to oversee the application thereof. Directing the administration of the bursary scheme. Overseeing the establishment and implementation of human resources policies that promote an equitable, progressive and legally compliant working environment. Provides the Board and the Shareholders with an authoritative and credible view of the performance of Rand Water. 	Ms L Kaunda	3/5
		Prof FAO Otieno	4/5
		Ms NGJ Mbileni	4/5

Notes:

1. Appointed to the HR & Remco on 29th March 2017

ROLES, RESPONSIBILITIES, MEMBERSHIP AND ATTENDANCE OF THE BOARD

	Summary of Roles and Responsibilities	Membership	Attendance
Group Risk Committee	<ul style="list-style-type: none"> The Committee consists of six independent (06) non-executive members and two (02) executive members, being the Chief Executive and the Group Shared Services Executive. One (1) independent non-executive member is a Board member of the Rand Water Foundation Board. Other Executives attend the Committee meetings without any voting rights. 	Prof FAO Otieno Chairperson	4/4
	<p>The Committee is established by the Board to properly align with management as it embarks a risk management program. The primary responsibility of the risk committee is to:</p> <ul style="list-style-type: none"> Assist and support the Board in discharging its responsibilities regarding risk management and the internal controls. Set the direction for how risk governance and information technology governance must be approached and addressed in the organisation. Review organisational policies that clearly articulate and give effect to the direction set by the Board on the employment of risk and information technology governance. 	Ms S Molokoane-Machika Ms L Kaunda Mr L Makibinyane	2/4 1/4 2/4

ROLES, RESPONSIBILITIES, MEMBERSHIP AND ATTENDANCE OF THE BOARD

	Summary of Roles and Responsibilities	Membership	Attendance
Group Risk Committee	<ul style="list-style-type: none"> Evaluate the nature and extent of organisational risks identified in pursuit of strategic objectives. Attain a sound understanding of the key risks and potential threats faced by Rand Water with a view of managing same within the ambit of a developed risk management framework. Recommend an enterprise-wide risk management plan that meets set requirements of Rand Water's stated philosophy. Implement an approved risk management process. Oversee the implementation of risk and information technology management strategies and consider a need to receive periodic independent assurance on the adequacy and effectiveness of risk management strategies of Rand Water. Regularly review and improve the effectiveness of the risk management strategies of Rand Water. Oversee that the executive team identified and assessed all the risks that the organisation faces and established a risk management infrastructure capable of addressing those risks. 	Mr DKP Sechemane Chief Executive	2/4
		Ms Z Lekubu RWF Board Member	3/4
		Mr R Monyokolo	4/4
		Dr F Ngoatje Group Shared Services Executive	4/4

ROLES, RESPONSIBILITIES, MEMBERSHIP AND ATTENDANCE OF THE BOARD

	Summary of Roles and Responsibilities	Membership	Attendance
Group Risk Committee	<ul style="list-style-type: none"> Oversee, in conjunction with other board-level committees or the full board, if applicable, risks, such as strategic, financial, credit, market, liquidity, security, property, IT, legal, regulatory, reputational, and other risks. Oversee the division of risk-related responsibilities to each board committee as clearly as possible and perform a gap analysis to determine that the oversight of any risks is not missed. Recommend the company's enterprise wide risk management framework. 		
Nominations Committee	<ul style="list-style-type: none"> The Committee consists of three (03) independent non-executive members and one (01) executive member, being the Chief Executive. 	Adv F Hashatse Chairperson	1/1
	<ul style="list-style-type: none"> The Committee was established by the Board of Rand Water to assist the Board in ensuring that: The Subsidiary Board/s have the appropriate composition for it to execute its duties effectively; Board members are appointed to Sub-Committees and Subsidiaries through a formalized process; and Induction and on-going training and development of Board members take place. 	Ms S Molokoane-Machika Mr I Mmushi Mr DKP Sechemane Chief Executive	1/1 1/1 1/1

RAND WATER SUBSIDIARIES AND ENTITIES

RAND WATER SERVICES

Rand Water is the sole shareholder of Rand Water Services (Pty) Ltd ("RWS") and Rand Water Foundation ("RWF"). Rand Water Services (Pty) Ltd was divisionalised in 2010, and during the year under review, the company was not actively trading.

RAND WATER FOUNDATION

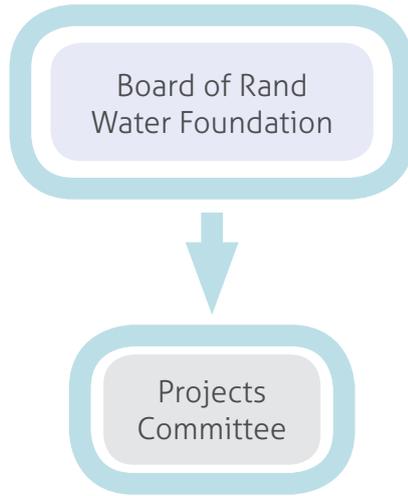
RWF was established in 2001 as a Non-Profit Company (NPC) to carry out Corporate Social Investment (CSI) programmes of Rand Water. The RWF is mandated to promote and support the delivery of water services to communities within and outside of Rand Water's areas of supply. The Foundation also coordinates, administers and manages Rand Water's CSI resources by undertaking community development projects in partnership with various donors and relevant stakeholders.

For the year under review, statutory requirements in terms of the lodging of annual returns to the Companies and Intellectual Properties Commission (CIPC) were completed. There are currently no returns outstanding.

SUBSIDIARY GOVERNANCE FRAMEWORK

The Board approved a Subsidiary Governance Framework which is an agreement between Rand Water and its subsidiaries. The Subsidiary Governance Framework regulates the relationship as well as the reporting requirements between the parties. The Framework is reviewed on an annual basis in consultation with all the parties involved.

The subsidiaries of Rand Water are accountable to Rand Water through their Boards as the main shareholder. Rand Water and its subsidiaries annually conclude a Shareholder Compacts which documents the Key Performance Indicators (KPIs) and expectations from the Shareholder. The Shareholder Compacts are approved by the Rand Water Board. Rand Water's subsidiaries are required to operate within the policy and governance framework of the Rand Water.



ROLES, RESPONSIBILITIES, MEMBERSHIP AND ATTENDANCE OF THE BOARD

	Summary of Roles and Responsibilities	Membership	Attendance
Foundation Board	<ul style="list-style-type: none"> The Board of Rand Water Foundation consists of five (05) independent non-executive members. The Group Governance Executive is a non-executive director. The General Manager: Rand Water Foundation is an ex-officio member of the Board. To ensure independent oversight, Rand Water Board Members resolved that no members of the Board may be appointed as Board members at any of the subsidiary Boards. However, the subsidiaries are required to report to the Board of Rand Water on a regular basis. <ul style="list-style-type: none"> The Board’s primary responsibilities are as follows: Act as the focal point for, and custodian of corporate governance by managing its relationship with management, the shareholder and other stakeholders of the Company along sound corporate governance principles; Contributing to and approving the strategy; Satisfying itself that the strategy and business plans do not give rise to risks that have not been thoroughly assessed by management; Identifying key performance and risk areas; Ensuring that the strategy will result in sustainable outcomes; and 	<p>Mr M Tsheke Chairperson</p> <p>Ms M Dooms</p> <p>Ms M Kabi</p> <p>Ms N Lekubu</p> <p>Mr L Mngomezulu</p> <p>Ms M Sekoaila</p> <p>Ms NSN Sithole</p>	<p>5/5</p> <p>5/5</p> <p>4/5</p> <p>4/5</p> <p>4/5</p> <p>4/5</p> <p>4/5</p>



ROLES, RESPONSIBILITIES, MEMBERSHIP AND ATTENDANCE OF THE BOARD

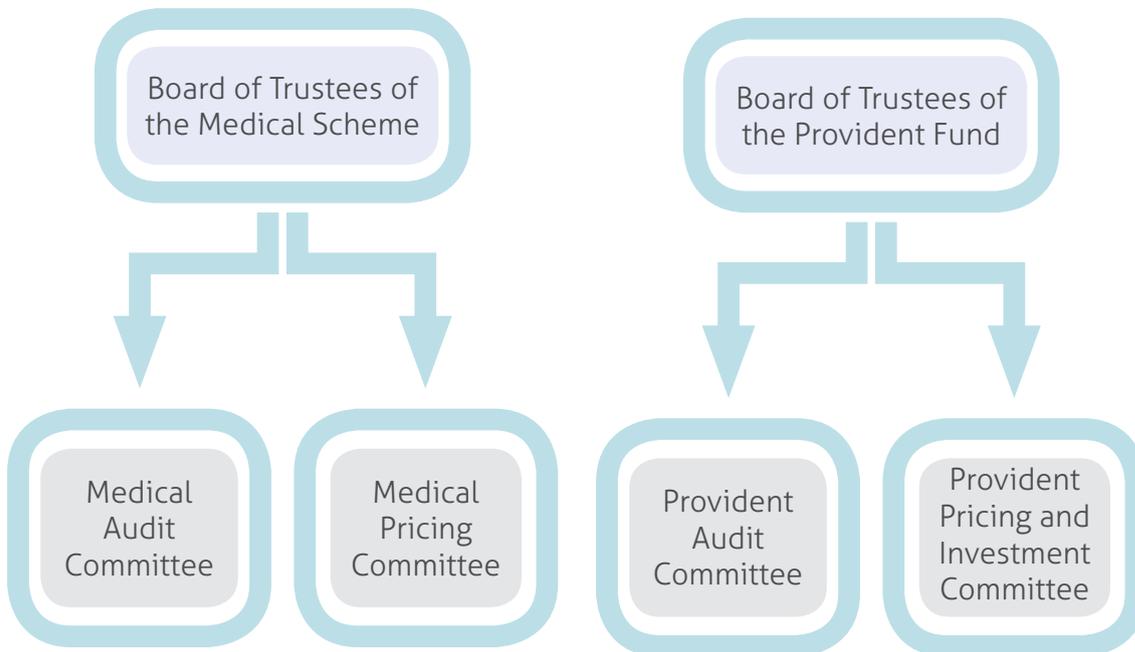
	Summary of Roles and Responsibilities	Membership	Attendance
Foundation Board	<ul style="list-style-type: none"> • Considering sustainability as a business opportunity that guides strategy formulation. • provide effective leadership on an ethical foundation; • ensure that the Company is and is seen to be a responsible corporate citizen by having regard to not only the financial aspects of the business of the Company but also the impact that business operations have on the environment and the society in which it operates; • ensure that the Company's ethics are managed effectively; • be responsible for the governance of risk; • be responsible for information technology (IT) governance; • ensure that the Company complies with all applicable laws and considers adherence to non-binding rules and standards; • ensure that there is an effective risk-based internal audit; • appreciate that stakeholders' perceptions affect the Company's reputation; • ensure the integrity of the Company's reporting; • act in the best interests of the Company by ensuring that individual directors adhere to legal standards of conduct • Appoint and evaluate the performance of the General Manager and overseeing the management of the RWF. 		
Projects Committee	<ul style="list-style-type: none"> • The Committee consists of three (03) independent non-executive members. • The GM: RWF is an ex-officio member of the Committee. • The Committee provides support and guidance in developing, implementing, monitoring and evaluating developmental projects aimed at enhancing the socio-economic capacity of communities. • The Committee considers projects and programmes as well as the projects quarterly financial report and recommends to the Board of RWF for approval. 	<p>Ms M Doms Chairperson</p> <p>Mr M Tsheke</p> <p>Mr L Mngomezulu</p> <p>Ms M Sekoaila</p>	<p>4/4</p> <p>4/4</p> <p>4/4</p> <p>4/4</p>

RAND WATER MEDICAL SCHEME

The Rand Water Medical Scheme is a non-profit closed Scheme registered in terms of the Medical Schemes Act 131 of 1998, as amended. The Scheme is self-administered and is a separate legal entity which provides healthcare for its members and their dependants. The Scheme is governed by a Board of Trustees which consists of 05 (five) member-elected Trustees and 05 (five) employer (Rand Water) appointed Trustees. The Chief Financial Officer of Rand Water is the Principal Officer of the Scheme.

RAND WATER PROVIDENT FUND

The Rand Water Provident Fund came into effect on 1st July 1995 and is administered in terms of Section 13B of the Pension Fund Act. The Fund is managed by a Board of Trustees who are appointed in terms of the Pension Fund Act, 1956 and the Rules of the Fund. The Fund is administered in-house by the Funding department. The objective of the Fund is to provide retirement and other benefits for members, and benefits in the event of their death. The Chief Financial Officer of Rand Water is the Principal Officer of the Fund.





PERTUNIA MOHLABI
GROUP COMPANY SECRETARY

Pertunia Mohlabi was appointed as the Group Company Secretary effective from 7th September 2009. Ms Mohlabi's qualifications are B Proc, LLB, LLM (Corporate Law), ICOSA Programme in Corporate Governance & Strategic Management, and a Post Graduate Certificate in Banking Law and Financial Markets. She is an Admitted Attorney of the High Court of South Africa and a certified Ethics Officer, Reg. EO 202, through Ethics SA.



Board Members have unrestricted access to the services of the Group Company Secretary who is responsible for, amongst others, administering the proceedings and affairs of the Board/s within the group to ensure overall governance compliance. The Group Company Secretary, who is the secretary for the Board, all the Board's committees, and all internal governance structures, is available to assist Board members, advise them on their roles and responsibilities, their professional development, ensure that the Board members are updated on all legislative requirements to ensure compliance, and also provide advice on all governance and ethics matters.

The Group Company Secretary is the link between the Board and Executive Management. The Group Company Secretary reports administratively to the Chief Executive and functionally to the Board of Rand Water.

The performance of the Group Company Secretary is evaluated by Board members on a quarterly basis and annually through the entity's performance review process.

Responsibilities: Corporate Governance, Secretariat Services, Ethics Management, Policy Governance and Records Management.

GROUP GOVERNANCE REPORT



The year under review witnessed an escalation in adherence to good Corporate Governance. Group Forensic Services enhances the role of Internal Audit, thereby advancing Combined Assurance.

GROUP FORENSIC SERVICES

Rand Water recognises that corporate reputation is built on a solid foundation of ethical culture. Fraud prevention is an all-encompassing phenomenon and Ethics play an integral part in the process. This constitutes a shared responsibility among the members of the organisation led by the Board, Executive, and Senior Management.

GROUP FORENSIC SERVICES ACTIVITIES

The activities of Group Forensic Services (GFS) have been integrated with the overall business strategy to assess risk and compliance management. Primarily these activities are aimed at minimising and reducing white collar crime, fraud, and risk within the organisation. The Board-approved GFS charter and Audit Plan establish the authority to regulate planned risk assessments. These include but are not limited to Lifestyle Audits, Fraud Risk Assessment, Ad-hoc Audits, Staff Vetting, and Debtors and Vendor Vetting.

GFS has a positive impact in the management of risk as a key function through methodical processes of identifying inherent business risks. The integration of the extended area of operation of Rand Water necessitated GFS to conduct similar initiatives, as envisaged in the GFS Audit Plan. Organisational policies on fraud and investigations policies in conjunction with the code of ethics and the GFS charter have a zero tolerance on white collar crime.

Pro-active measures are contained in the annual plan that is approved by the Board Risk Committee. These include activities such as fraud risk assessments. The Fraud Prevention

Plan takes into account verification processes on staff employment, vendor appointments, creditor verification, and tracing of defaulting debtors. In this respect verification processes are undertaken on an on-going basis.

The organisation has a dedicated Hotline where stakeholders are encouraged to report suspicions and/or allegations of white collar crime. Most investigations pursued, in accordance with the organisation's investigation and fraud policies were triggered by information reported and received on the Hotline service. In the event where irregularities were identified, recommendations were made for corrective action to be undertaken. This proved to be an effective and proactive way of mitigating fraud risk in line with the Board Risk Register.

REPORTING

GFS is independent of the business operations it assesses. To achieve this independence, proper governance, clearly defined reporting lines, authority, organisational placement, and access are key to the success of GFS. The Manager Group Forensic Services ("MGFS") reports administratively to the Group Governance Executive (GGE) and functionally, for guidance and support to the Board Risk and Audit committees on a periodic basis (quarterly). GFS auditors have an obligation to be impartial, unbiased in attitude and avoid conflicts of interest.

If independence or objectivity is impaired in fact or appearance, details of the impairment shall be disclosed to the relevant parties.

LEGAL FRAMEWORK

Forensic service activities take place within the parameters of all relevant South African legislation which includes, but is not limited to, the Criminal Procedures Act 51 of 1977 (as amended), Prevention and Combating of Corrupt Activities Act 12 of 2004, and Public Finance Management Act 1 of 1999.

In addition, Rand Water developed and implemented a Fraud Prevention Plan that was approved by National Treasury. It sets out Rand Water's zero tolerance approach and response to instances of fraud. GFS applies the Association of Certified Fraud Examiners (ACFE) methodologies and best practice models in its approach to identify and minimize fraud risk in the organisation.

TRENDS

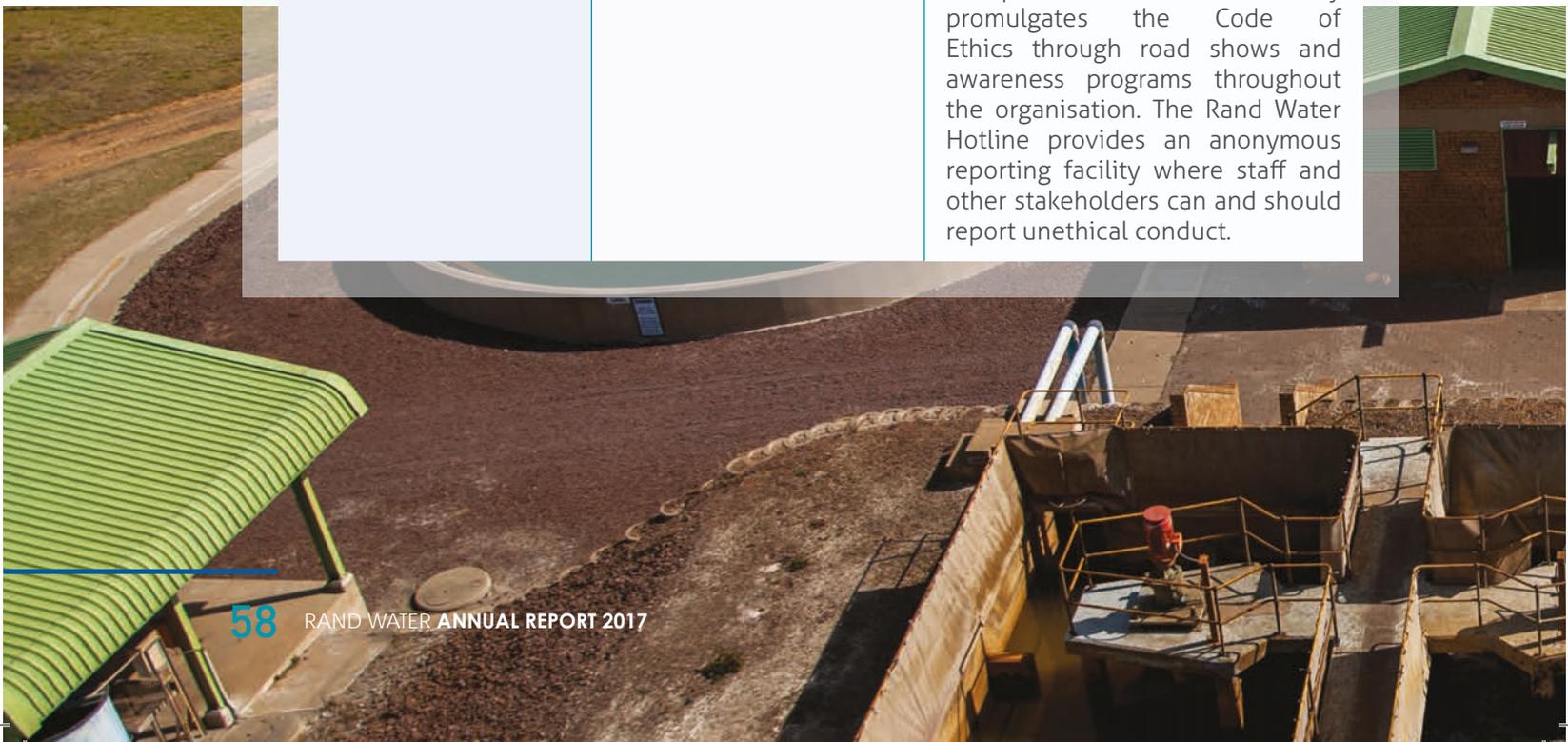
Due to the pervasive nature of fraud, internal controls have to be reviewed and revised continuously to mitigate fraud risks. For the period under review, Rand Water experienced an overall downward spiral in fraud, theft and corruption instances.

AWARENESS

GFS embarks on scheduled workshops and seminars, in its drive to promote the organisation's Code of Ethics. Awareness workshops were conducted to maintain staff sensitivity to potential fraud risk faced by the organisation. With the integration of the extended area of operation, GFS implemented an awareness drive to sensitize staff members to the organisational zero tolerance to fraud culture.

ETHICS IN RAND WATER

Governance Outcomes	Principles	Practices
Ethical Culture	Principle 2: The governing body should govern the ethics of the organisation in a way that supports the establishment of an ethical culture	<p>The Board, management and employees commit to conducting business in accordance with the highest standards of integrity, behaviour and ethics. This is assured through the entire chain of governance.</p> <p>Group Forensic Services actively promulgates the Code of Ethics through road shows and awareness programs throughout the organisation. The Rand Water Hotline provides an anonymous reporting facility where staff and other stakeholders can and should report unethical conduct.</p>



Governance Outcomes	Principles	Practices
Ethical Culture		<p>Group Forensics Services gives assurance to the Board on the implications of the following applicable legislations (list not exhaustive) :</p> <ul style="list-style-type: none"> • Public Finance Management Act • Criminal Procedures Act • Prevention and Combating of Corrupt Activities Act. • Protected Disclosures Act • International standards as prescribed by the Association of Certified Fraud Examiners • International standards for the Professional Practice of Internal Auditing <p>Through regular educational awareness sessions, management and staff are sensitised to applicable legislation, the implications thereof, and efforts to combat White Collar Crime.</p> <p>The RUBI case management system is used to manage fraud related risks and further serves as a data repository for the compilation of an annual risk register. The latter forms an integral part of Corporate Risk Register.</p> <p>Placing sharp focus on the management of White Collar Crime Risk, the Board is given the assurance to perceive Rand Water as ethically compliant.</p> <p>The Board portrays interest in the organisation’s ethical behaviour through its engagement in the monitoring and recommending measures to curtail fraud.</p> <p>Board of Directors are appointed through a formal process</p>



GROUP INTERNAL AUDIT

The internal audit function in Rand Water is best served by being independent of all areas subject to audits to ensure objectivity. It is governed by professional standards, completed by certified individuals independent of the process being audited that prohibit internal audit responsibility from operations. To achieve this independence, development of proper governance, lines of reporting and authority remain important to the success of internal audit functions. Group Internal Audit (GIA) recognises that it is a part of an integrated effort to the provision of assurance to the business but continues to strive to maintain the independence of the function.

GIA is governed by an Audit Charter, which is an express commitment to adherence to standards prescribed by the Institute of Internal Auditors. Key to the professional and functional standards expressed in the Charter is the continued execution of the GIA mandate as an assurance provider in line with required levels of independence and objectivity. The appointment and removal of Group Head - Internal Audit is guided by the terms of reference of the Audit Committee.

GIA functionally reports to the Audit Committee and administratively to the Group Governance Executive in line with the Rand Water Delegations of Authority and organogram.

GIA maintains the key following features as definitive to the execution of its mandate in providing assurance and advisory services to the business:

- Risk Focus
- Quality and Innovation
- Business Alignment
- Talent model
- Stakeholder Management

- Cost Effectiveness
- Technology, and
- Services Culture

GIA is an objective assurance and consulting activity designed to add value and improve Rand Water operations. It functions in line with a Board approved charter that establishes its authority. GIA operates in adherence to an annual audit plan that seeks to address corporate risk levels, governance, and internal controls. As defined by the Committee of Sponsoring Organisations (COSO) of the Treadway Commission, internal control is a process, effected by an entity's Board of Directors, management and other personnel to provide reasonable assurance regarding the achievement of objectives in the following categorisations;

- Effectiveness and efficiency of operations
- Reliability of financial reporting
- Compliance with applicable laws and regulations

APPROACH ADOPTED

GIA follows a risk based combined assurance approach as prescribed by the King Code IV. The approach was slightly adapted to give effect to the transition from King III. The annual audit plan is modelled on operational activities that are aligned to Rand Water's Corporate Strategy. The prevailing audit plan, due for review at the expiry of the period under review, is based on risk assessment outcomes, agreed organisational objectives, risk profile, and mitigation measures to ensure that areas of concern from the business are reviewed and independent assurance is provided.

These mitigation measures are included in the audit plan to give assurance on the



quality of controls in the areas of concern. GIA carried out assessments on the identified risk management. The outcomes are presented to the Audit Committee in the form of a risk report highlighting the management of these risks. From those risk mitigations that were audited, it can be ascertained that the controls associated therewith were effective.

COMPLIANCE

GIA is subject to stringent adherence requirements of the Institute of Internal Audit (IIA) Standards and Code of Ethics, King IV, and PFMA. All efforts to implement the newly prescribed requirements are underway during this transition from King III to King IV.

GIA is subject to external Quality Assurance Review (QAR) that is reviewed every five years in line with industry standards and as expressed in its own Charter. The purpose of the review is to ensure that there is adherence to high quality standards GIA committed to in line with the IIA professional and performance standards. To reiterate, the last QAR was carried out in 2013. GIA obtained Generally Compliance status, being the highest obtainable accolade. The review process is in line with international norms and standards. Attaining such an outstanding outcome is indicative that GIA applies itself to the highest standards possible.

REPORTING

The report to the Audit Committee is intended to give assurance that organisational concerns, as addressed in the audit plan and execution of GIA activities, are aligned and relevant to predetermined strategic objectives of the business. In alignment with the "combined assurance" model GIA is satisfied it ensured

that the internal control environment is both efficient and adequate. It further affirms the information upon which governance structures, the Board, Board Sub-committees, Executive, and Senior Management rely on to make informed decisions has integrity.

The write-up on the internal financial controls is made every year and reported in the integrated annual financial statement. These have been found to be adequate. To this extent, reviews are conducted on financial audits and the outcomes are used for reporting on Internal Financial Controls.

COMBINED ASSURANCE

GIA are focused on adding value to the control environment whilst rendering independent assurance to the Group Audit Committee and to the Board on, inter alia:

- Adequacy and effectiveness of risk management, controls, compliance activities, and governance systems
- Effectiveness of mitigation plans

In line with King IV recommendations for combined assurance model, GIA aligned the execution of activities to provide a coordinated approach to assurance provision. GIA continues to facilitate the combined assurance process by ensuring that relevant forums and frameworks have been established and that all elements of the identified Rand Water business's top 10 risks in the preceding reporting period are adequately addressed.

GIA applied an internal audit methodology adopted from the standards, including a combined assurance model to ensure that the audit plan methodology complies with set standards.



COMPLIANCE AND REGULATION

Principle 4.3 of the King IV report states that *“the governing body should govern compliance with laws and ensure consideration of adherence to nonbinding rules, codes and standards.”* This is the primary objective of the Compliance and Regulatory Department and the sole reason for its establishment. Compliance with rules is entrusted with the Compliance and Regulatory Department but also requires that all other business units assist in this regard.

A governing tool was implemented to ensure that the activities of the business are within the ambit of the law. One of the recommended practices from the King IV report is that the governing body should delegate to management a responsibility to implement a policy on enterprise-wide compliance management and to embed same into day-to-day, medium and long-term decision making, activities and culture.

Legal compliance requires that laws, regulations, and business rules adhere to ethical codes within the entire profession. Policies must be consistent with respect of the law. Legal consistency remains a fundamental part of the compliance department so to ensure that the workplace indiscretions are averted. The deterrence principle is encompassed in the Compliance Framework which is one of the recommended practices of the King IV report. It states that there should be disclosure of material or repeated regulatory penalties, sanctions or fines for contraventions of, non-compliance with, statutory obligations-whether imposed on the organisation, members of the board or officers. This is to ensure that workplace indiscretions are averted and accountability is upheld.

The Compliance and Regulatory Department worked closely with other business units within Rand Water in an attempt to realise the compliance goals of the entire corporation. Proper communication is at the core of interactions for such to effectively take place. The ever-increasing number of regulations requires that entities to be vigilant about maintaining a full understanding of their compliance requirements. This requires the entity to subscribe to databases that will provide updates as and when they are available. Collaboration with other business units is required, given the fact that this is an enormous task that cannot be entrusted to one business unit only.

COMPLIANCE RISK MANAGEMENT

This forms an integral part of Rand Water’s pursuit of compliance. On an annual basis, the risk register is updated with all the risks that have been identified in the past financial year. The compliance Department subscribes to the following principles in order to mitigate the identified risks:

- Risk identification
- Design and implement controls
- Monitor and report on the effectiveness
- Resolve compliance difficulties
- Advise the business on rules and controls

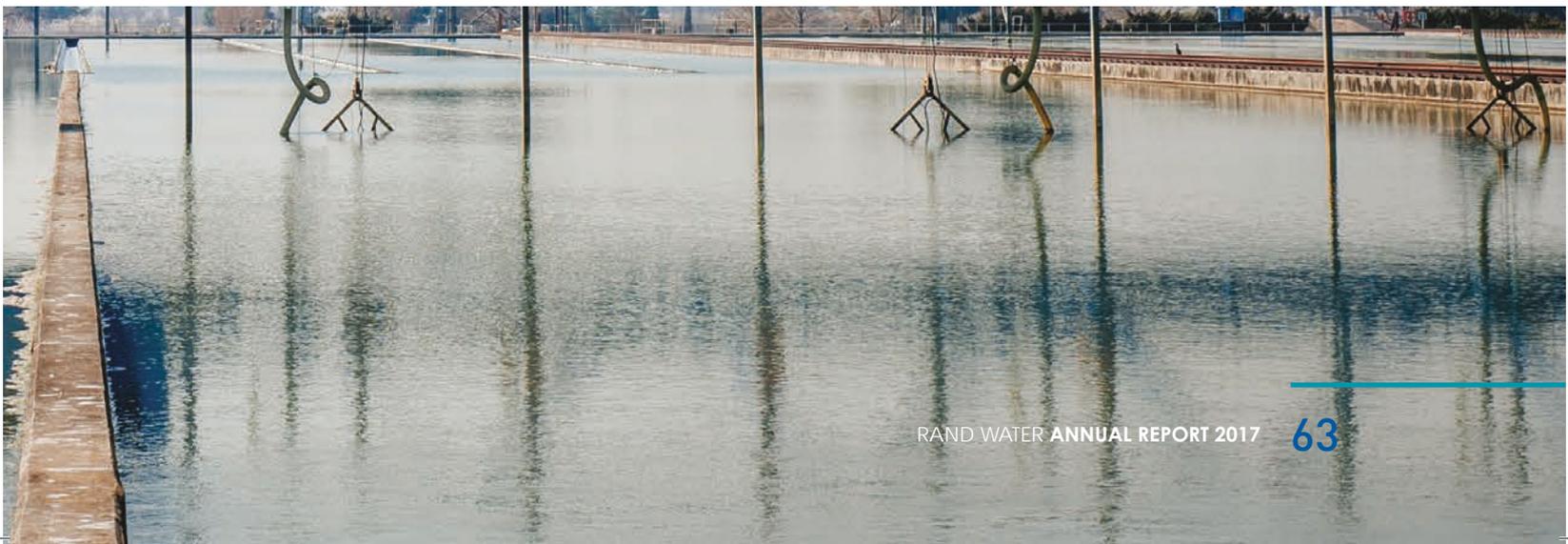
Governmental bodies, regulators, industry mandates and internal policies in harmony with one another govern the entire operations of the business. Since its incorporation, the compliance department identified the need to conduct Compliance road shows at all sites of Rand Water, taking into account the continued exposure to non-compliance with the binding rules.



KING IV REPORT

The incorporation of the report that saw the replacement of the King III requires that the compliance model that Rand Water subscribed to has to be evaluated. The following table reflects the new practices that have been recommended.

Principle 4.3: the governing body should govern compliance with law and ensure consideration of adherence to non-binding rules, codes and standards	Recommended Practices	Application
Ethical Culture	<p>The governing body should provide strategic direction for compliance</p> <p>The governing body should approve policy that articulates its strategic direction on compliance</p>	<p>Rand Water’s intention when establishing the Compliance and Regulatory Department was to ensure that there is overall compliance and across all borders within the Company. The identification of the corporate risks pertaining to compliance on an annual basis is the foundation and base that offers the direction that the corporation ought to take.</p> <p>The Compliance and Regulatory division has a draft compliance framework that is awaiting the approval of the Executive. The aim of the framework is to provide the corporation with the rules that are binding on the business and the non-binding rules that the Corporation adhere to.</p>



Principle 4.3: the governing body should govern compliance with law and ensure consideration of adherence to non-binding rules, codes and standards	Recommended Practices	Application
	<p>The governing body should oversee management of compliance with laws and adherence to non-binding rules, codes and standards and specifically in the following:</p> <ul style="list-style-type: none"> a) Compliance is understood not only for the obligations it creates, but also for its rights and protection that it affords b) Compliance management takes a holistic view of how applicable laws, non-binding rules, codes and standards relate to one another c) Compliance management is responsive to changes in the regulatory environment 	<p>The role of the Compliance and Regulatory divisions to oversee the overall management of compliance to all the laws whether binding or otherwise. The compliance department is fairly new and seeks to conduct a due diligence on all the policies that operate within the corporation. Policy reviews remains at the core of the compliance, so to ensure alignment with the laws and also to sever all the conflicting provisions within all the governing tools and instruments.</p> <p>The compliance department subscribed to various databases, such as the Sabinet, to provide all the legal updates as and when they are passed. Law can change overnight and the Compliance adopted the pro-active principle in order to ensure that it updates the Corporation with the new rules and comments on those that will affect the business in a negative manner.</p>

GROUP LEGAL SERVICES

This division within Group Governance Portfolio is a strategic role player that adds value to combined business efforts embedding a coherent approach of legal compliance to a hybrid of assurance and risk management. It strives to effectively manage entity-wide regulatory compliance, and integrated reporting and thinking to usher in newly introduced rules and regulations.

The daily activities of Group Legal Services (GLS) are modelled around integrated-thinking that actively considers operational interdependencies between the various functional areas in Rand Water. GLS is primarily focused on being responsive to business needs to promote a more efficient assessment of operational activities delivering value to stakeholders.

This is executed by a formidable team of in-house counsel with different skills offerings. Collectively the team embeds a coherent approach of legal compliance to a hybrid of assurance and risk management. It ensures the Rand Water Group complies with relevant legislation, is minimally exposed to management risks; and possesses the ability to provide advisory services, administer, and control litigation. Overall, the division is proactively focused on remaining responsive to business needs that promote efficient assessment of operational activities to deliver value-add to stakeholders.

GLS constantly self-evaluates and self-introspects to measure the impact of its significance and efficiency in providing in-house legal counsel including a cross-cutting support designed to facilitate overall value-add.

QUALITY ASSURANCE

The King IV model recommends quality management as an effective tool for overseeing operational activities and tasks essential to maintain the desired level of excellence. Comprehensively, this includes the determination of a quality policies, creation, and implementation of quality plans and assurances for continuous quality control and improvement.

In response to King IV, GLS developed a Quality Charter that articulates desired levels of excellence supported by quality standards from which performance on legal support to the Rand Water business shall be measured. These standards set the tone for legal performance by the division in support of attainment of the corporate objectives. In light hereof, the charter seeks to reinforce quality standards for audit trail purposes.

Contract management is singled out as one of the material risks in the organisation. To mitigate against this risk, a Corporate Contracting Strategy (CCS) in the form of a framework was developed as a control risk measure.

The purpose of CCS framework is to set out governing principles for contracting and contract management in Rand Water. The framework further allows for permanent or temporary forums and committees to carry out certain functions that are aimed at ensuring that contract management is governed in accordance with third party contracting principles. It is a necessary framework that depicts the governance picture for contracting and contract administration. The framework provides an overarching perspective of Rand Water's contracting landscape. It outlines the governance of each sphere of contracting from inception to closure. Such a picture is, not only limited to contracting, but also delves into other elements of the legal administration of contracts.

The framework ensures that there is uniformity, to an extent possible, amongst all units within Rand Water for execution and management of corporate contracts. The standard for corporate contract ensures seamless integration of business units when contracting. This eliminates fragmented thinking which often leads to duplication of efforts and misses opportunities for synergies.

The embedded Corporate Contract Standards sought to mitigate the risk of litigation emanating from inadequate contracting management. Such inadequacies expose Rand Water to unending litigation and ultimately taint its reputation.



BULK WATER SERVICES PORTFOLIO



Under the leadership of the Chief Operating Officer (COO), the Bulk Water Services Portfolio team consists of four divisions, namely;

- Operations Division,
- Scientific Services Division,
- Strategic Asset Management Division, and
- Sector Growth and Development Division.

Each division is a specialised entity that uniquely forms part of the value chain. They are responsible for the significant tasks of providing water services to customers 24 hours a day in the quantities required.

The portfolio manages the Vaal and Mpumalanga water supply schemes. The Vaal Scheme is the biggest scheme using the majority of assets to supply the Gauteng province and some bordering municipalities. In the financial year, it supplied an average of 4 323 ML/d mega litres (ML) per day of potable water, up from the previous years' 4 285 ML per day. The peak day demand was 5 008 ML/day in October 2015, compared to 4 962 ML/d in October 2014. The Mpumalanga Schemes combined supply an average of 228 ML/d mega litres (ML) per day of potable water. The Schemes are operated based on plants capability, and not on based on demand which is the case with the Vaal scheme.

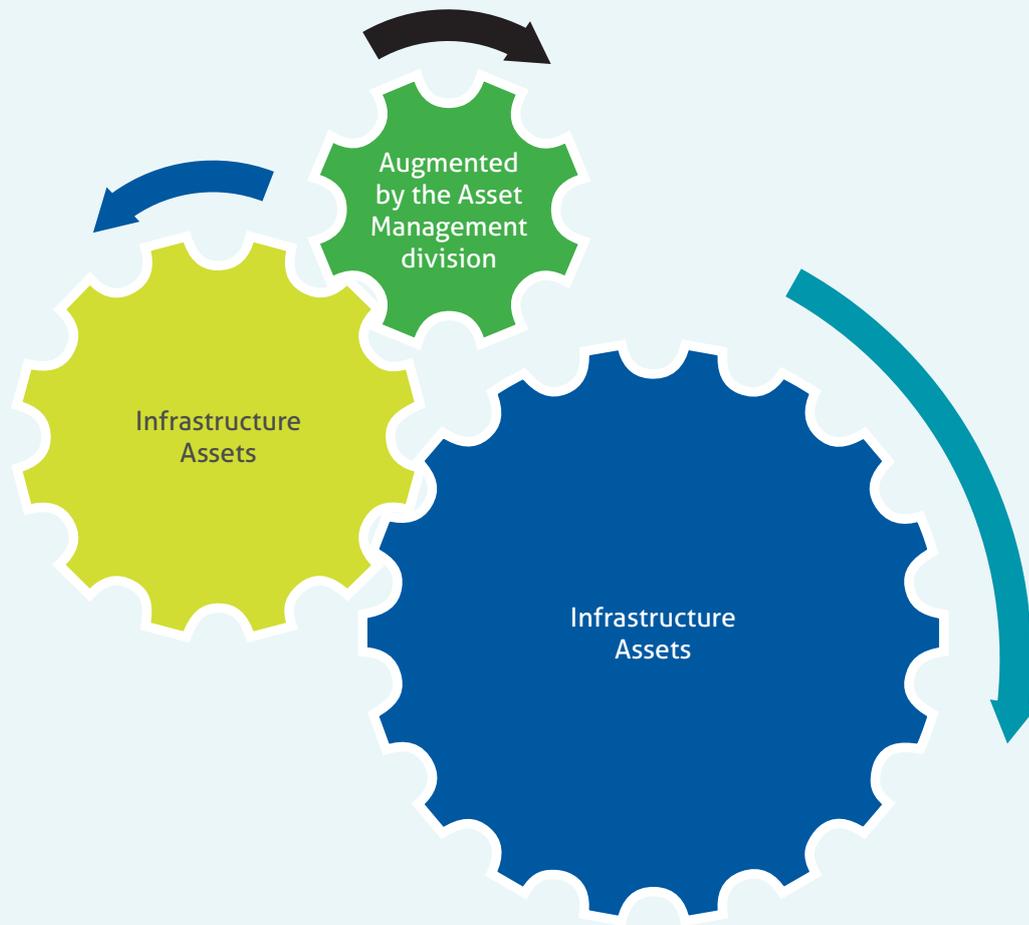
Rand Water continues to place a very high premium on the quality of its water. Thus, Rand Water has again provided water that met both the national drinking water standards as well as the World Health Organisation's drinking water quality guidelines. This is achieved by implementing an extensive integrated water quality management plan. The plan ensures that Rand Water is able to sustain this performance well into the future, without only relying only on compliance monitoring. This promotes multiple quality assurance checkpoints (multi

barrier approach) throughout the entire water supply chain. This risk based system is able to pro-actively identify challenges and employ pre-defined corrective protocols for those determinants that have the highest probability of failure.

The principle of "healthy catchments = healthy water" was maintained during the financial year as well. This was incorporated in the Water Quality Safety Plan in the form of a "catchment to tap" approach. The approach incorporates concerns for the health of consumers who drink the water supplied by Rand Water as well as the people living and working in the catchment areas.. Deteriorating raw water resources have necessitated the installation of on-line monitoring devices at key points within the catchments. Rand Water derives real time information on water quality from these devices. Furthermore, Rand Water is planning to secure a comprehensive online monitoring system. This is aimed at improving water quality monitoring and response times. This maintains an impeccable reputation with regards to the provision of safe and healthy drinking water into the future.

During the year under review, Rand Water initiated a process of securing an Enterprise-Wide Asset Management system, targeted to be the nerve centre for the management of all assets going into the future. The system is further aimed at improving the management of Rand Water assets which will lead to longer asset lifecycles, improved availability, and production capacity amongst other output. The business also embarked on a massive condition assessment aimed at establishing a base- line of the status quo of the condition of the assets. These two initiatives are in their infancy but are great milestones towards better management of assets.

THE ALIGNMENT OF BULK WATER SERVICES PROVISION



The above diagram depicts an alignment of individual components towards effective bulk water provision. The efficiencies derived therefrom are passed on to consumers.

OPERATIONS

The Operations Division is constantly striving towards high performance excellence in support of Rand Water's vision, mission and strategic objectives. As the largest division within Rand Water, it is responsible for abstraction, purification, pumping, and distribution of potable water in compliance to SANS 241:2015 standards.

As commitment to the needs of customers is the priority of Rand Water, the leadership strives to ensure that water service delivery is the passion of each and every staff member of the team. This is an important consideration in the composition of Rand Water, realising that an effective response to meet the growing future demands of the water industry will require effective leadership and innovative thinking. Therefore the Operation's team is carefully sourced to take responsibility to maintain Rand Water's world class standard of providing the earth's most treasured resource to customers.

VEREENIGING PUMPING STATION

This is the first river intake pumping site, constructed and put into operation in 1923. The site is situated 37km upstream of the Barrage and about 2.4 km from Vereeniging city centre. The Vereeniging Pumping Station continues to meet all Rand Water requirements with regard to potable water produced. The plant receives its water from the Vaal River catchment. The raw water quality is acceptable and fairly stable from this catchment. This plant is also able to abstract from the barrage catchment although this is not presently done due to the poor raw water quality.

The treatment plant's main purpose is to remove all suspended particles, the inactivation of pathogenic, production of non-corrosive palatable drinking water according to Rand Water production specification and hence meeting the South African Bureau of Standards (SABS) specification (SANS 241). The pumping plant objective is to pump purified water to the Vereeniging, Vanderbijlpark, Sasolburg (VVS) system; Eikenhof system; and Zwartkopjes system from where further

pumping is done to conclude the Rand Water value chain.

The plant capacity increased over the years as water demand increased. Significant investment in upgrading production capacity to sustainably produce the quality and quantity required occurred over the past decade. The plant is able to treat 1400 Mℓ of purified water and pump 1800 Mℓ. The plant is a 24 hour operation and is used as a base load production of 1200 Mℓ over the past year. Further updates on production capabilities are planned as Rand Water's needs change.

Annually, in line with Rand Water's infrastructure development plan, projects have been initiated to upgrade and expand infrastructure at Vereeniging according to Rand Water's demand projections. Due to operating costs associated with Vereeniging and space constraints, very limited expansion projects have been undertaken. However, many projects have been initiated and approved that focus on plant life extension and reliability of potable water supply. The total staff complement for Vereeniging is 464.

ZUIKERBOSCH PUMPING STATION

In April 1949, Rand Water realised that the 1946 scheme (Vereeniging Station), was not sufficient to supply enough water to consumers after 1950. The Zuikerbosch Water Treatment Plant was established. The Treatment Plant officially commenced production on the 15th July 1954. At the time, the plant was established as a base station.

As a result of its geographical location, the site cost of abstraction is low due to its water being gravity fed as opposed to electrical pumping to the treatment works. Zuikerbosch Water Treatment Plant comprises of four (4) Water Treatment Plants and associated pumping facilities. The main activity of the site is to abstract raw water, purify it to potable water standards, and pump it into the distribution network. There are four purification and pumping stations at Zuikerbosch. The different station capacities are:

- Station 1: 480 Mℓ/d
- Station 2: 420 Mℓ/d
- Station 3: 1100 Mℓ/d
- Station 4: 1800 Mℓ/d

The site purifies and supplies water to all four booster plants of Rand Water; that is, Zwartkopjes, Palmiet, Eikenhof and Mapleton.

With a total staff complement of 495, Zuikerbosch met all its key performance targets for the year under review.

ZWARTKOPJES PUMPING STATION

Zwartkopjes Pumping Station is Rand Water's oldest booster pumping station, established in 1907 on the Zwartkopjes farm. It has under its control Palmiet, Eikenhof and Mapleton booster pumping stations. All these sites are situated to the south of the Johannesburg within close proximity to each other. Zwartkopjes and its satellite sites receive on average of 4460 Mℓ of potable water from Zuikerbosch and Vereeniging Purification Plants daily.

The following were the daily bulk distribution of potable water delivered by Zwartkopjes (760 Mℓ), Palmiet (1760 Mℓ), Eikenhof (1200 Mℓ), and Mapleton (740 Mℓ). The booster stations' primary function is to increase system pressures and effect secondary disinfection. The total staff complement for Zwartkopjes is 380.

BULK WATER DISTRIBUTION

Bulk Water Distribution (BWD) is a Department within the Operations Division of Rand Water. BWD's overall responsibility is to supply potable water of acceptable quantity and quality to Rand Water's customers at all times. This involves day to day operations and maintenance of 3200km of pipelines, 58 larger reservoirs, 13 (thirteen) tertiary pump stations and 05 (five) tertiary chemical dosing plants. A total of 1600 bulk consumer meters are read on a monthly basis.

Bulk Water Distribution attained accreditation of one of its meter test rigs from South African National Standards (SANAS). A process is underway to get accreditation for the second meter test rig.

The distribution area of supply is divided into three regions, (West, South and North). These are further sub-divided into fourteen districts located strategically throughout the area of supply. The Rand Water customer base consists largely of municipalities, mines and industries.

These regions, sub-divisions and responsibilities for districts are as follows:

- North Region: Forest Hill, Germiston, Benoni, and Esselen Park
- South Region: Amanzimtoti, Meyerton, Barrage, Bloemendal, and Brakpan
- West Region: Zuurbekom, Libanon, Krugersdorp, Waterval, and Rustenburg

All the functions and activities of BWD are managed and co-ordinated from a central location called Central Depot. This is the place where all other supporting sections are situated. The total staff complement for BWD is 520.

PROCESS OPERATIONS DEPARTMENT

The Process Operations department principally is responsible for the co-ordination function. It provides support to treatment, pumping and distribution sites as follows:

- Panfontein exists to accept all Water Treatment Residue (WTR) produced by the purification stations, treat this waste product, reclaim the usable supernatant water and dispose of the resulting thickened WTR. It is the storage site for WTR, thus allowing the purification stations to be able to continue functioning effectively without concerns of WTR disposal.
- Performance Monitoring and Enhancement section is responsible for the effective use of operational energy consumption within Rand Water in order to minimize cost and enhance competitive positions of the Organisation. It manages all activities related to the consumption of the operational energy with the main focus on the elimination of waste, maximize efficiency and optimize supply of energy. This section is responsible for all spheres of operational energy management including: budgeting, budget control, scheduling pumping loads to enable the pumping stations to supply the consumer demand, including the budget for raw

water, training, compliance to applicable acts, compliance to the SA Energy Efficiency codes and all technical aspects regarding operational energy management.

- Water Quality Services Section is responsible for managing the procurement process for bulk chemicals from an operational perspective. It acts as the liaison link in the bulk chemical supply chain. This section prepares the annual chemical budget. In addition it manages water quality data from sites by trending, identifying and reporting areas of concern or non-compliance to specifications that may have long term effects on Rand Water's infrastructure.

DIVISIONAL SUPPORT SECTION

- The Divisional Support section provides advice and assistance to all sites/ sections within the division on all matters pertaining to:
 - Finance such as budgets, variance reports
 - The business planning process
 - Project financing
 - Performance measurement
 - Service level agreements,
 - Delegations of authority
 - Audits
 - Inventory Management
 - Procurement
 - Policy and Procedure
- The division ensured that sites functioned optimally. This effort is critical in bringing about consistency in the application of corporate standards and policies at all sites.

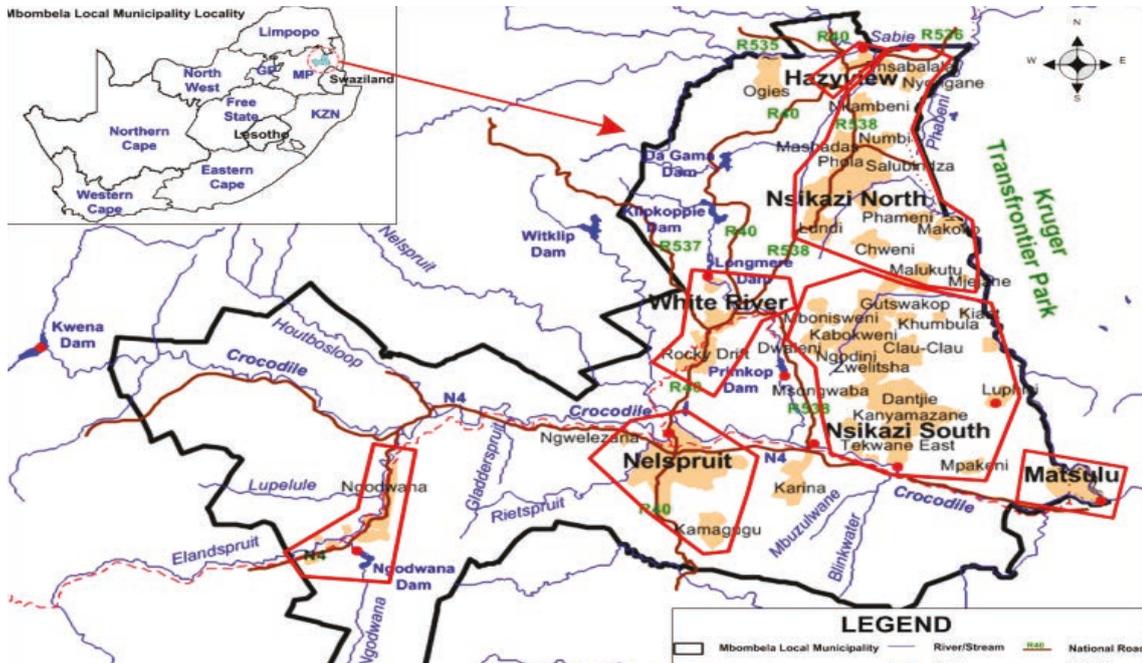
MPUMALANGA

Rand Water is the successor-in-title to the former Bushbuckridge Water in terms of section 28(1)(d) of the Water Service Act as gazetted in Government Notice No. 241. Furthermore, the Honourable Minister, in terms of Section 28(1) (c) read together with Section 46(1) extended the service area of Rand Water to include the Mpumalanga area and further directed Rand Water to take over the area of operation, business and assets and liabilities of the former Bushbuckridge Water with effect from the 1st April 2014. Accordingly, Rand Water is now the official 'bulk' Water Services Provider to the Water Services Authorities in the area with specific reference to the Bushbuckridge Local Municipality and the City of Mbombela.

Rand Water Mpumalanga is currently providing 'bulk' water services to the Bushbuckridge Local Municipality and the City of Mbombela. The total area of operations is 15 644 km² (that is 10 250km² for Bushbuckridge Local Municipality and 5 394 km² for City of Mbombela. It should be noted that Rand Water's area of operations in the City of Mbombela only covers Nsikazi North & South, and not the entire area of City of Mbombela. Rand Water Mpumalanga region is currently operating thirteen (13) water supply systems, that is seven (07) for Bushbuckridge Local Municipality and six (06) for City of Mbombela. Seven (07) out of thirteen (13) supply systems are conventional Water Treatment Works, and the balance of six (06) are package plants and river schemes. There are a total of 16 Booster Stations and 130 Bulk reservoirs in the entire Rand Water's area of operations. The average daily production for the entire area of Rand Water Mpumalanga operation is about 225 ML/d. The following map below depicts the service area of Rand Water Mpumalanga:



TURNAROUND STRATEGY: SUPPLY AREA



Since Rand Water began its operations in Mpumalanga in April 2014 to date, the focus is on a turnaround strategy aimed at addressing more pressing challenges around mainly service delivery. The prevailing challenges include bulk water infrastructure development backlog, the outstanding debt from Bushbuckridge Local Municipalities as

well as the reliability of infrastructure to meet current and future water demand. Having clearly identified the state of operations, infrastructure, systems, gaps, challenges, risk, and opportunities, the site implemented the following activities to turn the situation around.



IDENTIFIED GAPS AND DRIVE TOWARDS IMPROVEMENTS

Gaps Identified	Drive Towards Improvement
<ul style="list-style-type: none"> • Hostile relationships between Rand Water and stakeholders • Lack of ownership of assets • Failure by Water Service Authorities to achieve Blue Drop • Non-revenue in the bulk infrastructure system • Inadequate IT & OT infrastructure • Liquidity, Cash flow and debt • Non Compliance to SHEQ Requirements 	<ul style="list-style-type: none"> • Facilitate engagement between the Accounting Authority of the Water Board and that of the Province on key issues that affect the presence and operation of the Water Board in the Province • Consider new business model • Facilitate development of integrated infrastructure development plans in Water Service Authority space. • Upgrade and Refurbishment of Bulk Infrastructure to address water losses • Development of water conservation and water demand management plan with the aim of reducing water loss in the plant and distribution network. • Develop and implement integrated IT & OT plan. • Joint effort between Municipality and the Water Board to operate the entire value chain. • Assist Municipalities on Installation of metres • By-Laws implementation by Local Authorities • Implement SHEQ System

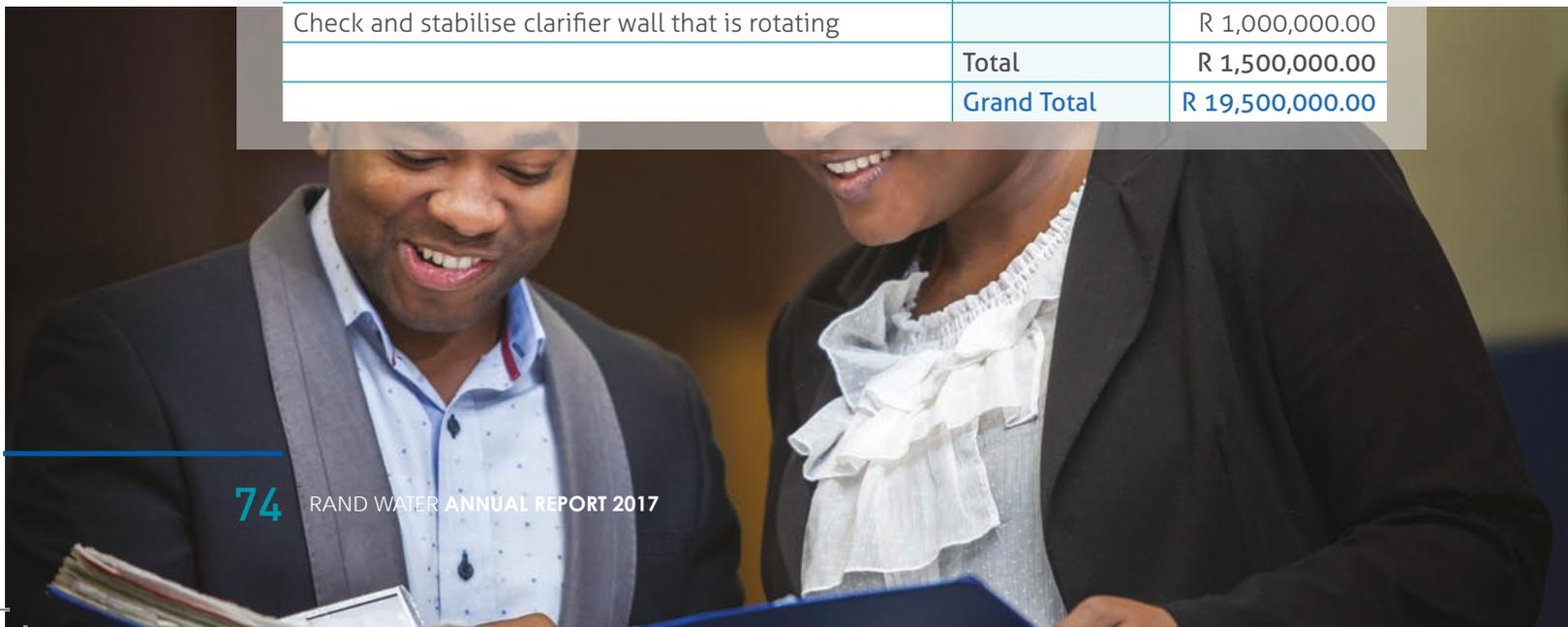


FURTHER ACTIVITIES UNDERTAKEN ACCORDING TO THE PLAN

These activities are divided into short-, medium- and long-term projects. They also include budget requirements. This will make it easy for all the key stakeholders involved to understand the challenges faced and their costs so to make meaningful inputs to address them.

PLANNED ACTIVITIES

SHORT TERM INTERVENTIONS 0-8 MONTHS		
Interventions which will give additional Capacity	Additional Capacity	
Repair 2 out of commission filters to give added capacity	5ML/d	R 1,500,000.00
Replace filter material in all filters to improve filtration	5ML/d	R 2,000,000.00
Re-commission Old-Old section of plant to give additional 1.8ML/d	1.8ML/d	R 2,000,000.00
	Total	R 5,500,000.00
Inteventions which will improve operational efficiency		
Repair 5th Raw Water Pump complete with electrical systems		R 500,000.00
Install 6th Raw Water Pump complete with electrical systems (Already being done on contract Ayamah)		Nil
Purchasespare electrical components for stores to prevent down time when plant breaks		R 500,000.00
Upgrade jet pumps and install scour valve to flush sand from inlet channel		R 1,500,000.00
Replace 1x 13ML/d pumps with 1x 22ML/d pump to provide standby capacity		R 4,000,000.00
Remove and close off most the lines and build lockable chambers for the air valves		R 2,500,000.00
Total shutdown of sections of the lines to repair leaks and unauthorised tapping points		R 2,500,000.00
Provide Water tankers during pipeline renovation		R 1,000,000.00
	Total	R 12,500,000.00
Inteventions which will improve safety		
Install additional hand rails on sump platform		R 100,000.00
Install ventilation in pumping room		R 100,000.00
Repair lime handling equipment to improve operation and safety		R 300,000.00
Check and stabilise clarifier wall that is rotating		R 1,000,000.00
	Total	R 1,500,000.00
	Grand Total	R 19,500,000.00



MEDIUM TERM INTERVENTIONS 0 -18 MONTHS		
Inteventions which will improve operational efficiency		R 3,000,000.00
Install SCADA system to facilitate control of the system		R 4,000,000.00
Install bulk meters to effectively manage water losses and pumping		R 2,000,000.00
Investigate if sections of the old pipeline to Pienaar res can be put back into service		R 3,000,000.00
Upgrade emergency (Gorman Rupp) raw water intake		R 1,500,000.00
Install Power Factor Correctors to protect plant and reduce energy consumption		R 500,000.00
Install back-up backwash pumps, blowers etc		R 2,500,000.00
	Total	R 16,500,000.00
Interventions which will improve safety		
Upgrade chlorine dosing system for efficiency and safety		R 2,000,000.00
	Grand Total	R 18,500,000.00
LONG TERM INTERVENTIONS 0 - 3 YEARS		
Inteventions which will improve operational efficiency		
Increase size of clear water sumps to prevent having to switch off main pumps		R 8,000,000.00
Construct weir in river at Raw Water abstraction to facilitate with sand problem		R 5,000,000.00
Install a new pipeline from Kanyamazane WTW to Clau Clau reservoir and OMO reservoir to complete a ring main		R 70,000,000.00
	Total	R 83,000,000.00

MANAGEMENT AND OPERATIONS ARRANGEMENTS

The following Service Delivery Model / Value Chain was implemented during the period under review.

SUPPORT SERVICES	Financial Management and Administration Records Management Marketing and Communications Stakeholder Relations Management Human Resources Management Supply Chain Management Risk Control Management Information Technology Business Development
	Technical Services / O&M
CORE BUSINESS	Operations Department Maintenance Department

Supply Chain

- Manage the demand, procurement, contracts, assets and transport of Supply Chain Management to achieve compliance to the SCM policy
- Review, maintain and implement strategies, policies, processes, standards, guidelines and procedures in line with legislations and regulations
- Provide a strategic guidance bid administration to establish the bid specifications, bid evaluations and bid adjudication committees and oversee the proper functioning of the committees
- Maintain and manage the suppliers' database with emphasis to increase BBBEE compliance
- Manage all assets, including the recording of acquisition, depreciation and disposals
- Maintain, control and monitor assets in accordance with Procurement laws and regulations
- Manage the SCM sub-directorate and provide leadership and sound management of staff performance
- Monthly reporting of budget against actual
- Report on Supply Chain Management information, as required to internal and external stakeholders

Maintenance

- Implementing infrastructure maintenance plans
- Introduce and implement effective Reliability Centered Maintenance (RCM)

- Ensure that availability and reliability of plant is in accordance with agreed targets.
- Improve overall plant performance
- Implement action plans where applicable.
- Minimize pumping processing cost.
- Identify areas to improve overall site performance.
- Implement Replacement & Refurbishment plans

Operations

- To manage the entire value chain of fifteen (15) water supply systems from abstraction, purification /disinfection, pumping and distribution network, as well as management of potable water to the set quality and quantity standards
- Water resource management
- Ensure compliance to regulatory and statutory requirements
- Strategic Support to Government objectives
- Ensure compliance to Blue Drop Certification requirements

Risk Control Management

- Ensure compliance to Occupational Health and Safety Act (OHS Act)
- Align site targets with corporate objectives.
- Conduct periodic medical surveillance on all employees
- Compliance to Measurable Objectives
- Conduct Management Review as per ISO 9001 standards

- Conduct Management Review as per ISO 14001 standards
- Conduct internal audits to identify & address non-compliances
- Ensure protection of Rand Water assets
- Provide legislative training to Protective Services personnel
- Conduct incident investigation on all risk related incidents

Human Resources

- Manage the Human Resources aspects and ensure good employee relations.
- Implement Performance contracts & PDP's.
- Ensure relevant training and development is provided.
- Develop culture of PCP
- Review organograms & updates where applicable.
- Identify critical skills set of competencies for Managers.
- Draw up a training/orientation programme for new site Managers.
- Monitor and assess the performance of managers.
- Site – Head office liaison maintained
- Represent site at Steering Committee & Stakeholders Forum.
- Represent BWS portfolio on various project task groups

Marketing and Communications

- Develop strategic marketing plans for Rand Water Mpumalanga site
- Manage stakeholder relationships by collaborating and identifying platforms for engagements, at the local and provincial level, for Rand Water's image
- Manage the brand: the positioning, perspective and brand offering
- Manage Corporate Social Responsibility function for Rand Water and ensure professional standards are upheld
- Manage events and exhibitions, in line with the Rand Water's Corporate strategy
- Manage marketing performance plans and budget for Rand Water Mpumalanga
- Manage Corporate Communications for Rand Water
- Identify and manage sponsorships in the Mpumalanga Province that are in line with promoting the Rand Water's growth targets
- Comply to ISO requirements on marketing inventory management

Records

- Ensure the smooth running of records within the registry, ensuring that documentation is registered, captured and controlled while in the registry's possession
- Establish and maintain a central register that is signed off as it is submitted, to avoid complications and/or disputes that may arise

RAW WATER TREATMENT WORKS

TREATMENT WORKS IN BUSHBUCKRIDGE LOCAL MUNICIPALITY

WTW	Capacity	Operational capacity	State of infrastructure
Inyaka	100	100	Conventional (abstraction, pre-settling, coagulation, flocculation, sedimentation, filtration and disinfection)
Hoxane	27	27	Conventional (abstraction, sedimentation, coagulation, flocculation, filtration and disinfection)
Thulamahashe	9	6	Conventional (abstraction, sedimentation, coagulation, flocculation, filtration and disinfection)
Acoernhoek	6	6	Conventional (abstraction, sedimentation, coagulation, flocculation, filtration and disinfection)
Edinburg	4	3	Conventional (abstraction, sedimentation, coagulation, flocculation, filtration and disinfection)
Marite	3	2.5	Non-conventional (abstraction, coagulation, filtration and disinfection)
Shatale	1.8	0	Conventional (abstraction, sedimentation, coagulation, flocculation, filtration and disinfection)

TREATMENT WORKS IN THE CITY OF MBOMBELA

WTW	Capacity	Operational capacity	State of infrastructure
Kanyamazane new	47	62	Conventional (abstraction, coagulation, flocculation, sedimentation, filtration and disinfection)
Kanyamazane old	4	3	Conventional (abstraction, sedimentation, coagulation, flocculation, filtration and disinfection)
Dwaleni package plant	2	0.5	Non-conventional (abstraction, coagulation, filtration and disinfection)
Mshadza package plant	2	0.8	Non-conventional (abstraction, coagulation, filtration and disinfection)
Legogote package plant	2	0.5	Non-conventional (abstraction, coagulation, filtration and disinfection)
Nyongane river scheme	18	22	Non-conventional (abstraction and disinfection)

STRATEGIC ASSET MANAGEMENT

A defining feature of utilities such as Rand Water is the size and value of infrastructure or fixed assets in relation to annual turnover, and the intention to maintain these assets indefinitely to provide specified levels of service. It follows that proper management of fixed assets is a key success factor of the utility – supporting achievement of agreed service levels to customers at minimum long term cost.

Asset Management is the systematic and coordinated activities and practices through which Rand Water optimally manages its assets, their associated performance, risks and expenditures over their lifecycles for the purpose of achieving its organisational strategic plan. It is a formalized way of conducting business that is adopted by world leading infrastructure companies. It is a holistic and integrative approach to the managing of assets over the whole life cycle, from inception to disposal. It is a strategic discipline which enhances the quality of decisions made by organisations with regards to its assets.

Typical results achieved by the effective implementation of Asset Management are:

- Increases in customer satisfaction, sustainability, profitability, availability, reliability, maintainability, resilience, flexibility, compliance, efficiency, effectiveness, safety, etc.
- Decreases in life cycle cost of assets, capital expenditure, operational expenditure, supply failures, asset failures, unplanned shutdowns, carbon emissions, etc.

The international standard, ISO 55000, specifies requirements for an organisational asset management system, and was formally published in January 2014. Rand Water is working towards accreditation in terms of ISO 55000. External asset management maturity assessments have been carried out, and further assessments will be scheduled as progress on key issues is achieved. The assessments have provided feedback on 17 KPA's, measuring all asset related activities across the organisation such as strategic, operational, financial, IT, HR, SHERQ or other business components.

The KPA's are listed in the table below, grouped under the areas of strategic planning, enablers and controls, execution and assess/improve.

ASSET MANAGEMENT KEY PERFORMANCE AREAS

Strategy Management	Strategic Planning
Information Management Technical Information Organisation and Development Contractor Management Financial Management Risk Management Environment, Health and Safety	Enablers and Controls
Maintenance Asset Care Plans Work Planning and Control Operator Asset Care Material Management Support Facilities and Tools Life Cycle Management Project and Shutdown Management	Execution
Performance Management Focused Improvement	Assess and Improve

Rand Water's infrastructure amounts to multi-billion Rands and is managed and leveraged in order to extract maximum value. In the next 5 years, approximately 63% of infrastructure expenditure work takes place in the form of augmentation to meet the growth in demand. The remaining 37% covers renewal projects that replace or extend the life of existing assets, reducing operating costs, improving treatment processes or enhance plant safety.

Growth in demand is projected to continue. Infrastructure maintenance and refurbishment have been undertaken in terms of the Annual Infrastructure Development Plan. The main objective is to ensure that Rand Water continues with its proud record of complying with the mandate of supplying bulk potable water to its customers.

The best Lifecycle Asset Management practices were confirmed for design, operation,

maintenance, rehabilitation and disposal of assets. Management of the existing assets were planned in conjunction with augmentation to meet growth in demand.

BENEFITS OF IMPLEMENTING LIFECYCLE ASSET MANAGEMENT PRACTICES

The following achievements confirm the progress made in setting up and improving structured and auditable asset management practices:

- The Blue Drop assessment requires plant condition and performance assessments and, where applicable, capital investment plans, to confirm that plant will be able to continue providing required levels of service. The last Blue Drop assessment confirmed an A+ rating for asset management within Rand Water.



- The technical asset register were expanded to provide more detailed coverage of all asset categories, to a level enabling lifecycle management of infrastructure components based on design life, maintenance requirements and other key criteria. The adequacy of the asset register for these purposes was also included in the Blue Drop assessment. Future plans are to link it to the financial register.
- Lifecycle strategies were developed for all key asset classes, including expected rates of deterioration, maintenance and capital refurbishment or replacement interventions. This supports, inter alia, a 20 year view of capital expenditure for the organisation. The capex forecast is based either on identified projects, or on current condition, projected design life and replacement values.
- Various systems and databases have been integrated into an Enterprise Asset Management System (EAMS). The EAMS supports efficient management of infrastructure assets and strategic decision making.

INFRASTRUCTURE

Rand Water operates a network of 3 500 km of pipelines, two large combined pumping and purification stations (situated at Vereeniging and Zuikerbosch), four main booster pumping stations (Zwartkopjes, Palmiet, Mapleton and Eikenhof) and a number of enclosed reservoirs and secondary booster stations. Total asset replacement value of Rand Water infrastructure is estimated at R99 billion. The largest component of this is Rand Water pipelines at 63%.



AUGMENTATION AND RENEWAL PLANNING

After decades of expansion to meet the challenge of infrastructural development and population growth, Rand Water's infrastructure continues to be adequate to meet the needs of customers. It is remarkable to consider that in 1965, Rand Water was supplying 1 000 Megalitres a day (ML/d) and that demand increased more than four-fold to 4 300 ML/d.

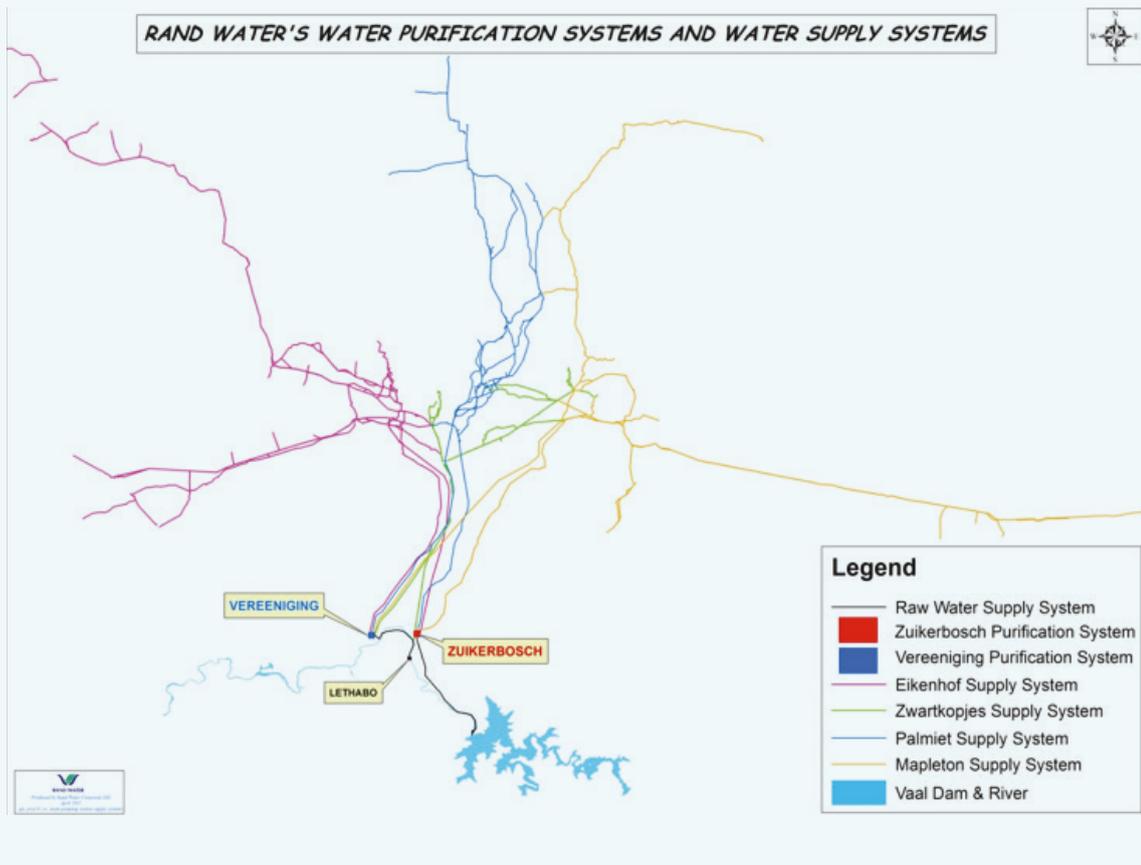
Rand Water is ready for the demands of 2035 and beyond; hence the focus on infrastructure renewal and development. Rand Water works on a 20-year planning horizon for projects, driven by forecasts of future water consumer needs and the need to maintain the capacity of existing infrastructure. This involves analysis of trends and usage patterns, assessment of condition and performance of infrastructure,

compliance with evolving legislation, and discussions with various stakeholders on their expectations.

As a maturing utility, it is expected that demand growth will moderate a trend reinforced by limitations on raw water availability. In parallel, ageing pipeline infrastructure will require significant investment, which is currently being planned and executed. It is anticipated the renewal spend on existing infrastructure will move to 50% of total spend.

Planning and management of assets is undertaken on the basis of supply systems, matching system capacity with projected customer requirements.

RAND WATER'S WATER PURIFICATION AND WATER SUPPLY SYSTEM



Rand Water primarily draws raw water from the Vaal River System. Two combined pumping and purification stations (at Zuikerbosch and Vereeniging) purify and pump into the network approximately 98% of the water supplied to customers. About 90% of this water is pumped further by four booster stations situated on the southern side of the Witwatersrand ridge. These are the Eikenhof, Zwartkopjes, Palmiet and Mapleton booster pumping stations. The portions of the network supplied by each system are indicated by colour coding on the map as follows:

- Raw water (black) – supply to Zuikerbosch from the Vaal Dam
- Zuikerbosch (red) – purification and supply to all booster systems
- Vereeniging (blue) – purification and supply to local areas in southern Gauteng and northern Free State, as well as to Eikenhof and Zwartkopjes booster systems.
- Eikenhof (pink) – western and north-western Johannesburg, the West Rand and greater Rustenburg area.
- Zwartkopjes (green) – central Johannesburg and a high-lying portion of the East Rand.
- Palmiet (blue) – eastern and northern Johannesburg, large parts of Tshwane and western portions of Ekurhuleni.
- Mapleton (yellow) – central and eastern parts of Tshwane and Ekurhuleni, and selected areas in Mpumalanga.

The three primary systems (Raw water, Vereeniging and Zuikerbosch) are jointly planned to ensure the abstraction and delivery

of 98% of total demand indicated above. Each booster system is designed to meet the requirements of a defined customer base.

PROJECTED GROWTH IN THE DEMAND FOR WATER

Rand Water's municipal customers accounted for 92% of total demand, with direct supply to mines making up most of the balance. Future demand for water is determined periodically by Rand Water through engagement with major customers regarding their expected future demands. The latest forecast indicates a continuation of the trend of gradually decreasing rates of annual demand growth. Rand Water now supplies a predominantly urban, domestic consumer base. Population growth is the main driver of the growth in demand. Worldwide, urbanizing populations exhibit reduced rates of population growth. In South Africa, this effect is magnified by the impact of AIDS on fertility and mortality rates. Demographic studies undertaken on behalf of Rand Water, confirm this trend.

Total average daily demand for the Rand Water network is projected to increase from current demand of 4 300 ML/d to around 5 900 ML/d by 2035. This gives an average rate of demand growth of 1.7% per annum over this period. The three largest metros supplied by Rand Water are Johannesburg, Ekurhuleni, and Tshwane; and they consumed 75% of this water.



PROJECTED PEAK DEMANDS BY MAIN SYSTEM

Through a hydraulic modelling process, forecast demands are added at each significant supply point. This allows the estimation of future peak flows in each pipeline, and peak demands on each of the pumping stations. Results for each of the major systems are given in the table below (quoted capacities exclude standby units).

PEAK DEMAND FORECASTS AND AUGMENTATION DATES

Station	Design capacity (ML/d)	Proposed work to increase capacity (ML/d)	Proposed augmentation year	Projected peak day demands (ML/d)			
				2020	2025	2030	2035
Primary pumping							
Zuikerbosch	3800	1200	2018 (first 600)	4300	4800	5300	5800
Vereeniging	1200	200	2019	1300	1300	1300	1300
Booster pumping							
Eikenhof	1800	Nil	N/A	1470	1610	1750	1880
Zwartkopjes	800	Nil	N/A	750	652	690	740
Palmiet	1870	600	2017	2000	2350	2500	2730
Mapleton	960	300	2019	990	1080	1180	1270

CAPITAL EXPANSION PROGRAMME

The current 2009 Additional Water Supply Scheme and general capital programme is aimed at ensuring security of water supply in terms of both quantity and quality of water supplied. The first phase will increase the current design capacity to 5800 ML/d. The 2009 programme is a combination of augmentation and renovation. Rand Water will be spending over R18.8 billion on infrastructure, for financial years 2017 to 2021. Of this amount, 63% is allocated to augmentation schemes, with the remaining 37% allocated to renovations and upgrades of existing infrastructure.

The planned projects are listed under two main categories, namely:

- Augmentation projects that have the primary purpose of increasing the capacity to meet growth in demand and area of service; and
- Renewal projects, including upgrade, rehabilitation and replacement projects that have the primary purpose of maintaining existing capacity to supply both quantity and quality.

Some projects, particularly involving pipelines, will serve a dual purpose.

For the period 2017 to 2021, the capital expenditure plan incorporates capital investment of R11.9 billion comprising augmentation and R7.15 billion comprising renewal work. Additional expenditure for this period is expected as follows: R12.3 billion for growth projects falling outside of core business, an additional R290 million for moveable assets as well as R600 million expenditure in Mpumalanga.

The 5 year plan continues to be dominated by projects associated to the 2009 Additional Water Supply Scheme. Phase 1 of the 2009 scheme aims to deliver an additional 300 ML/day by 2018/19 and 300 ML/d by 2019/2020. It is anticipated that the major contribution towards renewal expenditure will be associated with pipeline refurbishment and replacement and to a lesser degree with civil, mechanical, automation and electrical works.

The Augmentation and Renewal plan is set to affect the following systems over the five year period as depicted in the table below.

AUGMENTATION AND RENEWAL PLAN

System	Augmentation (R m)	Renewal (R m)
Eikenhof	1,795	1,187
Mapleton	2,498	1,488
Palmiet	2,322	1,744
Primary	2,425	1,870
Zwartkopjes	2,337	1,911
Total	11,377	8,200

TOP FIVE PROJECTS WITHIN THE 5-YEAR PERIOD

Capital Project	Estimated Cost (R m)	System	Augment/ Renewal
Station 5 A	1,910	Zuikerbosch	Augment
H43 pipeline to Brakfontein	724	Palmiet	Augment
Engine room 3 Mapleton pump station	662	Mapleton	Augment
Hydro power	642	Selected sites	Augment
Mamelodi pipelines through Rietvlei nature reserve	590	Mapleton	Augment

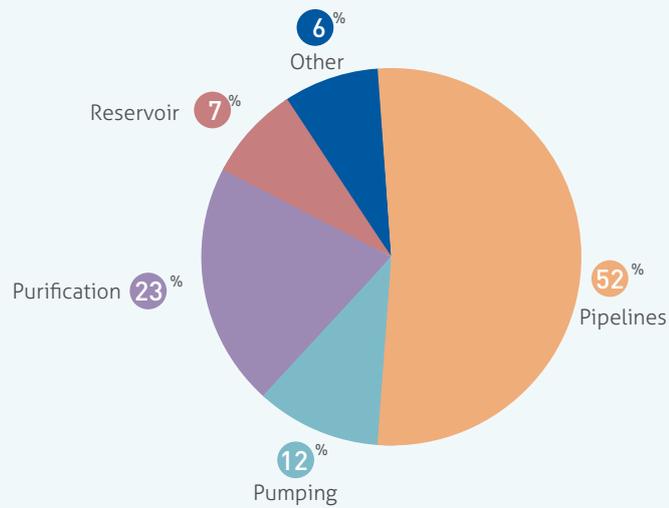
The average ratio of Augmentation and Renewal to the total program is 58/42 respectively over the total five (05) year planning horizon. It is expected over time that the renewal program

percentage will increase closer to 50% based on the results of current comprehensive condition assessment work and ongoing focus on pipeline renewal in particular.

5 YEAR AUGMENTATION AND RENEWAL CAPITAL REQUIRED PER SITE

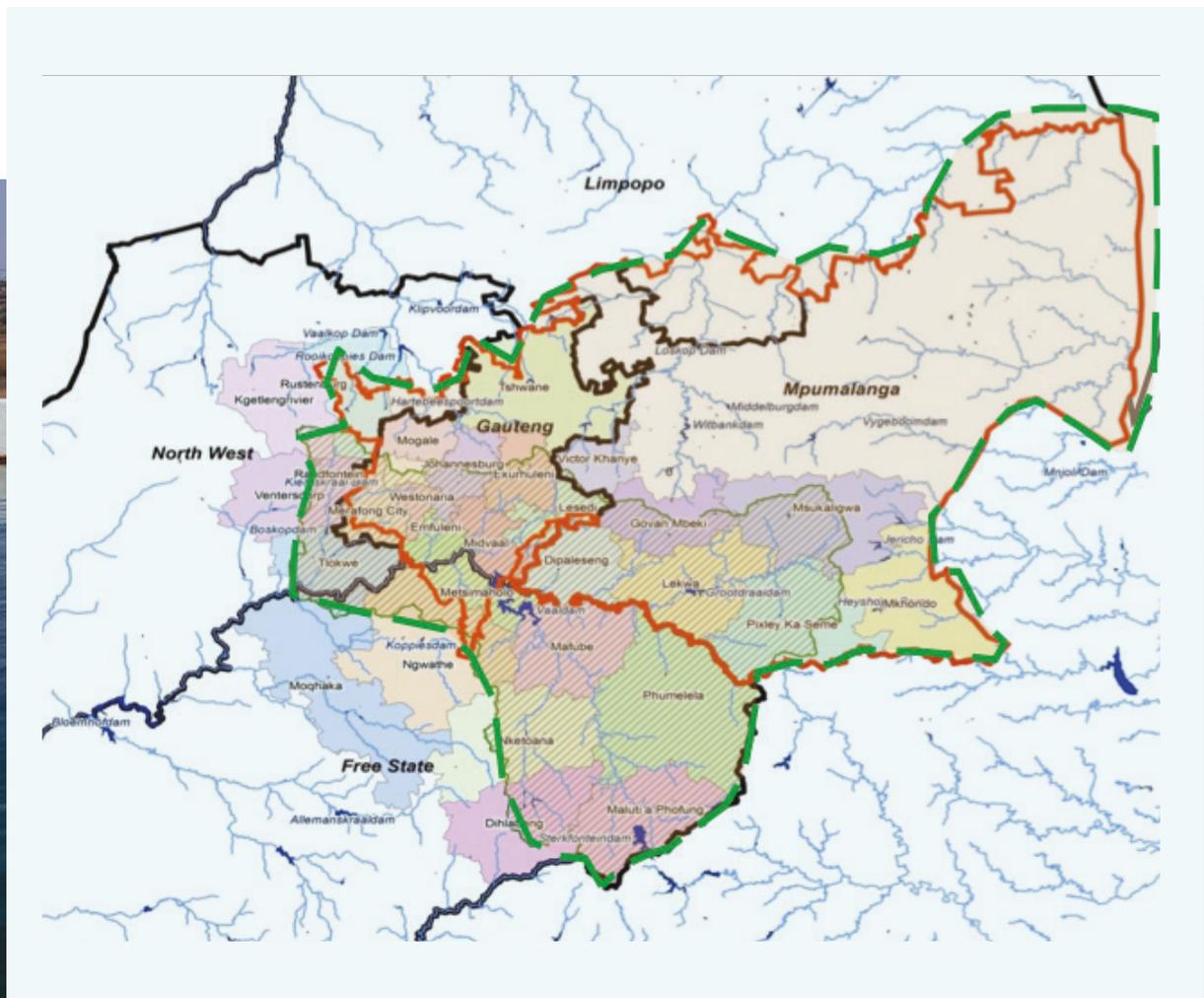


INFRASTRUCTURE PLAN (2018-2022) - R19.6BN



RAND WATER'S EXTENDED AREA OF OPERATIONS

The bulk infrastructure of the disestablished Bushbuckridge Water, that supplies mainly urban and rural domestic users, is currently operated and maintained by Rand Water.



Most existing infrastructure suffers from a lack of maintenance, standby capacity and/or adequate automation and control. A number of augmentation projects are planned, particularly to boost capacity in the Hoxane and Inyaka supply systems.

- During his financial year, Rand Water completed a project which is the augmentation of existing Hoxane WTW. The plant is situated on the northern bank of the Sabie River, abstracting raw water from the Sabie River, and consists of five modules. Each module is currently having a treatment capacity of 9 ML/day and therefore the total treatment capacity of the plant is 45 ML/day, where three modules (27 ML/day) are dedicated to Bushbuckridge Local Municipality and remaining two modules (18 ML/day) are dedicated to Mbombela Local Municipality.
- The completed augmentation project extends the capacity of Hoxane WTW from five treatment modules to eight treatment modules and this increases the supply of potable water produced from 45 Mℓ/day to 72 Mℓ/day.

- The three newly constructed modules together with the two already existing modules will provide potable water to a population of 317665 and 49663 households of Nsikazi North which is located in Mbombela Local Municipality with 45 Mℓ/day (from current 18 to 45 Mℓ/day). The population is made up of the people residing in 23 villages. This is a R120.5m project.

A project commenced to assess the condition and performance of bulk infrastructure, and produce master plans for bulk infrastructure to meet projected demands throughout the gazetted Rand Water area of service.

As part of the extended area of responsibility for Rand Water, the organisation upgraded the Steynsrus bulk water scheme at Moqhaka Local Municipality in province of Free State where Rand Water constructed a 9 kilometre pipeline. This project improved the raw water supply of the entire scheme and will supply 3847 households. The project cost R30m and is completed.



SECTOR GROWTH AND DEVELOPMENT

Water challenges continue to grow and becoming more complicated resulting in huge investments required to upgrade infrastructure and to find more innovative solutions. The purpose of Sector Growth and Development (SG&D) is to respond to these water related challenges in order to mitigate their negative impact to the environment, society and the economy.

The growth strategy emanates from one of Rand Water's corporate strategic objectives, namely "Achieve Growth". The thrust is founded on the expertise which Rand Water accumulated over the past millennium in the business of providing water to communities, mines and industry. It is therefore a Rand Water responsibility to identify the market

needs and then package solutions properly in order to respond effectively and efficiently to the demands of the national and international (Africa) water markets. These services are provided at an agreed cost with the recipient or sponsors.

Up and above revenue generation, SG&D is tasked with managing strategic customers of Rand Water. The Strategic Customer Partnerships (SCP) department seeks to proactively understand and quickly adapt to the needs of the customers. It manages customer interface and co-coordinate interactions with customers. This is the department which facilitates compilation of the annual Customer Value Management Surveys (CVM), Service Level Evaluations (SLE) and customer forums.

DEPARTMENTS WITHIN SECTOR GROWTH AND DEVELOPMENT

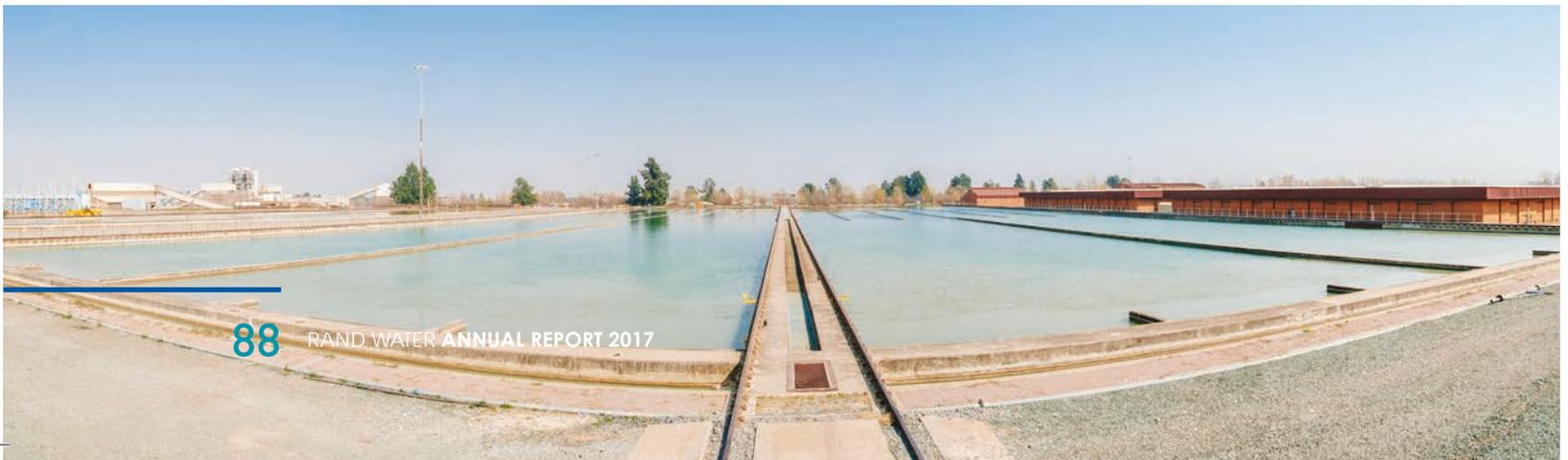
The Sector Growth and Development Division comprise the following departments;



Revenue generating departments are; Water Services, Sanitation Services and Water Cycle Management.

These departments provide the following services;

- Water and Sanitation Utility Management Services, Water Demand Management, Water Quality Monitoring/Management Services, Catchment Management Services, Infrastructure refurbishment and upgrade, Training and Mentoring, Projects and Program Management, and Customer Management.



PROJECTS UNDERTAKEN DURING THE YEAR UNDER REVIEW

The following major projects were undertaken during the year under review.

DESILTING OF DOUGLAS DAM

Msukaligwa Local Municipality - Ermelo.	
Client:	Msukaligwa Local Municipality
Total Budget:	R20 m
Project Duration:	May 2016 – 28 th July 2017

During the drought in 2013, the Douglas Dam dried up and could not provide raw water to the Ermelo water treatment works. An emergency pipeline was installed from the Rietspruit Reservoir to be used as an emergency raw water supply. The Honourable Minister of Water and Sanitation requested Rand Water to implement the desilting of the Douglas Dam.

In 2013, Rand Water subsequently made an allocation of R20m towards the implementation of the project. The service provider that was appointed in 2013, had an additional task of conducting the Environmental Impact Assessment (EIA) for the desilting of the Douglas Dam. The report and EIA were approved by DWS in June 2015. This was followed by the approval by DWS of the Water User License in October 2016.

The desilting project commenced in April 2017. The project is 60% complete and scheduled completion date is July 2017. Local communities are benefiting from the project which created eleven (11) temporary jobs.

OPERATION AND MAINTENANCE OF A BULK POTABLE WATER PIPELINE

Client	SASOL SYNFUELS
Budget	R468, 000.00 per annum
Project Duration	February 2012 – January 2017

Rand Water was involved with the design and construction of a potable water supply pipeline from the Wildebeest Reservoir near Evander to the SASOL SYNFUELS plant in Secunda. Sasol later appointed Rand Water to

Operate and maintain the bulk potable water pipeline.

The tasks include monthly meter readings and meter maintenance, pipeline patrol - inspection & maintenance (weekly), maintenance of valves and chambers (annually), development and submission of management reports to the client (monthly).

Since the start of the project Rand Water managed to supply water to Sasol without fail.

OPERATIONS AND MAINTENANCE OF WATER SCHEMES IN MSUKALIGWA

Client:	Msukaligwa Local Municipality
Budget:	R15.0m
Project Duration:	1 st November 2013 – 31 st October 2016

Gert Sibande District Municipality (GSDM) appointed Rand Water to assist Msukaligwa Local Municipality with Operations & Maintenance (O&M) for a period of three (3) years starting 1st November 2013 to 31st October 2016. Rand Water was responsible to provide O&M support to the following five (5) water treatment works within the Municipality jurisdiction:

- Northern Water Treatment Works in Ermelo;
- Southern Water Treatment Works in Ermelo;
- Davel Treatment Works in Davel
- Sheepmoor Treatment Works in Sheepmoor;
- Warburton Treatment Works in Warburton

As a result of an assessment conducted by Rand Water, additional expertise was brought in to this space. These included;

1 x Process Controller; 1 x Electrician; 1 x Mechanical Fitter, and 2 x Artisan Hand Assistants

During the course of the project, the following assessments were conducted;

- Human resources assessment – looking at the numbers required as well as skills sets and also training requirements;

- Blue Drop assessments – looking at water quantity and quality as well as determining water quality testing equipment for each plant. All plants have managed to increase the water quantity and achieve water quality close to 70% of compliance to the Blue Drop requirements.
- O&M assessments – Rand Water conducted and implemented the recommendations of the O&M assessment including the implementation of Standard Operating Procedures for all five water purification plants, the Municipality's Process Controllers were trained. Daily Log sheets were introduced to control the efficiency of chemical usage and electricity against water produced.
- An Asset Register was developed and introduced to all five (05) purification plants
- Store Control System was implemented to control the spare parts used for maintenance and control of equipment bought.

The project continues to yield result of improved water supply, improved water quality and reduced down time.

RESOLVING WATER SUPPLY AND SANITATION INFRASTRUCTURE PROBLEMS IN MSUKALIGWA

Client:	CoGTA and Msukaligwa Local Municipality
Budget:	R12.5m (Revised to R 8.6 m)
Project Duration:	10 months

CoGTA and Msukaligwa Local Municipality appointed Rand Water as their implementing agent to resolve water supply and Sanitation infrastructures problems in the following identified areas: Breyton Ext 5, Warburton Ward 19, Wesselton and Farm Areas. The project activities include;

- Installation of Boreholes and Bulk Pipeline in Warburton (Ward 19),
- Installation of Internal Water Network in Breyton (Ext 5),
- Installation of Internal Sewer Network in Breyton (Ext 5),
- Installation of Convertible Toilets in Farm Areas

- Assessment of Sewer Network System in Wesselton.

The projects were not sufficiently completed, as initially planned due to insufficient budgetary challenges experienced by Msukaligwa Local Municipality. Rand Water as an Implementing Agent managed to executed the following tasks:

It is important to highlight that all the five projects that were to be executed by Rand Water were under budgeted.

The work done to exhaust the available budgets under Phase 1 is here under described:

Installation of Boreholes and Bulk Pipeline

Client:	Msukaligwa Local Municipality
Budget:	R 2.05m (Available: R 1.6m)
Project Duration:	5 th November 2015 – 30 th July 2016

The project geared to improve the water supply to the residents of Warburton and building of proper infrastructure for future sustainable development. The boreholes were aimed at augmenting the bulk water supply to the existing reservoir and thereby improve reliable and sustainable clean portable water supply to Warburton residents. The scope of work consisted of the following:

- Sighting, Drilling, Equipping and Testing of four (04) electrical boreholes each with yield of at least 2 300 liters /hr.
- Securing the boreholes against vandalism.
- Installation of 2km long 110mm diameter uPVC bulk pipeline from the new developed boreholes to the existing reservoir.

Due to the budget constraints, the following works have been done:

- Site Establishment
- Detailed designs
- Geophysical Desktop Analysis
- Geophysical sighting
- Drilling of 3 Boreholes, the first one yields 2200 liter/hour, the second one was dry, and the third one had collapsible soil.
- Replacement and installation of 2 old

electrical pumps and connection to water network system.

- Pump testing of 5 existing boreholes
- Water quality analysis.

Installation of Convertible Toilets in Farm Areas

Client: Msukaligwa Local Municipality
 Budget: R 2.8m (Available: R 2.35m)
 Project: 15th November 2015 – 30th Aug 2016

The purpose of the installation of convertible toilets in farm areas is to provide farm dwellers with hygienic sanitation infrastructure and service and to provide dignity and a better life. The scope of work consisted in the following:

- Supply and delivery of complete 100 Toilets units,
- Installation of maintenance of Units
- Training to educate the end-users.
- Training of the local services providers on how to install these units.

It is noted that the allocated budget allowed only the installation of 36 toilet units out of 100 units.

Installation of Sewer Network in Breyten Ext 5

Client: Msukaligwa Local Municipality
 Budget: R4.3m (Available: R 2.3m)
 Project: 15th November 2015 – 30th June 2016

The purpose of the Breyten Extension five (05) Sewer Network project is to provide sewer infrastructure and service to 476 new stands. The scope of work consisted of the following:

- Construction of 2 km long Pipeline by 160mm uPVC diameter outfall sewer
- Construction of 7 km Pipeline by 110 mm diameter uPVC diameter internal water network.
- Installation 476 stand connections
- Installation of two (02) line valves, two (02) air valves and two (02) bulk water meters
- Ancillary works.

The project remains ongoing due to budget constraints.





MBOMBELA - NSIKAZI NORTH BULK WATER SCHEME SUPPLY

Executive Summary

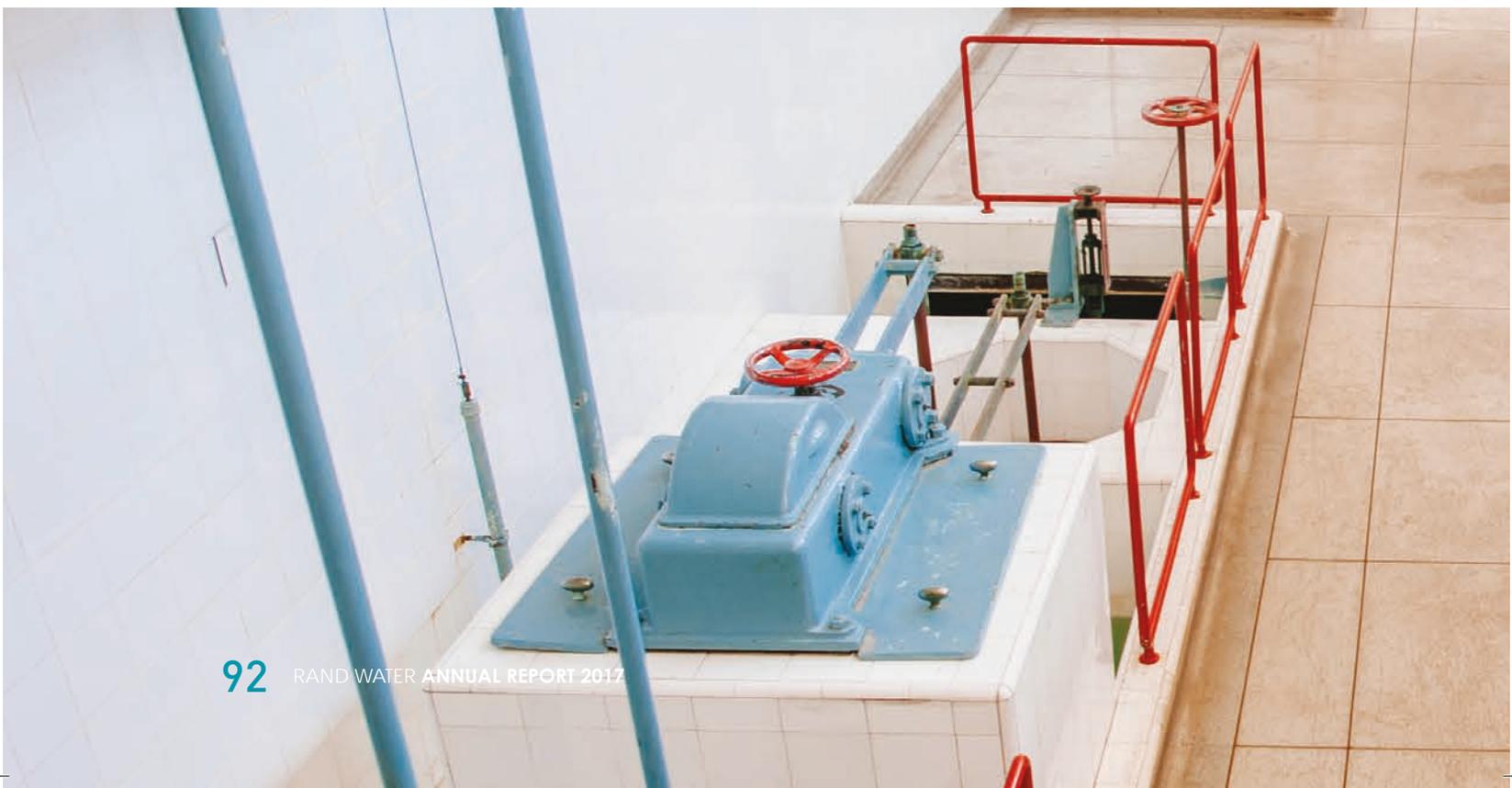
The project area is located in Mbombela Local Municipality within the Ehlanzeni District. The objective of the project is to improve the delivery of water services in the Mbombela Local Municipality by developing and constructing / upgrading a Bulk Steel Water Scheme Supply. This project is funded through DWS.

Project Scope and Milestones

The project scope includes the design and installation or construction of:

- Bulk Water Pipelines (900mm * 11.587km) with Associated Pipe Fittings Pump-station with associated equipment
- Reservoir/Sump (1MLD) and associated equipment

The site handover for Phase 1 was on the 19th March 2015 and is planned to be completed



on 29 September 2017. The scope of work includes the pipeline of 3.287 km from Sabie River to Nyongane, 8.300 km from Nyongane Booster Pump station to Numbi reservoir and 1MLD Sump at Nyongane Pumpstation, clearing and blasting from Sabie river to Numbi reservoir and a booster pumpstation.

The overall percentage completion is at 73%. The percentage expenditure based on the total budget of R 275,545,200.00 is 72%.

Job Creation

The contractor has employed 53 local labourers comprising 51 general labourers, one Safety Officer and a CLO. In addition, one local labourer is employed by the subcontractors bringing the total number of local laborers onsite to 54.

MBOMBELA - HOXANE WATER TREATMENT WORKS

Executive Summary

The project area is located in the City of Mbombela within the Ehlanzeni District. The objective of the projet is to improve the delivery of water services in the City of Mbombela by developing and constructing / extending the Hoxani Water Treatment works

Modules 6,7 and 8. This will enable the City of Mbombela to meet its water demands. The project is funded by DWS through RBIG.

The project handover was on 19th March 2015 and the completion date was 14th June 2017. The works, which had been completed, included three water treatment modules, each at 9 ml/ day. The communities of Nsikazi North, which are located in the City of Mbombela were to receive 45 ml/day (from the current 18 ML/day) of potable water to a population of 317, 665 people in approximately 49,663 households. However, Inkomati-Usuthu Catchment Management Agency (IUCMA) has indicated that due to the Sabie River being stressed, only 36 ML/day is approved.

The overall percentage completion is at 100%. The percentage expenditure based on the total budget of R120,155,070 is 93% and inclusive of retention held is 100%.

Job Creation

The main contractor employed 13 local labourers comprising 11 general labourers, one safety rep and a CLO. The mechanical and electrical subcontractors have employed two local labourers. The total number of labourers currently on site is currently at 15.



SANITATION SERVICES

The Water Service Act defines the term 'Water Services' as inclusive of 'Sanitation Services'. Bulk Sanitation Department's primary objective is to extend sanitation services within and beyond Rand Water's area of supply. Rand Water partnered with municipalities and DWS to address wastewater infrastructure challenges in order minimize pollution of water resources by effluents emanating from wastewater treatment facilities. Services provided by Bulk Sanitation include;

- Assessment of wastewater treatment plants. Provision of management, operation and maintenance of the wastewater treatment works,
- Capacity building and training of process controllers,
- Industrial effluent monitoring programme,
- Refurbishment and process upgrade of wastewater treatment works and
- Water reclamation

The key projects undertaken by Bulk Sanitation for the year under review are as follows;

SEDIBENG REGIONAL SEWER SCHEME (SRSS) (R4.2 BILLION)

The Sedibeng Regional Sewer scheme is aimed at addressing overloading of current Wastewater Treatment Works (WWTW's) and sewer networks (including pump stations), improving quality of effluent discharged by these WWTW's and also unlocking economic developments within the Sedibeng District.

The project is governed by an Implementation Protocol agreement which was signed by multiple parties including Rand Water, DWS, Emfuleni Local Municipality, Midvaal Local Municipality, Sedibeng District Municipality and Gauteng Province.

The project is fully managed by Rand Water. Service providers appointed by the municipalities, after being subjected to due diligence by Rand Water, were ceded to Rand Water for implementation and management.

The project objectives are as follows;

- Deliver an effective solution that will eradicate the pollution of the Vaal River System

- Create bulk sanitation infrastructure for the Southern Gauteng Region
- Institute interim measures to address immediate/emergency problems
- Facilitate local economic development and job creation
- Eradicate Water and Sanitation service delivery challenges, inhibiting both social and economic developments in the region
- To create institutional capacity to provide water services sustainable in the region
- To create project management capacity to deliver the project successfully
- To create institutional capacity to provide water services sustainability in the region

The Sedibeng Regional Sanitation Scheme (SRSS) is a mega sanitation project that is scoped to:

- Upgrade Sebokeng WWTW to 200Mℓ/d
- Upgrade Meyerton WWTW by 15Mℓ/d
- Construct a mega pump station
- Construct an outfall sewer network linking the existing Waste Water Treatments Works (WWTW)
- Construct a 147Mℓ/d new WWTW
- Upgrade Leeuwkuil, Rietspruit WWTW, regional pipeline upgrades (feasibility output)

The project is in phases and sub-divided as follows:

Upgrading of Sebokeng WWTW by 100 Mℓ/d

The 100 Mℓ/d upgrade of Sebokeng Waste Water Treatment Works (WWTW) will be done in two 50 Mℓ/d phases, namely; Module 6 and Module 7. The phase one of the project consists of demolition work of the existing bio-filter wastewater treatment plant, bulk earthworks, construction of a new 50 Mℓ/d bio nutrient removal wastewater. The project is multi-disciplinary and consists of Civil, Mechanical, Bulk Electrical, Electrical Control and Instrumentation works. The project commenced on the 7th October 2014 and it's anticipated to be completed in early 2018.

Civil Works

This scope consists of demolition work of the existing dysfunctional bio filter wastewater treatment plant, bulk earthworks; structural concrete works (for inlet works, primary settling tanks, aeration basins, secondary settling tanks, chlorine contact tank, outfall canal, conveyance canals), pump station and associated pipework, buildings, sludge handling facility, storm water drainage and access roads. The progress is at advance stage on buildings and structures and overall progress is at 80%.

Mechanical Works

The Mechanical Contractor was appointed and their scope consist of the supply, installation, test and commissioning of the equipment to the following areas, namely; inlet works, Primary and Secondary Settling Tanks, Biological Reactor, Various pump stations, Sludge handling facility and Chlorination facility. Most mechanical plant was purchased and on storage. The overall progress during the year under review is at 86%.

Bulk Electrical Works

The purpose of the bulk electrical supply contract is to ensure a firm supply of the electricity to the upgraded works. This will be

done by constructing two independent bulk supply overhead lines Amasiza and Pulsar, to the works. The scope also includes the construction of a new 10 MVA 22 kV to 11 kV sub-station to supply electrical power to the upgraded works. The Pulsar line is complete and handed over to the municipality. The kingbird overhead line which will act as backup is still waiting for the approval of construction of the line. Eskom has not approved the budget quotation as yet. Overall progress during year under review is at 92%.

Electrical and Instrumentation Works

The scope of work on this tender is for the Electrical Control and instrumentation work to supply power reticulation, to the mechanical equipment installed by the Mechanical Contractor currently on site. The project covers the supply, delivery, installation, testing and commissioning of Motor Control Centers (MCC's), power factor correction equipment, cable work, emergency generators, general electrical installation, instrumentation and Distributed Control System (DCS) for the Sebokeng WWTW.



SEDIBENG REGIONAL SANITATION SCHEME (SRSS)



Local Economic Employment

Since the inception of the project, jobs in excess of 384 were created. 37% was spent on local employment, suppliers, and subcontractor.

Upgrading of Meyerton WWTW by 15 MI/day

The Meyerton Wastewater Treatment Works upgrade forms an integral part of Sedibeng Regional Sanitation Project and composed of the following projects:

- Extension of the treatment works by 15 MI/day,
- Upgrade of Rothdene pump station and,
- Construction of new rising main.



BIOLOGICAL REACTOR CONSTRUCTION



MECHANICAL EQUIPMENT



Extension of the works by 15 MI/day

The main component of Meyerton WWTW upgrade project is the Extension of Meyerton WWTW by 15Mℓ/day which commenced in March 2015. The total value of the project is R177 million and includes a completely new Head of Works (HoW) with mechanical screens and vortex degritters, a raw sewage pump station, a new biological reactor, a secondary sedimentation tank and new administration and control buildings. By end of June 2017, the civil works was 82% complete, Mechanical works at 75% complete and the electrical works at appointment stage. The physical progress was delayed several times due to community unrest within the greater Meyerton area during the year under review.

Since the inception of the project a total of 100 jobs were created and 14 local sub-contractors appointed.

Upgrade of Rothdene pump station

The contractor for the upgrade of Rothdene pump station was appointed in May 2017 and the site establishment was in June 2017 with site progress at 5%. The project is planned

to appoint two (02) local sub-contractors and creating a minimum of 35 local jobs opportunities.

Construction of the new rising main

The Environmental Impact Assessment (EIA) for the construction of a new rising main is nearing completion at 95% complete. Detailed design was completed and tendering will commence upon approval of the EIA. During the implementation stage of the project it is planned that a minimum of 35 local jobs opportunities will be created.

Technical Feasibility Study of the Sedibeng Regional Sewer Scheme (SRSS)

The SRSS was identified by the Presidential Infrastructure Coordinating Council (PICC) in 2005, and approved as a Strategic Infrastructure Projects (SIP) 18 catalytic project. One of many critical issues identified was the spillage of raw sewage and the discharge of non-compliant effluent into the Vaal River. It was reported that the spillages were impacting negatively on the health and safety of the communities, and also restricting the potential for the region to grow and attract investors and tourists. The project is expected to bring solutions to



raw sewage spillage, unlock job opportunities, improve service delivery and attract investors in the Sedibeng District Municipality (SDP) area.

The project was broken down into two stages of implementation which will include short term, medium-term and long-term interventions. The two stages are further explained as follows:

- Stage 1:
 - Technical Feasibility Study Review: This study reviewed and updated the existing Wastewater Treatment Works, Sewers Pump stations and/but not limited to Outfall Sewer within the SDP area. The "Final Technical Feasibility Study" was completed in March 2016.
 - Land Procurement: This process includes the land identification, owner verification, deeds search and land price negotiations for planned new infrastructure related to SRSS project.
 - Institutional Arrangements: As part of the project implementation plan, the project is required to conduct an investigation into the possible institutional arrangements that would eventually operate and maintain the scheme once it is complete. The process entails "Section 76 to 82 Compliances".
- Stage 2:
 - Following the approval of the "Final Technical Feasibility Study" the project team was instructed to continue with the Preliminary Designs" for the first phase (50 ML/day including associated sewer pump stations and outfall sewers) for SRSS. The preliminary Design Report is scheduled for finalization by September 2016.

The long-term solution demands the completion of the construction of a new WWTW, its associated sewer pump stations and outfall sewers.

The SRSS proposes various options to add more treatment capacity into the existing treatment system, reduce current operation and maintenance challenges, and also incorporate latest environmental friendly and green treatment technologies.

WESTONARIA LOCAL MUNICIPALITY: OPERATIONS HANNES VAN NIEKERK WASTEWATER TREATMENT PLANT

After the successful completion of the extension of Hannes Van Niekerk WWTW, Rand Water and Westonaria Local Municipality entered into a 33 months management contract, in April 2014 for the operation and capacity building services of/at Hannes Van Niekerk WWTW. The scope of works also included support services for the potable water sampling and uploading of water quality data into the Blue Drop System. During the year under review Hannes Van Niekerk WWTW effluent compliance was over 80% as compared to 73% of the previous year.

WESTONARIA REGIONAL SANITATION SCHEME

In February 2012, DWS concluded an Implementing Agent Agreement with Rand Water for the Westonaria Regional Sanitation Scheme (WRSS). WRSS seeks to address lack of sewer capacity, poor effluent compliance and unlocking development (such as Syferfontein Housing Project) within the Rand West City Local Municipality.

The WRSS can be categorized as follows:

- Construction of 15 mega liters per day at the existing Hannes Van Niekerk Wastewater Treatment Works (WWTW) to cater for the excess flows within the Westonaria and Randfontein catchment.
- Construction of 80 mega liters per day Zuurbekom WWTW and associated infrastructure to cater for excess flows that cannot be accommodated at Hannes Van Niekerk WWTW and also from flows new housing development at Syferfontein
- Construction of Mohlakeng Sewer Pump station and bulk rising mains to Hannes Van Niekerk WWTW and Zuurbekom WWTW

Construction of Hannes Van Niekerk WWTW was completed and handed over to the Municipality in 2014. Design work for Zuurbekom WWTW and Mohlakeng pump station including its rising main was completed and is currently at tender stage.

Based on the flows demand and the rate of development, the Westonaria Scheme will be implemented in phases. Phase 1 will include the construction of 20 ML/day Module at Zuurbekom WWTW and Mohlakeng pump station and rising main is planned to commence

during the fourth quarter of 2017/18 financial year.

Phase 1 of the scheme is expected to create more than 100 local jobs during the construction stage of the projects.

MIDVAAL LOCAL MUNICIPALITY: OPERATION AND MAINTENANCE OF VAAL MARINA WATER TREATMENT PLANT

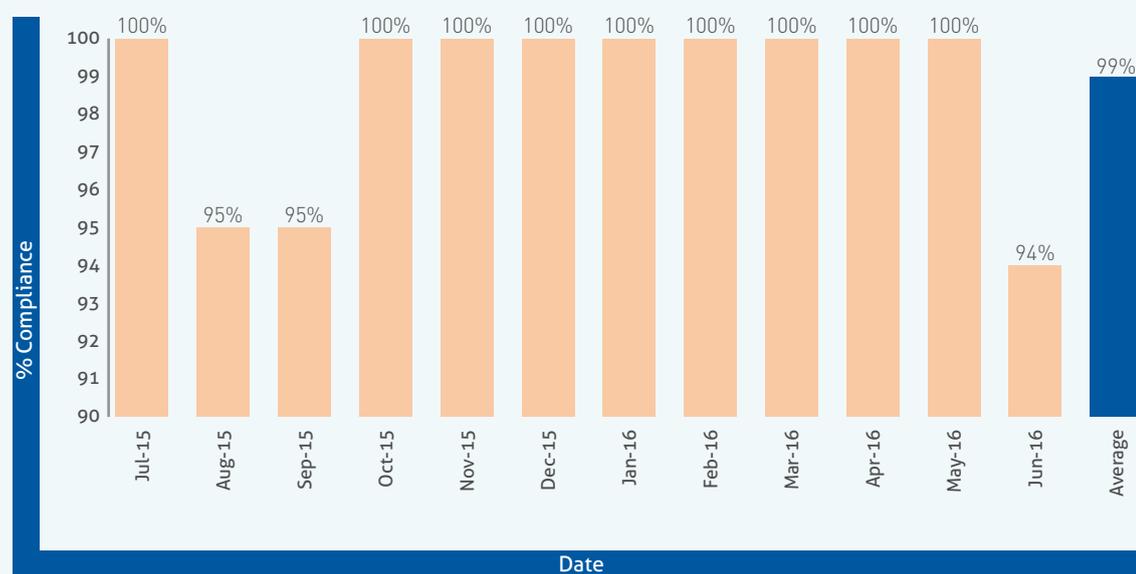
In November 2013, Bulk Sanitation entered into a 32 months partnership with Midvaal Local Municipality for Operations and Maintenance of Vaal Marina Water Treatment Plant.

The treatment capacity of the plant is 10 ML/d; the average operating capacity is 1.43 ML/d for period of 8 hours and 7 days a week. The plant is currently treating an average inflow of 43 ML/month. The overall SANS 241 compliance for the year under review is displayed below. Since the inception of the contract, the quality of water produced is compliant with SANS 241 standard and there was uninterrupted water supply to communities.

The parameters measured for the final treated water was as per SANS241, i.e. physical, chemical and microbiological and complied to average of 99% respectively. As recommended by SANS241, sampling frequency is done once per month.

It is worth noting that the Vaal Marina WTW's Blue Drop status improved from 39.65% in 2013 to 83.96% in 2014 as per audit conducted by DWS in second half of 2015.

VAAL MARINA 2015 / 2016 WTW BLUE DROP STATUS



THEMBISILE HANI LOCAL MUNICIPALITY: OPERATIONS AND MAINTENANCE OF TWEEFONTEIN WASTEWATER PLANT

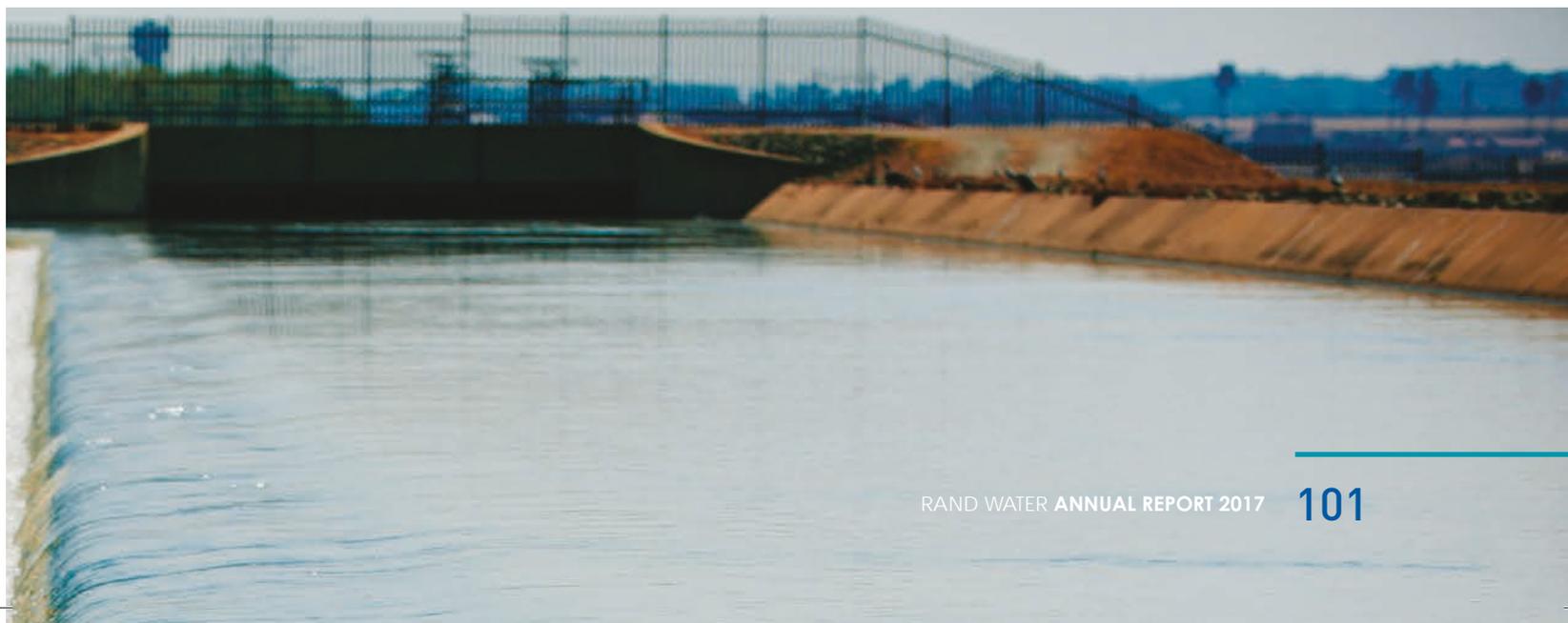
The partnership to provide bulk sanitation services to Thembisile Hani Local Municipality started in 2009 for the provision of operation, maintenance and capacity building services to Tweefontein K Wastewater Treatment Works. The overall effluent compliance of the works for the year under review was 75%, which increased by 4 % when compared to that of the previous year. Despite the increase in

compliance during this year, the treatment works was faced with biomass production challenge in the first quarter of the fiscal year. Tweefontein WWTW was upgraded with another 750m³/day Biological Nutrient Removal plant, resulting into the design capacity of the plant increase from 0.75 Mℓ/day to 1.50Mℓ/day. The new module was commissioned on the 22nd September 2016.

COMPLIANCE TO WATER QUALITY STANDARDS



Rand Water is also providing the process advisory services to the municipality at KwaMhlanga East and West Oxidation ponds. Through the advice and recommendations that were made by Rand Water to Municipality, Process Controllers who are classified by DWS were stationed in these ponds in-line with DWS Regulation 2834.



EMFULENI LOCAL MUNICIPALITY: PROCESS ADVISORY SERVICES FOR THE OPERATIONS AND MAINTENANCE WASTE WATER TREATMENT PLANTS

In March 2017, Bulk Sanitation entered into a 3 years partnership with Emfuleni Local Municipality for provision of process advisory services to its three wastewater treatment works, Vaal lower water treatment works and monthly laboratory services.

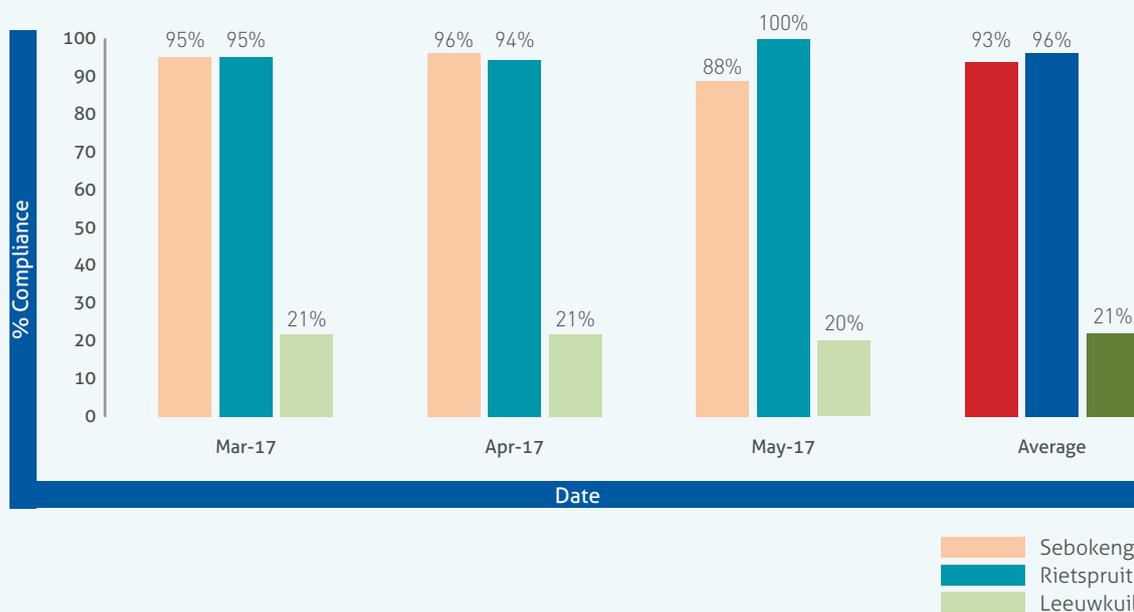
Since Rand Water's involvement with Emfuleni Local Municipality, the organisation managed to do sampling and update Green Drop System to comply with DWS regulation. Based on the water quality results analysed at Rand Water accredited Analytical Services, the overall effluent compliance of the works from March 2017 to June 2017 were recorded as follows:

- Sebokeng WWTW – 93%
- Rietspruit WWTW – 96%
- Leeuwkuil WWTW – 21%.

The sub-standard performance of Leeuwkuil WWTW was attributed to the introduction of new stringent Water Use License in December 2014 by DWS. It should be noted that Leeuwkuil WWTW continuously achieve the effluent compliance against the plant's design criteria. The upgrade of the plant to meet stringent Water Use License, address the hydraulic loading, and also meet future development within the Leeuwkuil Catchment was incorporated into the Sedibeng Regional Sanitation Scheme which is currently at the design phase.

The overall final effluent compliance of the wastewater treatment works for the year under review is displayed below.

EMFULENI WWTW COMPLIANCE TO EFFLUENT DISCHARGE STANDARDS

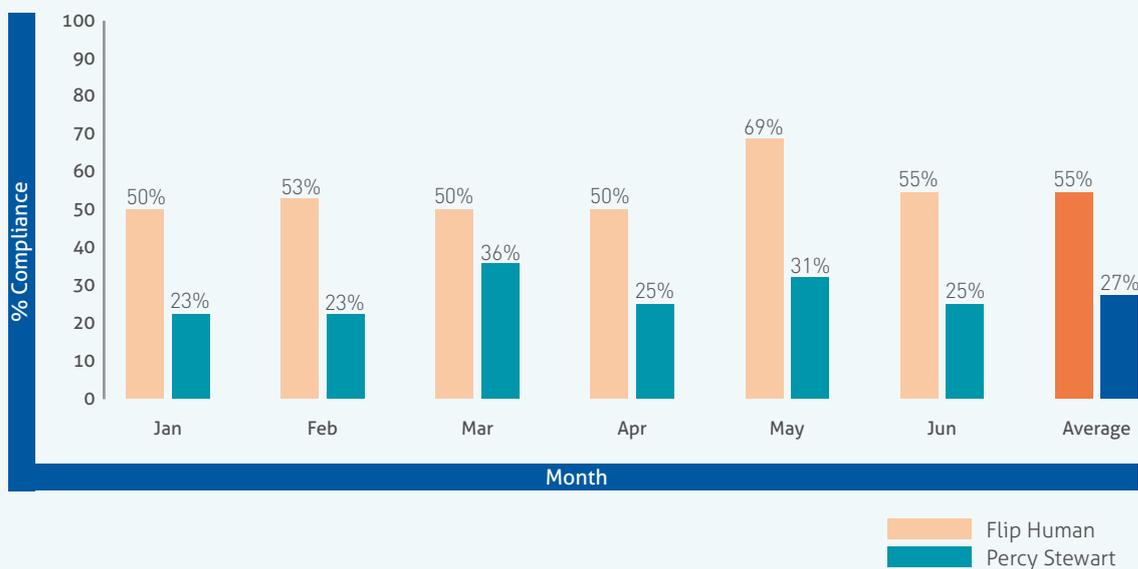


MOGALE CITY LOCAL MUNICIPALITY: OPERATIONS AND MAINTENANCE OF WASTE WATER TREATMENT PLANTS

On 1st November 2016 Rand Water entered into a partnership to provide Bulk Sanitation Services to Mogale City Local Municipality for the provision of Operations, Maintenance, Management and Capacity Building services to Percy Stewart & Flip Human Wastewater Treatment Works. There were various pressing challenges identified such as numerous mechanical failures, inconsistency with the shift schedule and sporadic toxic raw influent

emanating from industrial discharges, which inevitably led to poor performance of the works'. Apart from this, it must also be noted that Percy Stewart WWTW was issued with a new Water Use License in December 2014 with particularly stringent limits. A review of new water use license was requested by the municipality. Below is a graphical representation of the water quality compliance for both Flip Human and Percy Stewart during the year under review.

MOGALE CITY COMPLIANCE TO EFFLUENT DISCHARGE STANDARDS



Based on the commitment of Rand Water and Mogale City Local Municipality personnel, the backlog on the equipment failures at both Percy Stewart and Flip Human WWTW was adequately addressed resulting in plant availability of over 80%.



VICTOR KHANYE LOCAL MUNICIPALITY

Rand Water was appointed by DWS as an Implementing Agent through the Mpumalanga Implementation Protocol to implement the sanitation project in Victor Khanye Local Municipality. The project involves the refurbishment and upgrade of Delmas and Botleng Wastewater Treatment Works. The refurbishment of Delmas WWTW was completed the previously financial year.

REFURBISHMENT AND UPGRADE OF BOTLENG WWTW

The scope of work to refurbish Botleng WWTW included the following:

- Refurbishment of mechanical and electrical equipment
- Refurbishment of chlorine dosing systems
- Repairs to sludge drying beds

The project started in September 2015 and is planned to be completed in September 2016. The upgrade phase will commence after the successful completion of refurbishment.

MAFUBE LOCAL MUNICIPALITY

Rand Water is an Implementing Agent on behalf of DWS and Mafube Local Municipality for the extension of Wastewater Treatment Works in Namahadi and Frankfort. The original project value was R29 million, but due to the increase in scope, the total project value increased to R68 million. This project involves the upgrade of sewer pump stations and its associated works. This project is on the critical path of residential development and eradication of bucket sanitation within Namahadi Township. The project was at 91% completion during the year under review and is expected to be finished in October 2017.

Since the inception of the project a total of 125 jobs were created, with 25 jobs opportunities created during the year under review. Total of two local sub-contractors also benefited from the project during the year under review.

INSTALLED PUMPS AT NAMAHAADI PUMP STATION AND SEAGUL PUMP STATION



WATER CONSERVATION AND DEMAND MANAGEMENT

The provision of water services to sustain basic standard of living and economic activity is greatly threatened by water losses and wastage of water. In South Africa, the demand for water would have outstripped the availability of water by 2025. Water conservation and managing the demand for water is therefore critical in maximizing the productive use of the available water through the reduction of water losses and wastage, which will allow more people to gain access to this limited resource in a sustained manner.

The focus on serving communities better, informed by "Back-to-Basics" principles requires the delivery of basic services to create decent living conditions, ensuring effective functioning through good governance and sound financial management, constantly monitoring and managing performance, being accountable to communities and building capacity. The objectives of an effective water conservation and water demand management (WC/WDM) programme are strongly aligned to this and will contribute greatly to achieving these principles.

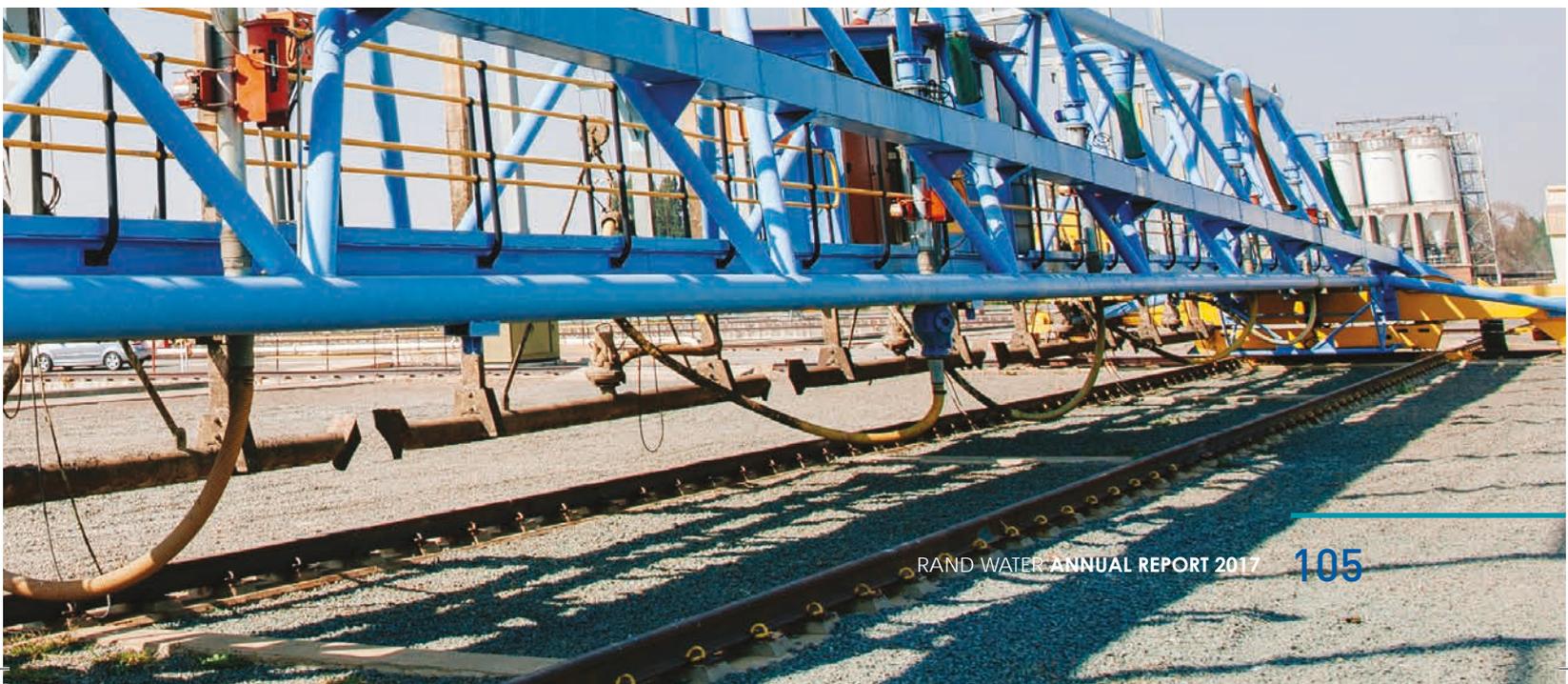
The approach adopted by Rand Water, is to gain a better understanding of the demand for water and the impact it has on the urban water cycle (i.e. from water resource, abstraction, purification, bulk distribution, reticulation, end- user consumption and return flows to resource), through analysis of available data and development of scientific-based tools on which decisions can be based. The

main purpose is to distinguish between real growth, water losses and wastages in order to adequately address and/or assist in addressing the losses and wastages.

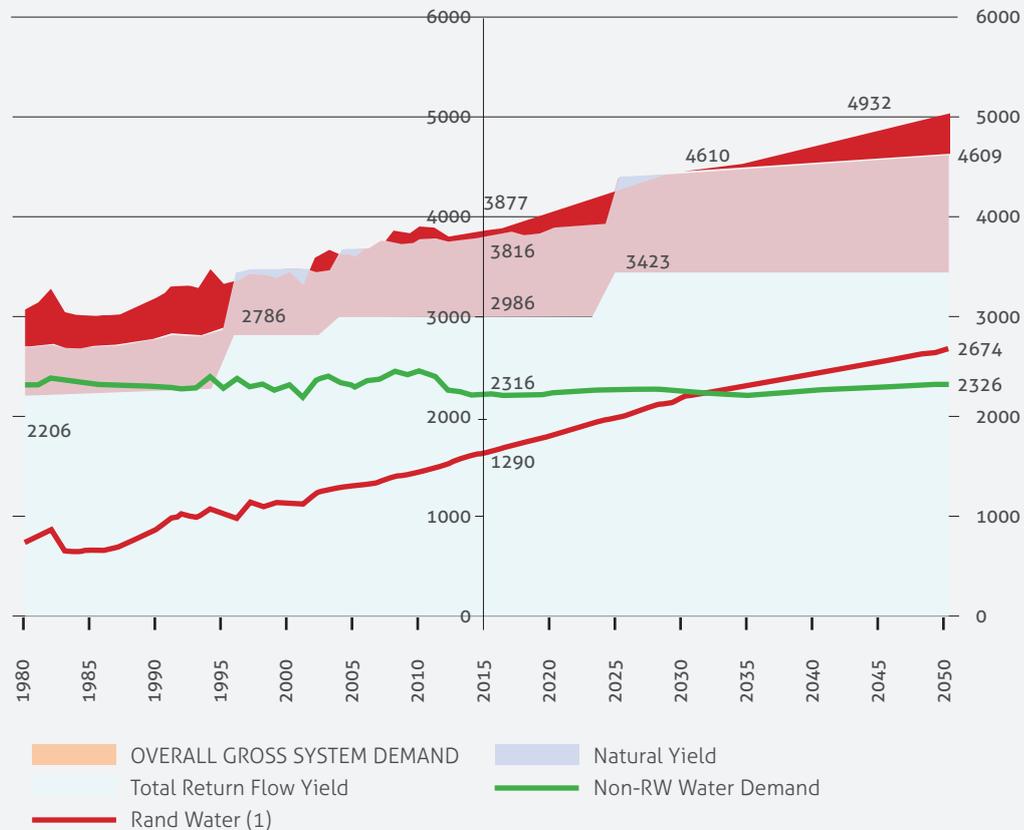
RAND WATER'S DEMAND ON THE INTEGRATED VAAL RIVER SYSTEM

The abstraction volume of 1 711 Mm³/annum in 2016, makes Rand Water the largest single user of raw water in the Integrated Vaal River System (IVRS), at about 46% of the total system yield of 3 751 Mm³/annum, including return flows. The current abstraction exceeds the allocated abstraction volume of 1 600 Mm³/annum by about 6.9%. The excessive demand by Rand Water and its customers creates an even larger than expected water shortage as depicted by the red areas in the diagram below. The municipal sector is the most significant part of Rand Water's demand and focused interventions in this sector will contribute greatly to the achievement of the required reductions in Rand Water's demand from the IVRS

At the projected demands, there is a growing shortfall with the current total yield of the IVRS, until the next phase of the Lesotho Highlands Scheme is commissioned, probably by 2025. The new scheme would provide relief for the medium term, until the demand is estimated to outstrip the system yield at a growing rate beyond 2033 to 2050. WC/WDM is therefore critical to minimize the shortfall and comply with the abstraction limit set by DWS.



VAAL RIVER SYSTEM DEMANDS AND YIELD (RETURN FLOWS INCLUDED IN YIELD Mm³/a)

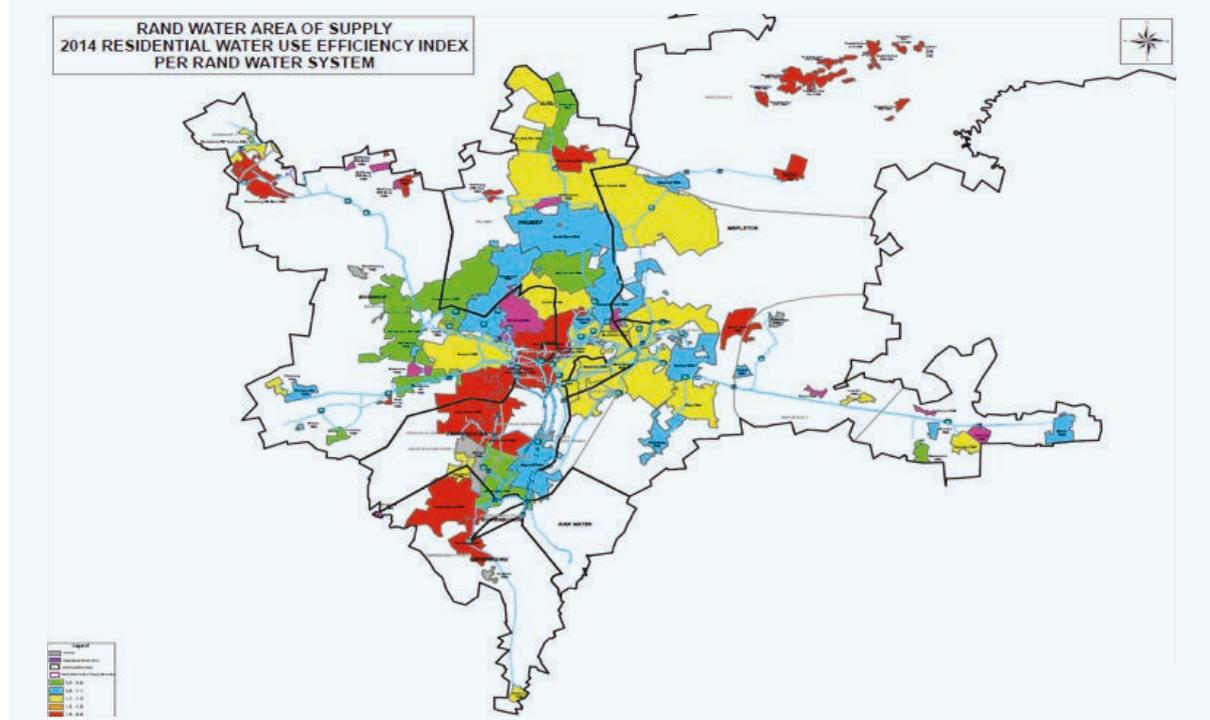


ASSESSMENT OF WATER USE EFFICIENCY

Rand Water developed a statistical model to assess the efficiency of potable water use in its area of supply (i.e. to determine the levels of wastage or unnecessary demand). The model looks at factors such as population, levels of water and sanitation service, development type, income levels, erf sizes and land use categories to determine 'normal' usage for a wide range of categories of domestic end-user properties. The normal usage figure for each category is then applied in an identical way across all Rand Water end-users and then summed up to obtain the normal usage per zone, town, municipality and ultimately the total Rand Water's Area of Supply. Normal usage figures for other user types, including mining, industrial, business and institutional are currently estimated based on the assumption that their efficiency is equal to that of the average for residential customers.

The 'normal' usage from this model is then compared with actual demand per demarcated zone supplied by each Rand Water bulk customer connection, where the necessary customer data is available. Dividing 'actual' usage by 'normal' usage provides a water use efficiency index (WUEI). In 2014 the WUEI for Rand Water's total area of supply was 1.3. This means that the average actual usage is approximately 30% more than 'normal' usage and therefore indicative of low efficiency. In 2016 the WUEI for the area increased to 1.38. This represents an increase in inefficiencies by 8% over the past 2 years. There are also priority areas where the actual usage exceeds normal by more than 90%. Consolidation of water demand management programmes of Rand Water and the respective municipalities should target these areas to address the inefficiencies that exist.

WATER USE EFFICIENCY ASSESSMENT



ESTABLISHMENT OF A REGIONAL FORUM

Following the 2015 - 2016 drought, water restrictions were imposed on the urban and irrigation users of the Integrated Vaal River System (IVRS) through the publication of the Government Gazette Notice Number 40203 of 12th August 2016. A committee was established to monitor the performance of the system with respect to the urban 15% reduction target, between Rand Water, the bulk water supplier and chair of the committee meetings, DWS as enforcer and owner of the water resources and Water Services Authorities as the users, (the municipalities' representatives, SALGA), and CoGTA. The outcomes of the committee meetings were escalated to the leadership of the respective organisation and in addition were presented at the weekly Joint Operating Committee established by CoGTA for Gauteng Province. When the water storage situation improved, the restrictions were lifted in March 2017 and the meeting resolved that the committee should continue on a quarterly basis, but with a focus on water conservation and water demand management.

The committee was renamed the IVRS Project 1600 Water Demand Management Steering Committee and it aims to provide support, guidance and oversight of the progress made by the municipal sector to reduce their water demand in order for Rand Water to comply with the abstraction limit of 1600 Mm³/annum from the IVRS, which was set by DWS, until the next phase of the Lesotho Highlands Scheme comes in operation. Critical in the functioning of the committee is the use of Rand Water's statistical model for water use efficiency to ensure an equitable and fair baseline against which performance will be measured, in relation to the 1600 Mm³/annum target. It is important to note that a tremendous amount of work has gone into communicating the development and outcomes of the statistical model of Rand Water over the past 2.5 years to the relevant stakeholders, such as DWS, SALGA, CoGTA and municipalities to obtain buy-in for its application and use as a decision-making tool for the region.

SUPPORT TO MUNICIPALITIES

Rand Water was involved in supporting the call for the reduction of non-revenue water through partnerships with various municipalities and other stakeholders. The initiatives undertaken include:

Metsimaholo Local Municipality: Water conservation and water demand management project

Metsimaholo Water Demand and Water Conservation Management is a project funded by DWS and entailed the installation of ultimately five (05) zonal meters in Vaalpark, Welgelegen, Sasolburg and Naledi. The main objective of the project is to improve management through sectorization, water balance calculations and response time to address leaks.

EXCAVATION AND INSTALLATION OF METERS



Rustenburg: Water Demand Management Project

Rand Water entered into an agreement with Rustenburg Local Municipality to assist in the implementation of water demand management related initiatives in 2014. Rand Water took the role of advisor and assisted the municipality to develop and finalise a comprehensive Water

Demand Management strategy and business plan which the municipality is utilising to source suitable funding to implement the initiatives identified. Rand Water continues to play a support and advisory role to the Municipality.

NO-DROP ASSESSMENT

DWS introduced a new incentive-based “No Drop assessment” whose prime aim is to monitor water loss and increase water use efficiency throughout South Africa. Rand Water provided abstraction and bulk supply information for each of its customers, and was previously required by DWS to attend the full audits of the three metros in its area of supply.

Water Demand Management Fund

Rand Water in consultation with DWS, SALGA and municipalities in its area of supply established a WDM fund by including a water demand management component to the tariff that was gazetted for the 2014/15 financial year. However, at the end of 2016 during the water restrictions period, the decision was made by Rand Water to refund municipalities their share of investment into the fund, in order for them to finance the initiatives to reduce their water demand to comply with the restriction target of 15%.

INTERNATIONAL PROJECTS

Rand Water aims to partner with utilities in the continent (Africa) and beyond. We believe that sharing best practices will improve the provision of Water Services in Africa. The Sustainable Development Goals (SDG) may not be achieved if relevant and strong collaborations between utilities are not in established in Africa. Rand Water currently has footprint/relationships in/with the following countries; Democratic Republic of Congo (REGODESO), Ghana (Ghana Water Company Limited), Mozambique (FIPAG), Swaziland (Swaziland Water Corporation), Namibia (NamWater), and Botswana (Water Utility Corporation).

The following growth projects were undertaken outside South Africa.

Zambia Water & Sanitation Project

Project	Zambia Water & Sanitation
Client	European Investment Bank (EIB)
Beneficiary	Mulonga Water & Sewerage Company
Budget	€ 150 million (€ 5.million for Rand Water)
Project Duration	60 Months

Rand Water as part of the Mott MacDonald led Consortium was awarded a contract as implementation consultants for the rehabilitation of the Mulonga Water Utility (MWSC) based on the Zambian Copper belt province, Zambia’s traditional copper mining region bordering on the Democratic Republic of Congo.

The contract was awarded by the European Investment Bank (EIB). EIB is the European Union’s bank, set up in 1958 by the Treaty of Rome and now existing under the Treaty on the Functioning of the European Union. The EIB’s shareholders are the 28 EU Member States. Whilst EIB’s main activities are focused on Europe, it is an active development finance partner in the African, Caribbean and Pacific countries (ACPs) and in the Overseas Countries and Territories (OCTs) since 1963 and 1968 respectively.

The project partnership is a formal unincorporated consultancy Agreement with the partner on an exclusive basis limited to the above project only.



CONSORTIUM PARTNERS FOR THE ZAMBIA PROJECT

Status	Names of Legal Entity	Nationality
Leader	Mott Macdonald Limited	England
Member	RODECO Consulting GmbH	Germany
Member	CONSULAQUA Hamburg Beratungsgesellschaft mbH	Germany
Member	Brian Colquhoun Hugh O Donnell & Partners (BCHOD)	Zambia
Member	Rand Water	South Africa

The Zambia Water and Sanitation Project (the Project) consists of rehabilitating and expanding water and wastewater services of Mulonga Water & Sewerage Company (MWSC) in the Copper belt Province,

The Project has five components;

- Programme management and monitoring
- Business improvement of MWSC
- Infrastructure investment
- Procurement
- Water and sanitation expansion programmes in peri-urban areas

The Project will ensure MWSC's ability to provide improved core water and sanitation services to a broader, more inclusive customer base in a sustainable manner. Besides investments in infrastructure, a significant business improvement component in, among others, the area of NRW reduction is envisaged as well as assistance in the area of service extension to peri-urban areas.

The overall investment budget of the Project is € 150 million and is expected to be provided by an EIB loan (EUR 75 million), a loan from AFD (EUR 50 million), a grant from the ACP-EU Water Facility (EUR 5 million), and a contribution from the Republic of Zambia / MWSC / Other (EUR 20 million). The project is fully funded by EIB.

The maximum budget available for the project for consulting services as Implementing Agents in which Rand Water is participating together with the Consortium partners is €5 million.

The total project duration is 60 months starting 30th September 2015 to 30th August 2020 and may be subject to extensions

DROUGHT RELIEF PROJECT IN NAMIBIA

Client	Department of International Relations and Cooperation (DIRCO)
Beneficiary	Department of Rural Water Supply (Namibia)
Budget	R50 million

Rand Water was appointed as Implementing Agents by the Department of International Relations in collaboration with DWS to execute the Drought relief project in Namibia. The scope of work was finalized between the Namibians and Rand Water during visits to Namibia by the project team in early March 2016. Approval to the scope of work was granted by the African Renaissance Fund (ARF) Advisory Committee mid-March 2016.

The project scope included equipping drilled boreholes in remote areas of the Omaheke, Ohangwena, Kavango, Kunene and Zambezi regions. This would include the supply and installation of suitable pumps, motors, storage tanks and the construction of concrete drinking troughs for livestock and wildlife. The aim of the project is to bring much needed water relief to communities and their livestock in drought hit areas of northern and central Namibia. The project completion and hand over is expected to take place during 2017/18 Financial Year.

STRATEGIC CUSTOMER PARTNERSHIPS

The Strategic Customer Partnerships (SCP) department is a vibrant and dynamic department within the Sector Growth and Development Division that seeks to proactively understand and quickly adapt to the needs of the customers. The primary purpose of SCP is "customer relationship management." SCP is positioned as the "front-end" of Rand Water's customer interactions.

CUSTOMER SERVICE CENTRE

In today's professional world, customers want immediate response and timely results when making enquiries. Customers spend millions of Rands per annum doing business with Rand Water. Hence customer service is vital for Rand Water. Rand Water operates a 24 hour Customer service centre and is continuously challenging its customer service technology to ensure that we respond to customer needs. According to the American Express 2011 Global Customer Service Barometer, U.S. consumers prefer to resolve their customer service issues using a variety of touch points. Hence Rand Water is following on that trend by having a customer self-service link on its web site. Achievements in this regard are:

- Customer queries that were handled by the Customer Service Centre were resolved within a day.
- Queries that require specialized information were resolved within 3.5 days.
- We managed to resolve 86% of calls at first hand, eliminating transferring of calls from one person to another

CUSTOMER VALUE MANAGEMENT (CVM) SURVEY

Rand Water is committed to consistently striving to enhance its product and service offerings by establishing customer needs, and the value customers derive from the services rendered. CVM is a measure of a

company's customers' view of the perceived value for money delivered relative to that of their competitors' customers. As part of its commitment to ensuring that consistent customer service is delivered and that customers derive value from the services offered by Rand Water, Rand Water conducts the annual CVM Survey. An independent service provider conducts the survey on Rand Water's behalf.

The objectives of the survey are to:

- Establish what creates value for customers
- Assess Rand Water's performance in meeting these value requirements
- Gauge overall customer satisfaction and recommendations on improvement of service levels

After receiving the results and sharing them with the wider Rand Water organisation, a process of compiling an improvement plan commences. The objectives of the CVM Survey Improvement Plan are as follows:

- To design effective processes to meet the needs of customers which are consistent with the Rand Water's mission, vision, goals and objectives
- To collect data to monitor the stability of existing processes, identify opportunities for improvement, identify changes that will lead to improvement, and sustain improvement.
- To aggregate and analyze data on an ongoing basis and to identify changes that will lead to improved performance and a reduction in errors
- To achieve improved performance and sustain the improvement throughout the organisation
- To promote collaboration at all levels of the organisation enabling the creation of a culture focused on performance
- To educate management and staff regarding responsibilities and effective participation in performance improvement activities



SERVICE LEVEL EVALUATION (SLE) SURVEYS

Rand Water entered into Bulk Water Supply Contracts with all its customers to record the current and continued provision of bulk water supply services so that it can render services in an efficient, equitable, cost effective and sustainable manner. In order to ascertain if we meet this objective, Rand Water conducts

annual Service Level Evaluation (SLE) surveys. Rand Water achieved a rating of 97.23% for the 2017 SLE survey. This represents a slight increase compared to the 2016 rating of 96.97%. A rating of more than 95% is above the industry norm.

SLE SURVEY RESULTS

Year	2013	2014	2015	2016	2017
SLE Survey Results	97.70%	95.54%	95.34%	96.97%	97.23%

FORUMS

Rand Water established the Forums as a communication vehicle with its customers. Rand Water has two Forums, namely:

- The Water Services Forum
- The Mining and Industry Forum

The Forums' main objective is to educate customers on all water related matters and create a debate around relevant topics. Rand Water customers are encouraged to contribute to the forums as this encourages dialogue and information sharing whilst giving customers a better voice in the water sector. Rand Water's Forums are "Knowledge Sharing Centre's". Topics covered include "Water Quality Management, Climate Change and Acid Mine Drainage (AMD)" but to name a few.

Not only do the forums engage in a board/classroom type set-up, there is also a practical

element where customers are taken on water related tours. For the year under review, the forums took customers to the Acid Mine Drainage plant at the now defunct Grootvlei Mine in Springs.

SCIENTIFIC SERVICES

The Scientific Services division employs 153 staff and utilises an annual budget of about R133 million. There are four departments within the Scientific Services Division. They are Analytical Services, Process Technology, Water Quality Specialist Services, and Divisional Support Services.

WATER QUALITY SPECIALIST SERVICES

The Vaal Dam is the hub of water supply in the Vaal River System. Rand Water, Sasol



(Sasolburg and Secunda), Eskom and Mittal Steel, as well as downstream users, such as irrigators, Midvaal and Sedibeng Water, are supplied with water released from Vaal Dam. As a result, the quality of the region's water resources is continuously under the spotlight and received extensive media attention throughout the year. This was because of a number of incidents and discoveries made that caused major concerns about the efficiency of the management structures and interventions related to water resources.

The decanting of acid mine drainage from various mines in the Johannesburg region remained high on the agenda, and numerous television and radio programmes covered the subject. The decanting of this water presents serious threats with respect to possible sinkhole formation and obviously, the pollution of receiving streams. The short-term solutions to both the Western, and Central and Eastern Basins decanting, have been successfully implemented. This involves the neutralisation of the acid mine water in these basins and discharging the saline water into the Tweelopiespruit, Klip River and Blesbokspruit respectively. The Central and Eastern Basin plants are presently discharging, and a general increase in the salinity of the receiving streams was observed since June 2014. The average salinity of the AMD discharge is 2500mg/l, but the dilution effect of the Klip, Blesbokspruit and Vaal rivers reduces the salinity in the Vaal River to approximately 570mg/l. It is important to note, however, that the dilution does not reduce the salt loading into the system.

Neutralisation plant at the Eastern Basin site near Springs was commissioned early 2016.

DWS Operating Rules for the Vaal River system require that water should be released from Vaal Dam when the salinity in the Barrage Reservoir reaches 600mg/l. This is to dilute the saline water in the system for the benefit of downstream users. With the Eastern Basin also discharging into the Vaal river system, the risk of exceeding the 600mg/l target is increasing.

An additional concern with respect to acid mine water is the rapid establishment of new mines and the high number of pending mining applications for new coal mines to satisfy Eskom's increased demand. Most of these mines are in the upper reaches of the Vaal Dam catchment, and will significantly impact Rand Water if pollution cannot be curtailed. The responsible issuing of mining- and water use licenses by the respective government departments is critical.

Sewage contamination remains a major concern, apart from the treatment works operated by the larger metros. Many of the works in the catchment area are functioning at a level where effluent of unacceptable quality is discharged into the environment. This caused DWS to intervene in the maintenance of several WWTW's around the Vaal Dam.

To monitor the situation Rand Water increased its sampling frequency at identified high risk Waste Water Treatment Works (WWTWs). Fortunately, the Vaal Dam size (surface area and dilution volume) acts as a natural risk mitigating factor against microbial pollution.



EXAMPLE OF POORLY OPERATED WASTEWATER TREATMENT WORKS



SOURCE WATER QUALITY MANAGEMENT

The Source Water Quality section actively engages with stakeholders at Catchment Forum level to address water management issues. Water quality reports are produced and discussed, highlighting both “hot spot” issues as well as cumulative trends in water quality. Water quality reports are also shared with DWS and published on the www.reservoir.co.za website for all stakeholders to access.

The establishment of the Vaal Catchment Management Agency (CMA), is eagerly awaited as the protection of source water is vital to Rand Water’s ability to provide an uninterrupted supply of world class potable water. As a first step, the CMA activities have been ring-fenced within DWS and identified staff have been delegated with the relevant functions. Progress is unfortunately slow.

Due to the prominence and successes of Rand Water, the Honourable Minister of Water and Sanitation directed Rand Water to also take over catchment management functions in Mpumalanga as part of the expansion of the organisation’s service area. However, the Inkomati-Usuthu CMA (IUCMA) already exists in

the area, and covers most of the Mpumalanga province. In this regard, Rand Water met with the IUCMA to establish a cooperative relationship that will be mutually beneficial to both organisations.

EUTROPHICATION AND THE VAAL BARRAGE

Although there was a general improvement in eutrophic levels of the Barrage Reservoir (mainly due to the engagement of Rand Water staff with authorities, stakeholders and municipalities), spillages of raw sewage continue to affect the Barrage Reservoir with high levels of nutrients and faecal bacteria.

Although an improvement in the effluent from some sewage treatment plants was observed, spillages still rose from pipeline bursts and pump failures. The improvements can be attributed to Rand Water’s vigilant monitoring and reporting of spills. Rand Water’s Bulk Sanitation department was appointed as management contractor by the Emfuleni municipality, to manage the three sewage treatment works in the area on its behalf. Unfortunately, some of the semi-formal areas seem to be under permanent threat as sewer lines are in such a poor condition that

permanent spillages and flooding are the order of the day.

Political unrest also had an impact on civil work which includes the upgrading of certain WWTWs, as residents protested, insisted on being hired by the contractor and blocked access to the site. The upgrading of Sebokeng

wastewater treatment works is already two years behind schedule as a result.

Because of financial challenges within DWS, the Sedibeng Regional Sanitation Scheme was placed on hold. Only the refurbishment work currently in progress will be completed.

RAW SEWAGE FROM LEAKING AND BROKEN MANHOLES



This will mean that significant sewage spillages will continue to occur in the area, with raw sewage being discharged directly into the Vaal river, as the current network capacity is already exceeded.

Compliance to effluent standards increased significantly at some WWTW's. The fact that action is being taken because of public pressure is comforting. It is also an indication that awareness levels among the public are high. People are making use of the catchment forums, and information made available by Rand Water, to inform and educate themselves.

MONITORING

The rivers and dams in the catchments of Rand Water's area of interest are extensively monitored and a great deal of effort goes into communicating the water quality status of these catchments to interested and affected parties. This takes place through involvement in every Catchment Forum and the website,

(www.reservoir.co.za) which is maintained by Rand Water. Rand Water fulfils the role of independent water quality "auditor" and facilitator in these catchment forums, as it has the most comprehensive database of chemical and biological data. A high level of trust therefore exists between Rand Water staff and the public.

As a result of the increasing water quality problems, economic pressures and uncertainties surrounding incidents such as fish kills; Rand Water installed a number of real time electronic monitoring units at selected sites in the Vaal and Wilge Rivers and the Vaal River Barrage Reservoir catchments. These instruments measure flow at weirs as well as selected water quality variables. The instruments are linked to data loggers, equipped with mobile phone technology, via which the data is sent to a central server. This information is available in real time to staff in the Water Quality Specialist Services Department of Rand Water.

This system vastly improves response time to pollution incidents, as well as significantly improves Rand Water's information base, which contributes to a better understanding of the dynamics of the Vaal River system. Some examples of such an improved knowledge base are a better understanding of the occurrence of fish kills and tracking the impact of Acid Mine Drainage (AMD) on the receiving river system.

Rand Water also invested in world leading technology in the form of hand-held instruments that measure certain variables in real-time, and connects via GPS and bluetooth technology to computers, making the data available instantly to users.

VAAL DAM CATCHMENT AREA

The Vaal Dam's level dropped to as low as 26% during the strong El Nino period experienced in 2016 - 2017. Water had to be released from Sterkfontein Dam to maintain safe operating levels in Vaal Dam. Storage in the total Vaal river system turned at 50%.

Due to good rains received during the latter part of summer, the Vaal Dam filled to 100% of its capacity, breaking the extensive drought experienced over the previous three years. During the filling period, many consumer queries were received as the possibilities of a major flood were reported in the media.

Several water quality issues have been identified regarding the current water quality status in the Vaal River system. Some issues impact the full length of the Vaal River while others are local in nature. The overall trend in the Vaal River system is one of increasing salinity levels which have and will continue to have an impact on the raw water quality supplied to the Vaal Dam and therefore ultimately on Rand Water's operations.

The increase in Total Dissolved Solids (TDS) and concomitant increase in constituents, such as chloride and sulphate, had major implications on domestic, industrial and agricultural water users. The occurrence of microbiological pollutants as localized problems is also a continuous concern. This is indicative of sewage works and related infrastructure not being properly operated, managed and

maintained. Coal mining activities in the upper reaches of the Vaal River are rapidly increasing. Many additional applications for mining rights are also being processed by the relevant government departments. These are already impacting on the water quality of the Vaal River, and, if not regulated effectively, will have similar effects on the river as the coal mining in the Witbank area had on the Olifants River (where crocodiles died because of poor water quality).

Eutrophication is the other key water quality challenge in the Vaal River System and resulted in algal blooms and growth of water hyacinth. Of importance is the fact that these blooms are occurring more frequently and with increased severity than historically experienced. Impacts have also resulted in economic implications for water users and large expenditure to control it.

Municipal wastewater effluent is the principal contributor to eutrophication and degradation of the Vaal River aquatic system. It is also one of the impacts that is easily mitigated because they can be easily identified, measured, and corrective action enforced using policies and regulations. Several directives were issued by DWS to some of the municipalities in the catchment, instructing them to improve the quality their effluent discharge from waste water treatment works. Unfortunately, this did not produce the desired effect.

In the long-term, increased pressure is expected from population expansion and development in the Vaal River catchment, which in turn will increase pollution levels. This in turn will necessitate additional measures and strategies to maintain acceptable pollution levels in the Vaal River system.

Law enforcement to control pollution has been a challenge for many years. A lack of human resources in government departments is the biggest concern resulting in them being unable to police the Vaal Dam catchment. It is only through continuous actions of the catchment forums, Rand Water staff and other stakeholders, that these problematic areas have been highlighted and are now gradually being addressed by DWS and local municipalities. The establishment of the Blue Scorpions has unfortunately not had any significant effect, largely due to capacity challenges.

Serious attention should be given by municipalities to upgrade the sewage infrastructure, minimize the ingress of storm water into the sewer systems during high flow events, and minimize operational spillages. Improved quality of treated sewage effluent discharges will contribute to the environmental sustainability of the Vaal River ecosystem.

VAAL BARRAGE CATCHMENT AREA

The Vaal River Barrage reservoir catchment receives extensive volumes of water from point source discharges. The point source discharges include the major wastewater treatment works run by Johannesburg Water, ERWAT and Metsi-a-Lekoa as well as discharges from gold mines. The bulk of the salt load from defunct mines is being discharged from the Central and Eastern Basins into the Vaal Barrage catchment area. There are also industrial effluent discharges, the largest being from SAPPI Enstra, Sasol (Sasolburg) and the storm water runoff from Mittal Steel Vanderbijlpark. The discharge volumes from the wastewater treatment plants will grow over time as the water requirements grow and the level of services are improved with the expansion of water- borne sewerage systems in the urban areas.

The two most important water quality issues to be managed in the Barrage catchment for most of the sample points are biological (in the form of faecal bacteria and protozoa) and chemical (in the form of gold mining and industrial impacts through manganese, sodium and sulphate). The threat of acid mine drainage (AMD) will be partially mitigated through the implementation of the short- to medium term interventions by DWS. Although the acidity and heavy metals are neutralised and removed from the water, the discharge is still highly saline, with total dissolved salts (TDS) values more than 2,500 mg/l. Irrespective of the quality of such water, these discharges will over time have major effects on the overall hydrology of the catchment. The more difficult issue of water quality management is that of controlling diffuse sources of pollution. In this regard, the biological impact of uncontrolled wastewater runoff from informal settlements, burst pipes due to lack of maintenance and general lack of waste management saw deterioration over the years in biological water quality. This can and will lead to potential harmful effects on the human populations who use the Barrage catchment river systems for domestic and recreational uses. The occurrence of high numbers of E.coli, Giardia and Cryptosporidium cysts in all the tributaries of the Barrage is a major cause for concern.

BURST MANHOLES IN THE CATCHMENT AREA



Regarding the eutrophic status of the Vaal River system, the Vaal River downstream of the Vaal Dam is severely impacted resulting in degradation of ecological integrity. It must be noted that the Vaal Barrage catchment is described as a serious "hotspot" with the highest levels of pollution (bacteria, algae, heavy metals, salts and nutrients) recorded throughout the entire Vaal River system. The pollution levels in the Klip River and Rietspruit catchments of the Vaal Barrage catchment are unacceptably high and the scale of nutrient inputs far exceeds the capacity of the natural environment to assimilate the waste discharged into these river systems.

Rand Water still successfully and vigilantly implements the Vaal River Complex Structure Plan of 1996, which provides guidance for the control over development in the riparian zone of the Barrage reservoir. The purpose of the structure Plan is to protect the river from dense urbanisation near this key water source, which presents an imminent water pollution risk. Although the Structure Plan requires consensus for the approval of development plans from various municipal and government offices, Rand Water is often the only party to oppose development and accordingly experienced increasing pressure to relax its stance in this regard. In the interest of protecting the Vaal River system, however, Rand Water maintained stringent application of the relevant legislation.

As part of its commitment to providing factual and relevant information, Rand Water staff regularly provides input and comment on various Environmental Impact Assessments (EIA's) that occur within its area of interest. This is done by linking with various departments within the organisation to provide effective comment to the EIA process thus ensuring that water resources are effectively protected and not significantly degraded through developmental impacts.

Whilst formal channels, such as the EIA process allows Rand Water to interact with stakeholders and developers, more informal interactions take place on a daily basis where staff are on site investigating pollution incidents, meeting with municipal staff or

providing direct assistance to stakeholders. It is through these interactions that a high level of trust was developed between Rand Water staff and the public often to the point where Rand Water was asked to mediate between disputes. Numerous requests for Rand Water data are also received on a regular basis to assist in solving pollution incidents as the organisation's information is viewed as being credible and unbiased.

PRODUCTION WATER QUALITY ASSURANCE

Rand Water has extensive monitoring capacity consisting of three ISO9001:2008 certified site labs, over 500 online instruments and an ISO17025:2005 accredited laboratory. Extensive monitoring programmes have been documented and complied to. The online instrument upgrade programme for the two production sites of Zuikerbosch and Vereeniging have been completed. An online instrument upgrade programme is in progress for the Booster sites and a further programme is being planned for implementation in the distribution network.

WATER QUALITY MANAGEMENT SYSTEM

Rand Water is committed to a documented systematic risk based water quality management system. In line with this, a Water Quality Safety Plan (WQSP), which is based on Hazard Analysis and Critical Control Point (HACCP) as well as ISO9001:2008 principles, was documented and implemented and the fourth revision completed as part of continuous improvement. This document will be adapted to meet ISO9001:2015 principles as the entire organisation must comply to this new version by September 2018. Detailed water quality risk registers have been formulated for the entire Rand Water supply chain and are revised annually. In addition, an organisation wide multi-stakeholder water quality management standing committee has been functional for many years, and meets on a monthly basis. The organisation is audited by DWS for Blue Drop certification every two years. Five Rand Water supplied Municipalities received Blue

Drop certification in the latest assessment report (2014 Blue Drop audit) released by DWS. Additionally, DWS's Gauteng Regional office conducts Blue Drop assessments yearly since 2015. Rand Water was audited twice in the past two years and performed well in both instances.

WATER QUALITY IN THE BULK DISTRIBUTION NETWORK

The supply of good quality potable water is of highest priority to Rand Water. To this effect, Rand Water provides safe, healthy water that is fit for lifetime consumption. Rand Water places a high premium on public

health protection and to this end adopted the SANS 241 drinking water quality standard to ensure the delivery of safe drinking water to Water Services Authorities. This is achieved by implementing stringent water quality standards and assessments throughout Rand Water's entire supply chain. This provides a safety margin to ensure that the water supplied to Water Service Authorities will continuously meet the SANS 241 standard when it reaches the furthest customers. The drinking water quality delivered to Rand Water customers during the financial year was of excellent quality. All physical, chemical and biological health related parameters were compliant to the SANS 241 drinking water quality standard.

Bulk Distribution Water Quality Report: July 2016 - June 2017

Determinand	Measurement units	Risk	Required compliance to SANS 241: 2015 standard (%)	SANS 241: 2015 standard limits (1)	No of results	Achieved Compliance to SANS 241: 2015 Spec(%)
<i>Microbiological determinands</i>						
<i>E. coli</i>	(mpn per 100 mL)	Acute health	99.0%	0	14 251	100.0%
Total Coliforms	(mpn per 100 mL)	Operational	95.0%	10	14 251	99.8%
Heterotrophic Plate Count	(cfu per 1 mL)	Operational	95.0%	≤1000	14 183	99.9%
<i>Cryptosporidium spp</i> (2)	(org / 10 Litre)	Acute health	99.0%	0	3 545	100.0%
<i>Giardia spp</i> (2)	(org / 10 Litre)	Acute health	99.0%	0	3 545	100.0%
Somatic Coliphages	(count per 10 mL)	Operational	95.0%	0	15 152	100.0%
<i>Physical and Aesthetic determinands</i>						
Colour	(mg / L as Pt-Co)	Aesthetic	95.0%	≤15	1 284	99.8%
Conductivity	(mS / m)	Aesthetic	95.0%	≤170	11 607	100.0%
Total Dissolved Solids	(mg / L)	Aesthetic	95.0%	≤1200	1 404	100.0%
Turbidity	(NTU)	Operational	95.0%	≤1	12 162	99.8%
Turbidity	(NTU)	Aesthetic	95.0%	≤5	12 162	99.9%
pH	(pH units)	Operational	95.0%	≥ 5 to ≤ 9.7	11 608	100.0%

Determinand	Measurement units	Risk	Required compliance to SANS 241: 2015 standard (%)	SANS 241: 2015 standard limits (1)	No of results	Achieved Compliance to SANS 241: 2015 Spec(%)
Chemical Properties						
Macro determinands						
Ammonia	(mg / L as N)	Aesthetic	95.0%	≤1.5	11 386	100.0%
Chloride	(mg / L as Cl)	Aesthetic	95.0%	≤300	1 262	100.0%
Free chlorine (3)	(mg / L as Cl ₂)	Chronic health	97.0%	≤5	14 263	100.0%
Monochloramine (4)	(mg / L as Cl ₂)	Chronic health	97.0%	≤4.1	10 875	100.0%
Fluoride	(mg / L as F)	Chronic health	97.0%	≤1.5	1 262	100.0%
Nitrate	(mg / L as N)	Acute health	99.0%	≤11	11 253	100.0%
Nitrite	(mg / L as N)	Acute health	99.0%	≤0.9	11 373	100.0%
Combined nitrate plus nitrite	(NO ₂ /0.9 + NO ₃ /11)	Acute health	99.0%	≤1	11 253	100.0%
Residual disinfectant (5)	(mg / L)	Operational	95.0%	≥0.2 Free Chlorine; ≥0.1 Sum of Free and Monochloramine	14 263	97.9%
Sodium	(mg / L as Na)	Aesthetic	95.0%	≤200	1 272	100.0%
Sulphate	(mg / L as SO ₄)	Aesthetic	95.0%	≤250	1 262	100.0%
Sulphate	(mg / L as SO ₄)	Acute health	99.0%	≤500	1 262	100.0%
Zinc	(mg / L as Zn)	Aesthetic	95.0%	≤5	1 272	100.0%
Micro determinands						
Aluminium	(µg / L as Al)	Operational	95.0%	≤300	1 272	100.0%
Antimony	(µg / L as Sb)	Chronic health	97.0%	≤20	1 222	100.0%
Arsenic	(µg / L as As)	Chronic health	97.0%	≤10	1 222	100.0%
Barium	(µg / L as Ba)	Chronic health	97.0%	≤700	1 272	100.0%
Boron	(µg / L as B)	Chronic health	97.0%	≤2400	1 272	100.0%
Cadmium	(µg / L as Cd)	Chronic health	97.0%	≤3	1 222	100.0%
Chromium (Total)	(µg / L as Cr)	Chronic health	97.0%	≤50	1 272	100.0%
Copper	(µg / L as Cu)	Chronic health	97.0%	≤2000	1 272	100.0%
Cyanide (Recoverable)	(µg / L as CN)	Acute health	99.0%	≤200	1 262	100.0%

Determinand	Measurement units	Risk	Required compliance to SANS 241: 2015 standard (%)	SANS 241: 2015 standard limits (1)	No of results	Achieved Compliance to SANS 241: 2015 Spec(%)
Iron	(µg / L as Fe)	Chronic health	97.0%	≤2000	1 280	100.0%
Iron	(µg / L as Fe)	Aesthetic	95.0%	≤300	1 280	99.9%
Lead	(µg / L as Pb)	Chronic health	97.0%	≤10	1 221	100.0%
Manganese	(µg / L as Mn)	Chronic health	97.0%	≤400	1 280	100.0%
Manganese	(µg / L as Mn)	Aesthetic	95.0%	≤100	1 280	99.5%
Mercury	(µg / L as Hg)	Chronic health	97.0%	≤6	1 222	100.0%
Nickel	(µg / L as Ni)	Chronic health	97.0%	≤70	1 272	100.0%
Selenium	(µg / L as Se)	Chronic health	97.0%	≤40	1 222	100.0%
Uranium	(µg / L as U)	Chronic health	97.0%	≤30	1 222	100.0%
Organic determinands						
Total Organic Carbon	(mg / L)	Chronic health	97.0%	≤10	1 195	100.0%
Phenols as C ₆ H ₅ OH	(µg / L)	Aesthetic	95.0%	≤10	1 167	100.0%
Chloroform - CHCl ₃	(µg / L)	Chronic health	97.0%	≤300	1 419	100.0%
Bromoform - CHBr ₃	(µg / L)	Chronic health	97.0%	≤100	1 419	100.0%
Dibromochloromethane - CHBr ₂ Cl	(µg / L)	Chronic health	97.0%	≤100	1 419	100.0%
Bromodichloromethane - CHBrCl ₂	(µg / L)	Chronic health	97.0%	≤60	1 419	100.0%
Combined trihalomethanes	(CHCl ₃ /300 + CHBr ₃ /100 + CHBr ₂ Cl/100 + CHBrCl ₂ /60)	Chronic health	97.0%	≤1	1 419	100.0%
Total Microcystin (2)	(µg / L)	Chronic health	97.0%	≤1	3 608	100.0%
For monitoring/reporting purposes only (6)						
Calcium	(mg / L as Ca)	Aesthetic	not applicable	≤150	1280	100.0%
Hardness	(mg / L as CaCO ₃)	Operational	not applicable	≥ 20 to ≤ 200	1 280	100.0%
Magnesium	(mg / L as Mg)	Aesthetic	not applicable	≤70	1 280	100.0%
Potassium	(mg / L as K)	Aesthetic	not applicable	≤50	1 272	100.0%

Water quality risk indices

Risk	Required compliance to SANS 241: 2015 standard	Overall Compliance-SANS 241: 2015 standard
Acute health microbiological	99.00%	99.99%
Acute health chemical	99.00%	99.99%
Chronic health	97.00%	100.00%
Aesthetic	95.00%	99.96%
Operational	95.00%	99.57%

Notes:

- (1) Specification date of effect : 1 July 2016
- (2) Measured at water treatment works exit points
- (3) Residual disinfectant : Results from both the chlorinated and chloraminated systems
- (4) Monochloramine : Results are from the chloraminated systems
- (5) Residual disinfectant : Results from both the chlorinated and chloraminated systems
- (6) Customer request: Results not included in the risk indices compliance calculations

To enable improved water quality monitoring, an online instrument upgrade programme is in progress for the Booster sites. Additionally, a project to install online instruments in the bulk distribution network is currently underway. This will enable continuous real-time monitoring of water quality in the entire bulk distribution area resulting in improved decision making.

INDEPENDENT EXTERNAL AUDIT ON WATER QUALITY SUPPLIED

To ensure confidence of customers in the quality of the water supplied by Rand Water, a monthly independent water quality audit is conducted. This is another safety barrier that Rand Water implemented to reinforce customers' confidence that the water they receive from Rand Water is indeed safe for human consumption. The organisation subjects itself to an independent system to assess water quality supplied to local authorities via

an external party. This audit is facilitated by an external ISO 17025:2005 accredited analytical facility (auditor) who performs all the analyses required by the South African National Standard (SANS 241) for drinking water. Monthly analyses are performed on randomly selected samples within the supply system. The selected company acts independently of Rand Water and any parties that conduct water quality monitoring in Rand Water's distribution network. During the current financial year, the Council for Scientific and Industrial Research (CSIR)'s Analytical Services team was used. The results obtained by the auditor as assessed against the SANS 241: 2015 national standards indicate that Rand Water delivered safe and wholesome water to its customers during the financial year under review. Additionally, Rand Water routine results compared favourably with the findings of the independent water quality audit. This indicates that the Rand Water laboratory continues to produce credible water quality results to its' customers.



Rand Water Bulk Distribution Water Quality Report - Independent Third Party (CSIR) Results: July 2016 to June 2017

Determinand	Measurement units	Risk	Required compliance to SANS 241: 2015 standard (%)	SANS 241: 2015 standard limits (1)	No of results	Achieved Compliance to SANS 241: 2015 Standard (%)
Microbiological determinands						
<i>E. coli</i>	(mpn per 100 mL)	Acute health	99.0%	0	59	100.0%
Total Coliforms	(mpn per 100 mL)	Operational	95.0%	10	59	100.0%
Heterotrophic Plate Count	(cfu per 1 mL)	Operational	95.0%	≤1000	59	100.0%
<i>Cryptosporidium spp</i> (2)	(org / 10 Litre)	Acute health	99.0%	0	12	100.0%
<i>Giardia spp</i> (2)	(org / 10 Litre)	Acute health	99.0%	0	12	100.0%
Somatic Coliphages	(count per 10 mL)	Operational	95.0%	0	59	100.0%
Physical and Aesthetic determinands						
Colour	(mg / L as Pt-Co)	Aesthetic	95.0%	≤15	59	100.0%
Conductivity	(mS / m)	Aesthetic	95.0%	≤170	59	100.0%
Total Dissolved Solids	(mg / L)	Aesthetic	95.0%	≤1200	59	100.0%
Turbidity	(NTU)	Operational	95.0%	≤1	59	100.0%
Turbidity	(NTU)	Aesthetic	95.0%	≤5	59	100.0%
pH	(pH units)	Operational	95.0%	≥ 5 to ≤ 9.7	59	100.0%
Chemical Properties						
Macro determinands						
Ammonia	(mg / L as N)	Aesthetic	95.0%	≤1.5	59	100.0%
Chloride	(mg / L as Cl)	Aesthetic	95.0%	≤300	59	100.0%
Free chlorine (3)	(mg / L as Cl ₂)	Chronic health	97.0%	≤5	59	100.0%
Monochloramine (4)	(mg / L as Cl ₂)	Chronic health	97.0%	≤4.1	53	100.0%
Fluoride	(mg / L as F)	Chronic health	97.0%	≤1.5	59	100.0%
Nitrate	(mg / L as N)	Acute health	99.0%	≤11	59	100.0%
Nitrite	(mg / L as N)	Acute health	99.0%	≤0.9	59	100.0%
Combined nitrate plus nitrite	(NO ₂ /0.9 + NO ₃ /11)	Acute health	99.0%	≤1	59	100.0%
Residual disinfectant (5)	(mg / L)	Operational	95.0%	≥0.2 Free Chlorine; ≥0.1 Sum of Free and Monochloramine	59	96.6%

Determinand	Measurement units	Risk	Required compliance to SANS 241: 2015 standard (%)	SANS 241: 2015 standard limits (1)	No of results	Achieved Compliance to SANS 241: 2015 Standard (%)
Sodium	(mg / L as Na)	Aesthetic	95.0%	≤200	59	100.0%
Sulphate	(mg / L as SO ₄)	Aesthetic	95.0%	≤250	59	100.0%
Sulphate	(mg / L as SO ₄)	Acute health	99.0%	≤500	59	100.0%
Zinc	(mg / L as Zn)	Aesthetic	95.0%	≤5	59	96.6%
Micro determinands						
Aluminium	(µg / L as Al)	Operational	95.0%	≤300	59	100.0%
Antimony	(µg / L as Sb)	Chronic health	97.0%	≤20	59	100.0%
Arsenic	(µg / L as As)	Chronic health	97.0%	≤10	59	100.0%
Barium	(µg / L as Ba)	Chronic health	97.0%	≤700	59	100.0%
Boron	(µg / L as B)	Chronic health	97.0%	≤2400	59	100.0%
Cadmium	(µg / L as Cd)	Chronic health	97.0%	≤3	59	100.0%
Chromium (Total)	(µg / L as Cr)	Chronic health	97.0%	≤50	59	100.0%
Copper	(µg / L as Cu)	Chronic health	97.0%	≤2000	59	100.0%
Cyanide (Recoverable)	(µg / L as CN)	Acute health	99.0%	≤200	59	100.0%
Iron	(µg / L as Fe)	Chronic health	97.0%	≤2000	59	100.0%
Iron	(µg / L as Fe)	Aesthetic	95.0%	≤300	59	100.0%
Lead	(µg / L as Pb)	Chronic health	97.0%	≤10	59	100.0%
Manganese	(µg / L as Mn)	Chronic health	97.0%	≤400	59	100.0%
Manganese	(µg / L as Mn)	Aesthetic	95.0%	≤100	59	100.0%
Mercury	(µg / L as Hg)	Chronic health	97.0%	≤6	59	100.0%
Nickel	(µg / L as Ni)	Chronic health	97.0%	≤70	59	100.0%
Selenium	(µg / L as Se)	Chronic health	97.0%	≤40	59	100.0%
Uranium	(µg / L as U)	Chronic health	97.0%	≤30	59	100.0%
Organic determinands						
Total Organic Carbon	(mg / L)	Chronic health	97.0%	≤10	54	100.0%
Phenols as C ₆ H ₅ OH	(µg / L)	Aesthetic	95.0%	≤10	59	100.0%

Determinand	Measurement units	Risk	Required compliance to SANS 241: 2015 standard (%)	SANS 241: 2015 standard limits (1)	No of results	Achieved Compliance to SANS 241: 2015 Standard (%)
Chloroform - CHCl ₃	(µg / L)	Chronic health	97.0%	≤300	59	100.0%
Bromoform - CHBr ₃	(µg / L)	Chronic health	97.0%	≤100	59	100.0%
Dibromochloromethane - CHBr ₂ Cl	(µg / L)	Chronic health	97.0%	≤100	59	100.0%
Bromodichloromethane - CHBrCl ₂	(µg / L)	Chronic health	97.0%	≤60	59	100.0%
Combined trihalomethanes	(CHCl ₃ /300 + CHBr ₃ /100 + CHBr ₂ Cl/100 + CHBrCl ₂ /60)	Chronic health	97.0%	≤1	59	100.0%
Enteric Viruses (2)	(µg / L)	Not applicable	not applicable	≤1	10	100.0%
<i>For monitoring/reporting purposes only (6)</i>						
Calcium	(mg / L as Ca)	Aesthetic	not applicable	≤150	59	100.0%
Magnesium	(mg / L as Mg)	Aesthetic	not applicable	≤70	59	100.0%
Potassium	(mg / L as K)	Aesthetic	not applicable	≤50	59	100.0%

Water quality risk indices

Risk	Required compliance to SANS 241: 2015 standard	Overall Compliance-SANS 241: 2015 standard
Acute health microbiological	99.00%	100.00%
Acute health chemical	99.00%	100.00%
Chronic health	97.00%	100.00%
Aesthetic	95.00%	99.72%
Operational	95.00%	99.52%

Notes:

- (1) Specification date of effect : 1 July 2016
- (2) Measured at water treatment works exit points
- (3) Residual disinfectant : Results from both the chlorinated and chloraminated systems
- (4) Monochloramine : Results are from the chloraminated systems
- (5) Residual disinfectant : Results from both the chlorinated and chloraminated systems
- (6) Customer request: Results not included in the risk indices compliance calculations

ORGANIC CONTAMINANTS

The occurrence of emerging organic contaminants in the drinking water value chain (from source to tap) is a growing concern for the drinking water industry and consumers given the adverse health risks these contaminants hold for the general public. These adverse health effects include endocrine disruption, toxicity, teratogenicity, mutagenicity and carcinogenicity. Currently, the South African Drinking Water Standard (SANS 241) does not focus on most of the

emerging contaminants of concern. However, Rand Water, in the interest of public health, implemented monitoring programmes for an extended list of organic contaminants. The identified organic contaminants include industrial chemicals, pesticides, disinfection by-products and cyanobacteria toxins. An assessment of the identified contaminants is conducted biannually to determine potential risks to customers.

Organic contaminants assessment in Rand Water drinking water supply value chain: December 2016 and June 2017

Organic contaminants	Unit of Measure	Guidelines limit		Analysing laboratory	Reporting limit (ng/l)	No. results	Achieved compliance level (%)
		Limit	Source				
INDUSTRIAL CHEMICALS							
Benzene	µg/l	10	WHO	RW	<1	28	100%
Benzo[a]pyrene (PAHs)	µg/l	0.7	WHO	RW	<15	28	100%
cis Chlordane	µg/l	3	USEPA	RW	<7	28	100%
Ethyl Benzene	µg/l	300	WHO	RW	<1	28	100%
Fluoranthene	µg/l	0.2	WHO & EU	RW	<35	28	100%
Fluorene	µg/l	30	USEPA	RW	<22	28	100%
Indeno[1,2,3-cd]pyrene	µg/l	0.0045	USEPA	RW	<13	28	100%
m+p-Xylene (sum of m- and p- xylene)	µg/l	500	WHO	RW	<1	28	100%
O-Xylene	µg/l	500	WHO	RW	<1	28	100%
Pentachlorophenol	µg/l	9	WHO	RW	<29	28	100%
Phenol	µg/l	10	RW	RW	<2.5	28	100%
Toluene	µg/l	700	WHO	RW	<1	28	100%
Bisphenol A	µg/l	<10	CSIR	CSIR	<10 (µg/l)	28	100%
Di-butylphthalate (DBP)	µg/l	<10	CSIR	CSIR	<10 (µg/l)	28	100%
di(2-ethylhexyl)-phthalate (DEHP)	µg/l	<10	CSIR	CSIR	<10 (µg/l)	28	100%
PESTICIDES							
a-BHC	µg/l	2	RW	RW	<20	28	100%
Alachlor	µg/l	20	WHO	RW	<23	28	100%
Aldrin	µg/l	0.03	WHO	RW	<33	28	100%
Atrazine	µg/l	100	WHO	RW	<13	28	100%
b-BHC	µg/l	2	RW	RW	<18	28	100%
d-BHC	µg/l	2	RW	RW	<22	28	100%
Desethylatrazine	µg/l	100	WHO	RW	<25	28	100%
Dieldrin	µg/l	0.03	WHO	RW	<26	28	100%
Endosulfan I	µg/l	20	RW	RW	<11	28	100%
Endosulfan II	µg/l	20	RW	RW	<11	28	100%
Endosulfan sulfate	µg/l	1	RW	RW	<27	28	100%
Endrin	µg/l	0.6	WHO	RW	<7	28	100%
Endrin aldehyde	µg/l	2	RW	RW	<18	28	100%

Organic contaminants assessment in Rand Water drinking water supply value chain: December 2016 and June 2017

Organic contaminants	Unit of Measure	Guidelines limit		Analysing laboratory	Reporting limit (ng/l)	No. results	Achieved compliance level (%)
		Limit	Source				
Endrin ketone	µg/l	2	RW	RW	<34	28	100%
g-BHC (Lindane)	µg/l	20	WHO	RW	<20	28	100%
Heptachlor	µg/l	0.4	USEPA	RW	<30	28	100%
Heptachlor epoxide	µg/l	0.2	USEPA	RW	<36	28	100%
Hexachlorobenzene	µg/l	1	USEPA	RW	<20	28	100%
Hexachlorocyclopentadiene	µg/l	200	USEPA	RW	<25	28	100%
Metolachlor	µg/l	10	WHO	RW	<24	28	100%
Methoxychlor	µg/l	20	WHO	RW	<31	28	100%
p,p-DDD	µg/l	1	RW	RW	<31	28	100%
p,p-DDE	µg/l	1	RW	RW	<25	28	100%
p,p-DDT	µg/l	1	WHO	RW	<25	28	100%
Simazine	µg/l	2	WHO	RW	<10	28	100%
Trifluralin	µg/l	20	WHO	RW	<21	28	100%
2,4-Dichloro-phenoxyacetic (2,4-D)	µg/l	30	WHO	SABS	<0.5(µg/l)	28	100%
Chlorpyrifos	µg/l	30	WHO	SABS	<0.5(µg/l)	28	100%
MCPA (2-methyl-4-chlorophenoxyacetic acid)	µg/l	2	WHO	SABS	<0.5(µg/l)	28	100%
Vinclozolin	µg/l	1	RW	SABS	<0.5(µg/l)	28	100%
ALGAL TOXINS							
Geosmin	ngl	6	RW	RW	<5	28	93%
2-MIB	ngl	15	RW	RW	<5	28	100%

Notes:

WHO - World Health Organisation WRC - Water Research Commission UP - University of Pretoria
 RW - Rand Water
 CSIR - Council for Scientific and Industrial Research
 SABS - South African Bureau of Standards
 EU - European Union
 USEPA - United States Environmental Protection Agency

Monitoring of organic parameters is subject to an ongoing investigation as the measurement of these parameters is complex. New emerging organic contaminants are being discovered as new and sensitive methods are developed to expand the limited analytical capacity available in South Africa.

DEPARTMENT OF WATER AND SANITATION BLUE DROP SYSTEM

In accordance with Section 67 of the Water Service Act which mandates the Honourable Minister of Water and Sanitation to ensure that there is a national information system on water services and that this information is made available to the public, DWS established the Blue Drop System (BDS). This system enables the department to monitor the performance of every Water Service Institution and allows limited access to the public with regards the quality of water supplied to them. All Water Services Institutions are required to register and upload information such as supply systems, laboratory used for analysis, water quality monitoring programmes, process controllers and water quality data, to mention a few, on a continuous basis. Rand Water's information is being updated on the system continuously as per the BDS requirements.

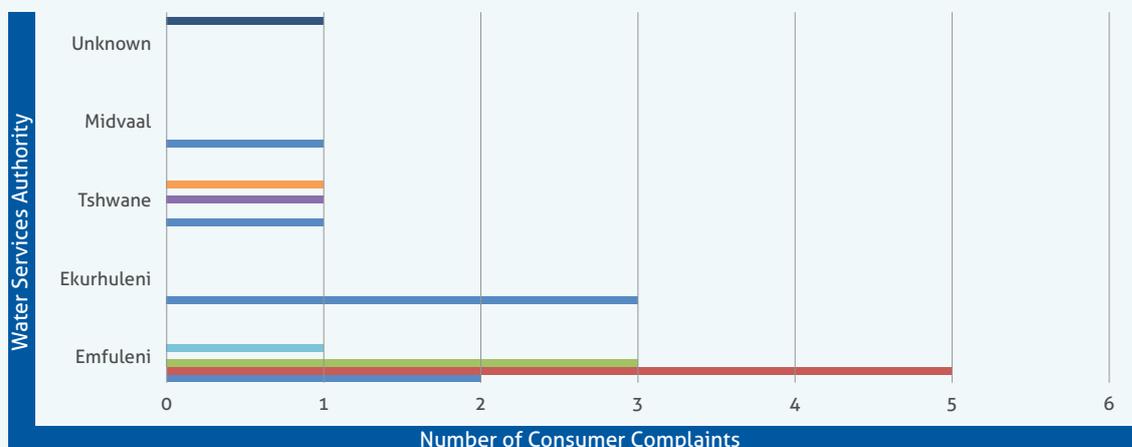
RETAIL WATER QUALITY

CONSUMER COMPLAINTS

There were 18 consumer complaints that required further technical investigation by Rand Water during the year under review. These complaints are summarised below. Most water quality complaints received from customers were related to health concerns, colour and taste and odour. All of these consumer complaints were successfully addressed and reported to the relevant Water Services Authorities. An increasing number of consumer complaints are being referred to the relevant Water Services Authorities technical staff for further investigation, as the level of competence of staff in these authorities improved over time. Rand Water developed a generic consumer complaint handling procedure that is intended to assist smaller Water Service Authorities to handle various types of complaints. This procedure is accompanied by ongoing training, the success of which was reflected in improved turn-around times and customer satisfaction.



CONSUMER COMPLAINTS DURING THE YEAR ENDING 30TH JUNE 2017



	Emfuleni	Ekurhuleni	Tshwane	Midvaal	Unknown
Hoax Email	0	0	0	0	1
Invertebrates	0	0	1	0	0
Health	1	0	0	0	0
Visual	0	0	1	0	0
Colour	3	0	0	0	0
Water Quality	5	0	0	0	0
Taste & Odour	2	3	1	1	0

EXAMPLES OF SOME COMPLAINTS INVESTIGATED

Complaint 1:

Consumer was complaining of a bad smell (mouldy muddy smell). She further complained that the water was “slimy” after standing in a container in the fridge. A site inspection revealed that there were cheap polycop pipes (not SABS approved) used onsite which were exposed to the sun. It was suspected that plumbing could possibly be the cause of the problem. Relevant advice was given to the customer and she was satisfied with the advice given.

CHEAP POLYCOP PIPES



Complaint 2: Hoax WhatsApp/ Social Media

Consumer raised a concern regarding a hoax whatsapp message going around. The Hoax message warns the public to boil the water due to the presence of a transparent organism. Expert advice from the Hydrobiology section was requested to assist with the investigation. The transparent organism was referred to as eel species and it is quite large by macro-invertebrates standard. It cannot survive the treatment regime of Rand Water. Possibility of it penetrating through the flow meters sieve, as well as sieve on the tap is unlikely. Research was conducted and consumer was provided with the information on the findings relating to the organism in the photos of the email provided.

TRANSPARENT ORGANISM



These are transparent creatures found in water. Be Careful if you are drinking tap or stream water without boiling it. Always boil your water before drinking.

Please forward this message to everyone, especially to those who drink tap water.

Complaint 3: Water Quality

Consumer complained that the water becomes brown when it is frozen. Onsite investigation was conducted and samples were taken. Onsite investigation revealed that there was a recent pipe burst in the area. Soil infiltrated the water supply line and the customer did not allow the water to run (until clear) before using it for making ice cubes.

BROWN ICE BLOCKS



Consumer Complaints Service Evaluations

The service evaluations done by the customer services department on the complaints investigated indicated that complainants were satisfied with the action taken. These were some of the direct comments from customers.

Comments from Customers

- "Water quality guys are associated with their prompt response," Midvaal representative.
- "Appreciate the assistance always."
- "Thank you for your assistance"

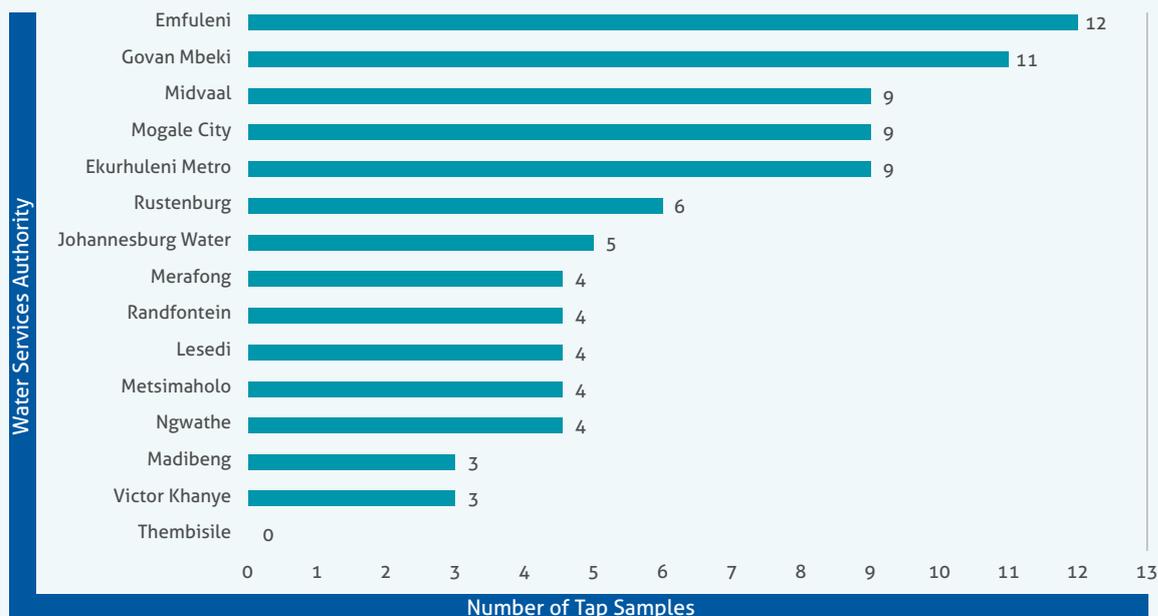
TAP ANALYSIS PROGRAMME DURING THE YEAR UNDER REVIEW

The Tap Analysis Programme (TAP) has been up and running for 19 years. This voluntary programme monitors water quality in the households of the end consumers. The programme was expanded again in 2016 to include Rustenburg Municipality. Municipalities participating in the TAP use water quality data generated through the programme as part of their water quality monitoring programme. The water quality data constitutes microbiological and chemical determinands (determinands selected were

based on those determinands that are variable). This data can be used and be uploaded onto the municipal Blue Drop System. The data constitutes samples taken voluntarily by staff members from the municipalities and Rand

Water's end consumers. All tap participants reside within the Rand Water service area. The diagram below shows the Water Services Authorities that are participating in the tap programme.

MUNICIPALITIES INCLUDED IN RAND WATER' TAP



The data collected confirms the excellent water quality that is supplied to the end consumer. The Programme is reviewed annually to include areas not covered within the Rand Water area of supply.

TECHNICAL MEETINGS

Regular water quality technical meetings are held between the Water Quality Specialist Services Department and Water Services Authorities within Rand Water's service area. These meetings were initiated in 2007 with the bigger Water Service Authorities and then expanded to include most of the Water Service Authorities in the Rand Water supply area. Rand Water currently holds these technical meetings with all Water Service Authorities. These meetings are scheduled to take place bi-monthly or quarterly, depending on the agreement between Rand Water and individual Water Service Authorities. The aim of these meetings is to assist the Water Service Authorities to improve on the management

of drinking water quality. As a bulk supplier, Rand Water assists municipalities and ensures alignment in water quality aspects to meet the Blue Drop requirements through these technical meetings.

BUSHBUCKRIDGE AND MBOMBELA WATER SERVICES AUTHORITIES

Rand Water supersedes in title the former Bushbuckridge Water following the disestablishment of Bushbuckridge Water Board by the then Honourable Minister of Water Affairs, now DWS (gazette in Government

Notice No. 241). Rand Water was furthermore directed to take over the area of operation, business, assets and liabilities of the former Bushbuckridge Water Board with effect from 1st April 2014. Rand Water officiates as “bulk” water services provider (WSP) to the Water Service Authorities of Bushbuckridge Local Municipality and City of Mbombela.

Rand Water Mpumalanga provides “bulk” water services to Bushbuckridge and the City of Mbombela. The total area of operations is 15 644 km² (10 250 km² for Bushbuckridge and 5 394 km² for the City of Mbombela).

The Bushbuckridge supply systems are designed to provide 149Mℓ/d of drinking water from seven water treatment works (WTW) to an approximate population of 855 000 consumers. 05 (five) of the 07 (seven) works operated by Rand Water, on behalf of Bushbuckridge, are conventional treatment works (Hoxani, Inyaka, Acornhoek, Thulamahashe and Edinburg). The remainder of the treatment systems (Marite and Sand River) are package plants.

The City of Mbombela supply systems are designed to provide 69Mℓ/d drinking water to a portion of the approximate population of 470 000 consumers in the supply area. Rand Water’s area of operations in the City of Mbombela covers only Nsikazi North and South.

Rand Water manages 06 (six) WTWs on behalf of the City of Mbombela. 02 (two) of the works operated on behalf of the City of Mbombela are conventional treatment works (Kanyamazane old and new). Dwaleni and Mshadza are package plants. Nyongane is a pumping station with only disinfection.

The scope of work of the Scientific Services Division is aimed at water quality assurance and related regulatory (i.e. Blue Drop) requirements. The activities need to be implemented from catchment to tap to ensure the water supplied is safe for human consumption.

During the year under review extensive work continued on existing and new water quality monitoring programmes to enhance the accuracy of measurement and optimise the spatial distribution of monitoring points. Routine water quality reporting was also improved and monthly water quality compliance reports are now presented to Rand Water management and customer municipalities. These key initiatives form the foundation of a sound water quality management system which is a regulatory requirement.

Although the current water quality does not fully comply with the SANS 241 Drinking Water Standard, planned infrastructure improvements should lead to a marked improvement in final water quality. Local testing laboratories have also come under intense scrutiny and upgrading of analytical equipment as well as up skilling of technical staff is receiving attention.

Water quality is becoming an increasingly important measurable of the performance of Rand Water as a water services provider to water services authorities. With this in mind, all water quality management programmes have been designed to meet regulatory as well as customer municipality requirements.



RAND WATER LABORATORIES

Throughout each twenty four hour shift, production staff at the water purification stations produce water quality data on basic quality variables. This data is produced at site laboratories within the purification works and is accessed immediately by plant operators for quality control purposes. In addition, each production site at Rand Water is equipped with on-line instruments producing water quality data on basic variables. These instruments generate data continuously, seven days a week, 24 hours a day. The reliability of all this water quality data is assured by Rand Water Analytical Services, with the coordination of a proficiency testing scheme and the provision of related technical support to production and booster sites at Rand Water.

Similarly, the water quality assurance programme at Rand Water is managed throughout the value chain, beginning in the catchment and culminating at consumers taps. This rigorous programme entails water sampling at designated sample points, followed by the testing of the water samples at Rand Water Analytical Services, which is Rand Water's fully accredited laboratory. Each year many thousands of samples are taken in this manner, and data obtained on these samples are used to monitor and manage water quality, ensuring the consistent supply of safe and healthy drinking water.

Rand Water Analytical Services is comprised of dedicated, ISO 17025 accredited facilities, with four main laboratories: Microbiology, Hydrobiology, Organic Chemistry and Inorganic Chemistry. Each of these laboratories remains fully accredited by SANAS (South African National Accreditation System). Laboratory accreditation instils confidence in the use of laboratory data since an accredited laboratory produces data in line with global standards developed by the International Standards Organisation. In addition, these laboratories participate in various national and international proficiency testing schemes to continuously monitor their performance against peer laboratories, ensuring their sustained technical competence and data integrity.

Rand Water Analytical Services performs analyses as stipulated in the South African National Standard for potable water (SANS 241). In addition, the laboratories analyse water samples for various other water quality parameters as advised by the World Health Organisation. The focus of these additional analyses on water samples are mainly in the area of chemistry, where emerging contaminants are receiving attention.

The World Health Organisation added a list of compounds classified as emerging contaminants, to the list of compounds which should be monitored for, in the production of drinking water. The organic laboratory proactively procured relevant technologies and validated analytical methods to detect for the presence of such compounds in Rand Water's chain of supply. Although Pharmaceutical and Personal Care Products (PPCPs) and Endocrine Disruptor Compounds (EDCs) are not regulated in the supply of potable water in South Africa, Rand Water proactively embarked on monitoring for these compounds in its supply chain.

The focus of the hydrobiology laboratory is aquatic toxicity, algae and algal toxin monitoring, aquatic invertebrate assessment, and aquatic bio-monitoring. Scientists from the hydrobiology laboratory continue in their collaboration with North West University and the University of Adelaide, Australia on the predictive modelling of toxic cyanobacteria in source water.

The microbiology laboratory focuses on analysing water samples for bacteria, protozoans, and viruses. The classical techniques used in this laboratory continue to be replaced by technologically advanced molecular techniques. This transition from classical techniques to molecular techniques provide for rapid detection of organisms with the required confidence. The microbiology laboratory developed and implemented a molecular based method for the rapid detection of vibrio cholerae in water; a method which successfully maintains its accreditation status. In addition, this laboratory introduced a method for the genotyping of protozoans

which positions the laboratory to forewarn Rand Water for potential threats in the quality of raw water.

The Analytical Services site of Rand Water support a variety of skills development programmes, including experiential student training, bursars, and graduate development. Each of these streams adds groomed talent into the feeder pipeline for recruitment at Rand Water. Supervisors and mentors at the laboratory work closely to ensure the meeting of laboratory production goals while developing and training these students.

The greatest challenge experienced by Rand Water Analytical Services in recent years is growth of laboratory operations. This resulted in numerous reconfigurations of the laboratory environment, utilising office space for additional laboratory production areas. This piecemeal expansion is no longer viable, and laboratory management is currently working with architects to design additional production space for Rand Water Analytical Services.

In line with ministerial directive, laboratory staff is engaged in various activities in the Mpumalanga province, to capacitate water supply operations there towards ensuring the quality of water being supplied to consumers. Rand Water laboratory management are presently designing laboratory facilities for selected areas in Mpumalanga to support the sustainable production of reliable water quality data in the province.

PROCESS TECHNOLOGY

Selection of the most suitable water treatment technology and chemicals is critical in the production of high quality, affordable drinking water. The Process Technology Department undertakes various projects and technology evaluations to ensure that this aspect of water treatment is adequately addressed. In addition, the department provides technical advice relating to water treatment and quality to both internal and external stakeholders.

KEY PROJECTS UNDERTAKEN AND FOCUS AREAS IN THE YEAR UNDER REVIEW

PROCESS CONSULTING

Three (03) important aspects of Rand Water's treatment process required increased attention in the year under review, these are the use of carbon dioxide, the management of water treatment residue, and specifications for treatment chemicals.

Carbon dioxide is an integral part of Rand Water's treatment process, where it is used in conjunction with lime for pH correction and chemical stabilisation. This is a robust process that is able to deal with relatively large variations in source water quality. However, the quantities of carbon dioxide required by Rand Water have necessitated a permanent piped supply. The consistent provision of such a supply proved challenging at times.



This motivated the need to seek alternate treatment options that are not dependent on carbon dioxide. The study involves an in-house empirical investigation as well as sourcing of the global market for proposals to treat Rand Water's raw water under current and future water quality scenarios. This priority project will continue in the next financial year.

Various interventions related to the management of water treatment residue proceeded in the financial year. This often neglected aspect of water treatment gained prominence in recent times, largely due to increased regulation and the often significant costs associated with compliance. Conventional disposal of treatment residue to land as practiced by Rand Water is not ideal. Thus Rand Water investigated alternate options for many years. Facing the challenge of a disposal site that was rapidly approaching capacity hastened the need to identify a viable solution. In this regard, a multi-faceted approach was used to explore several avenues simultaneously. These included a review of previous investigations, a retesting of the residue to confirm the waste classification in terms of legislative requirements, and the sourcing of alternate solutions through an Open Innovation Challenge. The outcomes of the investigation included:

- Confirmation of the classification of Rand Water's WTR, although analytical precision and ambiguity in waste legislation were areas of concern.
- Identification of an innovative technical solution to process WTR which includes several co-benefits. A comprehensive pilot scale evaluation of this technology was scheduled in the new financial year to confirm the initial findings.

Rand Water applies conventional processes for potable water production and these include the use of water treatment chemicals, which remain a critical component of best fit technology to produce the desired water quality at optimum cost. However, the addition of often synthetic chemicals to water intended for human consumption brings about a number of concerns. These include the potential presence of manufacturing contaminants and other impurities that may have a detrimental effect on water quality. It is therefore imperative that treatment chemicals meet the

required quality specifications. Given that in South Africa there is currently no legislation or formal regulation system for the control of these chemicals, Rand Water employs a variety of methods to ensure the quality of its treatment chemicals. These include in-house specifications and a requirement to comply with existing standards and international certifications. A review of these specifications was undertaken during the year under review and it is anticipated that further engagement with other water utilities and relevant authorities will be undertaken to address this issue of national importance.

PROCESS OPTIMISATION

To ensure that Rand Water delivers safe, high quality drinking water that is within the water quality standards as set out in the South African national standard for drinking water in the SANS241, it needs to ensure that all the barriers needed for treatment are sufficiently optimised. There is a direct relationship between optimised water treatment plant performance and maximum public health protection in the form of safe drinking water. Process Technology conducts comprehensive water treatment process capability assessment both in Mpumalanga and Gauteng water treatment plants. A task team comprising of various disciplines was formed and coordinated by Process Technology to ensure all capability requirements as specified on the Blue Drop handbook are met.

Rand Water's preferred treatment process involves the use of activated silica and slaked lime. An inherent characteristic of this process is its dependence on carbon dioxide for chemical stabilization. Currently, there is no alternate stabilization process available at Rand Water. This places the organisation at risk to factors such as exorbitant carbon dioxide price increases and supply shortages. As a result, a study on the use of mineral acids (sulphuric and hydrochloric acids) as alternate stabilization chemicals was conducted. The study focussed on settled water characteristics, mineral acid dosage requirements, treated water quality, and chemical dosage points during the application of lime/silica and moderate lime/ coagulant combinations as a primary coagulant.

The use of low pressure membrane systems, including ultrafiltration membranes are becoming increasingly prevalent in potable water treatment applications, due to their high level of pathogen removal, such as viruses, bacteria and protozoa cysts (*Giardia* and *Cryptosporidium*). Membranes provide a physical barrier capable of high percentage removals, but removals are dependent upon compound structure (size, polarity) and membrane properties. The primary mechanism for removing particles from solution in membrane filtration is straining.

Application of the submerged hollow fibre outside-in (PVDF) ultrafiltration membrane plant as a potential technology option for removal of *Cryptosporidium* and *Giardia* from source water was conducted a pilot scale. From the results achieved it can be concluded that the ultrafiltration membrane tested are capable of absolute removal of *Cryptosporidium* oocysts and *Giardia* cysts from spiked Vaal Dam source water.

To investigate the performance of the ultrafiltration membrane to reject the selected protozoa, the 2500 L feed tank containing A-18 raw water were spiked with non-viable *Giardia* and *Cryptosporidium* bulk seeds (concentration of 107). The permeate (final treated water) was analysed to determine rejection of the protozoa by the membrane. Backwash water was also collected to determine whether the protozoa were flushed from the membrane. It is important to note that although protozoa are rejected by the ultrafiltration membrane, ultrafiltration membrane will not disinfect and can never replace disinfection.

PROCESS INVESTIGATION

Rand Water relies entirely on surface water sources which are often compromised due to high return flows and indirect re-use. Considering the often-poor performance of upstream wastewater treatment plants, and the ever-changing and compromised catchment, cost effective treatment techniques are to be used to produce good potable water that will always meet water regulations set by government (i.e. SANS 0241).

Natural organic matter (NOM), an ever-present component of natural waters, is of concern because it adversely impacts water treatment processes. For example, it, facilitates the transport of heavy metals and hydrophobic organic chemicals through natural and engineered environments; imparts aesthetic characteristics of surface water; promotes biological growth in water distribution systems; and increases chemical requirements for oxidation, coagulation, and disinfection

Moreover, disinfectants such as chlorine have the disadvantage of reacting with NOM to produce undesired trihalomethanes (THMs) and other halogenated disinfection by-products (DBPs) because they are suspected to be carcinogenic and mutagenic. However, according to the World Health Organisation (WHO), disinfection in potable water systems must always be of paramount importance and must never be compromised. Therefore instead of stopping the use of such chemical disinfectants, which have been proven to be effective in controlling acute effects of microbial contamination, removal of the DBP



precursors prior to contact with chlorine or any disinfectant is to be done.

The focus of the study was therefore to assess the efficacy of magnetic ion exchange resin (MIEX) resins for the “near-maximal” removal of NOM and its DBP precursors. The preliminary results suggests reduction of polymeric coagulant, chlorine demand, UV 254, dissolved organic carbon, and trihalomethanes by about up to 67%, 57%, 87%, 63% and 73% respectively which could translate to possible future cost savings as well as assurance to meet NOM-related standards. Brine is used for resin regeneration. The future investigation aims to focus on waste management especially brine handling.

In its natural environment natural organic matter (NOM) is not problematic. However; during water treatment NOM does affect water quality specifically during the disinfection step, where if NOM is present it reacts with disinfectants resulting in the formation of disinfection by-products. Because Rand Water primarily uses chlorination the DBPs formed are trihalomethanes (THMs). The objective of this study was to investigate the influence that NOM character (composition and quantity) has on THM formation at Rand Water.

Because a single NOM characterization technique only identifies/highlights a certain character of the organic matter a cocktail of techniques were applied to fully understand the character of NOM. The seasonal character of NOM and its impact on NOM removal and THM formation was investigated by analysing DOC, UV254 and specific ultraviolet

absorbance (SUVA) in Vaal Dam source water. These results were then correlated to the actual THMs formed in the final drinking water. During this study a strong positive correlation was evident between raw water UV254 and the actual TTHM formed in the final water after full scale treatment. This indicates that high THM formation can be expected during certain months of the year and NOM concentration influences its removal during water treatment.

EXPERIMENTAL FACILITIES

One of Process Technology’s core functions is to verify the technical suitability of water treatment chemicals currently in use at Rand Water. Comprehensive evaluations undertaken on chemicals submitted for tender purposes in this review period included evaluation of liquid polymeric based coagulant, ammonium hydroxide, quick lime and ferric chloride used for the treatment of water intended for human consumption. Plant, equipment and instruments that enable the process investigations, process optimisation and chemical evaluations are shown below.

MPUMALANGA INTERVENTIONS

The Process Technology department also provided support with respect to Rand Water’s extended area of operations in Mpumalanga. A number of treatment plants in the Bushbuckridge and Mbombela local authority areas were assessed and recommendations for process optimisation were provided. Such proactive interventions will continue in the coming financial years.



SUBMERGED ULTRAFILTRATION MEMBRANE PILOT PLANT



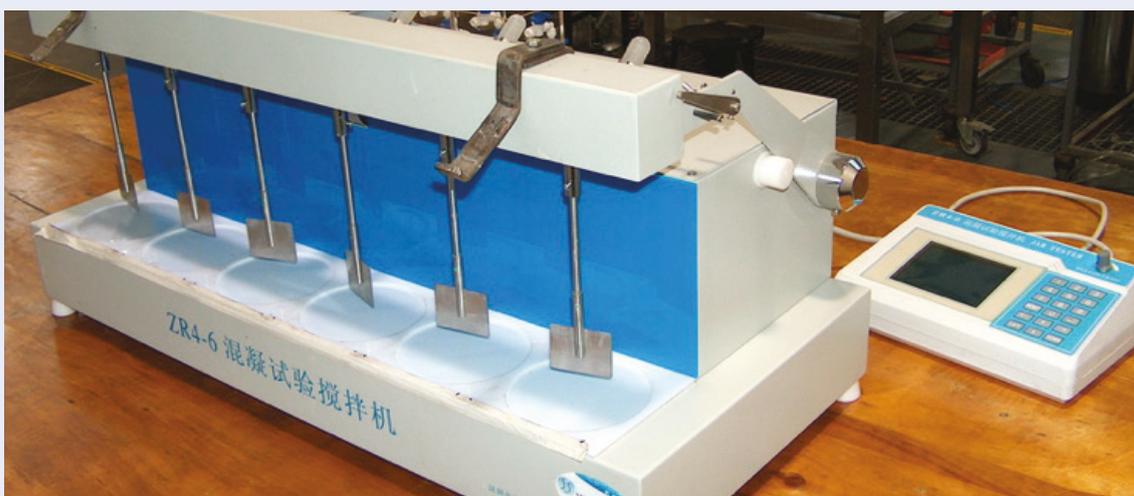
AUTOMATED PILOT PLANT WITH SCADA SYSTEM



AUTOMATED AND MANUAL FILTER TEST COLUMNS



MODERN JAR TESTING APPARATUS



PAPERS, POSTERS, PRESENTATIONS AND SESSION CHAIRS

In line with Rand Water's objective to ensure the development and growth of skills and the enhancement of technical networks, staff members are encouraged to present (and publish) papers, posters and chair sessions at various local and international conferences.



WATER WISE EDUCATION



The tension in the room was incredible. One could hear a pin drop onto the floor. It was the International Water Association's Project Innovation Awards ceremony which was being held on 12th October 2016 in Brisbane, Australia. Each winner of the four different categories waited nervously for the announcement...

"And the Grand Award goes to... Rand Water, South Africa for their innovative 'Let's be Water Wise Campaign. Congratulations."

Prof. Hamanth Kasan, General Manager of Scientific Services, accepted the award on Rand Water's behalf,

"This award is clear recognition by an international panel of judges of the excellence and innovation of the Water Wise Education Programme. The award will inspire the Water Wise Team, (which consists of staff from Water Quality Specialist Services and Environmental Management Services). Rand Water and the Water Wise Team are delighted and grateful for the award, which comes at a time when we are experiencing a severe drought in the country."

The Water Wise campaign had already won the Marketing and Communications Award for 2016 during the awards ceremony and now received the Grand Award.

The IWA Project Innovation Awards are a prestigious global competition, in its tenth year, and the winners are selected for their innovation and excellence in water management. They highlight innovative and practical solutions to global water challenges. To win an award, a project must improve efficiency, and provide real economic and health benefits throughout the water cycle.

"The water sector is facing unprecedented global challenges. Urgent and innovative action is necessary to ensure a sustainable water future. The drought that is still gripping South Africa is one such challenge. The only way to take better advantage of limited water resources is by changing people's attitude and their behaviours so that water is used more wisely. Rand Water are innovating how to do this, and are setting a successful example to other water utilities," said Dr Bergkamp, Executive Director of the International Water Association.

The Water Wise Education Team (WWET) uses innovative ideas to spread the Water Wise message, that is, attractive information brochures; interactive advertorials in a range of magazines & newspapers; The Love and Respect Show CD; the Water Use Calculator; the Flufftail Festival; Manzi's Rock Hopping Game; etc. Receiving this award means that Rand Water's Water Wise campaign was recognised internationally. Rand Water would like to THANK all the partners & suppliers that are involved in the Water Wise campaign, namely BirdLife South Africa, Delta Environmental Centre, Eskom, Department of

Education, Gauteng Department of Agriculture and Rural Development (GDARD), JNF Walter Sisulu Environmental Centre, South African National Biodiversity Institute (SANBI), UNISA, to name a few. A BIG THANK YOU GOES TO ALL the passionate Rand Water staff that are part of the Water Wise Team.

During the financial period under review, 603 programmes, roadshows and exhibitions were held with 104 289 learners, teachers and adults. The quality of the education service, as evaluated by teachers, was 96.10% which proves that the team continues to offer an educational service that the teachers and learners are satisfied with, and in line with the international recognition achieved. Apart from the regular Water Wise programmes offered at each of the Water Wise Education Centres, namely, Delta Environmental Centre, Victory Park, Rand Water Nature Centre, Glenvista, Vereeniging Purification Station, and the Jewish National Fund Walter Sisulu Environmental Centre in Mamelodi (JNF WSEC), there have been a number of highlights for the financial year:

- The Grade 10 Life Sciences programmes at the Rand Water Nature Centre are very popular with schools, proving that the team is providing a much needed service in line with the school curriculum.
- The annual partnership with the Gauteng Department of Rural Development is still going strong. The team did water quality testing and purification programmes for learners that attended Saturday camps at Roodeplaats Dam and at Suikerbosrand Nature Reserve.
- Working together with Johannesburg City Parks & Zoo and the National Zoological Gardens on a number of programmes.

- On 8th July 2016, the team facilitated a Water Wise presentation at the Veref Recreational Club for the Vaal Pensioners Club. The group was intrigued to learn how Rand Water purifies water.
- Ekurhuleni Municipality brought through Grade 10 and 11 learners to visit the Water Wise Centre in Vereeniging to assist them with their Grade 10 Physical Science portfolio project.
- Sasol Techno X was run from 13th – 19th August 2016 in Sasolburg at the local sports grounds. Rand Water's Maze of Mystery, a maze made out of recyclable materials, was built and learners had to find their way through the maze whilst collecting information on 'The Story Behind Tap Water'. This turned out to be an exceptionally successful programme as the demand was very high for learners to visit Rand Water. During a programme entitled 'A Journey through the Man-Made Water Cycle', learners had to purify water through an interactive experiment. The target group for the week was Grade 7-12 learners and visitors from as far as Limpopo booked for this programme. 26 019 learners, teachers and members of the public were exposed to Rand Water and the Water Wise brand during a period of 5 days. Rand Water, amongst approximately 30 other exhibitors, walked away with 2nd Place for Best Exhibition by a Business! A Certificate of Recognition was also received for contributing to the development of a generation of learners who are smarter, more knowledgeable, entrepreneurial and productive.
- On 27th August 2016, the team set up the Water Wise House Gazebo at Vaalpark Primary School in support of their Eco-Schools initiative. The day was very successful as the entire school participated in the day's events, as well as many parents and grandparents. This was an important event for Rand Water as the impact of the drought could be highlighted to almost 1800 people.
- Staff facilitated a session at the Walter Sisulu National Botanical Gardens on 4th September 2016 for the Africa Bird Fair, organised by BirdLife South Africa.
- 'Manzi's Rock Hopping Game' was launched at the Walter Sisulu National Botanical Gardens in September 2016. In this game, children are the pieces of an enlarged river board game. They must turn a spinner and work their way down the river to the finish. Positive actions move them forward and negative actions move them back. There are concrete animals and a colourful poster that shows Manzi moving through Rand Water's catchment and the 6 meanings of being Water Wise, also included in the game. It is hoped that families will play the game together, and by playing the game they will have fun and learn about the Water Wise message.
- A presentation on tap water supply was given to The Vaal Women's Club on the 14th September 2016.
- The Environmental Education Association of Southern Africa (EEASA) conference took place 2nd – 6th October 2016 and was attended by 4 members of the team. A paper on "Implementing Water Education into the South African School Curriculum through Edutainment" was presented by Nyree Steenekamp. The team presented The Water Wise Song at one of the opening sessions and all delegates enjoyed it. Site tours occurred on 6th October and Rand Water Vereeniging was visited by almost 40 conference delegates who saw the trip as 'an absolutely mind blowing wake up to reality and the current water crisis'.
- The Vereeniging Cleaning Campaign with staff children took place on 4th October 2016 and was once again well attended by more than 100 participants from the Vereeniging Station.
- The team facilitated a water workshop for the Fundisa For Change teachers training session in Kroonstad on 26th October 2016.



- Metsi-a-Lekoa, the water services unit of Emfuleni Municipality, brought school learners to the Water Wise Centre in Vereeniging for a series of water purification programmes throughout the year.
- The University of South Africa (UNISA) invited the team to facilitate water activities with the school that they have been working with in Mofolo, Soweto. There was an informative exhibition at the Heidelberg Mall in October which was very well received. Even though it was originally aimed at children, the adults asked many questions.
- The Water Wise Holiday Programme, for staff children, went to Coca Cola and Lory Park Zoo in December 2016. A total of 368 staff kids attended the programme which was a great success.
- In January 2017, a roadshow was performed with the South African Collieries Environmental Practitioners in Secunda and from this roadshow new partnerships were developed.
- The team partnered with Environmental Management Services (EMS), Birdlife South Africa, Eskom, the Rare Finch Conservation Group (RFCG), Johannesburg City Parks & Zoo and the Department of Environmental Affairs to present 'The Flufftail Festival' at Maponya Mall, Soweto from 31st January to 6th February 2017. This is a festival to celebrate the importance of wetlands water birds and to raise awareness about the rare White-Winged Flufftail bird. The exhibition was an interactive maze which the public had to work their way through in order to find answers about wetlands, water and water birds which formed part of a competition. The public were also given an opportunity to have a free photo of themselves in front of a wetland. A puppet show by the RFCG was also presented to 4 school groups and weekend visitors.

THE WATER WISE TEAM RECEIVING RECOGNITION FOR THEIR AWARDS



MANZI'S ROCK HOPPING GAME



- The team worked with 4 Soweto schools (Grade 6s) from November 2016 onwards as part of the 'Flufftail Festival'. They participated in a number of water and birding activities and this was done in partnership with the Department of Education.
- There were quite a few students who visited the Water Wise Centre in Vereeniging from GEM Nursing College, UNISA and Tshwane University of Technology.
- The team conducted a wetland activity with the Department of Environmental Affairs to celebrate Wetlands Day and the event was held in Tembisa – Esselen Park Pan.
- The team was invited to the Royalty Management (Royal Careers) exhibition held in Alexander Township for Grade 12 learners. Learners gained a lot of knowledge about careers within the water sector.
- An important meeting was held with the Gauteng Department of Education (GDE) district officials to discuss partnerships and possible Adopt-a-School environmental projects. They also assessed an 'Ecosystem and Food Webs' activity. This partnership continues to be strengthened.
- In March, programmes took place in Ogies, organised by Glencore Mpumalanga, and Kagiso, Mogale City, which was a partnership between DWS, Mogale City Local Municipality, a local Early Childhood Development Forum (ECD) and the Water Wise Education Team. Four roadshows also took place for Anglo American employees at different collieries.
- There is a great demand for water quality testing for learners undertaking various school projects which forms part of their school assessment.
- On 20th April 2017 the team assisted the Leeu-Taaibos Forum with their Water Week Celebrations. This programme involved facilitating the purification experiment to different schools from the Metsimaholo District and was hosted at North School in Sasolburg.

- The annual Yebo-Gogga exhibition took place in May 2017 at Wits University (School of Animal, Plant & Environmental Sciences). The exhibition celebrated 100 years and the team's theme for their exhibition was 'Rand Water – Now and Then', which centred on the history of Rand Water.
- The Sci-Bono Discovery Centre Health Science Week was held in May 2017 to raise awareness and increase public understanding around topics such as personal hygiene, nutrition and environmental health. Learners learnt a lot about the different types of germs and the importance of washing hands.
- The Royal Careers and Carnival City Career Expo (Young Water Professionals) showcased career opportunities in Rand Water and spread the Water Wise message.
- The Klipspruit West Secondary School Wetland Project started in May 2017 and will end in September 2017. This is part of the GDE Adopt-a-School Project.
- The Jewish National Fund Walter Sisulu Environmental Centre was involved in a 'Walk for Water' on 24th March 2017 which was attended by 7 schools and some community groups. They walked a circular route through Mamelodi with placards with water messages and after that they handed over a memorandum to Councilor Daryl Moss. It was a collaborative effort with a number of organisations particularly in the Moreleta-Pienaars catchment area.
- At the end of December the long term partnership between Delta Environmental Centre and Rand Water came to an end after 22 years. In February, HDI Youth Markeeters was appointed to offer the Water Wise roadshows and puppet shows to schools in the Gauteng Province. During the period 22nd March to 9th June 2017, 101 roadshows were performed with the reach of 33 592 learners. Manzi, the Water

Wise tapduck was able to meet a great number of schools and learners in a short period of time and spread his Water Wise message. Some of the comments received include:

- *"The kids enjoyed and learnt a lot about water! Water Wise thank you."* (Librarian from Alexander Library)
- *"Well done! Such an educational and fun show for the kids."* (Teacher from Sagewood School)

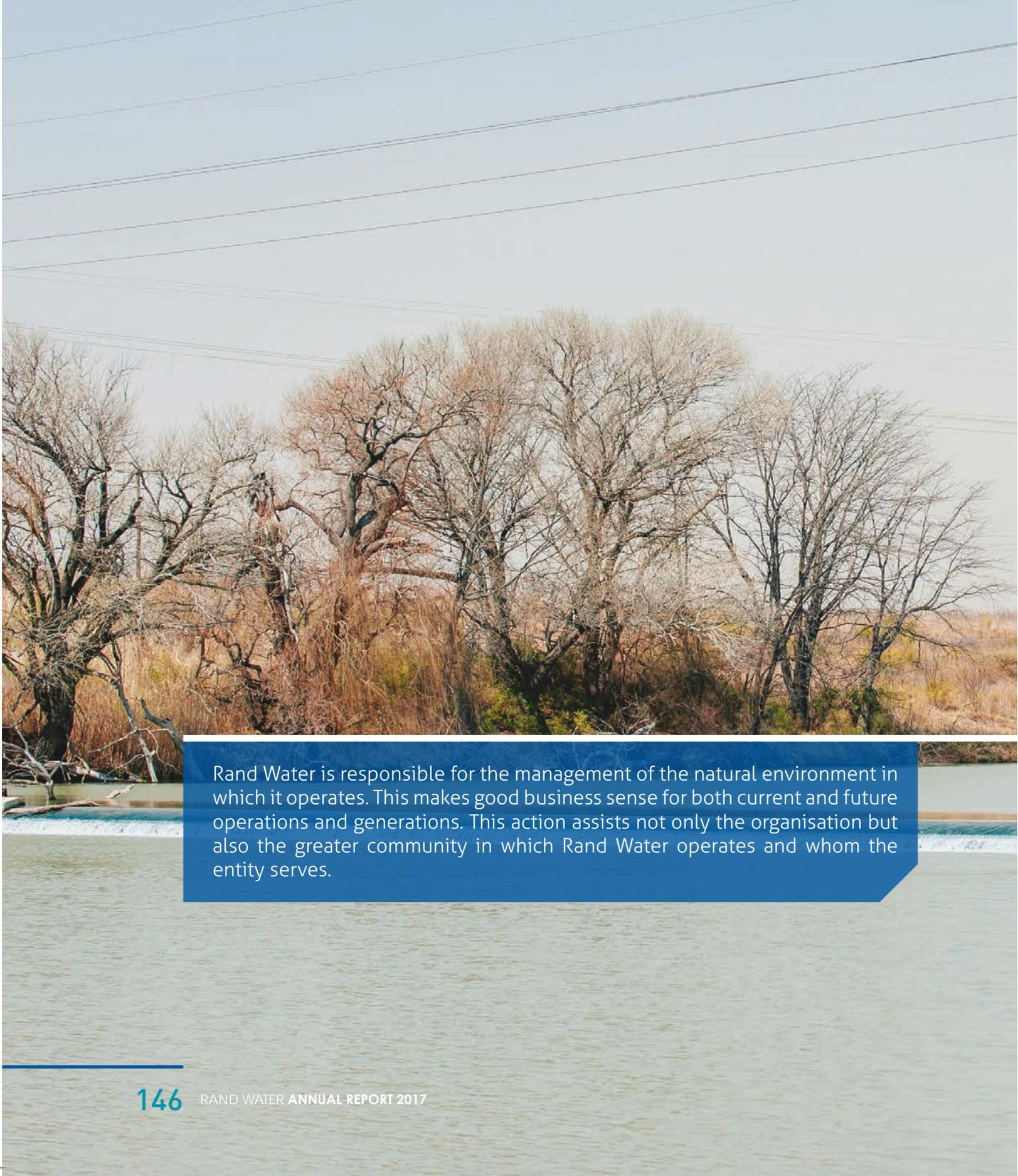
In terms of Water Wise educational material:

- "The Love and Respect Show" CD is still given out to learners attending a Water Wise programme as a means of spreading the Water Wise message.
- A book entitled "How to be a Water Wise Warrior" was produced for Nursery and Foundation Phase learners.
- The JNF WSEC, in conjunction with WWET, produced a poster for their man-made wetland entitled 'Wetlands are Nature's Way of Providing Water'. This poster was also printed and will be distributed to schools.
- A 'Let's be Water Wise' poster was produced.
- A number of Water Wise activities were placed in the Free 4 All newspapers throughout the year which are distributed to schools. Schools use these activities in the classroom.

The financial year under review saw the Water Wise Education Team involved in a wide variety of internationally recognised, edutaining activities that spread the Water Wise message. This was critical as South Africa felt the impacts of drought in a hard way. The Water Wise Education Team needs to consistently offer various Water Wise programmes for all ages that impart the Water Wise message to customers of all ages.



RESPECT FOR THE ENVIRONMENT



Rand Water is responsible for the management of the natural environment in which it operates. This makes good business sense for both current and future operations and generations. This action assists not only the organisation but also the greater community in which Rand Water operates and whom the entity serves.

Rand Water acknowledges that the ultimate success of the business and the wellbeing of communities depend on a sustainable and healthy environment, and on maintaining access to a critical natural resource – water!

The Environmental Management Services (EMS) Department based within Group Shared Services (GSS) in the Logistics Division is the service provider within Rand Water for aspects such as environmental related authorisation applications and compliance monitoring (of these projects), a full range of horticultural services, environmental rehabilitation services, and water conservation services to the adult market.

Environmental Management Services' mantra is "Better, Greener, Smarter". This is achieved by building the capability of people, knowledge to increase the contribution of natural and cultural assets to liveability, and customer value. Many colleagues have undergone various continuous professional development courses ensuring that the team is all working towards the latest and best practices in the industry. Some of the courses ranged from water sampling, ecological restoration, grassland assessment, wetland delineation and GIS training, legal updates and some have commenced with further tertiary studies focussing on horticulture, aquatic health, and environmental and water management.

WATER CONSERVATION

Promoting water conservation among adults is very challenging as adult audiences range from home owners to professional specialists in numerous industries. In the financial year, the Water Wise team at EMS focussed on strategic collaborations with key industries to enhance education and awareness within niche markets while at the same time also providing information to the masses on water saving practices especially during the drought period. This was achieved using the methods below:

RESEARCH

The financial year focussed on the existing research projects with University of South Africa (UNISA) as part of a previous Memorandum of

Understanding (MoU). The tertiary institution committed to the completion of these projects. As many of these projects form part of PhD and MSc qualifications, they are long term projects that require years of field work before the studies can be concluded. Significant progress was made on all projects and it is anticipated that some results may be published in the new financial year.

Other research undertaken in the year under review included the installation of Automatic Meter Readers (AMR's) on numerous Rand Water Zwartkopjes residential properties. This enabled Water Wise to monitor daily water use patterns which resulted in the detection of a substantial water loss at a particular property. The resulting water savings as a consequence of the repair triggered a more detailed water conservation research campaign.

The market research undertaken in this period focussed on the use and accuracy of a water calculator. This spreadsheet based calculator was initially developed to assist Water Wise in determining household water use. However, it will now become an education tool on the Water Wise website for all home owners to help them improve their awareness on their water use patterns and to understand their water bills.

DEMONSTRATION GARDENS

Water Wise chose to use demonstration gardens as a tool to educate end-users on water saving principles that can be applied in a domestic set up. Gardens create a relaxed recreational environment that encourages learning and awareness in a comfortable setting.

Water Wise maintains a garden at Delta Environmental Centre which received approximately 10 134 visitors this past year. Challenges around water use in the garden have stimulated a re-design that will require only rainfall dependant plants. This is currently under discussion with Delta Environmental Centre management.

There were no major upgrades took place at the Water Wise demonstration garden at the Vereeniging Pumping Station which continues

to serve as a practical aid to school groups (approximately 6076 learners and educators) who visit the Water Wise house in Vereeniging.

The Water Wise garden at Pretoria National Botanical Gardens received 371 666 visitors in the year under review.

The Water Wise garden at Walter Sisulu National Botanical Gardens attracted 288 480 visitors this past year. In addition, Manzi's Rock Hopping Game was launched in September, just opposite the Water Wise garden to encourage water conservation principles from a young age.

There was a declining trend in visitor numbers to Delta and Walter Sisulu National Botanical Gardens. However; visitor numbers to Pretoria National Botanical Gardens increased by 39% from last year. Collectively, the cost of exposure for demonstration gardens is the lowest of the methods used to communicate and educational message.

AWARDS

Water Wise trophies were awarded at two garden design shows; Lifestyle Garden Show and Garden World Spring Festival. These awards recognize landscape students, schools and professional landscapers who incorporate Water Wise principles into their designs with the aim of changing the end-user's perception of trendy landscapes. These gardens are judged in-house by the Water Wise team at EMS. The gardens are then open to the public for viewing. Approximately 120 000 people visited the two gardens.

As part of a strategic collaboration with the South African Landscaper's Institute (SALI), Water Wise was able to modify the criteria for the SALI Awards of Excellence for the first time. This meant moving away from seeing Water Wise as an individual category and instead including a Water Wise element to each category. This created a shift in mindset within this industry. This concept was launched together with a revamp of the SALI and Rand Water's Guide to Water Wise Landscaping Principles at the South African Green Industries Council (SAGIC) convention in June 2017.

In addition, Leslie Hoy of Rand Water received the SALI National Judge's Discretionary Award for his contribution towards water conservation within the green industry.

Water Wise also awarded trophies to the most Water Wise nurseries through the South African Nurseries Association (SANA) also at the annual SAGIC convention. This is another first for the green industry and Water Wise. This forms part of the strategic collaboration established in the past financial year.

PROJECTS AT SCHOOLS, PRISONS, AND COMMUNITIES

Water Wise (both EMS and Scientific Services teams), continued their collaboration with BirdLife South Africa to undertake the Flufftail Festival. The initiative attracted approximately 5000 visitors in Maponya Mall, Soweto. This initiative is aimed at creating awareness around the importance of wetlands, water and water birds. This was coupled with engagements at four (04) schools in Soweto. Plans are underway to bring in vegetable gardening training at these schools in the new financial year.

There was active engagement with eight (08) schools where 3191 learners were trained on water conservation in the garden. In addition, six (06) prison groups (under the banner of Hlumelelisa) where 114 inmates were trained, seven (07) community groups in various communities of Boitumelo, Soweto, Kanana and Alexandra were also trained with a total of 659 community members collectively trained.

During the financial year under review, Water Wise also focussed on training community groups at four (04) food gardens in Mpumalanga namely; Delmas, Phaake, KwaMhlanga and Lillydale. This was achieved through a strategic collaboration with the Agricultural Research Council (ARC). Through this initiative, approximately 325 community members were trained in April and May on methods to improve their existing food gardens. Equipment and tools were delivered to these sites in June 2017.

TALKS AND PRACTICAL TRAINING

Water Wise assisted in ad hoc talks to various nursery groups, corporates, and internal staff training at eight (08) different sites. In total 19 talks were given in the year under review to approximately 607 recipients. 442 Rand Water staff received internal training on water conservation practices.

ADVERTORIALS AND EXHIBITIONS

Educational material in the form of advertorials is developed to incorporate trends in water conservation applicable to selected audiences. As part of the approach to this year’s strategy to reach large masses of end-users, more popular newspapers were selected to improve exposure. As a result fewer advertorials were placed when compared with previous years. A total of 38 technical water conservation advertorials were also produced in 10 different magazines/newspapers based on specific

adult target audiences, reaching a minimum of 2 640 806 readers collectively for the year. This resulted in double the number of readers being reached despite fewer advertorials being placed.

Water Wise also set up a total of 21 displays and exhibitions which reached a minimum of 247 500 visitors. Ultimately, a return on exposure of R1.59 per visitor was estimated to have been achieved. This cost increased by 8% from last financial year in line with operational expenditure. Educational material such as z-folders and booklets are readily distributed at these events.

The Water Wise Website receives approximately 13 993 visitors per month with 1161 subscribers to the Water Wise Watch over the past year and 1036 followers received tweets from @water_wise. However due to the strategic collaboration with SANA (South African Nurseries Association), the water conservation message was also broadcasted monthly to their 2722 followers on twitter and their 22 512 website visitors.

INTERVENTION FOR CREATING WATER CONSERVATION AWARENESS

Intervention	No. of events / advertorials	No. of people reached
Advertorials	38	2 640 806
Displays and exhibitions	21	247 500
Demonstration gardens	Open all year	676 347

HORTICULTURAL MAINTENANCE

The area maintained by EMS-Horticulture amounts to 366 ha of land and landscapes across the organisation. A further 230 ha of horticultural maintenance contracts were managed by EMS-Horticulture for Rand Water at Panfontein, Analytical services, Process technology as well as the Water Wise training centre at Vereeniging pumping station.

Horticultural site maintenance includes the removal and control of listed alien invasive plants, improvement of landscapes, revamping

and upgrading of older less productive landscapes. This is aimed at improving site maintenance standards, aesthetical values as well as improving productivity of maintenance activities. Rand Water strives to be environmentally responsible where possible in all areas. The recycling of waste including the recycling of food waste through the composting process commenced in 2014/2015 and continued to include more kitchens throughout Zwartkopjes and now includes the entire station in the financial year



under review which resulted in a reduction of general and increase in compost.

In an effort to reduce use of potable water and electricity, EMS-Nursery and corporate EMS offices continued to extend the recycled water irrigation for landscape water use. In addition to this numerous small periodic maintenance projects were undertaken in the year under review. Others will start in the coming financial year to upgrade and maintain existing infrastructure on the site.

For the financial year under review, a total of 26 periodic maintenance projects and 71 interventions were completed within the Horticultural section. , Some pipeline routes also have a number of interventions within the Environmental Rehabilitation section. This includes the Mpumalanga area where six (06) of these projects were implemented. Five (05) additional unplanned rehabilitation projects were undertaken within this period as well as Horticultural maintenance of three selected Sanitation plants. For the coming financial year, the Horticulture section budgeted to undertake 23 periodic maintenance projects and 48 within the Environmental Rehabilitation section.

REHABILITATION

The reliability of water supply is very dependent on the integrity of the extensive pipe line and related infrastructure network. Over time many pipelines and associated infrastructure have been compromised by either having

been exposed or have the potential to become exposed due to soil erosion. As a result an annual program was implemented for the proactive monitoring of erosion and potential erosion as well as sink holes on Rand Water pipelines and access routes. It is essential that this work be undertaken annually to ensure the continued safety of Rand Water pipeline infrastructure as well as the access roads to inspect this infrastructure. As more municipal areas are being developed, there is the added risk of water runoff which increases soil erosion. The work undertaken to reduce this risk entails detailed investigation, planning, budgeting and rehabilitation. Areas of concern are noted in three possible manners. Firstly, Rand Water experts inspect pipeline and access routes to investigate causes and severity. Secondly, Rand Water's District Inspectors report any areas of concern on their pipelines which require erosion repairs. Thirdly, remote sensing is used to highlight possible areas where erosion or sinkholes can occur and these potentially sensitive areas are investigated and addressed.

Sinkholes are also becoming an increasing threat for pipelines. Currently, this is mainly limited to dolomitic areas. Albeit that engineering departments within Rand Water are addressing aspects of sinkholes and rerouting of pipelines, the actual sinkholes that occur under or adjacent to Rand Water pipelines still need to be addressed. Some of these are addressed by the EMS department, directly or via negotiation with land owners in conjunction with engineering input.

The table below provides various data on rehabilitation that was undertaken over the last six years. It should be noted that the physical area rehabilitated reduced during the year under review because those sites consisted mainly of smaller more intense working units rather than large expanses of veld areas.

COMPARISON OF REHABILITATION WORK UNDERTAKEN

Financial Year Ending 30th June	2017	2016	2015	2014	2013	2012
Amount of projects	71	61	43	31	27	21
Hectares Rehabilitated	17.8	43	230	236	44	61
Pipe encasing (m ³)						
Grass blocks	85					
9527	45	140	2 023	0	0	
Irrigation installations and maintenance (m ²)	2 750	5500	547	5 500	5730	6 700
Fence line restored (m)	311	0	106	280	0	1302
Alien invaders removed	15 000 (estimated)	97ea	100m2	120 ea	192 ea	12 2320 m2
Re-grassing (m ²)	178 927	304 903	187 272	247 329	34 4294	608 000
Indigenous trees planted	1 200	415	177	1 906	1 050	1 698
Reno/gabions (m ³)	884	2 554	324 452	7 635	1 430	19 655
Ash removed (m ³)	None	18 000	5 000	15 000	None	None

The following unplanned rehabilitation projects have been implemented within the financial year under review.

UNPLANNED WORK IMPLEMENTED

Projects	Role
R5	Search and rescue of plants as well as removal of topsoil within a sensitive area.
3 Sanitation plants	Submitted cost estimates for the Horticultural maintenance on site
Bulk Water	Planning and installation of grass blocks at the entrance of Bulk water to reduce and prevent erosion.
Panfontein	Submitted cost estimates for rehabilitation as well as monitoring of rehabilitation activities on site.
Driefontein reservoir	Implementation of grass blocks to reduce erosion control

SUSTAINABILITY

During the period under review EMS continued to remove listed alien invasive plants as part of a long term strategy. A total of 46 Large alien invasive trees were removed from Rand Water Nursery, Zwartkopjes, Rietvlei, Forrest Hill, and Valley settlements. These were replaced by planting 86 indigenous trees.

In order to monitor fauna wellbeing on sites, fences are inspected regularly for traps and snares. A total of 42 snares/traps were removed and in this process 6 birds and animals were rescued and successfully re-released.

The following reports were received from independent consultants; AIP identification on 4 of Rand Water properties, DASSIE control at Rietvlei, Red data identification at Central depot and Fauna and Flora identification at Zwartkopjes.

AUTHORISATIONS AND COMPLIANCE MONITORING

Rand Water's status as a water board operating within the parameters outlined in the Water Service Act means that Rand Water is not driven by short term gains and interests and is committed to long term sustainability objectives. The EMS department is the custodian of environmental assessments and compliance, and as such the EMS department has a continuous relationship with IAP's and project teams within Rand Water as well as an intensive relationship with authorities. Part of the engagement with the authorities involves reviewing and commenting on new legislation and alignment towards infrastructure delivery while considering the environment through engagement and understanding of processes on the ground.

EMS provides an important service to corporate Rand Water. All new capital constructions and relative maintenance work that triggers environmental authorisations are required to be environmentally legislatively compliant. The operation philosophy is not surprisingly cascaded down from DWS to Rand Water and corporate EMS. This is summarised as follows:

- DWS Strategic objectives: Enhanced regulatory compliance and Increased water ecosystem health.
- Rand Water Corporate vision: Legislative compliance and best practice.
- Corporate strategic objectives: Achieve Operational Integrity and Use Best Fit Technology and Achieve a High Performance Culture.

NEGOTIATIONS DURING THE YEAR UNDER REVIEW

The year under review witnessed significant progress in comparison to previous years. More specialised staff employed by DWS produced this significant progress, albeit with more stringent conditions.

This trend is reflected in the increased use of approved EMPr for maintenance in water courses and linear projects, as well as the promulgation of the GA for Section 21 C & I along with the provision for emergency repairs. Rand Water welcomes these changes as the Water Service Act requires that leaking pipes are fixed promptly and this follows the expectation that water conservation be practiced.

The authorities noted that these changes in legislation are, imed at facilitating non-polluting industrial and large commercial developments, while reinforcing the protection of Critical Biodiversity Areas within urban and rural environments (meaning that stricter no-go options are to be expected in the future.).

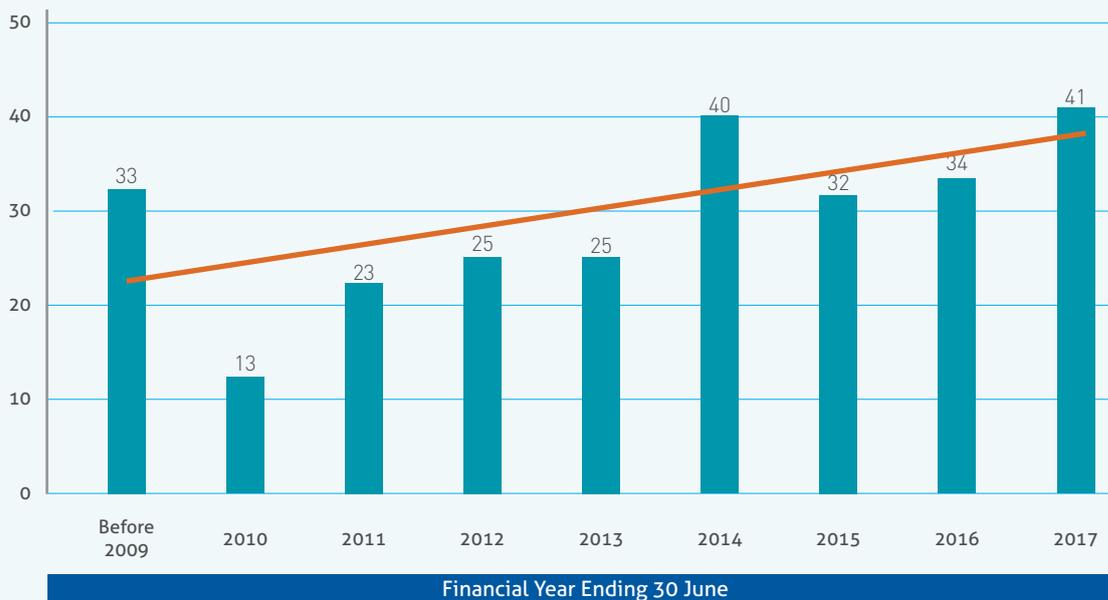


NATIONAL ENVIRONMENTAL LEGISLATION

Programmes undertaken by Rand Water were informed by the following relevant national environmental legislation.

- The National Water Act, 1998 (ACT No. 36 of 1998) for Water Uses as Defined in Section 21(C) or Section 21(I) General Authorisation
- 2017, National Environmental Management Act, 1998 (Act No. 107 of 1998) Notice of intention to adopt Gauteng Provincial Environmental Management Framework (GPEMF) Standards and Exclusion of Activities (N351 - GG40785)
- National Environmental Management Act, 1998 (Act No. 107 of 1998) Amendment of the Environmental Impact Assessment Regulations Listing Notice 1, 2 and 3 of 2014
- 2016 National Environmental Management Act, 1998 (Act No. 107 of 1998) Amendment of the Environmental Impact Assessment Regulations, 2014
- National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) Alien and Invasive Species Lists, 2016 (GG 40166 - GN 864)

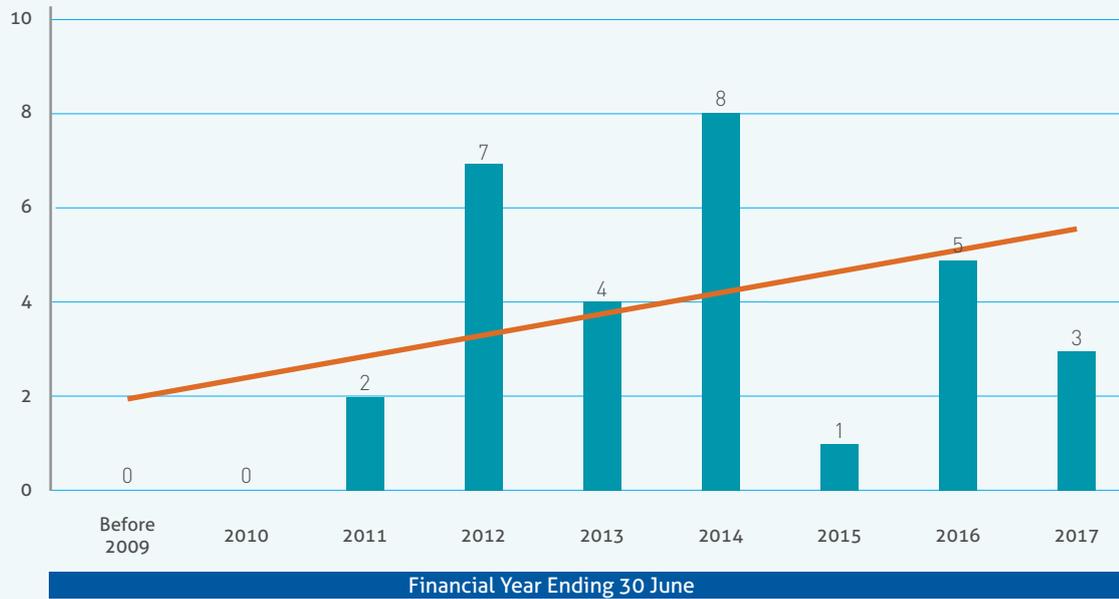
NUMBER OF AUTHORISATIONS RECEIVED



The diagram above shows an increasing trend over time of the number of authorisations received. However the mix of authorisations that are received changed over time.

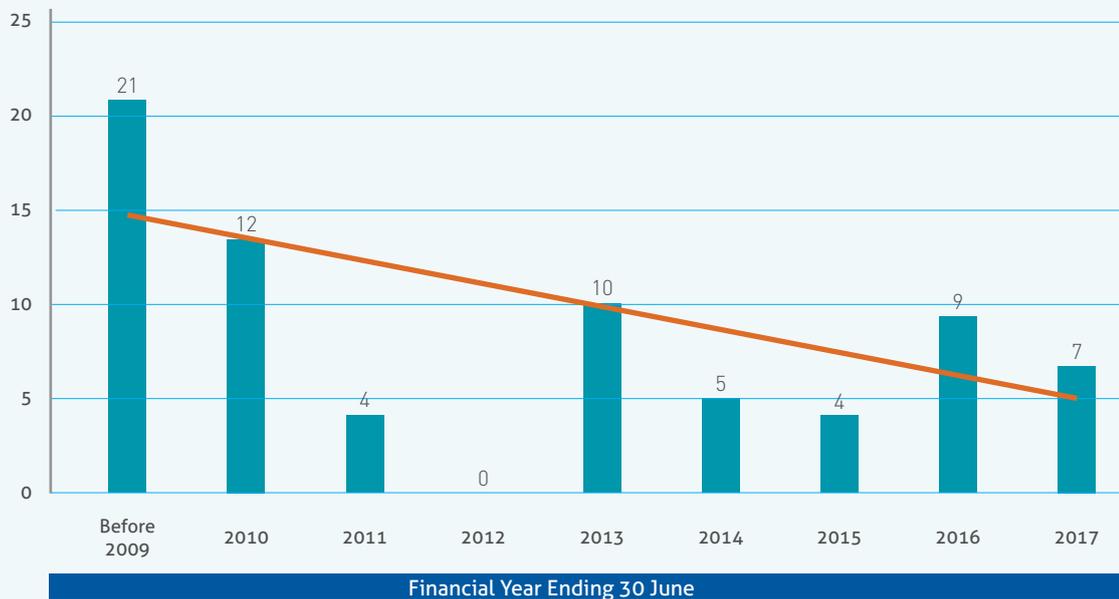


AUTHORIZATIONS RECEIVED FOR FULL WATER USE LICENSES



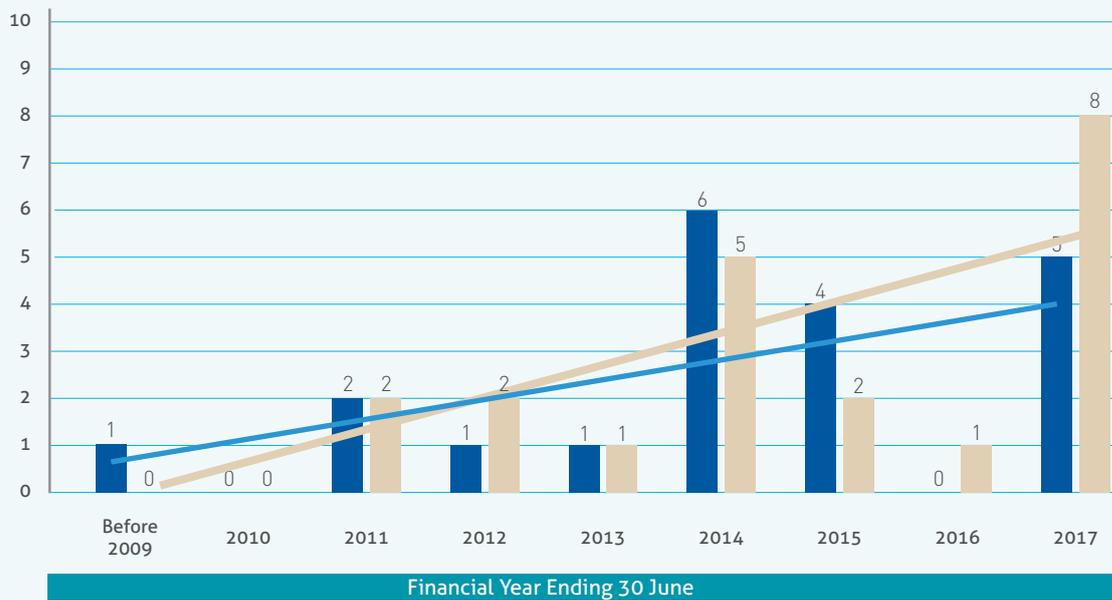
The trend line above shows an increasing trend. However, this trend may change again next year as more projects may qualify to use the option of Section 21 C&I General Authorisation.

ENVIRONMENTAL AUTHORISATIONS RECEIVED



The provision of authorising projects through approved NEMA's, EMP's, and NWA's, GA's is increasing strongly and is expected to further increase. This trend enforces stronger, more stringent, more accountable self-governance coupled with regular external audits and better qualified staff.

EMP AND GENERAL AUTHORISATIONS RECEIVED



Within the year under review 41 authorisations were concluded. However 4 Water Use Licences remain outstanding for long periods of time, as can be seen in table below indicating pending authorisations. On average, excluding exceptional cases, environmental amendments took 21 days, Environmental Authorisations 84 days, EMP approval 22 days, and General Authorisation were received in 51 days. However, Water Use licences all exceeded the legislated 300 days. The success of the GA can be attributed to good working relationship with officials of the authority, in contrast to the Water use licence that is administratively hamstrung and officials have little effect on speeding up the full licencing process.

AUTHORISATIONS RECEIVED

Applications Submitted and Pending Final Decision				Total
Authority	DEA / GDARD	DWS	PHRAG	
2009		1		1
2010		1		1
2014	0	0	0	0
2015	0	2	0	2
2016	0	0	0	0
2017	3	0	0	3
Total	3	4	0	7
Authorisations Not Yet Submitted				21
Total Authorisation Submitted and Pending				7

The table below provides all the authorisations obtained within the year under review.

LIST OF ALL AUTHORISATIONS OBTAINED

Submission date	Date received - Prior 2009	Processing days	Type	Project Description
04 June 2013	07 July 2016	1113	WUL	Zoekfontein Hydro Power
12 December 2015	13 July 2016	211	WUL exempt	Emhlangeni Pipe Manufacturing Plant
07 July 2016	05 August 2016	28	EMP approval	Condition assessment southern region
07 July 2016	05 August 2016	28	EMP approval	Condition assessment northern region
07 July 2016	05 August 2016	28	EMP approval	Condition assessment western region
06 June 2016	19 August 2016	73	GA	Sebokeng WWTW power line maintenance
25 June 2013	01 August 2016	1116	EA	J8 Germiston Pipeline
10 May 2016	11 August 2016	91	EA	Panfontein access road
14 September 2015	12 September 2016	358	EA amendment	ZKB waste dump amendment
08 August 2016	21 October 2016	73	HIA	B16 pipeline from ZKB to Slangfontein
13 October 2016	20 October 2016	7	GA	Various erosion crossings
01 June 2016	24 October 2016	143	WUL	Douglas Dam Dredging Project

Submission date	Date received - Prior 2009	Processing days	Type	Project Description
11 September 2016	10 October 2016	29	EMP	Panfontein access road
15 October 2015	28 October 2016	373	GA	Panfontein access road
15 June 2016	28 October 2016	133	GA	Driefontein Jetty removal
17 October 2016	02 November 2016	15	EA	B16 pipeline from ZKB to Slangfontein
27 October 2015	09 December 2016	402	GA	H43 Pipeline
14 December 2016	31 January 2017	47	Permit	H14 Phase II
14 July 2014	01 December 2016	857	WUL	R5 Phase 2 and Bronberg Reservoir
26 August 2016	10 January 2017	134	EA	Mahlokeng WWTW
14 December 2016	02 February 2017	48	EA	H14 Phase II
03 November 2016	10 March 2017	127	HIA	H14 Phase II
14 December 2016	09 March 2017	85	EA	Meredale Reservoir
03 February 2017	23 March 2017	50	HIA renewal	VG sedimentation tanks
26 August 2016	11 January 2017	135	EA	Mohlakeng WWTW
13 October 2016	28 April 2017	195	HIA	Q6
15 March 2017	06 April 2017	21	EA amendment	ZKB station 5
22 February 2017	21 April 2017	59	WUL amendment	O6
13 May 2015	21 April 2017	698	GA	F49
NA	19 July 2016	NA	Registration certificate	C3,C5, C7, C11 AND C24

Submission date	Date received - Prior 2009	Processing days	Type	Project Description
NA	19 July 2016	NA	Registration certificate	Emhlangeni fence
06 May 2017	17 May 2017	11	GA	Mpumalanga erosion projects
03 February 2017	08 May 2017	95	GA amendment	PTN access road
20 April 2017	24 May 2017	34	GA	Q6 pipeline
14 December 2016	07 April 2017	113	HIA	Meredale Reservoir
13 September 2016	07 April 2017	204	HIA	Mahlokeng WWTW
18 April 2017	03 May 2017	15	EMP	Mpumalanga erosion
14 December 2016	28 May 2017	164	Letter	H14 pipeline phase II
12 May 2017	30 June 2017	48	HIA approval	Sludge Pipeline
08 April 2017	05 June 2017	57	WUL exempt	Kensington Pump station
31 May 2017	6/21/2017	21	EA Amendment	R5 Phase II



TYPES OF AUTHORIZATION RECEIVED

Authorisations Received	TOTAL	HIA	EA	EA amend	EA exempt	EA Waste	EMP	WUL	WUL amend	WUL exempt	WUL dir.	GA	WUL ELU	Waste	Rejected	Withdrawn
Prior to 2009	33	0	21	2	5	0	1	0	0	0	0	0	0	3	1	0
2009-2010	13	0	12	0	1	0	0	0	0	0	0	0	0	0	0	0
2010-2011	23	2	4	5	3	0	2	2	0	1	1	2	0	0	1	0
2011-2012	25	1	0	5	4	2	1	7	1	1	0	2	0	0	0	1
2012-2013	25	0	10	2	0	2	1	4	1	2	0	1	1	0	0	1
2013-2014	40	5	5	9	0	0	6	8	1	0	0	5	0	0	1	0
2014-2015	32	11	4	0	1	0	4	1	2	4	0	2	3	0	0	0
2015-2016	34	11	9	2	0	0	0	5	3	2	0	1	0	0	0	1
2016-2017	41	8	7	3	0	0	5	3	2	3	0	8	0	0	0	0
Total all years	264	38	72	28	14	4	20	30	10	13	1	21	4	3	3	3

Rand Water Environmental Management Services (EMS) department recognises the internal contribution from other departments within EMS and Rand Water to achieve their authorisations. The alliance between the departments was a fruitful exercise with good levels of co-operation demonstrated through regular meetings.

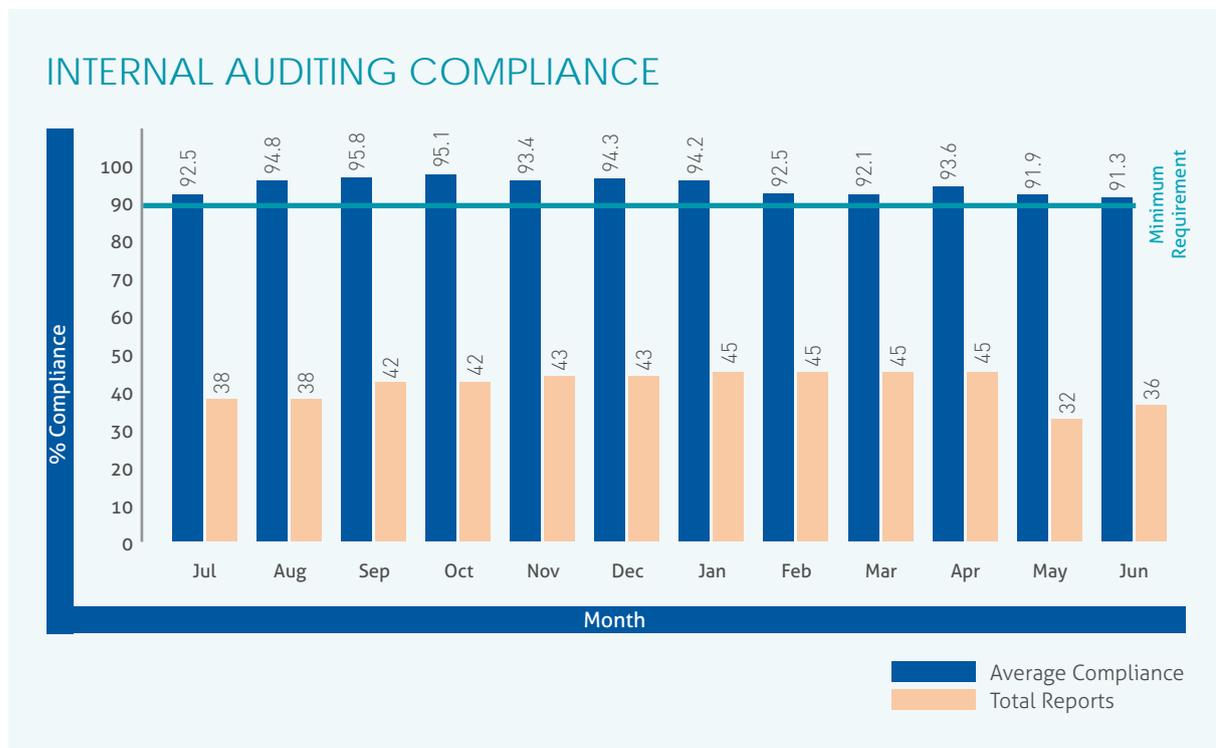


ENVIRONMENTAL COMPLIANCE MONITORING TO AUTHORIZATIONS

Rand Water self regulates Environmental Authorisations by way of appointing its own Environmental offices. Quality assurance is conducted by external providers. The competent authorities have recognised the EMS department as reasonably independent and allowed Rand Water to have internal Environmental Control Officers. The external audit included 22 contractors across various projects and these were conducted as per the requirement of the authorisation requirements.

The average overall audit for external auditing was 95%. Internal audits were conducted and produced 494 audits for the year that were conducted on 46 projects and 59 contractors. The overall compliance for the year for internal auditing is 93%, and this provides for good correlation between internal and external auditing.

Waste management was the most common non-compliance and programmes are under way to rectify the matter.



The diagram above indicates the minimum compliance of 90% on the green line. The monthly scores for overall performances are depicted in red markers on the blue bars. The blue bars show the distribution of auditing each month. The number of reports per month averaged 41 per month.

INTERNATIONAL WATER CO-OPERATION

The activities of Rand Water, be they local or international, are informed by the country's agenda in terms of its National Development Plan (NDP) and its global co-operation with the world, and in particular, with the African continent through the African Union (AU), NEPAD and the Southern African Development Community (SADC). South Africa's involvement in the international space stems directly from its firm belief that it cannot succeed in a sustainable manner if it acts in isolation or is surrounded by unstable and economically unsuccessful neighbours. The success of the African continent lies in unselfish co-operation in trade and in the exchange of knowledge, new ideas, skills exchange and new water and sanitation technologies.

INVOLVEMENT IN INTERNATIONAL ENGAGEMENTS AND FORUMS

Taking its cue from the government of South Africa's international activities, Rand Water, during its financial year ending 30th June 2017, participated in various local and international forums, workshops and seminars and formed strategic partnerships with various like-minded organisations, all deemed to be beneficial to the utility.

During the year under review Rand Water, through NEPAD, participated in the SADC Heads of State Summit held in Swaziland. This enabled Rand Water to fully understand the challenges SADC as a region faces in the water and sanitation space. The utility also participated in the high level UN World Water Week and Exhibition held in Durban where the important matter of wastewater re-use was debated.

A Memorandum of Understanding (MoU) was officially signed by DIRCO, DWS and Rand Water in terms of which Rand Water was appointed as the Implementing Agent for a Drought Relief Programme in Namibia funded by the African Renaissance and International Co-operation Fund.

Rand Water also hosted the following international delegations which in some cases were at the request of the shareholder, DWS:

- Delegation from Denmark
- Dutch / Salga delegation
- Delegation from Namibia

CO-OPERATION WITH THE DEPARTMENT OF WATER AND SANITATION

Rand Water has a cordial working relationship with DWS and often attends meetings on matters of common interest. In the near future DWS will be sharing with Rand Water its proposed "Guidelines on the International Relations Implementation Plan"

Furthermore, Rand Water always strictly complied with various Directives issued by the Department including one that requires Rand Water to submit requests for international travel to the Honourable Minister 90 days before departure. This Directive now forms part of Rand Water's Policy on International travel. On its part DWS also approved Rand Water's application for blanket approval that will enable Rand Water officials to travel internationally without having to apply to the Honourable Minister for permission. The specific areas covered under this are as follows:

- Education
- Cross-border Projects, for example, the Drought Relief Project in Namibia
- International Associations, Boards and MoUs (African Water Association, International Water Association, International Office For Water, Netherlands Water Partnership and UNESCO-IHE)

Rand Water has obligations to fulfill in these organisations where senior Rand Water personnel serve as Chairpersons and Committee Chairpersons. With regards to cross-border projects, Rand Water is obliged to execute and complete the projects without fail as the organisation's reputation depends on this.

GROUP SHARED SERVICES



RISK ADVISORY SERVICES

The board places its focus on the most significant risks facing Rand Water. These include strategic, operational, financial, legal & compliance, as well as any risk that may lead to loss of Rand Water's reputation. The Executive team takes ownership of the identified significant risks and account to the Board Risk Committee and the Board on a quarterly basis on the initiatives being undertaken to effectively manage the significant and identified emerging risks

Annually in March, Rand Water management identifies and review major risks that the company will prioritise in the new financial year beginning in July. This is done through the process of risk assessment. Risks identified through this risk management process are prioritised based on probability and severity of the risk.

These risks are discussed and the responsibilities related to them get assigned to people that are most suited to manage them in terms of expertise and areas of responsibility. Mitigating strategies are designed and committed upon. The risk register is then taken through governance structures for approval. These structures include Corporate Risk Committee, Portfolio Integrating Committee, Board Risk Committee and the Board.

After approval by the Board, management reports to the above stated structures on progress in mitigation of risks in a meeting that is held quarterly. Thereafter the risk report as well as any emerging or materializing risk is also discussed at the Board meeting.

TOP TEN STRATEGIC RISKS

Twenty risks were identified to have a potential of hindering achievement of Rand Water objectives in the period under review. The risks were identified through the process detailed above, in a two day strategic risk review workshop held in March 2016. The following is a list of the Top Ten strategic risks that emanated from that process.

No.	Risk Name	Owner
1	Availability, reliability, reliance and quality of electricity supply, critical spares and chemicals	COO
2	Encroachment over pipeline servitudes and properties	GSSE
3	Non-revenue water in the Rand Water and municipal system	COO
4	Capacity to supply sufficient volumes / inability to supply potable water to clients	COO
5	Failure to supply quality potable water	COO
6	Business continuity	GSSE
7	Extended area of service and products	GSE
8	Credit risk	CFO
9	Supply Chain Management process	GSSE
10	Health and Safety	GSSE

OCCUPATIONAL HEALTH, SAFETY, ENVIRONMENT, AND QUALITY

Rand Water's Occupational Health, Safety, Environment and Quality (SHEQ) performance continued to improve in the year under review. This is indicative of the embedding of SHEQ management systems across the organisations. It is also evidence of leadership and employee commitment on rendering a hazard and risk free working environment. Everyone is taking responsibility of his/her occupational health & safety, looking after the environment for generations to come as well looking after and understanding their documentation to deliver the right product/services on time.

In the advent of the upgraded ISO 9001 & 14001 to the 2015 versions by International Organisation for Standardization (ISO), Rand Water commenced with the preparations to implement the new standards. The main changes in the new standards were mainly around the standard structure as well as the terminology changes. Risk identification and management was introduced to the Quality Management Standard (QMS) viz ISO 9001:2015. This is a significant change but in Rand Water this new concept in QMS will be handled with ease as Rand Water employees are conversant with Risk Management implemented across the business.

Although, ISO 14001:2015 introduces new changes, the concepts are still the same and have well been implemented within the business. The new standards emphasize the "Plan-do-Check-Act" principle which was there in the previous standards. Rand Water already embedded it into the organisational culture.

The publishing of the new standards aligns well with Rand Water SHEQ management systems manual and procedure review cycle. SHEQ Policy was amongst the first SHEQ documents reviewed in line with the new standards requirements. Training on the new standard of all specialist teams was done by external service providers. The trained team members have also started with training the rest of the workforce on their roles and responsibilities.

Revitalization of all employees on SHEQ management system was amongst the benefits of the new standards. Signs of further improvements on the SHEQ performance are already starting to show.

Continuous focus on SHEQ culture transfer to Rand Water's suppliers and customers is ongoing. This is done through induction as well as inclusion of SHEQ requirements in all goods and services specification. A Rand Water standard is incorporated as part of all SHEQ requirements in the project management cycle process, namely from project initiation phase up to the handover of the project including the Procurements process.

SHEQ MANAGEMENT SYSTEM CERTIFICATION

Rand Water continues to maintain certification on all the three schemes listed below.

- Occupational Health & Safety – OHSAS 18001:2007
- Environmental Management Systems – ISO 14001:2004



- Quality Management System – ISO 9001:2008

As a responsible organisation, obtaining and maintaining certification provides assurance to stakeholders and Enforcement Agents that Rand Water complies with legislation and industry best practices. Rand Water is proactive in maintaining production of a quality product and strives to promote the safety, health and well-being of its employees and to protect the environment.

CORPORATE ENVIRONMENTAL STATUS

It is easy to take for granted the importance of environmental management in an organisation. However, its economic and intrinsic value cannot be overstated. Environmental management is a systematic approach to finding practical ways to save water, energy, and materials, and reduce negative environmental impacts. As an ISO 14001 certified organisation, Rand Water is committed to preservation / conservation of the environment by continuously scanning the environment and putting environmental management programmes in place for effective environmental management. Rand Water is committed to achieving its goal to be recognised as an exemplar of environmental best practices and a sustainable organisation. A few of these management programmes include waste management and air quality management. Below is the report of all these aspects and the results obtained.

REPORTING OF ENVIRONMENTAL INCIDENTS

The direct link between environmental performance objectives and standards, and recordable incidents has the potential to lead operators to set 'easy' environmental performance objectives and standards. The recording, reporting and close-out of environmental incidents, plays an important role in the continuous improvement of environmental performance. Therefore Rand Water employees are constantly encouraged to report near misses, minor and major environmental incidents.

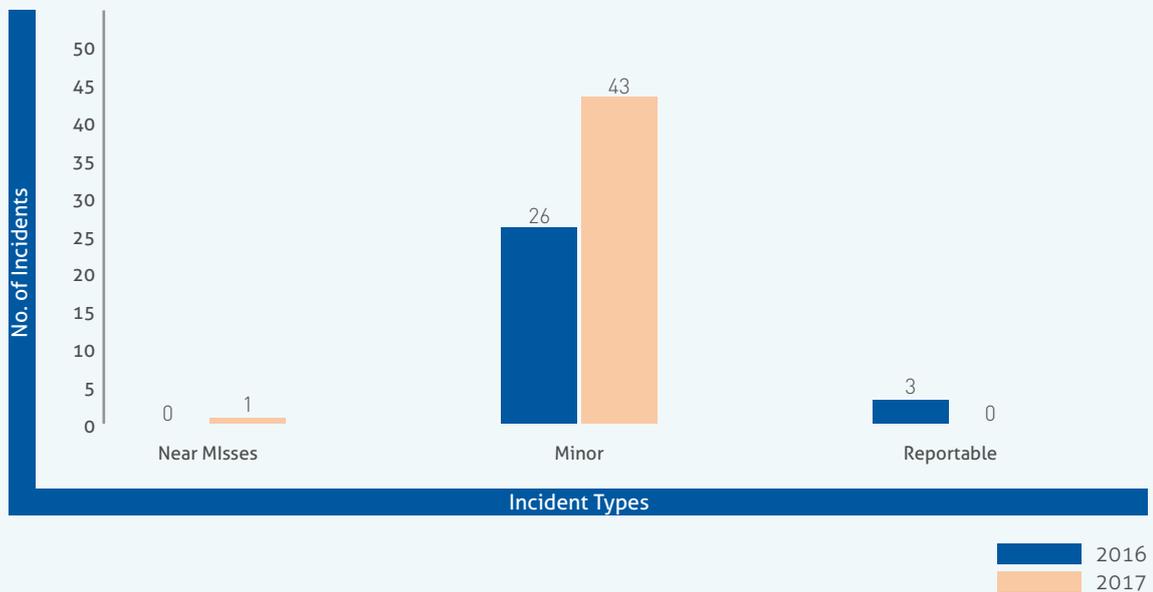
Incident reporting provides a way to encourage employee participation in improvement whether it's about safety, quality, environmental or security in organisations. In this way everyone can see that their concerns are investigated and acted upon by the organisation. In the end the culture of improvement can be created with a two-way communication and everyone being a part of it.

All Rand Water incidents are investigated with a view to identifying the root cause and putting in place effective corrective action to prevent them from being repeated. According to Section 30 of the National Environmental Management Act 59 of 2008 (NEMA), a reportable incident means an unexpected, sudden and uncontrolled release of a hazardous substance, including from a major emission, fire or explosion, that causes, caused or may cause significant harm to the environment, human life or property. Reportable incidents are reported to the Department of Environmental Affairs (DEA) and DWS depending on where the incident occurred.



The Risk Advisory Services' efforts in involving employees in the reporting of incidents are paying off as more incidents continue to be reported as depicted below.

TYPES OF INCIDENTS REPORTED



During the year under review, 94% of Environmental Incidents recorded were of a minor scale. Only 4% of the incidents were reportable. This is a good indication of best practices that are being implemented on sites. These were investigated and reported as per Rand Water procedures. This year, near misses were recorded and they were 2% of all the incidents recorded. Again this shows an improved culture of incident reporting in the organisation.

WASTE RETURNS

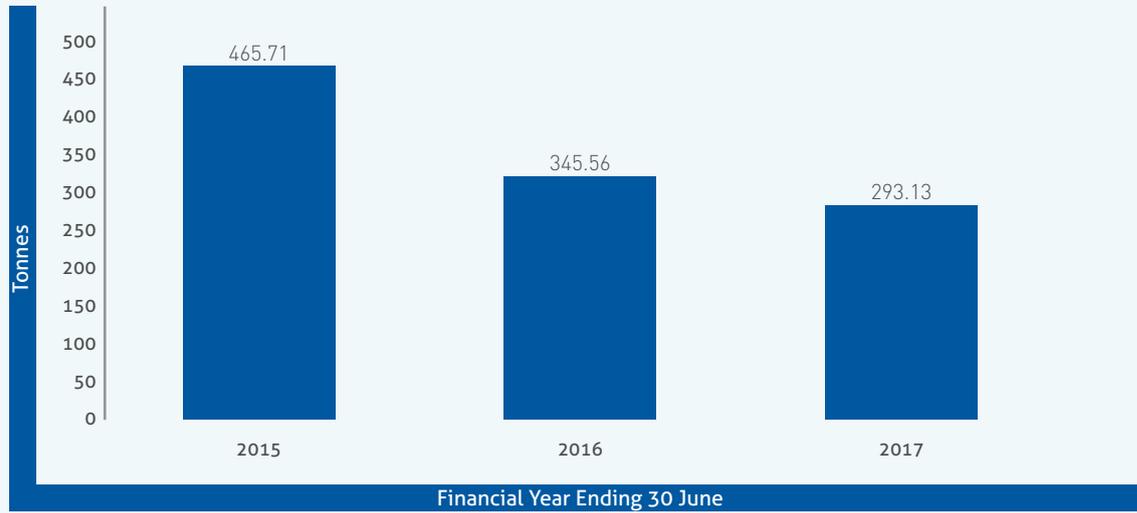
The transportation, treatment, storage and disposal of all manner of waste, including general, hazardous, laboratory and medical waste, among many other types of waste is governed by the National Waste Management Act 59 of 2008. The Act is generally designed to minimise or eliminate uncontrolled dispersal of waste materials into the environment in a manner that may cause ecological or biological harm. This includes regulations designed to reduce the generation of waste and promote waste recycling. Regulatory efforts include identifying and categorising waste types and regulating transport, treatment, storage, and disposal practices.

Rand Water continues to change so as to align with international best practices and standards and this is from Rand Water's personnel tenacity to strive to ensure that the organisation's waste management practices continue to be in line with the corporate strategy direction and to national and provincial legislation. Rand Water is also committed to work with stakeholders, and interested and affected parties to find solutions that contribute to the desired environmental outcomes, while advancing the country's socio-economic development priorities.

Currently, Rand Water contracted a Waste Management Service provider for the collection, transportation, recycling and disposal of general, hazardous, laboratory and medical waste from all Rand Water sites. The Risk Advisory Services and Supply Chain Management are researching and investigating the idea of carrying out waste management activities without the use of a service provider. This will dramatically cut costs to the company, eliminate "the middle man", and ensure that the Rand Water complies 100% to the cradle to grave principle. A phased approach will be utilised so that the organisation can have optimum benefits with regards to waste management.

The diagram below depicts all of the organisation’s waste that was disposed at the landfill in the year under review.

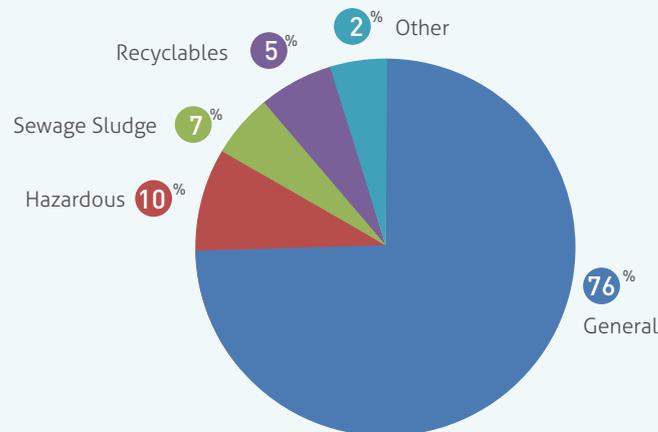
WASTE DISPOSED OF AT LANDFILL



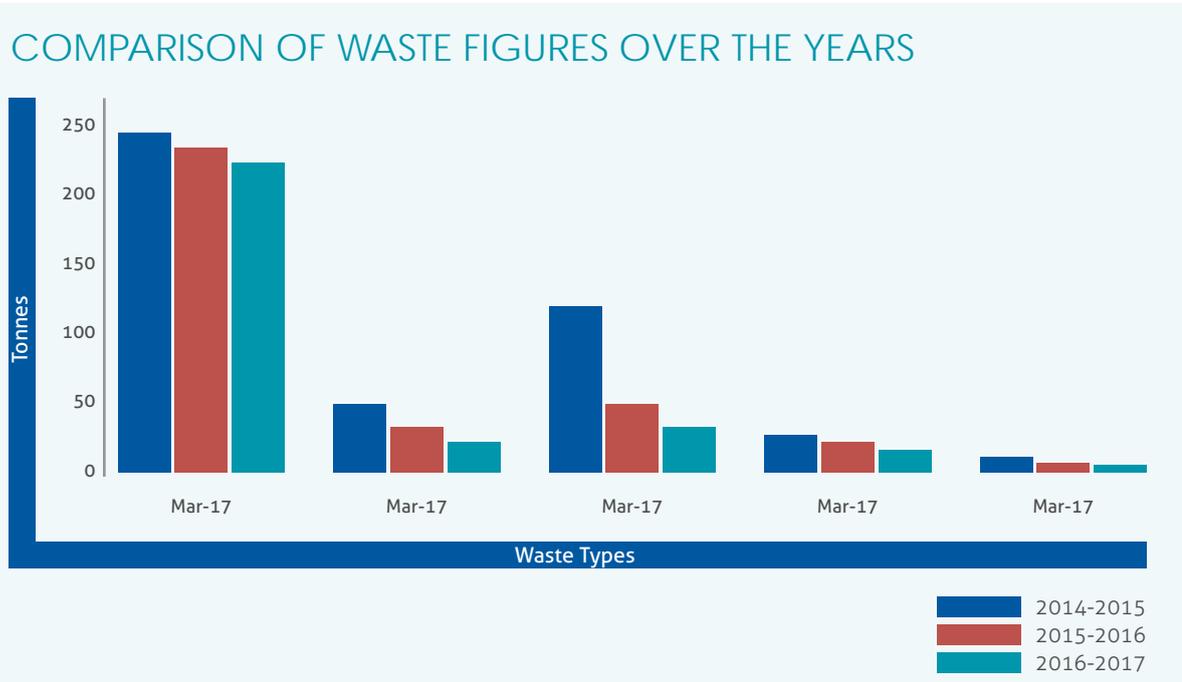
In the financial year under review, a total of 293.13 tonnes of waste was disposed of to landfill compared to 345.56 tonnes the previous year. This shows a decrease from the previous year which can be attributed to the Rand Water’s waste management procedures. These ensure that waste is handled,

transported and disposed of accordingly. Of the waste to landfill 76% was general waste, 10% hazardous waste, 7% sewage sludge and 2% was other (Wood, medical waste, PVC and other unrecyclable plastic). Medical waste from site clinics are collected and disposed of in accordance with provincial by-laws.

WASTE TYPE BY PERCENTAGE



The table below depicts the different waste types disposed of over the past three financial years. Hazardous waste and sewage sludge have decreased which is a reflection of good waste management practices. Aggressive recycling approaches and initiatives are still underway to ensure compliance to the National Waste Management Strategy and to increase awareness so as to promote recycling throughout Rand Water.



DUST FALL-OUT

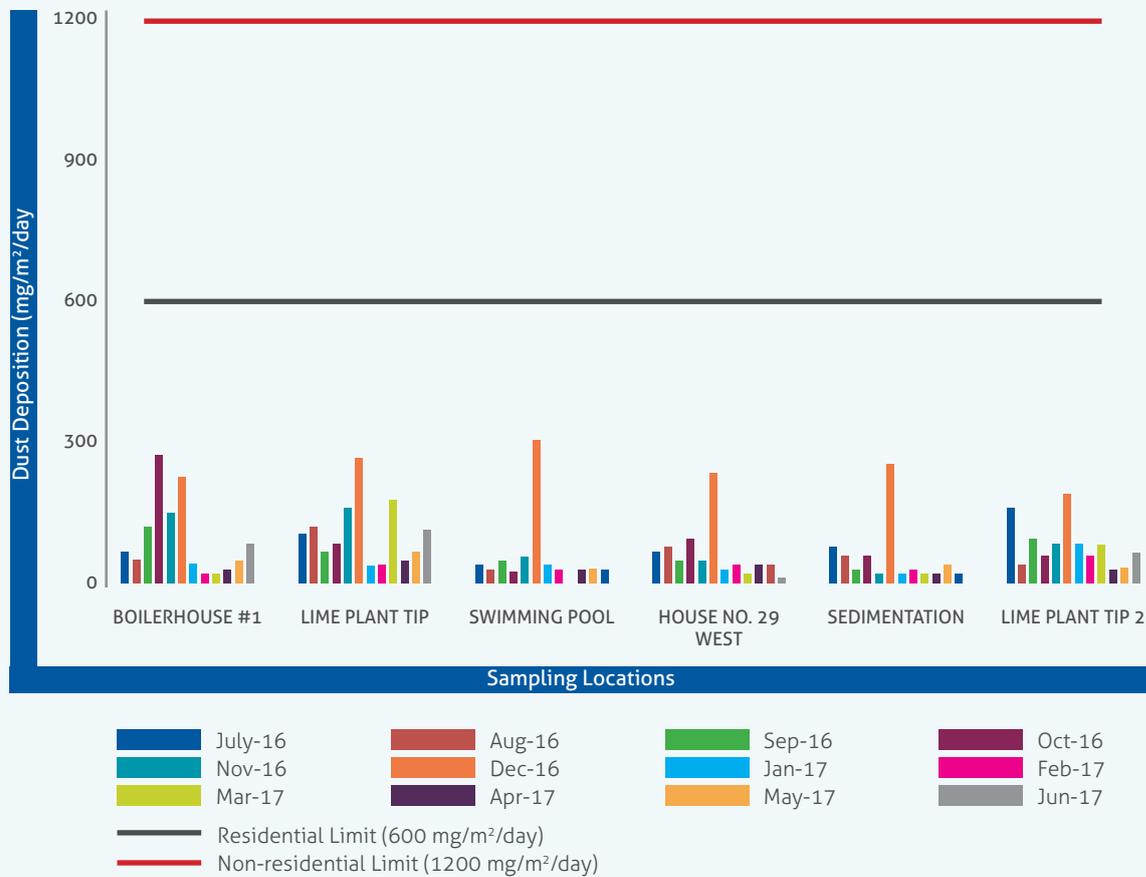
In 2006 the Honourable Minister of Environmental Affairs and Tourism declared the Vaal Triangle Air-shed Priority Area in terms of Section 18(1) of the National Environmental Management: Air Quality Act 2004 (Act No. 39 of 2004). Rand Water sites, namely Vereeniging Pumping Station, Zuikerbosch Pumping Station, and Panfontein Sludge are both situated in the priority area and thus required specific air quality management actions.

To achieve this, dust fall-out was monitored since 2010 at different locations at the sites so as to determine the levels of dust that the organisation's operations is producing. Over the past years, it was evident that all the sites' results from the monitoring have always been below the residential threshold of 600 mg/m²/day. Therefore monitoring of Zuikerbosch and Panfontein were ceased. The only site remaining that is still being monitored is Vereeniging as lime operations are still continuing on site.



The following diagram depicts the results from Vereeniging that was monitored from July 2016 to June 2017.

DUST FALL-OUT RESULTS FROM VEREENIGING PUMPING STATION



In the year under review, the dust fall-out at all the monitoring points was again below the residential threshold. There was a significant decrease in dust fall-out as compared to those of the previous financial. Rand Water continues to optimise best operational practices together with the operation’s preventative maintenance plans which attribute to the significant decrease in the dust fall-out results.

OCCUPATIONAL HEALTH AND SAFETY - OHSAS 18001:2007

The target for Disabling Injury Frequency Rate (DIFR) was reduced from 0.41 to 0.34. This target was achieved and exceeded at 0.29. The ultimate goal is “ZERO HARM TO ANYONE EVER” at the workplace. These trends show that this ultimate goal is achievable. Some of the Rand Water sites have completed a year without any disabling injury and a number of sites have achieved one million hours without any disabling injury. This improvement is also confirmed by the reduced number of

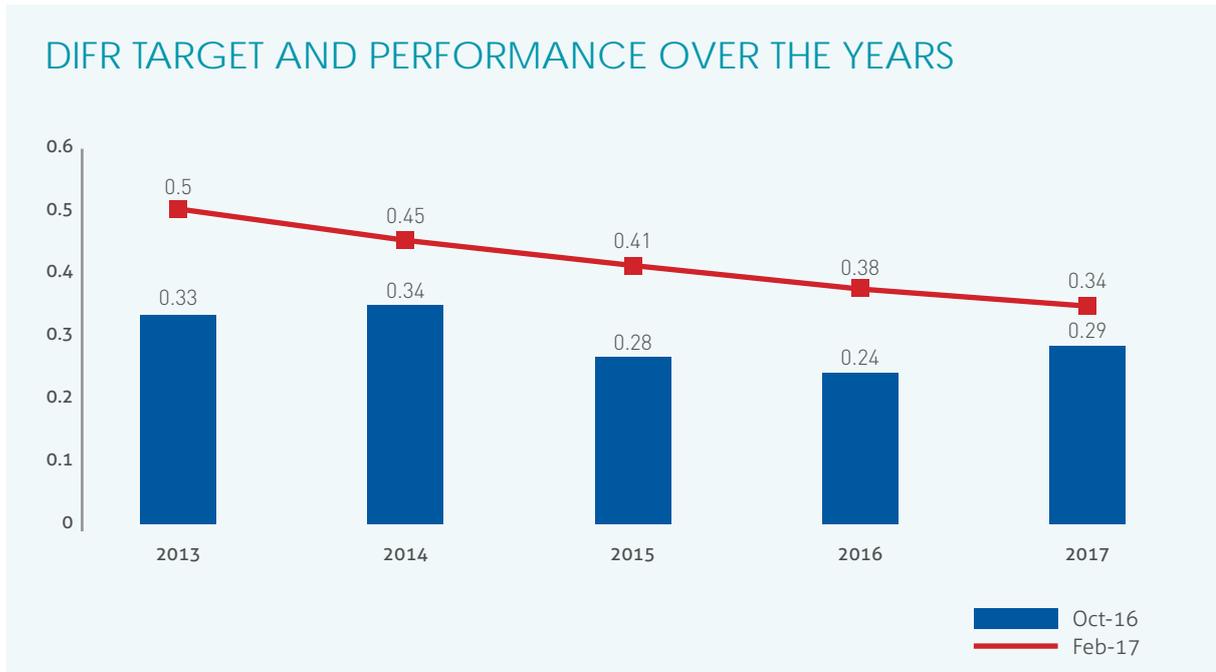
claims from the Federated Employers’ Mutual Assurance (FEMA).

However, the gradual improvement on safety performance was interrupted by motor vehicle accidents and crime related accidents. In one accident, four (04) employees got injured on a national road accident and two (02) of protective security guards got injured in an attempted copper cable stealing crime activity.

The Occupational Health and Safety (OH&S) program focused on the identified unsafe acts and conditions, including paying special attention to near-miss/near-hit incidents. The OH&S strategy continued to concentrate on the task observation, mini-hazardous identification, and risk assessment as well as incident investigations on all incidents occurring at the workplace. The OH&S program elements delivered a list of risk control measures as well as very effective mitigation plans to prevent incidents from happening.

The SHE structures viz Management meetings, SHE Committees, SHE Representative committees, green area meeting, within the organisation are very effective and contribute significantly to the success of improvements of the SHE management systems which results with reduced degrading and loss time incidents.

The diagram below depicts the performance of DIFR against the decreasing targets for past five years.



QUALITY MANAGEMENT SYSTEMS (QMS) – ISO 9001:2008

Rand Water has a well-developed quality management system based on the principles of International Organisation for Standardization (ISO) 9001:2008. The quality management system allows for all processes within Rand Water to be documented, controlled, and communicated to all employees. It also allows for employee engagement in day to day activities in identifying non-conformance, correcting, and preventing future reoccurrences in order to continuously improve Rand Water processes and ensuring customer satisfaction. A total of 231 Improvement Reports were raised. This is an indication that the system is entrenched and people are recognising its value.

The SHEQ policy was revised to ensure that requirements of Rand Water and interested stakeholders are still addressed accordingly. The business further developed detailed measurable objectives which are aligned to the

SHEQ policy and strategic objectives. These measurable objectives are communicated to employees, monitored, and evaluated during management reviews.

SABS conducted the surveillance audits for the financial year under review. Rand Water retained its ISO 9001:2008 certificate. In comparison to the previous 3 year cycle, there was a great improvement in the following areas; Control of monitoring and measuring equipment, identification and traceability as well as document management. This improvement was due to increased number of awareness initiatives and audits.

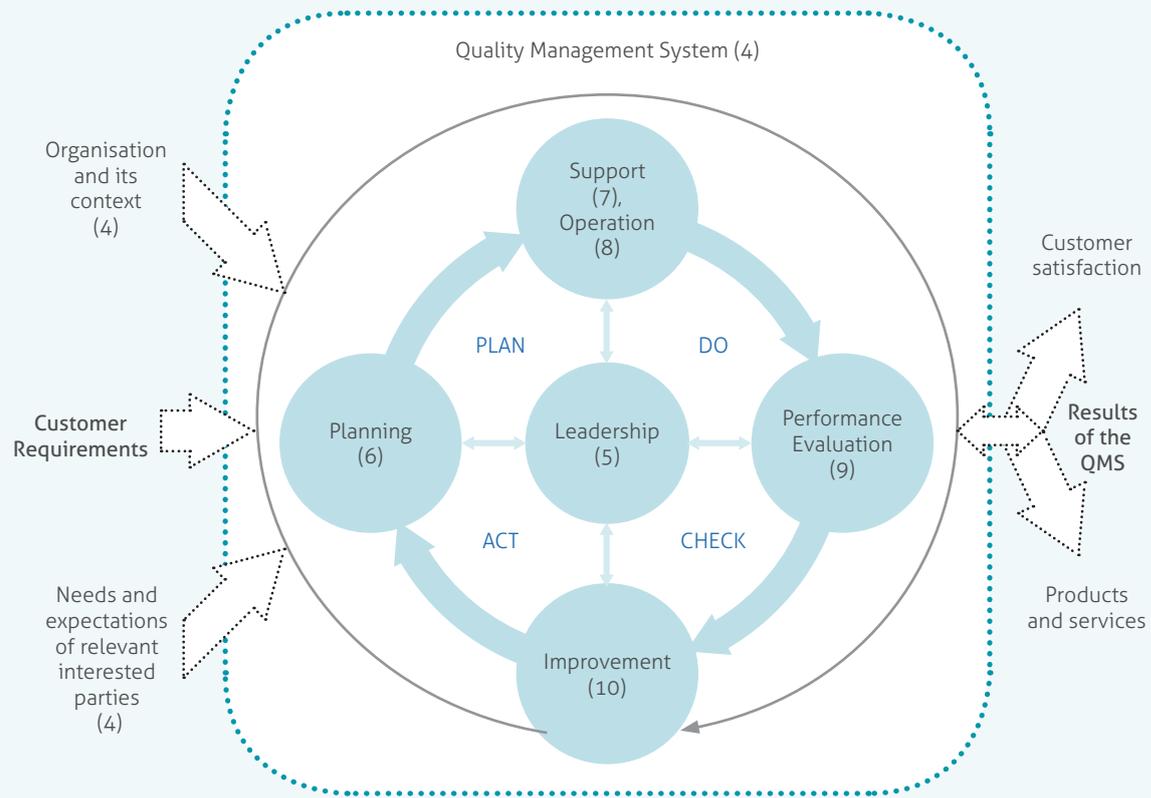
ISO revised ISO 9001:2008 to ISO 9001:2015. The diagram below depicts requirements overview for the new standard. All organisations certified with ISO 9001:2008 are expected to upgrade to the new standard by September 2018. Rand Water is mindful of the changes

and work resumed ensuring smooth transition and certification by September 2018.

Even though some concepts are new on the ISO 9001 standards, the concepts are not

new to Rand Water, as ISO 14001 and OHSAS 18001 have been using these concepts for some time. These common concepts amongst the three standards have allowed Rand Water to explore into SHEQ combined systems.

ISO 9001:2015 STRUCTURE OVERVIEW



CONTRACTOR MANAGEMENT

In-line with the organisation’s capital expenditure targets as well as meeting the organisation’s growth strategy, a number of capital projects are being undertaken to expand and maintain the integrity of Rand Water infrastructure to meet the nation’s potable water and sanitation demands. Rand Water also implements other projects on behalf of DWS. In these projects including where Rand Water is rendering operation & maintenance activities, Occupational Health & Safety is amongst the first critical items to be focused on. Rand Water is committed to ZERO INJURIES, ZERO degrading incidents as well as timeous delivery of these projects.

Inpursuitoftheabove,RandWatermanagement teams continued to enforce compliance to legislation, especially Occupational Health, Safety and Environment (SHE). The legislation and the Organisation’s SHE requirement was integrated into the project management process from the project initiation to project hand over and closure.

During the period under review, implementation and enforcement of compliance with the Construction Regulation 2014, as framed under the OHS Act 85/93 was intensified. The following elements of project management were further enforced by Rand Water on all contractors:

- Enforced complete compliance to the SHE specification in the tendering document
- Intensified H&S inspection during the project execution
- Stoppages on all identified hazards on construction works
- Introduced penalties on non-compliances to legislation and Rand Water H&S rules
- Increased the SHE monitoring on all project at predetermine frequencies.

Due to the abovementioned interventions, Rand Water contractor's SHE performance

showed a great improvement from the previous year. A further 29% disabling injury frequency rate reduction was achieved. The actual performance was from DIFR of 1.12 to DIFR 0.80 for the reporting year.

The severity of the disabling injuries that were experienced was low in nature, with lost time averaging below five days per disabling injury. Project construction management teams including contractor are committed to ensure and maintain this encouraging SHE improvements in terms of disabling injuries.

ACTUAL DIFR PERFORMANCE FOR CONTRACTORS

Financial Year Ending 30th June	Actual DIFR	Target DIFR
2013	1.21	2.00
2014	0.55	2.00
2015	1.62	2.00
2016	1.12	2.00
2017	0.80	2.00

The diagram below depicts disabling injury frequency rates for each month during the year.

MONTHLY DIFR FOR CONTRACTORS



OCCUPATIONAL HEALTH MANAGEMENT

In compliance with health legislation, health standards as well as best practices, the organisation established an Occupational Health Program which aims to maintain the highest degree of employee wellbeing and fit for duty status. In this endeavour, the organisation established a number of clinics in its major sites to provide the occupational health services to all its employees. These site clinics are manned by professional occupational health practitioners as well as an outsourced occupational medical practitioner to oversee the occupational health programme.

These services cover the early identification, monitoring, and management of occupational health of all employees. This program ensures proper placement of employees in relation to the work exposures.

This is achieved through the provision of medical and technical expertise to achieve improvements in the working environment, adaptation of work to the individual worker, and promotion of the health and welfare of workers. To accomplish a workplace free of hazards and occupational risks the following program elements were carried out:

- A number of Occupational Health surveys were conducted as per schedules within the workplaces by the Occupational Health Practitioners to continuously identify and assess occupational and environmental hazards and recommend actions necessary to eliminate or control these. This was also done to review and update the Occupational Health Risk Profiles of employees.
- In keeping and ensuring that the workforce is fit and health for their tasks, medical surveillance schedules were also adhered to. These are regularly in line with their position and serve as pro-active personal good health maintenance.

- Although, Occupational Health Clinics mainly cater for occupational health programs, some primary health care matters are also handled by Occupational Health Practitioners as this could impact negatively on the employees fit to work.

During the reporting financial year, there was no new occupational disease cases reported. This is an indication of the effectiveness of Rand Water occupational health programmes implementation and continual maintenance. Organisation clinics continued with occupational health programs which commences at the employee engagement right up to the employment disengagement with the company. Any anomalies get reported to the Compensation Commissioner.

SHEQ ACHIEVEMENTS FOR THE YEAR

- ISO 9001:2008 – Certification maintained and commenced with implementation of the ISO 9001:2015 upgrade
- OHSAS 18001:2007 – Certification maintained
- ISO 14001:2004 – Certificate successfully maintained and commenced with the implementation of the ISO 14001:2015 upgrade
- Disabling injury frequency rate target of 0.34 met
- Contractor (Capital projects) target met – actual DIFR of 0.80 improvement of 29%

BUSINESS CONTINUITY MANAGEMENT

Business Continuity Plans were reviewed and desktop tests were undertaken on some. Disaster simulation exercises were undertaken across Rand Water sites. This is done to test readiness and response should a real disaster strikes.



INFORMATION TECHNOLOGY

The Rand Water IT landscape provided a secure and reliable platform for business enablement in the financial year ending 30th June 2017, notwithstanding the significant increase in the cyber security threat level. Rand Water was not impacted by the various ransom-ware attacks that occurred in the financial year ending 30th June 2017, there were no unauthorised external access to the Rand Water IT environment and there were no successful malicious software attacks on the Rand Water data centre. The average core IT infrastructure and IT system availability was 99.9% and 100% during agreed critical business periods.

Rand Water IT contributed to good corporate governance by continuing to satisfy the IT governance requirements of King III and continuing to improve compliance with the Department of Public Services and Administration's Corporate Governance of ICT Framework Policy. All IT related legislation was complied with, as confirmed by an independent legislative compliance assessment. The IT operational risk continued to reduce, partially due to a defined and tested disaster recovery plan, retaining the ISO 9001 certification, cyber security improvements, and the alignment of the IT service management processes to the ITIL framework.

The IT environment contributed to the financial sustainability of Rand Water, with a cost efficiency level that is significantly better than the utilities average, as per an external global benchmark. The Green IT initiative contributed to the achievement of the sustainability objectives of Rand Water through IT

infrastructure consolidation and virtualization, as well as a carbon-neutral managed printing solution that prevented paper wastage of approximately 380 000 pages in the financial year ending 30th June 2017.

The most significant IT investment, namely the integrated Enterprise Asset Management system, added value to the Rand Water by improving its infrastructure asset management capability and maturity. The new creditors reconciliation system also added value by reducing the cycle time of the monthly creditor reconciliation activity by 86%, from two weeks to two days. Rand Water IT further enabled and supported strategic corporate initiatives, such as the War on Leaks, with the required IT systems and infrastructure.

Alignment with business strategy and plans was improved by formalising and initiating IT programs for business functions, such as Group Finance and Group Governance. The finance program focuses on improving process efficiency, including enabling financial shared services, with improved process automation, billing, planning and reporting solutions. The governance program focuses on integrated contracts management, improved data discover and analytics, as well as integrated governance, risk and compliance IT solutions. The five-year journey towards an agile and streamlined business, enabled by a low risk and cost effective hybrid cloud IT infrastructure strategy and an end-to-end business process management and automation strategy, was initiated in the financial year ending 30th June 2017.



SUPPLY CHAIN MANAGEMENT

Rand Water is currently complying with the 2013 DTI B-BBEE Codes of Good Practice. Rand Water is measured under the applicable scorecard as outlined below.

BBBEE SCORE CARD

Element	Target	Achievement
Management and Control	20	19.84
Skills Development	25	17.40
Enterprise Supplier Development	50	48.90
Socio Economic Development	5	5
Overall Score		91.14
Achieved Level		Level 3

Rand Water maintained the B-BBEE status level 3 in the financial year under review.

PREFERENTIAL PROCUREMENT

Rand Water's B-BBEE Preferential Procurement target for the financial year under review was 85%. Through preferential procurement and initiatives supporting black owned enterprises, Rand Water managed to achieve 95%.

ENTERPRISE DEVELOPMENT AND SOCIO-ECONOMIC DEVELOPMENT STRATEGY

Rand Water realised a need for a structured economic transformation approach. It is for this reason that an Enterprise Development and Socio Economic Development (ED and SED) Strategy were approved by the Board. The strategy will enable Rand Water to assess, monitor and evaluate the empowerment component of the procurement spend in terms of supplier development and local beneficiation.



STAKEHOLDER RELATIONS POLICY AND STRATEGY

The main objective of the department is to create awareness of the Rand Water brand within the sector and enable the repositioning of the brand to support the organisation's strategic objectives. A Stakeholder Relations Policy and Strategy was approved by the Board. This provided much needed direction towards developing effective and responsive strategies towards the needs of stakeholders.

The following initiatives were implemented in contributing to this objective.

BE THE HERO CAMPAIGN

Be The Hero Campaign is aimed at increasing awareness of the need to value water and to use it wisely. South Africa is a water stressed country, and the water resources are under tremendous pressure from a growing population in Gauteng.

The amount of water available for use remains the same, and despite plans to increase storage capacity through the building of new dams or water transfer schemes, predictions are that the demand for water will outstrip supply by 2025. The only answer to this dilemma lies in changing people's attitude and thus their behaviour to use water more wisely

Rand Water has a major transportation and distribution system that comprises 3000 km of pipelines. Rand Water has been accessing its pipeline and servitudes without problems. Recently the accessibility was abruptly impacted upon in certain areas because of the mushrooming of Informal Settlements encroachment on these servitudes.

The objectives of the campaign are;

- To educate the residents of Gauteng and beyond about the importance of saving water
- To ensure the indigents within the community use the free 6 kilo litres efficiently

- To create the Be the Hero ambassadors in the communities within Rand Water's area of service
- To influence the people to take action
- Inform and educate communities about the danger of encroaching on Rand Water pipelines

The activities undertaken within the Campaign included;

- The Brand Ambassadors interacted and educated the community members at the Taxi Rank and invited them to the event
- The DJ entertained the crowds with different genres of music
- Promoters ushered people to the gig rig and distributed brochures
- The gig rig was fully branded by Rand water and utilised as the main stage and focal point
- Be The Hero Shower contained "1 litre" vouchers which goal was to see which contestant can catch as many vouchers in 10 seconds , bringing across the message of how much water can they save
- The prizes up for grabs were Water Bottles, T-Shirts, caps and a shower timer
- Rand Water created a partnership with JHB Water, Mogale City Local Municipality and City of Ekurhuleni to bring the Be The Hero Campaign to the communities
- Municipalities of the different areas were provided a platform to educate and address the issues in their areas
- Municipalities assisted communities with queries or concerns.

ENCROACHMENT CAMPAIGN

Informal settlement communities have and continue to encroach upon or use Rand Water's land and pipeline servitudes for all types of accommodation choices, for example, shacks, dumping sites, squatting, scrap yards, playgrounds, bus terminals, houses, barns and college activities. 30 seconds radio adverts

were placed at different local radio stations. The placements of these adverts came as an opportunity to address the concerns of encroachment.

The 30 seconds adverts were placed at the following radio stations:

- Alex FM
- Eldos FM
- Jozi FM
- Kasie FM
- Mamelodi FM
- Thetha FM
- Tshwane FM
- East Rand Stereo

SPONSORSHIPS

Rand Water identifies and participates in sponsorships that are aligned to the Corporate Strategic objectives. The Sponsorships offer a Return on Investment made in the form of exposure, publicity, goodwill and positioning of the organisation. Sponsorships are both proactive and reactive and are guided by Rand Water Sponsorship Policy, Procedures and Guidelines.

The sponsorships are applied with the purpose of achieving the following objectives:

- To create and improve corporate brand awareness and image
- To partner and foster relations with key stakeholders
- To support the corporate strategy and build brand value
- To enhance the quality of life of the communities and customer groups within and outside Rand Water's area of service
- To educate and encourage responsible water usage
- To foster goodwill and positive attitudes towards Rand Water as a company that demonstrates good corporate governance and citizenry.

The sponsorships below are highlights of the year:

SWIMMING SOUTH AFRICA

Swimming South Africa is widely recognised as a benchmark South African and world class sporting organisation which focuses on delivering quality water safety education programmes at grassroots level and international medal winning performances.

Its objectives includes amongst others:

- To reduce incidences of drowning nationally.
- To increase participation in South African in aquatic disciplines.
- To identify, capacitate and sustain talented young swimmers.
- To encourage the love for aquatics
- To inculcate the importance of leading an active and healthy life style

Rand Water continues to partner with SwimSA for the Learn to Swim Program which is run through their provincial structures.

HIGHLIGHTS DURING THE FINANCIAL YEAR

- Involvement of municipal departments that deal with Public Safety i.e. (City of Joburg Community Development; Joburg EMS, JMPD, Joburg Water, JRA & Ekurhuleni EMS).
- Malls and public galleries activations and presenting on water safety.
- Walk about in Alexandra Township after the floods experienced in November.
- An increase in new swimmers for schools and clubs.
- Programme reached 5751 children.
- Increase in Media coverage was huge, eNCA and SABC



VELOKHAYA LIFE CYCLING ACADEMY

Rand Water's partnership with the Velokhaya Life Cycling Academy provided deserving cyclists with a much-needed platform to develop their cycling talent, compete against the best cyclists in the country and improve their lives through the sport of cycling.

These riders have not only made their mark on both the local and international cycling stage, but have inspired township youth to participate and excel in the sport.

DEVELOPMENTAL HIGHLIGHTS DURING THE FINANCIAL YEAR

- Higher education and life development support through learnerships for all project participants
- Permanent and part-time work opportunity for project participants.
- "Team House" for project participants for the duration of the project.
- One of the participants from Soweto, Thulas Mxenge had multiple call ups to the SA team for international competitions and also toured Ethiopia, All Africa Games in Congo & was the London to Paris event winner.
- Mthetheleli Boya from Khayelitsha, who is also part of the Competitive Team, is a

beneficiary of a full scholarship from the Cape Peninsula University of Technology studying Sports Science.

- Zanele Tshoko is a product of Team Rand Water who joined the academy at 14 years old and had multiple road racing achievements as well as representing South Africa abroad. She now rides for Team Bestmed, a leading South African Ladies Team.

RAND WATER FRANCES VORWERG RACE FOR VICTORY

Frances Vorweg School caters primarily for cerebral palsied children and for those with learning disabilities. The school has approximately 415 learners at present, aged between 3 and 17. The cerebral palsied learners have disabilities ranging from minor physical impairments to permanent dependence on wheelchairs. Special equipment such as custom built chairs and tables, wheelchairs, stationary, walking aids and computers are needed to facilitate mobility in the school and enable learning to take place in the classroom.

The level of care required (specialists teachers, services of therapists, psychologists and doctors), by nature, is extremely costly and because of limited resources, the school is obliged to appeal to its communities and the



businesses from time to time for financial contributions and/or other donations.

The Rand Water Race for Victory was the main fund raising event for the school since 1997 and the continuous support enables Frances Vorweg School to meet some of its financial obligations.

STAKEHOLDER RELATIONS DEPARTMENT

This department is an integral supportive-partner that facilitates strategic platforms whilst implementing the initiatives/programmes that aligns to the Presidential Outcomes and National Calendar. The critical role it plays refers to the business' participation in Community Outreach Engagements that:

- Profiles Rand Water's business proposition;
- Advocates Anti-Vandalism of water infrastructure;
- Creates awareness on Encroachment; and
- Creates awareness on #SAVEWATER CAMPAIGNS, partnering with the relevant stakeholders of various disciplines.

The interventions and partnerships with these stakeholders contribute positively to socio economic impact while implementing its mandated business.

MEDIA RELATIONS

Rand Water had enjoyed healthy relations with the majority of media outlets during the period under review. This culminated in the organisation receiving positive publicity in the print, broadcast and online publications. Rand Water's Media Relations Strategy (MRS) was central in the organisation's proactive interactions with the media and served as a pillar that guided it on how the media should be dealt with.

The MRS guided the organisation's continuous engagement with the media in pursuit of positive corporate positioning. During the period under review, several Press Releases were issued in an effort to highlight Rand Water's projects, responded to ad hoc media enquiries and educate the public about the importance of saving water.

A hive of media activities was encountered during the second quarter of the year under review, when Rand Water participated in 22 interviews in both local and national radio stations, television and print media. This after DWS issued a directive to have Rand Water reduce water abstraction by 15 percent. Rand Water's Twitter account was also effectively used to convey the messages and correct misinformation on matters of public interest in the area of supply. During the period under review, the organisation posted 1 428 tweets regarding the Vaal Dam level as well as urging consumers to use water responsibly.



MEDIA TOURS

Rand Water arranged media tours to its Zuikerbosch Water Purification plant and testing laboratories in Vereeniging, Gauteng Province, attended by 15 journalists and photographers from nine publications. It was a proactive engagement with the media that resulted in significant positive publicity for Rand Water. We have also arranged for the Democratic Republic of the Congo's RTGA World television station to visit the Zuikerbosch purification plant to film the water purification process.

RAND WATER FOUNDATION AND ENVIRONMENTAL MANAGEMENT SERVICES

We have issued Press Releases that generated more positive publicity for Rand Water. These included the Flufftail Festival that was aimed at educating pupils in and around Soweto about the value of the wetlands. This led to Rand Water being prominently profiled in the local Joburg and Soweto Television stations, whereas Jozi FM - a prominent Soweto radio station staged an Outside Broadcast of the event.

During the period under review, four Press Releases were issued in support of the Rand Water Foundation's Back to School Initiative – a programme aimed at handing over school uniforms to underprivileged pupils in Gauteng, the reduction of water abstraction from the Vaal Dam by 15 percent, the pipe burst in Meyersdal Eco Estate and about Rand Water winning two prestigious international awards for its innovative Water Wise campaigns.

STRATEGIC MEDIA RELATIONS COVERAGE

The name 'Rand Water' was reported in the South African print and electronic media during the period under review in 1 934 individual instances. In addition, there were 556 online articles mentioning Rand Water. Most articles that were published during this period had been predominantly positive and neutral, with negative publicity only emerging during the water shortage period.

The Advertising Value Equivalent (AVE), for the media activities undertaken during the period under review is R90 923 916. 36.



ENHANCING RAND WATER'S REPUTATION

Rand Water has been accessible to media enquiries and formally responded to all enquiries. Rand Water executives and specialists have participated in numerous media interviews on both local and national media, which included print and broadcast media. Rand Water also arranged formal and informal lobbying sessions with members of the media in an effort to continuously improve Rand Water's public reputation. The meetings assist in clarifying any misunderstanding or demystifying any misconception about the organisation's operational activities.

ENVIRONMENTAL SUSTAINABILITY

Rand Water's efforts to preserve the environment also received positive publicity. As part of the Rand Water Media Relations Strategy the organisation's senior specialists would be prepared on handling of media interviews before they were interviewed. It would be during the interviews that

specialists would give more details on the organisation's roles and responsibilities in the preservation of the environment. The Rand Water environmental brand received positive publicity in the media during the commemoration of the national events such as the World Wetlands Day, National Water Week and Arbour Day.

EMPLOYEE COMMUNICATION

Rand Water regularly shares key performance and other critical business information with employees through mass emails, a weekly electronic newsletter and bulk SMS messages to targeted groups. During the year under review, we have but posted the quarterly magazine, called 'Aquavita', online.

Pertinent subjects such as medical aid matters, legal compliance and compliance to Rand Water Code of Ethics, are still communicated through series of road shows at various sites to ensure common understanding.



HUMAN RESOURCES STRATEGY



Staff - The Important Resource

To meet business challenges today and tomorrow, organisations must maximize the potential of their workforce while improving efficiency through employee productivity. Rand Water is mindful of the challenges that emanate from the water sector skills required now and into the future, the demographics and age profile of the current workforce, the demand and supply issues in the labour market, the progression of the business landscape as well as the potential impacts of the “fourth industrial revolution”.

In response to this, the organisation implemented various means of positioning itself as an employer of choice as well as creating a pipeline of skills from which the organisation can sustain itself. Part of these initiatives include building organisational capabilities to support growth, innovation and strategy by encouraging life-long learning, recognition and development of talent in all areas of the business including giving back to the community by offering bursaries and enrolling unemployed youth into learnerships and internships.

One of Rand Water's strategic objectives is to build a "High Performance Culture" and the Human Capital Portfolio is tasked with creating an environment within which employees are encouraged to enable the organisation to deliver on its objectives. Strategic Human Capital delivers this through targeted initiatives that enable employee development, recognizes their efforts, rewards them for their service and fosters an enabling working environment.

The Group Human Resources Portfolio supports the business through enabling the organisation to attract, develop and retain engaged employees. All interventions are directed at;

- Supporting the organisation in achieving its strategic objectives,
- Building capability to create a conducive environment
- Engaging in Human Resources practices that are legislatively compliant
- Creating a pipeline of suitably qualified staff from which the organisation can draw skills
- Encouraging and supporting holistic employee wellbeing
- Recognizing and rewarding performance
- Giving back to the community

TALENT MANAGEMENT

Human resources are scarce, and it is important to attract and retain the best people that contribute towards the achievement of organisational objectives. In a recessionary economy, human capital is a major expense that needs to be managed effectively. But no matter the global economic situation may be, companies need maximum insight and flexibility to manage human capital and to perfect the ability to adapt dynamically to ever-changing circumstances.

Rand Water implemented a comprehensive talent management strategy which aims to motivate employees to support business goals, allow the organisation to respond to change, and improve the bottom line. This strategy allows the business to track, monitor, plan, simulate, and execute human capital initiatives with increased precision.

While many interventions are targeted at internal staff, the organisation also takes a broader view of the economy as well as contributing towards the alleviation of youth unemployment as well as the funding of tertiary education. To this end, Rand Water supports learners with bursaries for undergraduate qualifications in fields critical to the organisation and provides for training opportunities through apprenticeships, learnerships and internships.

STRATEGIC WORKFORCE PLANNING

Strategic Workforce Planning (WFP) is the process of assessing the current and projected supply of staff and comparing this to the current and projected demand for staff based on the strategic goals of an organisation. The Strategic Workforce Planning model was

established to perform the projections which can be used (amongst others) to:

- Analyse the gap between supply and demand;
- Project performance against transformation targets; and
- Determine financial impact of the gap.

The benefit of Strategic Workforce Planning is that it aligns talent initiatives and plans to the organisational strategies and thus gives the organisation the ability to address the skills capability gaps with the shifting workforce demographics to enable and achieve growth.

The process differs across organisations since the culture, objectives and mandates will guide business trajectories. In a dynamic and constantly evolving workplace it is important that the workforce planning is integrated with budgeting and business planning.

The output of this exercise is packaged in a strategic human resources plan that will enable the organisation to have requisite skills and expertise. Interventions include up-skilling the current staff to assume higher positions, investing in formal training for staff, sponsoring undergraduate bursaries in fields critical to the operations of the organisation as well as implementing learnerships and internships.

In the sections to follow, information regarding the achievements and progress on initiatives implemented.

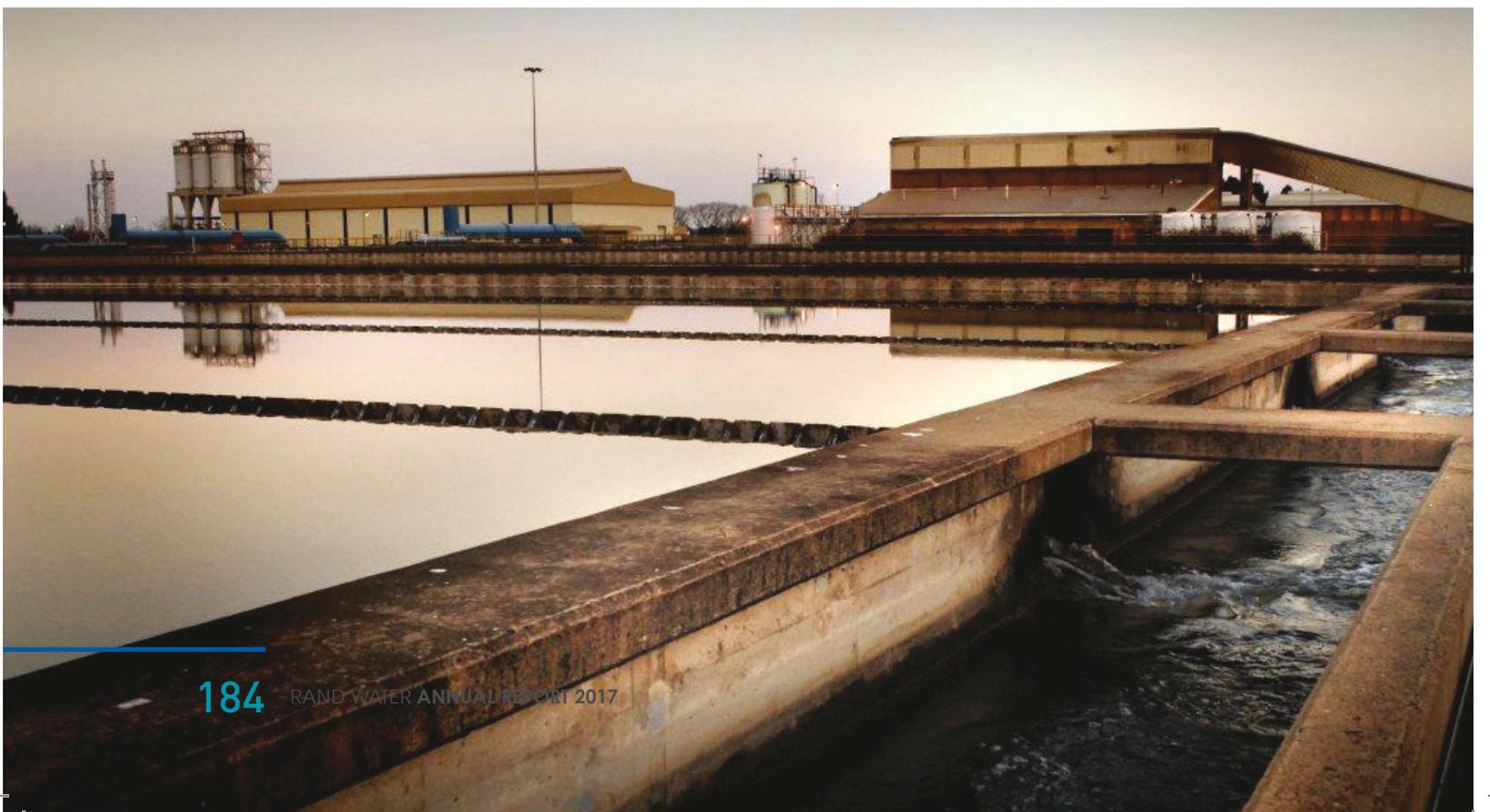
CAPACITY BUILDING

Rand Water's main focus is to provide development opportunities to internal staff in preparation for them assuming higher roles and enhancing their skills to perform in their current jobs. The organisation adopted an approach that prioritises capacity building initiatives that are value-adding improving business efficiencies and effectiveness.

Below is an indication of all the initiatives that have been successfully implemented for the year under review.

FUNCTIONAL TRAINING AND CONFERENCES

Rand Water supports the development of staff through funding training initiatives that allow employees to continuously develop themselves with the aim to improve business efficiencies and productivity. Employees undertake legislative training prescribed by law or Rand Water policies. The collation of all the identified training interventions culminates in the Workplace Skills Plan (WSP) and Annual Training Plan (ATR) submitted to the Energy and Water Services Sector Education and Training Authority (EWSETA) annually.



TRAINING INSTANCES/INTERVENTIONS COMPLETED PER OCCUPATIONAL LEVEL FY 2016/2017

COMPLIANCE, CONFERENCES & FUNCTIONAL TRAINING EMPLOYED – 18.1	Female Total	Male Total	Grand Total
OCCUPATIONAL LEVEL			
Professional qualified and experienced specialist and mid-management	291	274	565
Semiskilled and discretionary decision making	579	1210	1789
Senior Management	26	18	44
Skilled technical ad academically qualified workers, junior management, supervisor, foreman and superintendents	1055	2236	3291
Specialist or Middle management	0	1	1
Technical worker or junior Management	0	3	3
Top Management	5	0	5
Unskilled and defined decision making	67	32	99
Grand Total	2023	3774	5797

BENEFICIARIES TRAINED PER OCCUPATIONAL LEVEL FY 2016/2017

COMPLIANCE, CONFERENCES & FUNCTIONAL TRAINING EMPLOYED – 18.1	Female Total	Male Total	Grand Total
OCCUPATIONAL LEVEL			
Professional qualified and experienced specialist and mid-management	152	152	304
Semiskilled and discretionary decision making	207	494	701
Senior Management	18	12	30
Skilled technical ad academically qualified workers, junior management, supervisor, foreman and superintendents	358	596	954
Specialist or Middle management	0	1	1
Technical worker or junior Management	0	3	3
Top Management	3	0	3
Unskilled and defined decision making	22	19	41
Grand Total	760	1277	2037

SETA CO-FUNDED LEARNING PROJECTS

The organisation partners with the EWSETA in the provision of skills development projects such as Learnerships, Apprenticeships, Adult Education & Training, Nated Courses, Section 26D for internal (employed -18.1) and external (unemployed -18.2) through

co-funding in order to support the National Skills Development Strategy. These projects are targeted to build feeder pipelines that will enable the supply of key skills in critical positions and to address historical challenges.

BENEFICIARIES HEAD COUNT

LEARNING PROJECTS – UNEMPLOYED 18.2	Female Total	Male Total	Grand Total
Graduate in Training/Experiential Students	60	53	113
Water Purification Learnership	7	7	14
Sanitation Learnership	6	4	10
Grand Total	73	64	137

LEADERSHIP DEVELOPMENT PROGRAMMES

Rand Water believes in developing leaders in a systematic manner and introduced the Leadership Ladder of Learning. Leadership development is integrated with strategic workforce planning, the capability assessment process and has integration into employee engagement. This approach serves to channel

and build current and future leaders through a process which begins at junior management/supervisory level and progresses the employee along a learning trajectory which builds on leadership and managerial skills. It also addresses current and future needs in line with organisational growth.

BENEFICIARIES - HEADCOUNT			
LEADERSHIP DEVELOPMENT – EMPLOYED 18.1	Female Total	Male Total	Grand Total
OCCUPATIONAL LEVEL			
Future leaders Development Programme (FLDP)	13	11	24
Management Development Programme (MDP)	14	6	20
New Managers Programme (NMP)	18	12	30
Women as Leaders (WAL)	54	0	54
Coaching and Mentoring Workshop	3	0	3
Expert Negotiator	4	6	10
Ontological Coaching	1	3	4
Masters of Business Administration (MBA)	3	4	7
Masters of Business Leadership (MBL)	1	1	2
Post Graduate Diploma in Business Administration (PDBA)	2	1	3
Grand Total	113	44	157

BURSARIES

Rand Water provides bursaries to both internal (employed -18.1) and external (unemployed – 18.2) bursars. The internal bursaries are awarded to permanent employees of Rand Water with the aim to enhance business productivity, promote individual career aspirations and building a high performance

culture. External bursaries are awarded to those individual who aspire to pursue studies in line with the field of Rand Water's core and/or support business, with the aim to build a pipeline of suitably qualified candidates for Rand Water

BENEFICIARIES HEAD COUNT			
BURSARIES	Female Total	Male Total	Grand Total
Internal Bursaries – 18.1 (Employed)	84	70	154
External Bursaries – 18.2 (Unemployed)	27	21	48
Grand Total	111	91	202

GIVING BACK TO THE COMMUNITY

Giving back to the community is a focus area within Capacity Building which is aimed at strengthening and maximizes educational support programmes for unemployed graduates and providing skills development to unemployed youth and existing employees. This is undertaken through learnerships, apprenticeships, graduate in training/ internships, external bursaries etc. One of the initiatives driven under the stream is Career Expo / High School Drive – which serves to create an information sharing platform about Rand Water career opportunities and to educate about water sector careers. The following are some of the career expo’s / high school drives that Rand Water participated on in collaboration with internal key stakeholders.

- Alexandra Career Expo
- Rand Easter Show Expo
- Katlehong Career Expo
- Gauteng Provincial Government (Boksburg) Career expo

WATER TREATMENT TECHNOLOGY

Water Technology Training (WTT), under Capacity Building is currently overseeing the entire Rand Water Blue Drop Training profile for Process Controllers (PCs) and Supervisors. This is in accordance with the revised Regulation 17 of the Water Service Act / Regulation 813, outlining that there shall be no person operating a water treatment works without a Process Controller license. One of the nine criteria for Blue Drop Award is Process Controller licensing and an individual must be rightfully classified as per site requirement as mandated by the Department of Water & Sanitation. In order to meet this requirement, Process Controllers should be appropriately qualified coupled with relevant years of experience. WTT also initiated in collaboration with Bulk Sanitation, the development of district aides and their supervisors through a Water and Wastewater Reticulation Services learnership.

BENEFICIARIES HEAD COUNT

WTT BLUEDROP LEARNERSHIPS – EMPLOYED 18.1	Female Total	Male Total	Grand Total
National Certificate: Water and Wastewater Reticulation Services 60169 – NQF L2	3	22	25
National Certificate: Water and Wastewater Treatment Process Operations 58951 – NQF L2	11	15	26
Further Education and Training Certificate: Water Purification Processes 48910 – NQF L4	21	77	98
National Certificate: Water and Wastewater Process Control – NQF L3	15	40	55
Grand Total	50	154	204

ZWARTKOPJES TRAINING CENTRE

The Zwartkopjes Training Centre is used to host the Rand Water learnerships as well as classroom facilitated training. During the financial year ending 30th June 2017, the Centre hosted approximately 689 training interventions, varying from Leadership development, Legislative, Learnerships for employed and unemployed, Soft Skills Programs, Workshops and meetings, for

various sections from business. The training interventions duration ranges from 1 day to 12 months and the number of learners per intervention range from 10 to 45, respectively. The Centre saved the organisation a substantial amount of money by utilizing internal qualified facilitators and the Centre itself instead of external venues.

CAPABILITY ASSESSMENTS

The Capability and Leadership Assessment process was finalized for the targeted audience in the organisation. This process also directed and had an influence in the re-engineering process for Supply Chain Management Division in the execution of turnaround strategy. The organisation now has a view on the level of potential and leadership capability that exists and can therefore as that level of comfort in the pool of potential successors. Given the organisational strategy Talent Management plays a crucial role in building a leadership pipeline that is aligned to those key competencies that are required in enabling and translating organisation strategy.

TECHNICAL CAREER PATH PROMOTIONS

In order to drive progression and mobility within the core areas of the business the critical workforce segmentation exercise was the tool that was utilized which is informed by Rand Water's Value Chain. Therefore the technical career path process is only limited to the minority as a means of driving retention. This process also drives the professionalization of the core skills within the business as the leading Water utility in the continent. The partnerships created with registration and voluntary bodies are too ensure that we drive the level of quality of skills that is aligned to best fit technology and the quality of water that Rand Water supplies. This is also to ensure that we are aligned to international standards and operate at a level that is of competitive advantage. We have thus far within the current financial year we promoted 28 as part of the TCP process. The organisation has thus seen a high percentage of professional registration with the implementation of the Technical Career Path Framework.

SUCCESSION MANAGEMENT AND TALENT MODELING

The talent modeling process is an integrated model looking at various levels of capability with the view of sustaining organisational knowledge. The talent management division is therefore responsible in identifying where the talent risks and gaps lie in the organisation. In mitigating those talent risks that have been identified, talent management has the sole

responsibility of building sufficient pool of potential successors by making deliberate efforts in streamlining training in line with future organisational needs. The talent modelling process enables the alignment of capacity building initiatives and as an influence on driving internal recruitment in order to realize the returns on training investments.

PERFORMANCE MANAGEMENT

The collective performance of all employees contributes towards the achievement of the strategic objectives to foster and sustain a "High Performance Culture". The performance management process is on-going and objectives of the organisation are cascaded down to all employees thereby ensuring that all individual efforts of the employees are channelled towards this goal.

The outputs of the process, which is fully operational at all sites, feeds into other human resources processes.

EMPLOYEE WELLNESS

Rand Water recognizes that employees are its biggest asset and established Employee Wellness Programmes with the intention to assist employees in becoming and remaining healthy, productive and committed to the achievement of set targets and objectives. Employee costs rank amongst the highest cost for many organisations, and these costs can be exacerbated by high absenteeism and related costs such as the loss of productivity. As a result, the Rand Water provides counselling and referral services, health screening and financial health information and conducts wellness weeks which are a platform for information sharing with regards to health matters. This is in line with recognizing that employees should be provided with holistic wellness services in line with the corporate value of caring.

Chronic non-communicable diseases remain the leading cause of death in the country and these are as a result of unhealthy lifestyles, poor nutrition, tobacco use, and frequent alcohol consumption to name a few. Employees

are encouraged to lead active lifestyles and provide for memberships to sporting codes, participation in sports competitions and access to gym and sporting facilities.

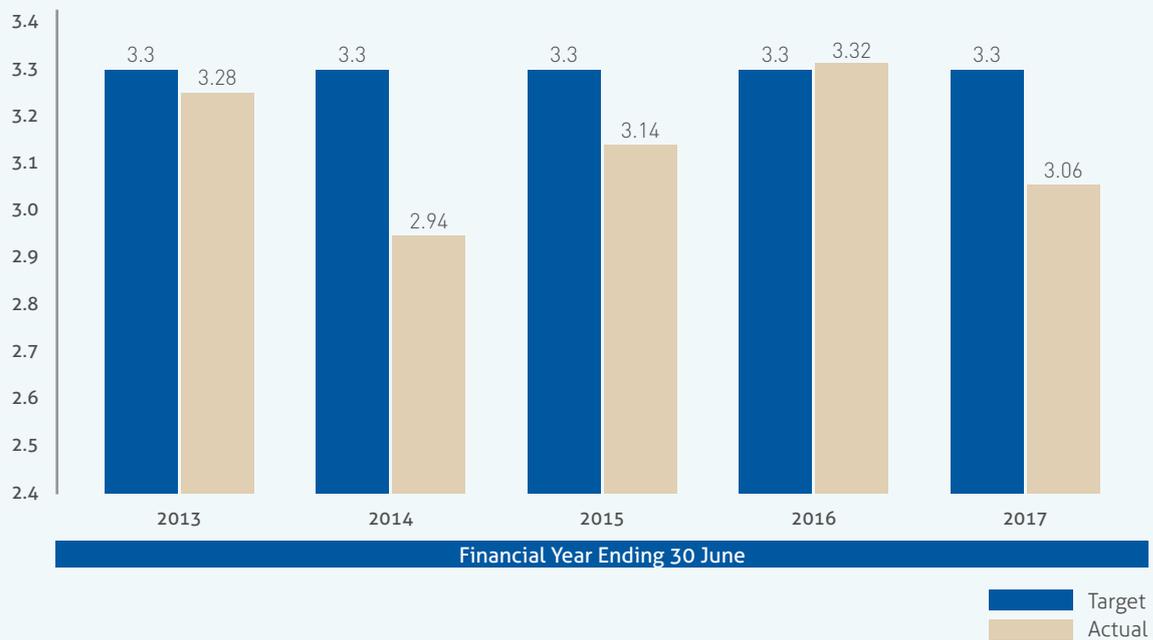
ABSENTEEISM MANAGEMENT

Absenteeism impacts negatively on the business and is therefore one of the key drivers for the Employee Wellness Programme. Absenteeism management is monitored

monthly as one of the generic Key Performance Indicators that Rand Water adopted to measure its performance. In the past 6 years, the target was set at 3.3%. It is the 5th year that the KPI is cascaded down to individual employee level as we believe that attendance is everyone's responsibility in the workplace.

The table below indicates the performance for the past 5 years including the financial year ending 30th June 2017.

ABSENTEEISM PERFORMANCE TABLE

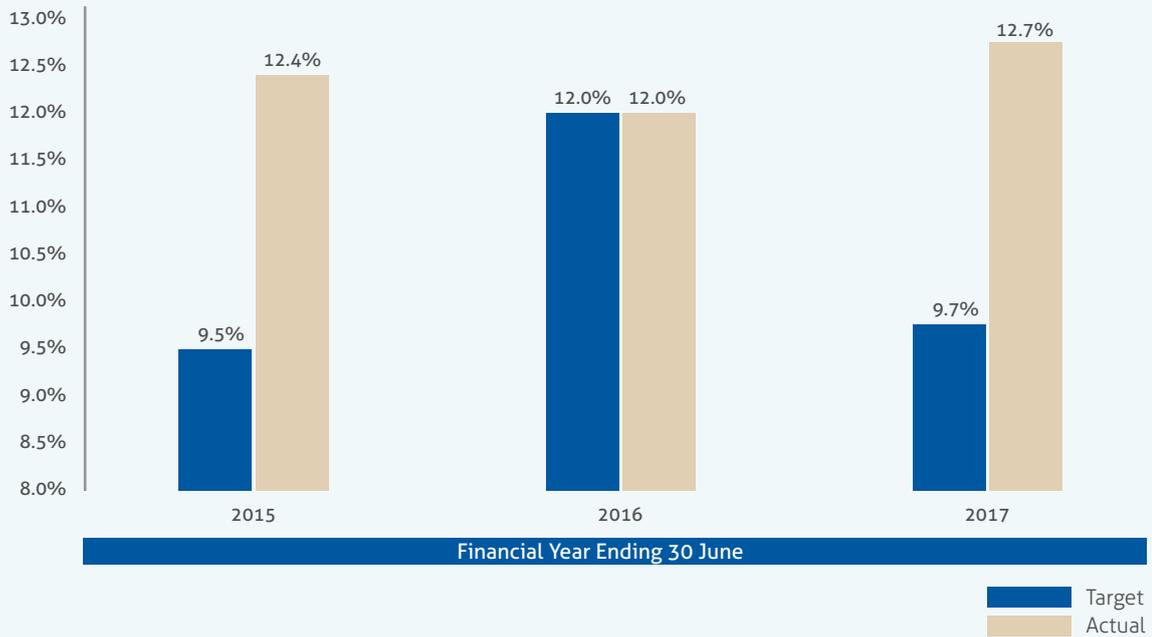


HIV COUNSELLING AND TESTING (HCT) PROGRAMME

Rand Water undertakes the HIV Counselling and Testing (HCT) campaign annually as part of its wellness calendar to all its sites. HCT was undertaken at Rand Water Mpumalanga sites for the first time in 2016. This round of testing provided the organisation with a base foundation and indicated the prevalence of HIV at these sites. These campaigns have intensified in order to maintain the momentum of ensuring that testing remains a regular part of health-seeking behaviour.

The organisation continuously monitors the prevalence and impact of chronic diseases and attempts to mitigate the impact of these diseases impacts through information, education and undertaking interventions such as the HCT programme. A total number of 1 215 tested during the Wellness days and below table provides the HCT results.

COMPARISON OF HCT RESULTS



- Rand Water prevalence rate is below the National prevalence
- An increasing number of employees are showing commitment to knowing their status
- Referral to relevant facilities is made available for employees who test positive for the first time for necessary care, support and further treatment.

EMPLOYEE ASSISTANCE INTERVENTIONS

Over and above the health screening wellness days held at all sites, dedicated Men's health and Women's health initiatives held during the financial year ending 30th June 2017 to create awareness on male-specific and female-specific health and psychosocial issues. These interventions proved to be extremely positive and the participation rate and feedback was encouraging.

SPORTS AND PHYSICAL FITNESS

Rand Water Sport and Recreation memberships have grown significantly in the various sporting codes available within the organisation. An increased number of employees have shown particular interest in athletics and aerobics across all sites.

In athletics, there was an increase in the number of employees affiliating and participating in monthly races as per the club's calendar. The Rand Water Athletic club took part in the Old Mutual Two Oceans Marathon, where we had more female runners than in the previous year. At this year's Comrades Marathon, two Rand Water runners, Mr Vincent Mello and Mr William Maduna, managed to complete the gruelling race of 90km in less than 9 hours which resulted in them receiving a Bill Rowan medal.

JP MORGAN CORPORATE RACE



Once again, Rand Water ranked in the top 10 at the JP Morgan Corporate Race.

EMPLOYEE RELATIONS

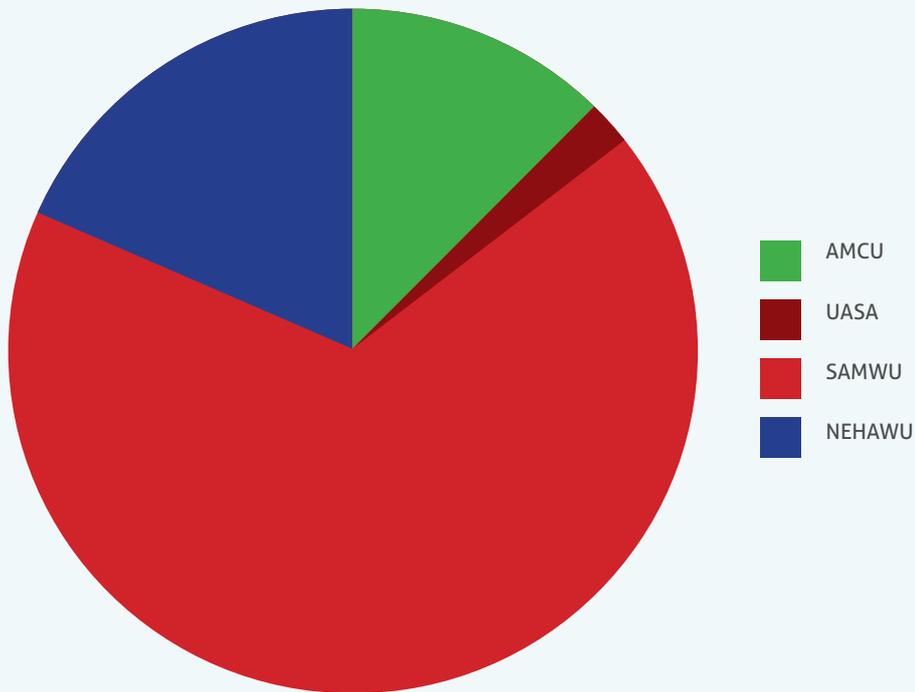
Rand Water is fully democratised workplace. It has well established participative structures and orderly collective bargaining processes. Participative structures deal with matters of information sharing and consultation. Negotiations take place in a different forum. Rand water is highly unionised:

- 90.4% of the bargaining unit is unionised;
- 81% of the total workforce belong to unions;
- 84.5% in the workplace are unionised.

There are four (04) unions in Rand Water, namely The Union UASA; South African Municipal Workers Union (SAMWU); Association of Mine workers and Construction Union (AMCU); and National Education, Health and Allied Workers Union (NEHAWU). Three (03) of these union are members of Amanzi Bargaining Council, as they have members who are equal or above ten per cent (10%) in the industry. They are UASA, SAMWU and NEHAWU. Two (02) of these unions are recognised to negotiate on behalf of employees in the bargaining unit, namely UASA and SAMWU.



UNION MEMBERSHIP AS A PERCENTAGE OF TOTAL WORKFORCE



EMPLOYMENT EQUITY

Rand Water is committed to transformation. Gender mainstreaming unit is in place. A program to expose girl children to world of work was started, appointment of females is a priority and Rand Water has the highest number of people with disabilities in the country (3.8%).

Rand Water views employment equity as a strategic priority for every year, and is committed to ensuring implementation of the Employment Equity Act ('the Act'). Rand Water ensured that employment equity is aligned to the organisation's strategic objectives and is integrally linked to the human resource development strategy.

For the year under review, the Employment Equity Unit not only focused on the achievement of female employment targets, but also ensured that disability equity management awareness sessions, as well as diversity management sessions take place.

For the year under review, Rand Water managed to attain a target of 61% female recruitment at M-Q bands, represented by 42 female appointments out of a total of 68. The current female population at the above band-range is 43%, which is still above the female economically active population of the country.



EMPLOYMENT EQUITY STATUS (M-Q)

Band	Occupational Level	Males				Females				Total	FEMALE	ACI	F%
		African	Col	Indian	White	African	Col	Indian	White				
Q	Top Management	4	0	0	0	2	1	0	0	7	3	7	42.85
P - Q	Senior Management	27	2	12	7	16	2	2	1	69	21	61	30.43
O	Specialist or Middle management	92	6	12	26	75	4	11	11	237	101	200	42.61
N	Specialist or Middle management	94	10	13	33	101	8	8	17	284	134	234	47.18
M	Technical worker or Junior management	133	5	11	41	145	7	7	23	372	182	308	48.92
Total M-Q	total management	350	23	44	123	312	21	29	58	969	420	788	43.34

The appointment rate of females at management level is a firm indication of Rand Water’s commitment to achieving gender equality, women advancement and empowerment.

DISABILITY AWARENESS SESSIONS

The organisation embarked on disability awareness campaigns across the organisation. The aim of the project was to get able-bodied employees to role-play various disabilities in order to be aware of the needs and challenges of disabled employees.

DIVERSITY MANAGEMENT SESSIONS

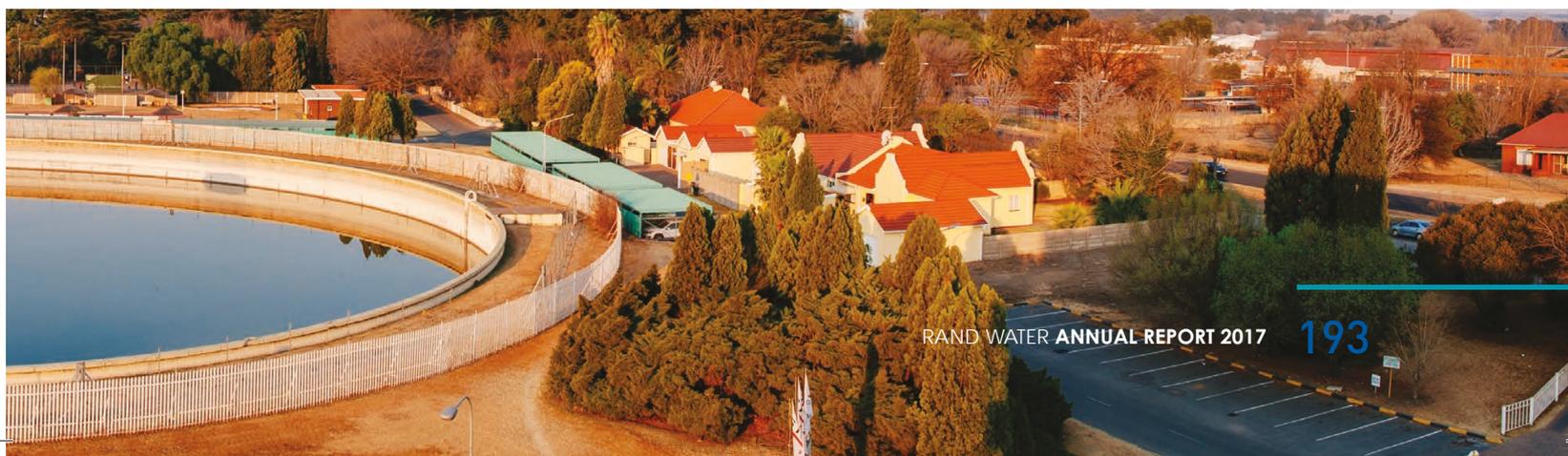
Whilst diversity management sessions are conducted continuously across the entire organisation, this year we had the first sessions conducted at Rand Water Mpumalanga, and the

reception of these sessions was remarkable. Approximately 40% of the total Mpumalanga workforce participated in these sessions.

TECHNOGIRL PROGRAMME

Rand Water continues to support the TechnoGirl Programme where high school girls are exposed to the work environment with the aim of encouraging them to consider careers in technical fields. The girls are provided mentors for the period and they job shadow these selected individuals who are specialists in their fields.

Rand Water engaged sixty (60) female learners from grade nine (09) to be part of this initiative.



PARTICIPATION CO-OPERATION AND PARTNERSHIP STRUCTURES

Rand Water prides itself in its espousal of the highly acclaimed Participation Co-operation and Partnership (PCP) structures and processes since its establishment in 1995.

The participative management system is seen as one of the enablers of the organisation, bringing into effect collaborative relationships between Management and the recognised trade unions and contributing towards a stable workplace environment.

Grounded on the principles of joint problem-solving, consultation, fairness, equity, empowerment, accountability, transparency and openness between management and unions, the Stakeholders' Forum over the years jointly reached agreement on numerous policies and matters which affect the working lives of employees at Rand Water.

For the year under review, the Stakeholders' Forum successfully reached consensus on the following:

- the Ziyagezana Excellence Awards Guidelines
- the Constitution of the Stakeholders' Forum, and
- the restructuring of areas within Strategic Human Capital, Group Company Secretariat, Group Finance and Group Shared Services.

ZIYAGEZANA EXCELLENCE AWARDS

Rand Water annually recognises its employees for excellence in performance against the achievement of its strategic objectives, and behaviour which is underpinned by the organisational values. 2016 was no exception, with the organisation hosting its 14th annual Ziyagezana Excellence Awards event. This recognition is based on peer-to-peer recognition and is awarded to employees who have distinguished themselves as being among the finest at Rand Water.

The prestigious black-tie event, themed "007 was held on the 2nd December 2016. Nominated employees across all sites and occupational levels of the organisation were recognised in the various categories.

The success of the event can undoubtedly be attributed to the positive and unwavering dedication and support from Board, Management, employees and Unions alike.

The following individuals and team awards were celebrated as the final corporate winners in the various categories:

Category	Winner	Representing
Employee of the Year	James Parsons	Combined Smaller Sites
Innovator of the Year	Roelof Fouchee	Zuikerbosch
Mover and Shaker of the Year	Shakera Arendze	Combined Smaller Sites
Team of the Year	Zuikerbosch Fire Team	Zuikerbosch
Boss of the Year	Anil Harrypurshad	Vereeniging
Wellness Champion of the Year	Annah Chabeli	Zuikerbosch
Values Champion of the Year	Musa Mkhathswa	Mpumalanga
Chief Executive's Award	Rand Water Academy	War-on-Leaks Project
Special Recognition Award	Implementing Agents	Audit Preparation Team

RAND WATER WOMEN'S FORUM

The Women's Forum is a strategic vehicle that seeks to ensure that women at all levels get involved in participative engagement that further advances the culture of caring, developing and empowering of women in their respective facets of work.

For the year under review, the Women's Forum conducted road shows at the various main Rand Water Sites communicating its purpose, key elements of its constitution and strategic initiatives to the female employees.

Furthermore, the Forum in partnership with the Capacity Building Department exposed thirty (30) women from across the organisation to a pilot 'Women in Leadership and Empowerment' programme. In addition, seven (7) female employees successfully achieved a globally-recognised certification as Leadership (for women) Facilitators.

With the leadership and women empowerment themes being at the helm of its key initiatives, the Women's Forum invited female employees to an event with the female Portfolio Heads of the organisation. The event kicked-off with a structured panel discussion "talk-show style", which aimed to explore how the most senior women leaders (the Portfolio Heads) build leadership skills and leverage them for success in the personal and professional areas of their lives.

ORGANISATIONAL DEVELOPMENT AND DESIGN

The Organisational Development and Design (ODD) department continued to provide its services and support to the organisation on the journey to become more efficient and have the ability to re-organize the business as the new mandates are introduced.

The organisation saw large scale change through the Back to Basic Restructuring programme in which the ODD department has been at the forefront of the process. The Productivity programme also continues to strive to optimize business efficiency and output.

BUSINESS REENGINEERING

Through review of the business model the organisation felt it necessary to undertake the Back to Basics restructuring project through business process updates / review. The review of the organisational structure follows a phased approach based on scale and complexity of the changes required.

RESTRUCTURING CHANGE MANAGEMENT ACTIVITIES

The following change management steps were created for organisational change involving



Back-to-Basics Restructuring activities. The steps are aligned with information presented by ODD. The following represents activities accomplished under change management processes.

- Assessment of readiness for change across impacted Portfolio
- Assisted teams to establish a sense of urgency
- Assembled restructuring task teams
- Created implementation timeline
- Dissemination of change
- Communication

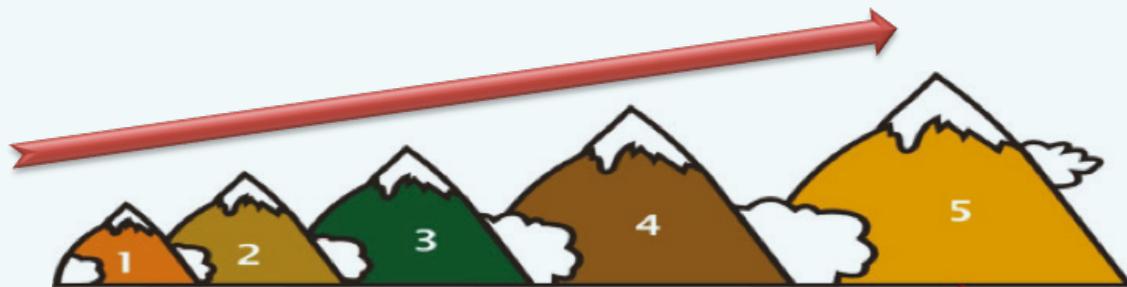
PRODUCTIVITY PROGRAMME

Productivity Programme is at a point where ODD is executing a Sustainability Plan to help business units regularly review their Productivity measures and providing coaching

where necessary for teams that are having any difficulties regarding their Mini business Units (MBU).

- MBU reviews were conducted with the team visiting the MBU teams across all sites. The teams are scored using the 20 judgment calls for in the Accelerated Productivity Programme.
- Depending on the team's final score they are given an MBU Performance rating and the team is left with an MBU report card highlighting their strengths and pointing out the MBU's weaknesses in order to help the team improve and ready their MBU for the next review. At the last review, Rand Water as an organisation was sitting on a Level 3 out of 5 on the World Class MBU measuring scale. The target is to get the organisation as a whole to level 5.

OPERATING PRACTICE LEVELS TOWARDS WORLD CLASS



- MBU's who achieve a high rating are highlighted in the Khulisa newsletter where MBU teams can show the rest of the organisation how through Productivity and team work they are fostering a high performance culture.

HUMAN RESOURCES OPERATIONS

In line with market trends to position Rand Water as a top employer and one of the leading brands in the water sector, the initiatives identified through the Strategic

Human Capital's Portfolio paid off with Rand Water receiving the Employer of Choice Award – Public Sector Category at the Careers24 Future of HR Awards held in July 2016.

EMPLOYER OF CHOICE AWARD



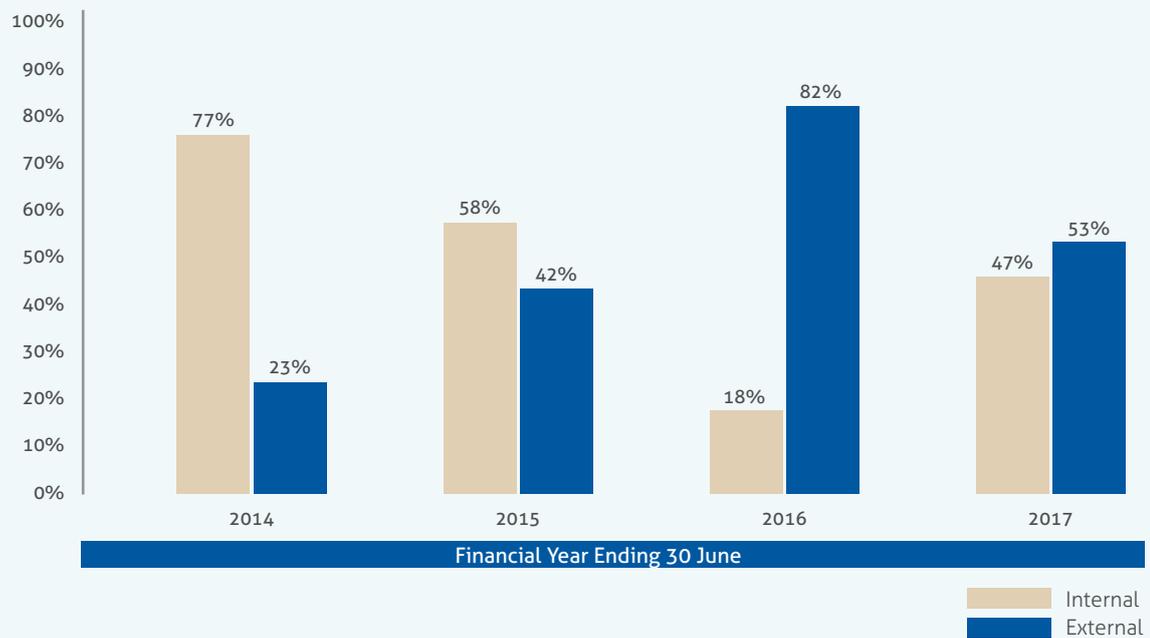
Employees and children around Vereeniging attended the Cleaning campaign and awareness session conducted in conjunction with Water Wise during October 2016 at Vereeniging Pumping Station.

CLEANING CAMPAIGN AND AWARENESS SESSION



A total of 533 appointments have been made across the organisation as a way of replenishing the resource base. The patterns for recruitment (constrained by the moratorium) and staff turn-over trends based on exits across the organisation is depicted below.

GENERAL APPOINTMENT TRENDS



- In the financial year ending 30th June 2017, a total of 100% ACI and 85.7% females were employed at Zuikerbosch Water Treatment Plant.
- The Zuikerbosch Community Outreach initiative was held at the Panfontein Intermediate School on the 18th July 2017 in conjunction with the Water Wise team.

ZUIKERBOSCH COMMUNITY OUTREACH INITIATIVE



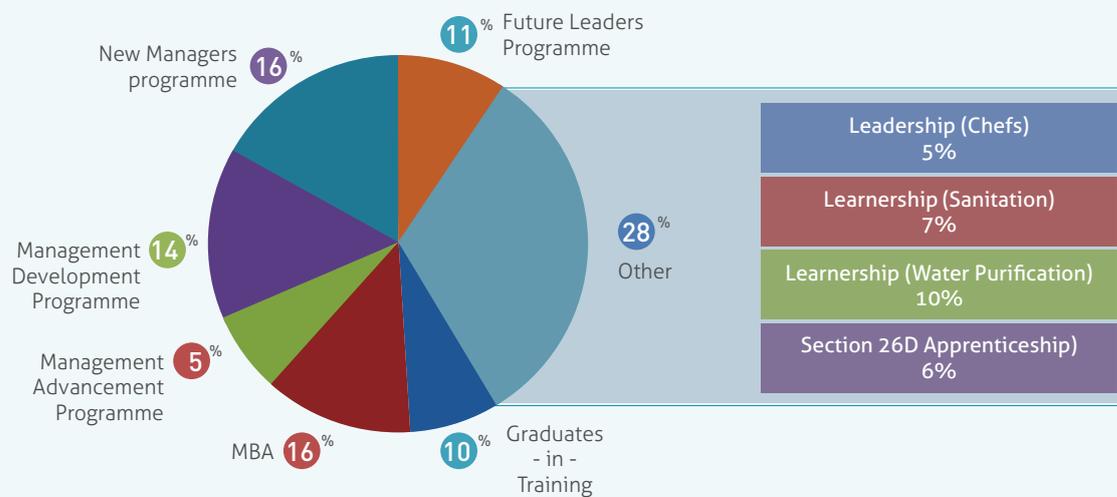
- Two hundred and twenty nine (229) employees attended the Zuikerbosch Annual World Aids day function took place on 5th December 2016.

ZUIKERBOSCH ANNUAL WORLD AIDS DAY



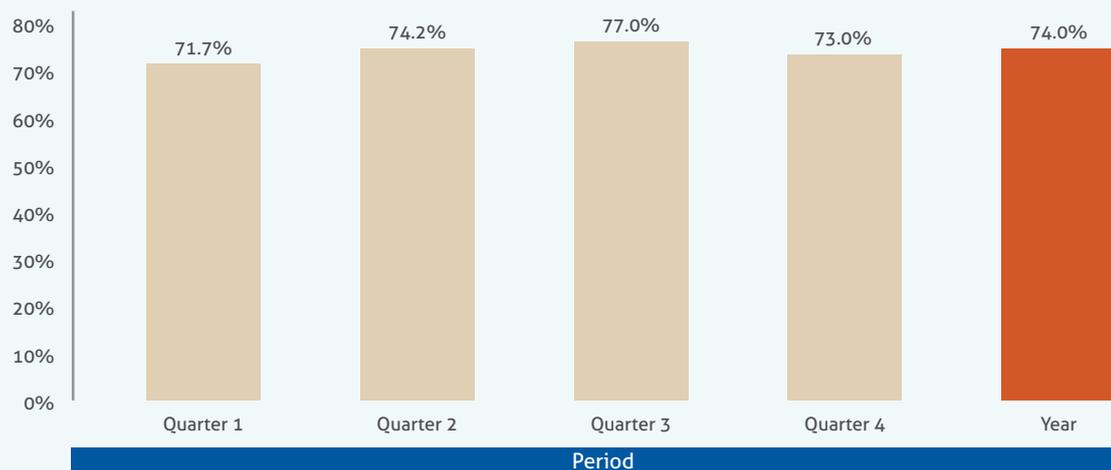
- Rand Water Young Professionals held winter classes for the grade 7 learners of Panfontein as part of giving back to surrounding communities during the Youth Month of June 2017 as part of the holiday programme.
- Fifty four (54) female employees based at Rietvlei participated in the Women Leadership Programme and the participation spread of Rietvlei based female employees in the various programmes were represented as follows:

WOMEN LEADERSHIP PROGRAMME



- The calls logged on the HR Service Help Desk during the year under review fluctuated due to the impact by major organisational events as demonstrated below:

HR SERVICE HELP DESK CALLS RESOLVED WITHIN TURNAROUND TIMES



RAND WATER ACADEMY



The Rand Water Academy serves as a service provider to roll out training on behalf of various entities and municipalities which will ultimately benefit the water sector at large.

The Rand Water Academy responds with various solutions to address the critical resource challenges faced in the water sector, through the five key concepts, namely:

- Centre of Competence
- Centre of Excellence
- Research and Development
- Professional Exchange Hub
- Water and Sanitations Solutions Unit

The Academy implements various projects and services which are explained in the sections below.

NATIONAL TREASURY GRADUATE INTERNSHIP PROGRAMME

Rand Water as the largest water utility clearly articulated its intent to play a role in skills and capacity development in the sector and thus embarked on a Graduate Internship Program in collaboration with Govan Mbeki Local Municipality, funded under the auspices of National Treasury to assist municipalities with capacity and infrastructure- related skills. The programme ran two projects to-date;

- Water and Waste Water program with 136 graduates (since inception in 2012), and
- The Built Environment program with 80 graduates (2017).

The programme’s mandate is to train and develop unemployed graduates initially from Gauteng and Mpumalanga and currently expanded to all provinces to generate a pipeline of skills for local Water Service Authorities. The Programme is geared towards professional development and registration of the candidates in the respective disciplines as follows:

GRADUATES REGISTERED IN THE PROGRAMME

PROJECT 1: WATER AND WASTEWATER

The Water and Wastewater Programme commenced in 2012 with three (3) graduate intakes totalling 136. It comprised of 30 Engineers (Electrical, Mechanical, Civil and Chemical); 36 Apprentices; 30 Scientists (Water Quality Generalists) and 40 Process Controllers. Out of 136 graduates, 125 of them have exited the programme successfully.

Twenty (20) graduates registered in a programme during financial year under review; six (06) graduates exited the programme and three (03) have since resigned. A total of six (06) Artisans exited the programme in December 2016 after completing their training with Rand Water and obtaining their Red Seal Certificates.

ARTISANS CERTIFICATION CEREMONY - 8TH DECEMBER 2017



This is a key success for Rand Water Academy and a meaningful contribution to skills development in the water and sanitation sector and the country. It is anticipated that the Artisans will be absorbed by municipalities and the sector to contribute to the development and maintenance of infrastructure which is one of the causes of component failure and regular disruptions in service delivery within local Water Service Authorities

PROJECT 2: BUILT ENVIRONMENT

Rand Water Academy secured another project (Built Environment) to implement due to the successful implementation of the first (Water and Wastewater) Project, and its positive results yielded in the employment and professionalization of the graduates.

The Programme commenced in June 2017 with 80 graduates comprising of 18 Engineers (Civil, Electrical and Mechanical); 18 Town Planners; 8 Quantity Surveyors; 9 Construction Project Management; 7 Natural science and 11 Geo- Information Scientists for the duration of 36 months.

RURAL DEVELOPMENT GRADUATE INTERNSHIP PROGRAMME

Rand Water identified eight (8) key strategic drivers towards its 2030 vision. Rural development is one of the key strategic drivers to contribute to its growth strategy.

The Rural Development Graduate Internship Programme is one of the platforms identified to capacitate young graduates with skills and equip individuals from the rural areas with workplace competencies, provide them with job opportunities and enable them to participate in the economic and social life of their respective areas. The Programme commenced in 2014 with three (3) graduate intakes totaling forty (40). It comprised of Engineers (Electrical, Mechanical, and Chemical); Finance; Science, Human Resource, Law, Accounting, Information Technology, and Process Controllers. Thirty two (32) graduates enrolled in a programme during the financial year ending 30th June 2017; and three (3) of them have since resigned.

INTERNATIONAL PROJECT: SETTING UP OF FIPAG ACADEMY IN MOZAMBIQUE

This is a four year project and is implemented in collaboration with a consortium of partners. The overall deliverable is to set up FIPAG Academy for Professional Development in Water and Sanitation. The role of the Rand Water Academy in this project is to provide support to the milestones related to the setting up FIPAG Academy; advising in the set-up of training facilities and training equipment; and also assist in the development of curricula for vocational training. UNESCO extended Rand Waters Academy contract for another year (October 2017) to support refurbishment of the FIPAG Academy.

IMPLEMENTATION OF STRUCTURAL BEAMS



To date, construction is in a finalization stage and the launch of the FIPAG Academy is scheduled for September 2017. The FIPAG Academy created the following short courses which will be offered during the September 2017.

- Water Analyses
- Dimensioning of Hydraulic Water Systems
- Water Distribution Systems Design
- Mastering EPANET Computer Software
- Maintenance Management
- Commercial Management

WAR ON LEAKS PROGRAMME

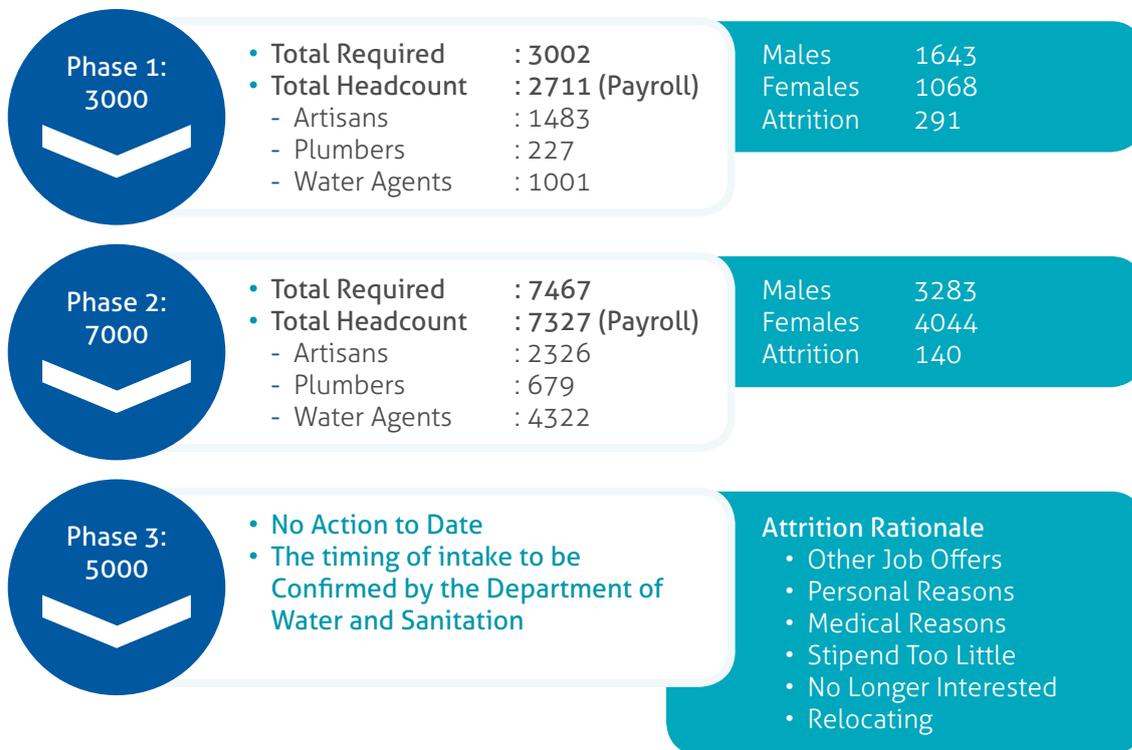
The War on Leaks (WOL) programme is a presidential initiative that is aimed at addressing the water losses in South Africa. This programme was initiated on 28th April 2015 where Rand Water and the Energy and Water Sector Education and Training Authority (EWSETA) were mandated as the programme implementing agent and training implementing agent respectively. The WOL programme mandate is to recruit, train, and develop 15 000 unemployed youth across

various municipalities throughout the country and equip them with skills across three (3) disciplines i.e. Plumbing, Artisans, and Water Agents. The artisan disciplines will comprise of Welders, Electrician, Plumbers, Instrumentation, and Fitter & Turner discipline.

The target trainee' recruitment training will be achieved through project implementation in three phases over a period of 3 – 5 years and will be culminating in 2020 with the following strategic objectives:

- To train & develop 15000 unemployed youth citizens, comprising of Water Agents, Artisans and Plumbers.
- To contribute to the improvement of water conservation at community level, in terms of the reduction of water losses.
- To embed a water conservation culture and advocacy across all municipalities, communities and households through stakeholder & communication campaigns.

The programme currently initially recruited a total of 10 0469 trainees for the first two programme phases.



TOTAL WOL TRAINEE HEADCOUNT = 10 038

EXTERNAL SERVICES

The Randwest Local Municipality (previously called Westonaria Local municipality) project forms part of the National Treasury Infrastructure Skills development Grant. Rand Water Academy facilitated experiential training for 4 engineering graduates for the Westonaria Local Municipality over a 13 month period. Rand Water provided graduates with the necessary work place experience required for professional registration. The project ended in February 2017.

ACCREDITATION

Rand Water Academy's accreditation standing is an assurance that graduates obtain solid training and work exposure, which are ultimately capable of leading the way in innovation and emerging technology. It moreover validates that the Academy's programmes meet exceptional standards necessary to produce graduates who are ready to enter their professions and have access to enhanced opportunities in the sector.

CURRENT ACCREDITATION STATUS

RWA Sites:

Both our offices in Rand Water Zuikerbosch and Zwartkopjies are accredited under Rand Water by the Energy and Water Sector Education and Training Authority (EWSETA).

Registered Assessors:

RWA Technical Trainers have been endorsed by EWSeta as expertise for the unit standards and/or skills programmes offered within the RWA.

Training Material

The RWA Technical Section develops and procures training material to facilitate water and wastewater training to both internal and external customers. The material is verified by the relevant Seta, prior use to uphold compliance.

Future Accreditation objectives are as follows:



PARTNERSHIPS

The municipalities and state entity that Rand Water Academy partnered with in the Graduate Internship Programme are:

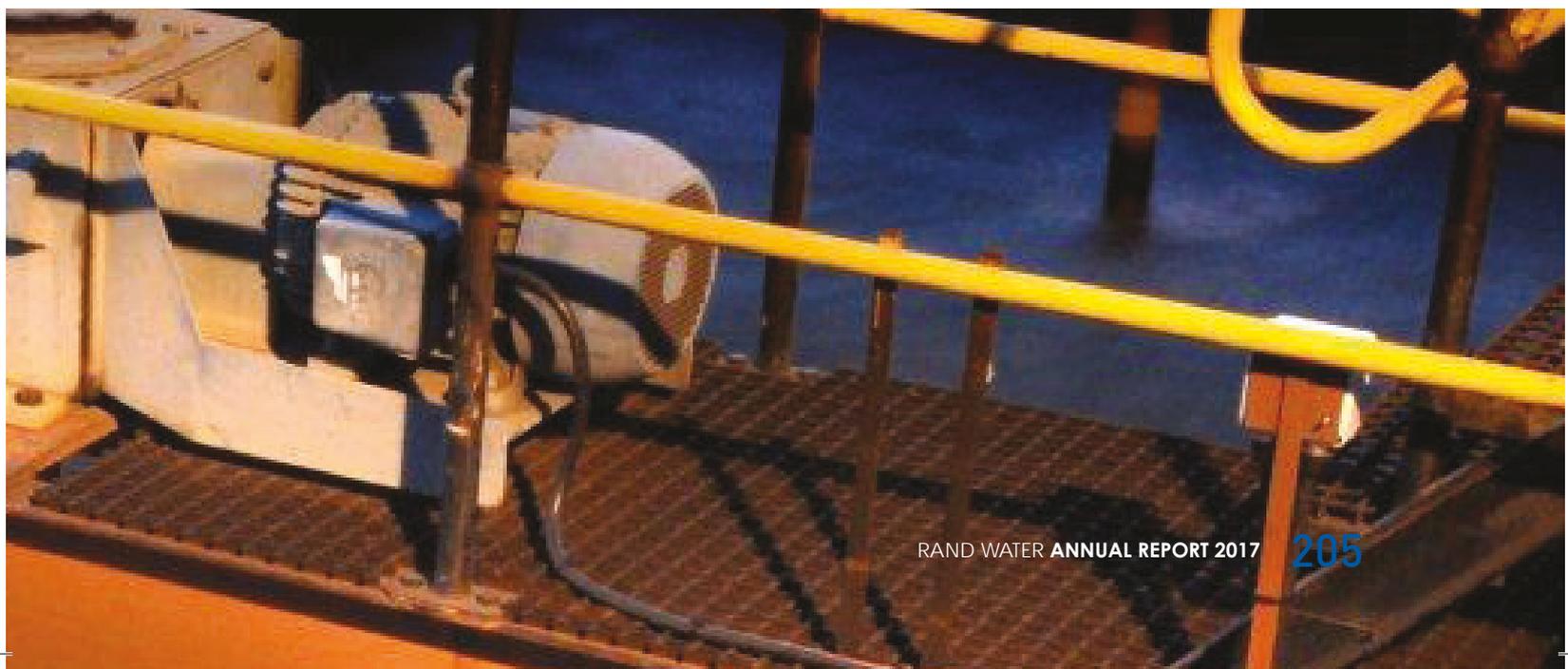
- City of Tshwane
- East Rand Water Care Company (ERWAT)
- Emalahleni Local Municipality
- Govan Mbeki Municipality
- Thembisile Hani Local Municipality

Rand Water Academy is in the process of collaborating with various other government entities to increase the strategic relationships by entering into Memorandums of Understanding.

OTHER SERVICE OFFERED BY RAND WATER ACADEMY

The Rand Water Academy employed professional and qualified Technical Trainers who specializes in various fields i.e. Wastewater treatment, Water treatment, Laboratories, Research and Development, and Blue and Green Drop Systems. The team is equipped with competent training practitioners with the ability to identify training need; strategize, develop and facilitate in closing the skills gap.

To date the Academy trained both internally (i.e. Rand Water) and externally in order to address the needs of training within the water sector.



TRAINING INTERVENTIONS



Specialized Report Writing Training for Professionals: Report writing skills training is aimed at developing professionals in various writing competencies. This training is customized based on the needs of the requestor, based on skills gaps identified. Amongst other writing interventions were training on aspects such as "How to write a good Abstract" and compiling a "Managerial Report" is specialized training, which is customized accordingly.

Report Writing Skills: The Contact Centre staff members of the War on Leaks programme, receive queries from trainees across the

country. These queries are analyzed and explained into a report format; thus it is important for the staff members working in the Contact Centre to understand the basic principles of report writing and how to compile an informative report. A total number of 9 participants were trained over a period of two days; participants had to compile a management report to demonstrate their knowledge gain in report writing using the managerial report format. Managerial reports were submitted for assessment and review; where-after feedback was given to each individual.

ABSTRACT WRITING SKILLS



Abstract Writing Skills: The Rand Water Young Professionals requested for Abstract Writing in response to their need to compile presentations (oral and article format) for various conferences. A total number of 27 participants (calculated according to the evaluation forms) attended the Abstract Writing session that was held at Analytical Services, Scientific Services in Vereeniging. This session was rolled out in the form a Workshop which allowed participants to actively participate in all activities.

Presentation Skills: Presentation skills are characterized as specialized training, which is customized according the needs of the requestor based on specific skills required by participants. The Rand Water Young Professionals requested for presentation skills in response to their need to compile presentations (oral and article format) for various conferences. This session was rolled out in the form a Workshop which allowed participants to actively participate in all activities.



RAND WATER FOUNDATION

Rand Water recognises the importance of ploughing back to communities within its service area.

MANDATE

The Foundation is mandated to:

- Promote the delivery of water related services to communities in the areas falling within and outside Rand Water's area of supply;
- Coordinate, administer and manage Rand Water's Corporate Social Investment (CSI) resources by undertaking community development projects in partnership with various donors and relevant stakeholders.
- Play a strategic developmental role that may require decisions that are not always optimal from a commercial perspective, but contribute to Rand Water's socio economic developmental imperatives, DWS's developmental priorities, and National Government's broader objectives and the growth and development in South Africa and Africa.

The vision, mission and values of the Foundation are aligned to those of the Group.

VISION

To become a socio-economic change agent of Rand Water signifying empowerment and quality in eradicating poverty, and improving living standards within communities.

MISSION STATEMENT

The Rand Water Foundation serves to advance the quality of life of communities and their surrounds; through partnerships; leading

to sustainable provision and management of water, sanitation and environment, contributing towards job creation, transfer of skills and poverty eradication.

VALUES

RWF Stands for:

- Caring.
- Transparency & Accountability.
- Development & Empowerment.
- Partnerships
- Quality Assurance.

STRATEGIC AGENDA

The Rand Water Foundation Strategy entails:

- Support of the core business of Rand Water being bulk water supply and sanitation solutions.
- Developmental impact and sustainability on communities within and outside Rand Water's area of supply.
- Primary focus on water, sanitation and environmental interventions at community level.
- "Hands Up, than Hands Out community development approach".

Rand Water Foundation strategic interventions carry both elements of social transformation, and capacity building, towards enterprise development in them, drawing in service providers from previously disadvantaged communities through preferential procurement processes, contributing towards both social and economic development of communities.



KEY FOCUS AREAS

Water and Sanitation: Supports the provision of water and basic sanitation in communities while maximizing citizens' access to water and proper sanitation.

Projects include; Community Basic Sanitation (Schools, Households and Clinics); Municipal Support through Capacity Building on Wastewater Treatment plants maintenance and operations; Rainwater Harvesting; War-on-Leaks Water Demand Management; and Rural Communities Water Supply.

Environmental Conservation: Refers to safeguarding the inter-dependence of ecology, and creation of pleasant and healthy surrounds through the following projects: Biodiversity Protection, Rural and Urban Landscaping and Greening, Wetlands Rehabilitation, Management of Alien Vegetation, River Cleaning initiatives, and Environmental Educational initiatives.

Enterprise Development: This programme entails developmental activities aimed at enabling and promoting an empowering environment for emerging entrepreneurs, enhancing competitiveness and capabilities at an entrepreneurship level including Cooperative Development.

Education and Training: Contributes towards quality of basic education within the country. The Programme Supports primary, and secondary education.

Health, including HIV and AIDS: Support health initiatives undertaken within communities by government and Non-Governmental Organisations (NGOs). The programme contributes towards combating HIV & AIDS, malaria and other diseases through interventions such as awareness campaigns on these diseases, preventative and support measures.

Non-Government Organisations (NGOs) Support Programme: Aimed at supporting special community based projects through funding/grants, as well as training and development.

PROGRAMMES AND PROJECTS DURING THE FINANCIAL YEAR

Implementation of most of the RWF projects is on-going and each year's performance is reviewed. The following projects were implemented.

WATER AND SANITATION PROJECTS

The following projects were implemented and concluded as per the RWF business plan for the financial year ending 30th June 2017:

SCHOOLS SANITATION AND WATER SUPPLY

Aimed at ensuring long term sustainable source of water supply, and adequate sanitation, waterless ablution facilities were constructed in seven (07) schools located in Acornhoek, Thulamahashe, and Kanyamazane within the Bushbuckridge Municipality, Mpumalanga. The project is benefiting two thousand, seven hundred and twenty two (2722) schools population inclusive of learners and educators.

SCHOOLS RAINWATER HARVESTING

Benefiting fourteen (14) schools, located in Alexandra, and Diepsloot within the City of Johannesburg and Hamanskraal in Tshwane, the initiative is aimed at Schools Water Supply, and Demand Management.

WAR ON WATER LEAKS-WATER DEMAND MANAGEMENT AND CONSERVATION

Implemented in Mbalenhle, within Govan Mbeki Local Municipality, Gert Sibande District in Mpumalanga the project continues to manage water demand and ensure conservation through: Training of sixty (60) local youth on plumbing and fixing of water leaks and Door to door education on water conservation. The project provided accredited plumbing training to the local community members.

HOUSEHOLD SANITATION-BUCKET ERADICATION

The Households Sanitation-Bucket Eradication project is aimed at improving on the sanitation conditions within communities affected by bucket systems. The project successfully eradicated bucket systems, replacing them with one hundred (100) adequate waterless sanitation facilities benefiting Northleigh township households in Moqhaka Local Municipality within Fezile Dabi District, Free State

Construction of double pit latrines urine diversion system toilet structures is in progress benefiting the Winterveldt community, Tshwane Metropolitan Municipality, in Gauteng. The project delivered, in the financial year ending 30th June 2017, 266 toilet structures for Winterveldt households.

RURAL COMMUNITIES WATER SUPPLY

The project is aimed at water supply in the rural areas contributing towards the achievement of the Presidential and Shareholder outcome of rural development. In the year under review, the project benefited fifteen (15) health clinics in Bushbuckridge and Mbombela local municipalities of the Ehlanzeni District in Mpumalanga.

MUNICIPAL CAPACITY BUILDING: OPERATIONS AND MAINTENANCE OF WASTE WATER TREATMENT PLANTS

Implemented in partnership with the Rand Water Bulk Sanitation, the project created jobs for seven (07) unemployed engineering graduates. The graduates are placed in municipalities for practical training on operations and maintenance of waste water treatment plants. Participating municipalities are: Randwest City Local Municipality, and the Emfuleni Local Municipality.

ENVIRONMENT CONSERVATION PROJECTS

The following projects were implemented and concluded as per approved projects business cases.

REHABILITATION OF WETLANDS

Rehabilitation of wetlands is aimed at conserving water and environment, including protection of biodiversity through interventions such as: Gabion structures; Concrete structures; Earth works; Ecologs; and Re-vegetation, contributing towards catchment management. Through wetlands rehabilitation, erosion is controlled and water table is raised. In the year under review, the Foundation undertook 20150m³ of earthwork in Oukasie, Madibeng local municipality in preparation for wetlands rehabilitation, creating thirty-eight (38) jobs for local community members, while on the other hand developing emerging entrepreneurs.

CLEARING OF ALIEN VEGETATION

Implemented in the Thabo Mofutsanyane Municipality (Bethlehem, Kestell and Clarens) in the Free State, the project aims at controlling the spread of invasive alien species using labour intensive approach. The project created 216 jobs for local communities, and the clearing plan of 630 hectares was 100% fulfilled. A total number of seventeen (17) SMMEs were supported through implementation of this project.

RURAL AND URBAN LANDSCAPING AND GREENING INITIATIVES

The project aims at implementing an integrated approach to planting, care, management of vegetation in the area, thus reducing pollution and increasing associated benefits such as reduced soil erosion, beautification of environment and increased surface infiltration through trees planting, landscaping and parks development. The project was implemented in Amelia within the Metsimaholo Local Municipality of the Fezile Dabi District in the Free State, Mbalenhle, within Govan Mbeki Local Municipality within Gert Sibande District benefiting the community of Mbalenhle, Kwa-Quka within Emalahleni Local Municipality within Nkangala District, Kinross and on-going maintenance in Hannies van Niekerk in Randfontein. During the year under review, the developed six (06) community parks, creating jobs for local communities, supporting Small, Micro, Medium Enterprises (SMMEs) as well as local suppliers.

EXPANDED PUBLIC WORKS PROGRAMME LAND CARE

Implemented in Gauteng the project is benefiting local communities through jobs creation while on the other hand conserving and protecting underground water through indigenous vegetation. In the year under review, the project created 92 jobs for local communities. The project further promotes cooperatives development.

ENTERPRISE DEVELOPMENT PROJECTS

The following enterprise development projects were implemented and concluded during the year under review.

BUSINESS START –UP PROJECT

Implemented in the Johannesburg, Ekurhuleni, Tshwane, Sedibeng, Thabo Mofutsanyane and Bushbuckridge municipalities, the project is aimed to empower the emerging enterprises with business start-up assessment, training and business counseling services in order for them to adequately establish their businesses. During the year under review, a total number of twenty three (23) SMMEs and Cooperatives were trained in business management skills; Thirty five (35) SMMEs received training and coaching regarding business; Eighteen (18) SMMEs were sponsored with business equipment; and fifteen (15) SMMEs were utilised to supply goods and services for the project. A total number of sixty four (64) temporary jobs were created through the project implementation.

BUSINESS INCUBATION PROJECT

Implemented in Thabo Mofutsanyane and Bushbuckridge municipalities, the project

is aimed to provide business management training and coaching to emerging enterprises through the incubation approach in order to increase their level of sustainability. The project, in the financial year ending 30th June 2017, supported twenty nine (29) SMMEs through business mentoring, and coaching; Fifteen SMMEs benefited through sponsorship; and Thirty Six (36) SMMEs were afforded opportunities to supply and render service through Rand Water Supply Chain.

THE BUSINESS INFORMATION AND AWARENESS RAISING PROJECT

This is aimed at creating business opportunities awareness and linkages amongst SMMEs and Cooperatives. The project empowered sixteen (16) emerging entrepreneurs through a Resources Mobilisation Symposium undertaken in partnership with the National Development Agency.

BUSINESS PARTNERSHIPS DEVELOPMENT

A total number of five (05) SMMEs were utilised for service delivery as business partners.

EDUCATION AND TRAINING PROGRAMME

In support of the basic education in the country, the Foundation implemented the following projects in the financial year ending 30th June 2017:

BACK TO SCHOOL EDUCATION SUPPORT PROJECT

More than one thousand five hundred and eighty (1580) learners from fifteen (15) schools in Gauteng and Mpumalanga received full school uniform and stationery from the Foundation in the financial year ending 30th



June 2017. The project further benefited more than fifteen (15) cooperatives through uniform manufacturing.

EARLY CHILDHOOD DEVELOPMENT SUPPORT

In the year under review, the RWF funded two ECD centres namely; Makhano Crèche in Atteridgeville within Tshwane Municipality in Gauteng and the Nazarene Crèche in Emgcobaneni, within Bushbuckridge Municipality in Mpumalanga.

ADOPT-A-LEARNER STUDY SUPPORT GRANT

A total number of sixteen (16) learners at Jeppe Girls High School have benefitted from the grant through the Ruth First Memorial Trust in the financial year under review. The first two learners have passed matric with distinction in 2016. Learners benefit from the study support grade for a period of five years from Grade 8 till Grade 12.

THE NATIONAL CURRICULUM SUPPORT AND SCHOOLS MOBILE LIBRARIES

In addition to the above mentioned projects, the Foundation also undertook two more education support projects namely; Curriculum Support and Schools Resources and Media Centres projects benefiting a total number of twenty two thousand and thirty (22030) learners from sixty schools within Gauteng and Mpumalanga.

The projects contribute towards fulfilling the Shareholder Non-Core Outcome of an improved quality of basic education.

HIGH SCHOOL CAREER GUIDANCE

The project was implemented in Westonaria, Alexandra, and Soweto in Randwest City and

the City of Johannesburg benefiting a total number of three thousand, two hundred and twelve (3212) learners.

HEALTH, INCLUDING HIV, AND AIDS PROJECTS

The following Health projects were implemented in the financial year ending 30th June 2017:

COMMUNITY HOME BASED CARE

The purpose of home based care health intervention is to reduce highly populated health care facilities. The project successfully trained a total number of forty two (40) unemployed local community members as home based care givers in Mpumalanga, and Free State.

COMMUNITY BASED HEALTH INFRASTRUCTURE DEVELOPMENT SUPPORT

The project contributed funding of R2.7 million towards the Nelson Mandela Children’s Hospital, and upgrading of the Msogwaba Community Health Clinic in Mbombela in support of the Mpumalanga and Gauteng Health Departments.

SCHOOL BASED HEALTH EDUCATION AND AWARENESS RAISING ON HIV AND AIDS

Aimed at creating HIV and AIDS awareness within communities, the project targeted a total number of two thousand (2000) learners from various schools in Gauteng and Mpumalanga. Learners were provided with dignity packs and also educated on HIV and AIDS, and awareness on other health related issues was raised among the learners.



CONSOLIDATED ANNUAL FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2017

The reports and statements set out below comprise the consolidated annual financial statements presented to the shareholder:

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STATEMENT OF RESPONSIBILITY BY THE BOARD

In accordance with the Water Services Act, No. 108 of 1997 and the Public Finance Management Act, No. 1 of 1999, the Board of Rand Water is required to prepare financial statements for each financial year in accordance with generally accepted accounting practice.

Following the Accounting Standards Board issuing Directive 12: The Selection of an Appropriate Reporting Framework by Public Entities, Rand Water followed the process of selecting an appropriate accounting framework. A self-assessment was performed and it was concluded that International Financial Reporting Standards (IFRS), as issued by the International Accounting Standards Board, would be adopted as the appropriate accounting framework.

For all financial years up to and including the financial year ended 30 June 2016, Rand Water prepared its financial statements in accordance with South African Statements of Generally Accepted Accounting Practice. These consolidated annual financial statements for the year ended 30 June 2017 are the first that Rand Water has prepared in accordance with IFRS.

The Board is responsible for ensuring that complete, accurate and reliable accounting records form the basis for preparing consolidated annual financial statements. Included in the consolidated annual financial statements are managements reasonable and prudent judgments and estimates, these have been reviewed and accepted by the Board. The Board also ensures that accounting policies are appropriate to the Group's circumstances. In order to achieve this objective the Board rely on the systems of internal control set up and maintained by management.

The Board acknowledges that they are ultimately responsible for the system of internal financial control established by the Group and place considerable importance on maintaining an effective control environment. To enable the Board 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. These controls are monitored throughout the Group and all employees are required to maintain the highest ethical standards in ensuring the Group's business is conducted in a manner that in all reasonable circumstances is above reproach.

The focus of risk management in the Group is on identifying, assessing, managing and monitoring all known forms of risk across the Group. While operating risk cannot be fully eliminated, the Group endeavours to minimise it by ensuring that appropriate infrastructure, controls, systems and ethical behaviour are applied and managed within predetermined procedures and constraints.

The Board is of the opinion, based on the information and explanations given by management; the deliberations through Group Audit Committee with external auditors on the results of the year-end audit and the assessment by the Group Risk Committee, that the system of internal control provides reasonable assurance that the financial records may be relied on for the preparation of the consolidated annual financial statements. However, any system of internal financial control can provide only reasonable, and not absolute, assurance against material misstatement or loss. The independent internal auditors also assisted the Board in their task of ensuring that internal controls are adequate and operate as intended throughout the financial year under review

The Board has every reason to believe that the Group has adequate resources in place to continue in operation in the foreseeable future and has, for this reason, adopted the going concern basis in preparing the consolidated annual financial statements.

The Group's external auditors, the Auditor-General South Africa (AGSA), who were given unrestricted access to all financial records and related data, including minutes of the Board and the committees of the Board, have audited the consolidated annual financial statements. The Board believes that all representations made to the independent auditors during their audit are valid and appropriate. Their unqualified audit report on the consolidated annual financial statements is presented on pages 220 to 226.



Adv Matshidiso Hashatse
Chairperson

The Board is of the opinion that the consolidated annual financial statements fairly present the financial position of the Group as at 30 June 2017, and the results of its operations and cash flows for the year then ended. Material facts or circumstances between the year-end date and the date of signature of these consolidated annual financial statements have been disclosed in the consolidated annual financial statements.

The consolidated annual financial statements set out on pages 245 to 316, which have been approved by the Board on 13 October 2017 and were signed on its behalf by:



Mr. Dinizulu Kumalo Percival Sechemane
Chief Executive

REPORT OF THE GROUP AUDIT COMMITTEE

1. BACKGROUND

On 2 December 2010, the Board of Rand Water resolved to form a Group Audit Committee (the Committee) combining the Audit and Risk Committee of the subsidiaries with that of Rand Water. In view thereof, the Group Audit Committee consists of members appointed by the Board of Rand Water to the Committee and the members who represent the subsidiaries.

2. GROUP AUDIT COMMITTEE TERMS OF REFERENCE

The Committee has a terms of reference in place, which regulates both its statutory duties and those assigned to it by the Board. The responsibilities included in the terms of reference from Section 77 of the Public Finance Management Act, No. 1 of 1999 (PFMA), Treasury Regulation 27.1 and the principles of King IV Report on Corporate Governance (King IV) were adequately entrenched therein. The terms of reference were reviewed and approved by the Board.

3. GROUP AUDIT COMMITTEE MEMBERS, MEETING ATTENDANCE AND QUALIFICATIONS

The members of the Committee are independent and consists of at least three independent, non-executive members. The Committee meets at least four times per year as per its terms of reference. Attendance of meetings, dates of appointments as well as qualifications of the members are included in the Corporate Governance report and the Board Profile reports.

4. ROLES AND RESPONSIBILITIES

STATUTORY DUTIES

The Committee has conducted its affairs in compliance with its terms of reference and has discharged its responsibilities therein. The

Committee is satisfied that it has complied with its legal, regulatory and other responsibilities.

EXTERNAL AUDITORS APPOINTMENT AND INDEPENDENCE

The Committee ensured that the appointment of external auditors complied with the applicable legislation relating to the appointment of auditors. The Committee in consultation with management agreed to the terms and conditions of the engagement letter, the audit plan and the budgeted audit fees for the year under review.

The Committee has satisfied itself that the external auditors were independent of the Group, which includes consideration of compliance with criteria relating to independence or conflicts of interest as prescribed by the Independent Regulatory Board for Auditors. Requisite assurance was sought and provided by the external auditors that internal governance processes within the audit firm support and demonstrate its claim to independence.

FINANCIAL STATEMENTS AND ACCOUNTING PRACTICES

The Committee has evaluated the consolidated annual financial statements of Rand Water for the year ended 30 June 2017 and, based on the information provided to the Committee considers that the consolidated annual financial statements comply in all material respects with the requirements of the PFMA, Water Services Act, No. 108 of 1997, and International Financial Reporting Standards (IFRS). The Committee concurs that the adoption of the going concern premise in the preparation of the consolidated annual financial statements is appropriate. The Committee is satisfied with the quality and timeliness of the information availed to the Committee for oversight purposes. The Committee has recommended the approval of the consolidated annual financial statements by the Board.

The Committee has

- reviewed changes in accounting policies and practices in light of the first time adoption of IFRS.
- reviewed and discussed with the external auditors and accounting authority, the

audited consolidated annual financial statements;

- reviewed the external auditors management letter and managements' response thereto;
- reviewed compliance with legal and regulatory provisions;
- reviewed significant adjustments resulting from the audit; and
- reviewed and discussed with the accounting authority, the performance information submitted to the external auditors.

During the year, the Committee met with the external auditors, without management being present, and confirmed that there were no unresolved issues.

INTERNAL FINANCIAL CONTROLS

The Committee is satisfied that internal controls and systems have been implemented and that these controls have functioned effectively during the year under review. The Committee has overseen a process by which internal audit has performed internal audits according to a risk based audit plan, where the effectiveness of risk management and internal control systems, including financial internal controls, were evaluated. The outcomes of these audits formed the basis for the Committee's recommendation in this regard to the Board, to enable the Board to report thereon. Further to this discussions were held with external audit on the results of their external audits that an adequate system of internal control is being maintained to:

- reduce the Group's risk to an acceptable level;
- meet the business objectives of the Group;
- ensure the Group's assets are adequately safeguarded; and
- ensure that all transactions undertaken were recorded in the Group's records.

The Committee is satisfied with the content and quality of monthly and quarterly reports prepared and issued by the Group during the year under review.

GOING CONCERN

The Committee has reviewed managements' assessments of the going concern of the Group and has made recommendations to the Board accordingly.

INTERNAL AUDIT

In line with the PFMA and the King IV requirements, Internal Audit provides the Committee and management with assurance that the internal controls are appropriate and effective. The Committee is responsible for ensuring that the Group's internal audit function is independent and has the necessary resources, standing and authority within the Group to enable it to discharge its duties. Furthermore, the Committee oversees cooperation between internal and external auditors and serves as a link between the Board and these functions.

The Committee considered and approved the internal audit charter. The internal audit function's annual audit plan and three year strategic plan were approved by the Committee. The internal audit function reports administratively to the Group Governance Executive and functionally to the Committee and has responsibility for reviewing and providing assurance on the adequacy of the internal control environment across all of the Group's operations. The internal audit manager has direct access to the Committee primarily through its Chairperson.

The Committee is satisfied with the effectiveness of the internal audit function.

From the various reports of the internal auditors, it was noted that no matters were reported that indicate any material deficiencies in the systems of internal control. Risks that have been identified through various processes are being addressed.

EXPERTISE AND EXPERIENCE OF THE CHIEF FINANCIAL OFFICER AND FINANCE FUNCTION

The Committee has satisfied itself that the Chief Financial Officer has appropriate expertise and experience. The Committee has considered and has satisfied itself of the appropriateness of the expertise and adequacy of resources of the finance function and experience of the senior members of management for the financial function.

GOVERNANCE OF RISK

The Committee oversees the implementation of the policy and plan for risk management taking place by means of risk management systems and processes through the organisation's Board Risk Committee. The Committee is satisfied that appropriate and effective systems are in place for risk management.

EXTERNAL AUDITOR'S REPORT

The Committee accepts the audit opinion of the external auditors on the consolidated annual financial statements and recommends that the audited consolidated annual financial statements be accepted and read together with the report of the external auditors.



Ms Rene Aloise Kenosi
Chairperson

REPORT OF THE AUDITOR-GENERAL TO PARLIAMENT ON RAND WATER

REPORT ON THE AUDIT OF THE CONSOLIDATED AND SEPARATE ANNUAL FINANCIAL STATEMENTS

OPINION

1. I have audited the consolidated and separate financial statements of Rand Water and its subsidiaries set out on pages 245 to 316, which comprise the consolidated and separate statement of financial position as at 30 June 2017, the consolidated and separate statement of financial performance and other comprehensive income, statement of changes in equity and cash flow statement for the year then ended, as well as the notes to the consolidated and separate financial statements, including a summary of significant accounting policies.
2. In my opinion, the consolidated and separate financial statements present fairly, in all material respects, the consolidated and separate financial position of Rand Water as at 30 June 2017, and its financial performance and cash flows for the year then ended in accordance with the International Financial Reporting Standards (IFRS) and the requirements of the Public Finance Management Act of South Africa, 1999 (Act No. 1 of 1999) (PFMA).

CONTEXT FOR THE OPINION

3. 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 consolidated and separate financial statements section of my report.
4. I am independent of the group in accordance with the International Ethics Standards Board for Accountants' *Code of ethics for professional accountants* (IESBA code) together with 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.
5. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

KEY AUDIT MATTERS

6. Key audit matters are those matters that, in my professional judgement, were of most significance in my audit of the current period. These matters were addressed in the context of my audit of the financial statements as a whole and in forming my opinion thereon. I do not provide a separate opinion or conclusion on these matters.

Key audit matters	How the matter was addressed in the audit
Valuation, verification and conditional assessment of pipelines The carrying value of property, plant and equipment of R19 674 million, as disclosed in note 5 to the financial statements, is material and includes pipelines with a carrying value of R9 934 million.	My procedures were executed with the assistance of an auditor's expert (civil engineer) and included the following: <ul style="list-style-type: none">• Selected samples of pipeline assets were physically verified to and from the pipeline asset register by the auditor's expert. The expert applied industry- acceptable techniques used to physically verify infrastructure located underground to confirm the existence and completeness of the pipelines recorded in the financial statements.

Key audit matters	How the matter was addressed in the audit
<p>The pipelines are primarily located underground and as they are not easily accessible, physically verifying them to and from the details contained in the fixed asset register, which support the financial statements, poses significant challenges. Details such as the type, thickness and material components of the pipelines require verification. However, being unable to physically inspect the assets I could not obtain assurance with regard to their existence and determine their condition. The individual components that require physical verification are also specialised in nature.</p> <p>Determining the carrying value of the pipeline assets involves a high degree of estimation by management. This is further complicated by a lack of a comprehensively documented methodology that clearly articulates the process engaged in by management to determine these carrying values. Significant assumptions and judgements are applied in determining the useful lives and impairment of the pipeline assets, as these assets are not only highly specialised in nature, but their condition is also dependent on a number of other factors such as soil conditions prevalent in the areas where the pipes are located. To this end, Rand Water uses various methods to assess the operational conditions of buried infrastructure to determine whether any impairment indicators exist. The methods include, but are not limited to:</p> <ul style="list-style-type: none"> • visual assessment of visible components of the pipelines • leak detection along the pipeline length to determine the extent, and quantify the actual leak detection readings, including the frequency of leaks linked to a particular geographical location. • Use of the Acoustic Intensity Probe to identify anomalies in the pipe and to determine locations of anomalies. This is accurate in determining points and the extent of leakages in the pipe. • External Corrosion Direct Assessment (ECDA) is applied to determine the corrosiveness of the immediate environment on the pipeline, thereby helping to determine adjustments on the pipeline value assessment and impairment. 	<ul style="list-style-type: none"> • In the absence of a comprehensively documented methodology detailing assumptions and criteria used by management in assessing useful lives and impairment indicators of pipelines based on their condition, I obtained an understanding of how the entity's pipeline assets are valued by management via the different current operational and management processes. This included the auditor's expert evaluating the methods applied by management against acceptable industry methods and the assessment of management's interpretation of the results of these methods. • I scrutinised the various considerations and assumptions made by management when assessing the useful lives and impairment indicators of the pipelines. The audit, which was conducted with the assistance of an auditor's expert, included a review of the results of various assessment reports, including leak detection processes, pipeline replacements and the frequency of the aforementioned reports linked to particular pipelines and geographical locations. An engineer's report on external corrosive direct assessment was also utilised. The assumptions applied and documentation supporting these reports were interrogated to determine whether we could rely on the assumptions that were made and whether they adequately support the subsequent conclusions that were drawn by management based on these. <p>I verified the existence and completeness of pipelines as recorded in the financial statements. I furthermore determined, in the absence of a finalised comprehensively documented methodology detailing assumptions and criteria used in assessing the useful lives and impairment indicators of pipelines based on their condition, the assumptions and criteria applied by management through various other operational and management processes, the assessment of the useful lives and indicators of impairment are reasonable and in line with industry standards.</p>

Key audit matters	How the matter was addressed in the audit
<p>Although these methods are used, a comprehensive documented methodology detailing all assumptions and criteria to be used for assessing impairment and useful lives was not yet in place.</p> <p>Accordingly, the impairment tests, determination of useful lives and testing of the completeness and existence of the fixed assets register for pipelines are considered to be a key audit matter. This can also be attributed to the amount of significant audit effort required in obtaining audit assurance on the amounts reflected in the annual financial statements.</p>	
<p>First time adoption of the IFRS framework</p> <p>Management adopted the IFRS framework for the first time during the year under review, in accordance with Directive 12: <i>The selection of an appropriate reporting framework by public entities</i> issued by the Accounting Standards Board. The adjustments resulting from the review are disclosed in note 36 to the financial statements.</p> <p>The adoption of the new framework required management to make significant judgements in determining and applying the required changes to accounting policies. Significant effort was necessary to audit the completeness and appropriateness of the adjustments made by management and as a result this is considered to be a key audit matter.</p>	<p>My procedures included the following:</p> <ul style="list-style-type: none"> • I reinforced the technical capacity of the auditors to review the methods and assumptions applied by management in determining the required adjustments to the financial statements. • I reviewed supporting documentation to assess the validity and accuracy of the adjustments made. • I reviewed the financial statements as a whole to assess compliance with IFRS and to ensure that the disclosures are in line with IFRS1. • I tested the completeness of adjustments made by reviewing the accounting treatment applied for material accounts against the requirements of the IFRS framework. <p>I consider the adjustments and disclosures made by management to be appropriate and in line with the requirements of IFRS, based on the information provided.</p>

EMPHASIS OF MATTER

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

RESTATEMENT OF CORRESPONDING FIGURES

8. As disclosed in note 36 to the financial statements, the corresponding figures for 30 June 2016 have been restated as a result of errors identified and adjustments made for changes in accounting policies resulting from the first time adoption of IFRS.

MATERIAL IMPAIRMENTS – TRADE DEBTORS

9. As disclosed in note 11 to the financial statements, material impairments to the amount of R469 million were incurred as a result of past default experience. A significant part of this impairment relates to the Rand Water Mpumalanga segment.

OTHER MATTER

10. I draw attention to the matter below. My opinion is not modified in respect of this matter.

PREVIOUS YEAR AUDITED BY A PREDECESSOR AUDITOR

11. The financial statements of the previous year were audited by a predecessor auditor in terms of section 4(3) of the Public Audit Act. The AGSA has taken back the audit effective 8 October 2016.

RESPONSIBILITIES OF ACCOUNTING AUTHORITY FOR THE CONSOLIDATED AND SEPARATE FINANCIAL STATEMENTS

12. The board of directors, which constitutes the accounting authority, is responsible for the preparation and fair presentation of the consolidated and separate financial statements in accordance with IFRS and the requirements of the PFMA and for such internal control as the accounting authority determines is necessary to enable the preparation of consolidated and separate financial statements that are free from material misstatement, whether due to fraud or error.
13. In preparing the consolidated and separate financial statements, the accounting authority is responsible for assessing the Rand 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 group or cease operations, or has no realistic alternative but to do so.

AUDITOR-GENERAL'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED AND SEPARATE FINANCIAL STATEMENTS

14. My objectives are to obtain reasonable assurance about whether the consolidated and separate 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 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 the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated and separate financial statements.

15. A further description of my responsibilities for the audit of the consolidated and separate financial statements is included in the annexure to the auditor's report.

REPORT ON THE AUDIT OF THE ANNUAL PERFORMANCE REPORT

INTRODUCTION AND SCOPE

16. 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.
17. My procedures address the reported performance information, which must be based on the approved performance planning documents of the public 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.
18. 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 public entity for the year ended 30 June 2017:

OBJECTIVES

Objectives	Pages in the annual performance report
Objective 1 – Operational integrity and use best fit technology	233-236
Objective 2 – Achieve high performance culture	233-236
Objective 3 – Positively engage shareholders base	233-236
Objective 4 – Achieve growth	233-236

19. 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.

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

OBJECTIVE 3 – POSITIVELY ENGAGE SHAREHOLDERS BASE

NEW MINISTERIAL DIRECTIVES ISSUED ARE IMPLEMENTED ON TIME: PROGRESS AGAINST IMPLEMENTATION PLAN

21. The target for this indicator was not specific in clearly identifying the nature and required level of performance during the planning process and was not measurable, as required by the FMPPI. In addition, the entity did not report its actual achievement reliably. The achievement was reported as *not applicable* even though a ministerial directive was issued during the year but was not accepted by the Accounting Authority. The requirement for acceptance was not part of the approved indicator.

NEW MINISTERIAL DIRECTIVES ISSUED ARE IMPLEMENTED ON TIME (PHASE 2)

22. The reported achievement of *not applicable* is misstated as the indicator was not well-defined as it refers to implementation of new ministerial directives issued instead of implementation and achievement of existing ministerial directives. Work was also undertaken during the year towards the achievement of phase 2 of a ministerial directive previously issued, which is required to be measured per evidence provided. The entity however did not design appropriate systems and processes to enable reliable reporting of actual service delivery against the indicator as the entity did not have an approved implementation plan setting out key deliverables to be achieved for the year under review.

23. I did not raise any material findings on the usefulness and reliability of the reported performance information for the following objectives:

- Objective 1 - operational integrity and use best fit technology
- Objective 2 - achieve high performance culture
- Objective 4 - achieve growth

OTHER MATTER

24. I draw attention to the matter below.

Achievement of planned targets

Refer to the annual performance report on pages 233 to 236 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 and 22 of this report.

REPORT ON AUDIT OF COMPLIANCE WITH LEGISLATION

INTRODUCTION AND SCOPE

25. 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 public entity with specific matters in key legislation. I performed procedures to identify findings but not to gather evidence to express assurance.

26. The material findings in respect of the compliance criteria for the applicable subject matters are as follows.

STRATEGIC PLANNING AND PERFORMANCE MANAGEMENT

27. The corporate plan did not include the performance objectives, measures, targets and indicators for a period of three years as required by treasury regulation 29.1.1(a) and (c).

OTHER INFORMATION

28. The Rand Water Group's accounting authority is responsible for the other information. The other information comprises the information included in the annual report, which includes the Board's report, the audit committee's report and the remuneration report. The other information does not include the consolidated and separate financial statements, the auditor's report thereon and those selected objectives presented in the annual performance report that have been specifically reported on in the auditor's report in this regard.
29. 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.
30. 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 consolidated and separate 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. If, based on the work I have performed on the other information obtained prior to the date of this auditor's report, I conclude that there is a material misstatement of this other information, I am required to report that fact. I have no matters to report.

INTERNAL CONTROL DEFICIENCIES

31. I considered internal control relevant to my audit of the consolidated and separate financial statements, reported performance

information and compliance with applicable legislation; however, my objective was not to express any form of assurance thereon. The matters reported below are limited to the significant internal control deficiencies that resulted in the findings on the annual performance report.

FINANCIAL AND PERFORMANCE MANAGEMENT

32. Management did not adequately review the corporate plan to ensure appropriate definition and adequate systems and process design for 2 indicators.
33. Management did not correctly apply the requirements of the Treasury Regulations to ensure that the five-year corporate plan included performance objectives, indicators and targets that covered at least a three-year period.

OTHER REPORTS

34. I draw attention to the following engagements conducted by the Auditor-General of South Africa during the year. These reports did not form part of my opinion on the financial statements or my findings on the reported performance information or compliance with legislation.
35. Two agreed-upon procedure engagements were performed on the accuracy of the water research levy payable for the periods July 2016 to December 2016 and January 2017 to 30 June 2017 respectively, and reports were issued to management on 31 March 2017 and 29 September 2017 respectively.
36. An agreed upon procedure engagement was performed on the interim review of the consolidated annual financial statements for the period ended 31 December 2016. The report was issued to management on 28 March 2017.

Auditor-General

Pretoria
19 October 2017



AUDITOR-GENERAL
SOUTH AFRICA

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 consolidated and separate financial statements and the procedures performed on reported performance information for selected objectives and the public entity's compliance with respect to the selected subject matters.

Financial statements

2. In addition to my responsibility for the audit of the consolidated and separate financial statements, as described in the auditor's report, I also:
 - identify and assess the risks of material misstatement of the consolidated and separate 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 public entity's internal control.
 - evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the board of directors, which constitutes 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 relating to events or conditions that may cast significant doubt on the public entity'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 the auditor's report. However, future events or conditions may cause a public entity to cease operating as a going concern.

- 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.
- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated financial statements. I am responsible for the direction, supervision and performance of the group audit. I remain responsible for my audit opinion.

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.

BOARD REPORT

1. INTRODUCTION

The Board of Rand Water is pleased to present its' report and the audited consolidated annual financial statements for the financial year ended 30 June 2017. In the opinion of the Board, the consolidated annual financial statements fairly represent the financial position, financial performance and cash flows for the financial year ended 30 June 2017 of Rand Water and its subsidiaries in accordance with the International Financial Reporting Standards (IFRS).

2. NATURE OF THE BUSINESS

Rand Water is a water board established in terms of the Water Services Act, No. 108 of 1997 (WSA) with a mandate of providing water services to other water service institutions within its service area. Rand Water is also a schedule 3B public entity in terms of the Public Finance Management Act, No. 01 of 1999 (PFMA).

RAND WATER

Rand Water extracts raw water from the Vaal River basin, then treats, transports and stores it in order to deliver potable water to municipalities, mines, industries and small consumers. Raw water is also delivered to certain industries by agreement. The entity also engages in secondary activities, which are deemed to be supportive of its primary activities.

RAND WATER SERVICES (PTY) LTD

Rand Water Services (Pty) Ltd (RWS) was established in 2000 in terms of the Companies Act of 1973, which has been repealed and now registered in terms of the Companies Act no. 71 of 2008, as a wholly owned subsidiary of Rand Water with an objective of enabling Rand Water to comply with the requirements of Section 30 of the WSA. RWS engaged in other business activities that were ring-fenced and managed at arm's length to develop and pursue the commercial aspects of Rand Water's business in the water services industry. The WSA requires Rand Water to ring fence other business activities from the regulated water

services. RWS was therefore established in order to tap into the potential of the water industry by allowing business partnerships and joint ventures with private and public companies in developing water infrastructure with a national and pan-African focus. On 06 November 2010, the Board of Rand Water took a decision to integrate the operations of RWS into Rand Water. RWS held a 49% stake in a joint venture, Vitens Rand Water Services BV a Netherlands based company which was subsequently disposed of on 7 July 2015..

RAND WATER FOUNDATION

Rand Water Foundation (RWF) was established in 2001 as a Section 21 Company in terms of the Companies Act of 1973 which has been repealed and now registered as a Non-Profit Company (NPC) in terms of the Companies Act no. 71 of 2008. RWF as a wholly owned special purpose entity of Rand Water to carry out its corporate social investment programmes. RWF has been operational since 2003.

The mandate of RWF is to promote and support the delivery of water services to communities within and outside of Rand Water's area of supply, and to coordinate, administer, and manage the Rand Water corporate social investment resources by undertaking community development projects in partnership with various donors and relevant stakeholders, advancing the quality of life of communities by making them self-sufficient and enhancing their physical surroundings. In addition to its mandate, the Shareholder acknowledges that RWF has a strategic developmental role that may require decisions that are not always optimal from a commercial perspective, but contribute to Rand Water's socio economic developmental imperatives, Department of Water and Sanitation's developmental priorities and National Government's broader objectives and the growth and development in South Africa and Africa. The RWF strategic interventions include elements of social transformation and capacity building for emerging enterprises, drawing in service providers from previously disadvantaged communities through preferential procurement processes and contributing towards both the social and economic development of communities.

3. COMPLIANCE WITH LEGISLATION, CORPORATE GOVERNANCE AND ACCOUNTING STANDARDS

The Board is committed to ensure compliance with all applicable legislations, in particular the WSA, as the enabling Act of Rand Water, the PFMA and the Companies Act No 71 of 2008, which is applicable to Rand Water subsidiaries and is of the view that Rand Water and its subsidiaries comply in all material respects.

The Board acknowledges and supports the practices and conducts as detailed in the King IV Report on Corporate Governance (King IV) and encourages the organisation to uphold the governance principles and align its practices, policies and procedures thereto.

The Group's consolidated annual financial statements were prepared in accordance with IFRS as issued by the International Accounting Standards Board.

4. PUBLIC FINANCE MANAGEMENT ACT COMPLIANCE

The PFMA is the Group's overarching piece of legislation and it supersedes any other applicable legislation in the business. PFMA compliance is one of the fundamental business regulatory imperatives. The Group continues to ensure that this compliance is managed effectively in its daily operational activities.

The Board has reiterated its unequivocal commitment to honour continued compliance in the form of implemented policies and frameworks to detect and prevent irregular expenditure. In terms of the materiality framework, as approved by the Board, and compliance to Section 55(1) (d) of the PFMA, material losses resulting from criminal conduct, irregular or fruitless and wasteful expenditure in excess of the approved threshold for materiality level shall be reported.

During the year under review the Group identified approximately R8.04 million worth of irregular expenditure and R1.9 million of fruitless and wasteful expenditure. The

identified items have been disclosed in note 37 in the notes to the consolidated annual financial statements.

The Board and the Chief Executive have shown unwavering commitment with a pledge to a zero tolerance approach towards fraud, corruption, misappropriation of funds and theft. Invariably, the Group has opened criminal and civil cases against perpetrators and endeavors to recover losses from criminal conduct as well as institute disciplinary measures in accordance with Section 51(e) in the PFMA which states that:

"The Accounting Authority must take effective and appropriate disciplinary steps against any employee of the public entity who:

- I. Contravenes or fails to comply with a provision of this Act;
- II. Commits an act which undermines the financial management and internal control systems of the public entity; and
- III. Who makes or permits irregular expenditure or a fruitless and wasteful expenditure".

The Group employs reactive investigations into allegations and reports of criminal misconduct and irregular expenditure. For sound governance protocols, the Group makes use of the Group Forensic Services Division under the astute leadership of the Group Governance Executive to meet the set objectives. It is against this practice that reported and investigated cases are dealt with by instituting disciplinary and criminal action which serves as a deterrent and to avert proliferation of the malpractice.

The continued implementation of the Group's Integrated Fraud Management Framework, that includes proactive audits, investigations, probity audits, and assurance audits to evaluate the effectiveness of governance and corruption controls, has proven to be highly effective in lifting ethical standards across the Group. The framework has further continued to build a genuine organisation-wide culture of integrity to the identification, management and control of crime risks. This has resulted in the Board further escalating reporting of similar activities to its sub-committees, specifically the Group Audit and Group Risk sub-committees.

The Group continues to enforce adherence to the implemented Fraud Prevention that includes staff fraud training workshops, white collar crime awareness programs and campaigns. Annual programs are delivered to ensure that integrity assurance standards are sustained throughout all levels of the organisation. For the year under review specific emphasis was placed on conducting fraud risk assessments in key areas of the Group in order to identify fraud risk exposure and to implement governance controls to mitigate identified fraud risk areas.

The primary objective remains focused on proactive mechanisms to fight corruption in all its forms thus strengthening operational business to be sustainable and becoming more resilient to inherent operational risks.

All initiatives in respect of Fraud Prevention plan are perpetually monitored and benchmarked internationally for the Group to uphold its corporate citizenship responsibilities.

The Board has re-affirmed its policy statement on mechanisms designed to detect and prevent irregular expenditure in accordance with established Group policies and frameworks endorsed.

5. NON-EXECUTIVE BOARD MEMBERS

In terms of Section 35 (1) of the WSA, the Minister of Water and Sanitation (Minister) may appoint members of the Board from time to time. The term of office of the Board is regulated in accordance with Schedule 1 of the WSA. The Board of Rand Water was appointed by the Minister effective 01 April 2014; however, the operational activities of the new Board were effective from 01 June 2014.

The names of the Board members in office during the financial year under review are set out in the Integrated Annual Report. The Non-Executive Board members fees for the financial year under review are detailed in the Remuneration Report included in the Integrated Annual Report.

6. FINANCIAL RESULTS

The financial results for the year are fully detailed in the consolidated annual financial statements set out from page 245 to 316. The summary of the Groups financial, business and operational performance are detailed in note 7 to 9 of this report.

7. FINANCIAL PERFORMANCE

		2013 Actual	2014 Actual	2015 Actual	2016 Actual Restated	2017 Actual
Revenue	R'm	7,751	8,665	9,803	11,072	11,981
Net income for the year	R'm	997	1,182	1,438	2,131	2,375
Property, plant and equipment	R'm	9,907	12,111	14,671	17,592	19,675
Capital expenditure	R'm	1,748	2,448	2,819	3,288	2,530
Interest bearing borrowings	R'm	1,516	2,512	3,672	4,419	4,415
Accumulated reserves	R'm	8,512	9,750	11,106	13,236	15,650
Potable water bulk tariff		5,0163	5,5090	5,9552	6,7591	7,5635
Net interest paid (received)	R'm	(43)	(71)	(79)	(52)	(13)

With the industry plagued by drought and the resultant imposition of water restrictions in South Africa, the expectation was a worsening set of financial results for the current year. The resilience of the entity in tough times is clearly visible in the exceptional results for the financial year ended 30 June 2017.

Revenue, driven by the 11.9% tariff increase, grew by 8.2% to R11.98 billion from 2016. This, coupled with the even greater tightening of the purse strings has resulted in growth in net income of 11% to R2.4 billion and accumulated reserves rose to R15.6 billion from the previous level of R13.2 billion.

The Groups net interest income from investments and payments on borrowings after capitalisation of borrowing costs to qualifying assets, during the year is R13 million, mainly attributable to the decline in infrastructure spend from R3.3 billion in 2016 to R2.5 billion in 2017. This reduced the number of qualifying assets to which borrowing costs could be charged. Capitalised borrowing costs amounted to R308 million (2016: R374 million) and are expected to increase in line with the capital investment programme over the next five years.

Rand Water has long-term loans of R4 415 million. Rand Water has a facility of R10 000 million of which R4 394 million has been utilised to date.

The Group incurred capital expenditure of R2 530 million for the year under review which includes borrowing costs of R308 million. The expenditure also incorporates costs, majority of which relates to the augmentation and rehabilitation of infrastructure; which has resulted in an increase in property, plant and equipment to R19 674 million. The Group is undertaking major infrastructure renovation to ageing infrastructure. The capital expenditure decreased by 32.6% compared to the previous year.

8. BUSINESS PERFORMANCE

		2013 Actual	2014 Actual	2015 Actual	2016 Actual Restated	2017 Actual
Net income margin	%	12.86	13.64	14.67	19.24	19.82
Income per employee	R'000	310.16	367.90	425.35	638.09	693.36
Average cost of capital	%	10.02	9.98	9.95	9.94	9.93
Debt-equity ratio		0.22	0.29	0.36	0.34	0.28
Return on assets		7.57	8.96	7.28	9.42	9.84
Assets turnover ratio		1.34	1.48	1.59	1.67	1.72
Current ratio		1.09	1.03	1.02	0.92	0.99

Net income margin continues to grow favorably, attaining a year on year growth of 3.0% from 2016. Good raw water quality that required a lower dosage of chemicals, maximizing off-peak pumping to minimize energy costs, cost synergies and other cost containment initiatives are the main contributing factors to this progression. With little growth in employee numbers, this has led to an increase of 8.7% in the income per employee.

Both the return on assets and assets turnover ratios have grown by 3% from the prior year; a testament of the efficiency with which the entity deploys its assets in generating revenue and increasing earnings.

It is a conscious decision of Rand Water to productively utilize cash reserves and ensure it is able to meet all its short-term obligations. This is visible in the current and prior current ratio trends.

9. OPERATIONAL PERFORMANCE

	2013 Actual	2014 Actual	2015 Actual	2016 Actual	2017 Actual
Volume sold (including consumption accrued to 30 June) (Average mgl/day)	4,309	4,413	4,619	4,684	4,414
Number of employees at year end	3,214	3,438	3,381	3,339	3,425

The drought and resultant low dam levels led to the Minister implementing water restrictions across the country. As a direct consequence thereof, the average mega liters of water sold per day decreased by 5.9%, compared to the prior year.

The moratorium on filling of vacant positions lead to a decrease in staff numbers in 2016. Critical vacant positions within the organization had to be filled in the 2017 financial year, leading to a 2.6% growth on staff numbers from 3 339 employees in 2016 to 3 425 in the current year.

10. GOING CONCERN

The consolidated annual financial statements have been prepared on the going concern basis. The Board has every reason to believe that the business has adequate resources to continue as a going concern in the foreseeable future. The going concern assessment was undertaken taking into consideration the following:

- The Group has adequate committed credit facilities from its lenders to fund its operations and meet its financial obligations in the normal course of business for the foreseeable future;
- A funding strategy and plan has been developed to ensure that the Group is able to successfully fund its capital expenditure programme without breaching the set financial parameters;
- The Group has adequate undrawn funding facilities and has set aside a liquidity buffer amounting to R859 million to cater for the liquidity requirements that may arise in the course of business;
- The operational and financial risks of the Group have been reviewed to determine their impact on the business under various conditions, and mitigating initiatives, strategies and controls are in place as reflected in the business and risk management plans of the Group and the Portfolios;
- The accumulated reserves of the Group has improved by 18.1% compared to the prior year;
- The gearing ratio reflected at 28.2% is below the set target of 50%;
- The interest cover and cash interest cover are significantly better than the target of 3,0 times; and
- Cash flow forecasts which are assessed by the Board on a quarterly basis indicate that the Group will be able to meet its obligations.

11. EVENTS AFTER THE REPORTING DATE

Subsequent to year end, Rand Water received judgement on two matters reported as contingent liabilities in Note 33. These two matters are reported as R4.4 million (claim 3) and R26.6 million (claim 4) in the contingent liabilities note, however the judgement handed down totalled approximately R0.9 million and R13.7 million respectively.

The Board is not aware of any other matter or circumstance that has arisen since the end of the financial year.

12. CORPORATE BUSINESS PLAN AND SHAREHOLDERS COMPACT

Since 1903, Rand Water has been playing an integrated role in the development and growth of Gauteng, its cities and its surrounding regions, providing water to people and industries. All the while, the infrastructure has been growing steadily, spreading the veins of life - the pipes containing water, interwoven underground throughout the province and surrounding regions. Today, Rand Water owns more than 3000 kilometres of pipeline. Water is the lifeblood that sustains economic growth and enhances human development, from the cradle to the grave, Rand Water runs through your being. The water flowing through the veins of Rand Water's infrastructure ensures that the heart of our economy through mines and industry continues to beat steadily. Gauteng is the economic powerhouse of South Africa and the continent, a steady heartbeat in this region helps ensure the economic health of our country and our continent.

Rand Water is proud of its rich history. Proud of the fact that the water it supplies is rated among the best quality potable water in the world. Rand Water is proud that it continues to grow to meet and anticipate the needs of an economy that has not stopped expanding for the past hundred years and more.

Profound political, economic and social changes have taken place in South Africa since Rand Water was established 114 years ago but Rand Water's core business remains the same and that is to deliver high quality of affordable bulk potable water around the clock. Rand Water is the only utility in the world that pumps large amounts of water over a long distance +/- 70 kilometres, over an elevation of 400 metres.

COMPLIANCE WITH LEGISLATION

Rand Water's Shareholder's Compact and corporate business plan contains the following detailed information in compliance with Treasury Regulations:

I. Strategic objectives and outcomes identified and agreed on by the executive authority in the Shareholder's Compact;

- II. strategic and business initiatives as embodied in business function strategies;
- III. key performance measures and indicators for assessing the entity's performance in delivering the desired outcomes and objectives;
- IV. a risk management plan;
- V. a fraud prevention plan;
- VI. a materiality and significant framework;
- VII. a financial plan spanning a five year period covering: –
 - (a) projections of revenue, expenditure and borrowings;
 - (b) asset and liability management;
 - (c) cash flow projections;
 - (d) capital expenditure programmes; and
 - (e) financial performance ratios.

Rand Water has complied with the compact and corporate plan in the prescribed format as provided by the Shareholder. The Shareholder as the primary user of the information further confirmed compliance of the Rand Water submission to the prescribed format as required by the PFMA.

At the Annual Assessment of Water Boards, Rand Water raised the matter that the external auditors are of the view that the Shareholders template did not comply with the PFMA (Section 52) and Treasury Regulations (Section 29). This was undertaken in the current business cycle.

STRATEGIC OBJECTIVES AND OUTCOMES

The vision of Rand Water, as stated in the Shareholder's Compact, is the following: "To be a provider of sustainable, universally competitive water and sanitation solutions for Africa".

In order to attain its strategic intent, Rand Water has set the following strategic objectives, which will focus and direct the business activities of the organisation over the planning period:

- Achieve Operational Integrity and Use Best Fit Technology
- Achieve a High Performance Culture
- Positively Engage Stakeholder Base
- Achieve Growth
- Maintain Financial Health & Sustainability

It is important to highlight that the shareholder analyses several KPIs that not only apply to

Rand Water but to eight (8) other water boards. Therefore, it is important to continue to align with the shareholder. The Shareholder's Compact aims to align performance indicators and targets of water boards with the relevant Ministerial Outcomes and the strategic plan of the Department.

This Shareholder's Compact coincides with a review of the Rand Water strategy. The review assesses past performance and sets the course for the next phase of the Rand Water vision. It is therefore important for the review to inform the key performance indicators (KPIs) in the Shareholder's Compact.

The following performance report follows the format of the Shareholder's Compact. The Shareholder's Compact contains Rand Water's targets that will support the Ministerial Outcomes and the DWS strategic plan. A significant number of the targets are influenced by financial KPIs.

This Shareholder's Compact forms the basis for the Corporate Key Performance Indicator set for the financial year ended 30 June 2017.

During the year as part of compliance to the Treasury Regulations Rand Water agreed its materiality and significance framework with the Shareholder. The current materiality level is set at R90 million.

12.1. PERFORMANCE INFORMATION FOR THE YEAR

Performance objective	Strategic objective	Key performance indicator	Target	Performance result
Bulk potable water quality compliance	Achieve operational integrity and use best fit technology	Test results SANS 241 Composite indicator	>= 98.33%	Achieved 99.84%
Manage avoidable water losses	Achieve operational integrity and use best fit technology	Avoidable water lost as a percentage of water produced	<= 3.50%	Achieved 3.14% (1)
Reliability of supply	Achieve operational integrity and use best fit technology	Number of days supply interrupted as a percentage of possible supply days	= 0%	Achieved 0%
Increased access to services	Achieve operational integrity and use best fit technology	Actual CAPEX spend on expansion related projects as a percentage of budget	>=15%	N/A (2)
Annual external audit	Maintain financial health & sustainability	Unqualified external audit report	=100%	Achieved 100%
Effective internal controls and risk management	Positively engage stakeholder base	Number of repeat internal audit findings	0 repeat findings	Achieved 0 repeat findings

PERFORMANCE INFORMATION FOR THE YEAR. CONTINUED

Performance objective	Strategic objective	Key performance indicator	Target	Performance result		
Bulk supply agreements concluded with municipalities/ other customers	Positively engage stakeholder base	Municipalities/ other customers with bulk supply agreement	= 100%	Achieved 100%		
Financial health and sustainability	Maintain financial health & sustainability	Current ratio	>=1.14	Achieved 1.24 (3)		
		Gross income margin (primary activities)	>=30.1%	Achieved 33.2% (4)		
		Gross income margin (secondary activities)	>= 5.0%	Achieved 5.9% (5)		
		Net income margin (primary activities)	>= 18.9%	Achieved 23.0% (6)		
		Net income margin (secondary activities)	>= 1.0%	Achieved 2.6% (7)		
		Debt equity	<= 0.41	Achieved 0.28 (8)		
		Return on assets	>= 9.3%	Achieved 11.2% (9)		
		Debtors days	<= 34 days	Not achieved 45 days (10)		
		Repairs and maintenance as a percentage of PPE (carrying value)	>= 95%	Not achieved 76.7% (11)		
		Staff remuneration as a percentage of total operating expenditure	<= 17.0%	Achieved 16.4% (12)		
		Increase BBBEE expenditure relative to operational projects	Positively engage stakeholder base	Percentage of spend increased	>= 85%	Achieved 95% (13)
				Award of work to BBBEE compliant entities through the tender systems	>= 85%	Achieved 95% (13)
Manage costs within the approved budget	Positively engage stakeholder base	Actual expenditure compared with budgeted expenditure	<= 15%	Achieved 3.4% (14)		

PERFORMANCE INFORMATION FOR THE YEAR. *CONTINUED*

Performance objective	Strategic objective	Key performance indicator	Target	Performance result
Capital expenditure programme	Achieve operational integrity and use best fit technology	Overall projects expenditure within target	>= 95%	Achieved 96.39%
		Overall project completion dates within target	>= 95%	Achieved 112% (15)
Engagement in secondary activities	Achieve growth	Percentage of total turnover	>= 7.8%	Not achieved 7.4% (16)
Implementation of Ministerial directives	Positively engage stakeholder base	Progress against implementation plan	>= 95%	N/A (17)
		Implementation of new mandate (phase 2)	>= 95%	N/A (17)
Support rural development	Positively engage stakeholder base	Total number of identified Municipalities with signed contracts and memorandum of understanding	>= 8	Achieved 9
Achieve statutory reporting compliance	Positively engage stakeholder base	All statutory submissions made on time	= 100%	Achieved 100%
Jobs created	Achieve a high performance culture	Number of permanent and contract staff (direct)	>= 50	Achieved 238 (18)
		Temporary (indirect)	>= 5000	Achieved 6068 (18)
Training and skills development	Achieve a high performance culture	Skills and capacity building		
		• Learnerships	>= 50	Achieved 66 (19)
		• Bursaries employees	>= 60	Achieved 85 (19)
		• Graduate programmes	>= 55	Achieved 302 (19)
• Female recruitment in management and technical positions (external and internal M-Q)	>= 51%	Achieved 61.76% (19)		
Good Governance	Positively engage stakeholder base	Breaches of materiality and significance framework	= 0	Achieved 0%

PERFORMANCE INFORMATION FOR THE YEAR. *CONTINUED*

Performance objective	Strategic objective	Key performance indicator	Target	Performance result
Board effectiveness	Achieve a high performance culture	Board member attendance of all Board or Committee meetings	>= 80%	Achieved 90.45%
		Percentage number of resolutions taken by the Board vs. number of resolutions required	>= 95%	Achieved 100%
Corporate social responsibility initiatives	Positively engage stakeholder base	Percentage spent on corporate social investment	>= 95%	Achieved 98%
Staff levels	Achieve a high performance culture	Staff turnover	<= 5%	Achieved 1.6% (20)
		Employee engagement survey	>=72%	N/A (20)
Reliability of supply	Positively engage stakeholder base	Customer satisfaction survey	>= 82.5%	Achieved 85%

12.2. PERFORMANCE INFORMATION EXPLANATIONS

Explanations for variances that are more than 10% to target are provided below, whether positive or negative:

1. Rand Water continuously reviews its treatment and distribution systems to minimize water losses and maximize the recovery of waste water. The target has therefore been achieved. Actual water loss 3.14% achieved against a target of 3.5%.
2. This measures the actual capital expenditure on expansion related projects as a percentage of budgeted expenditure. For the year under review, Rand Water has yet to allocate any capital expenditure to expansion projects. Rand Water's experience is that growth projects directed by the Minister can be ad hoc and/or can arise during the year. The target is currently 15% of budgeted CAPEX for that project that will arise during the year.
3. The current ratio measures the organisation's ability to pay its current obligations and also receive outstanding amounts in a timely manner. The target (1.14) was met in the year under review with a performance of 1.24.
4. The dominant business of Rand Water is defined under primary activities. This constitutes the sale of bulk potable water to local municipalities, mines and industries. Rand Water met the target for this indicator. This is one of the critical targets that demonstrate the financial health of the organization.
5. Rand Water is faced with an increasing challenge of extending its business beyond its mandated geographical area, current product provision and current service offerings. With this in mind, and extending beyond the definition of primary business, Rand Water is actively engaged in secondary business. For the year under review Rand Water's portfolio of projects and activities that are defined as secondary activity exceeded their target (5%) with a performance of 5.9%. As this category of business matures, it has been anticipated that the level of profitability would also improve, as reflected by these results.
6. One of the key strategic objectives of the organisation is financial health and sustainability. This key performance indicator

is a leading measurement towards achieving that. Rand Water's performance of 23.0% against a target of 18.9% demonstrates that the organisation remains on sound financial footing.

7. As Rand Water's mandate is expanded and as Rand Water strives to meet its strategy the role of secondary activities has significantly increased within the organization. However, it is important that this extended role does not occur at the expense of Rand Water's core mandate. With this in mind, Rand Water has actively engaged with this line of secondary business. In the year under review, Rand Water's portfolio of projects demonstrates an increasing level of maturity. Thus Rand Water met its target of 1% with a performance of 2.6%.
8. This measures the percentage of total debt to equity. Rand Water always strives to be prudent by ensuring that it is not overlaid with debt. At the same time, Rand Water also strives to ensure that there is an intergenerational mix with regards to its infrastructure, that is, the current generation pays for current infrastructure. This is a leading indicator that strives to attain this goal. Rand Water met its target (0.41) with a performance of 0.28. This is largely driven by timeous execution of its capital expenditure programme, current financial health and timeous raising of debt to meet long term requirements.
9. This is one of the critical drivers of Rand Water's current business. It provides a significant guideline on the ability of current infrastructure to provide surplus and reserves for future infrastructure requirements. With this in mind, the organization exceeded its target (9.3%) with a performance of 11.2%. This is driven by a fine mix between the current infrastructure and the level of surplus that Rand Water attained this year.
10. Rand Water failed to meet its target (34 days) with a performance of 45 days. This is a significant negative performance from last year (38 days). An increasing number of municipalities are failing to pay Rand Water on time. The negative variance was mainly driven by the following customers who did not settle their accounts on time: Emfuleni Local Municipality, Merafong Local Municipality, Bushbuckridge Municipality, Rand West Local Municipality, Govan Mbeki Local Municipality, and Mogale City. Rand Water met with local municipalities, DWS, and Provincial Government in an attempt to settle this matter.
11. The repair and maintenance of infrastructure is critical to the business of Rand Water. However, this is also shared with the need to implement urgent capital expenditure to replace ageing infrastructure. Therefore, the target of 95% was not met with actual spend of 76.7%.
12. This indicator measures staff remuneration as a percentage of total operating expenditure. This KPI is affected by the settlement with organised labour. This KPI is particularly useful in benchmarking water boards, local municipalities and other state owned entities. Rand Water performs favourably in this regard. The target of 17% was met with an actual performance of 16.4%. The filling of non-critical vacancies was deferred in line with the expected drop in revenues from the water restrictions imposed.
13. Rand Water met its target on amount spent and amount of work awarded to BBBEE compliant entities. The set target was 85% and Rand Water performed at 95% on both indicators. Rand Water remains committed to being an excellent corporate citizen of the South African economy in meeting these critical objectives of the country.

Rand Water met its target on amount spent and work awarded to BBBEE compliant entities through the tender systems. The set target was 85% and Rand Water performed at 95% on both indicators. Rand Water remains committed to being an excellent corporate citizen of the South African economy in meeting these critical objectives of the country.

14. This indicator demonstrates the ability of the organization to prudently manage its affairs and operating expenditure. This indicator calculates the variance between the budgeted and actual operating expenditure. Rand Water met the variance target of 15% with a performance of 3.4% demonstrating prudent financial management of resources under a difficult and challenging environment.

15. A critical component of Rand Water's activities is ensuring that Rand Water meets its core mandate. This is largely achieved by ensuring that infrastructure is available to meet current and future demand. The overall project expenditure within target KPI determines Rand Water's ability to outlay infrastructure in actual amount spent. Through prudent monitoring of its capital expenditure activities, Rand Water was able to attain the set target of 95% with a performance of 96.4%.

While it is possible for an organisation to spend on infrastructure, a complimentary indicator is the actual work done. The overall project completion dates within target KPI determines Rand Water's efforts in undertaking set targets. Rand Water exceeded its set target on the amount of work done with a performance of 112%. These efforts are attributable to streamlining of processes and constant monitoring of performance.

16. This refers to the revenue generated from other ventures that are listed as secondary activities. In January 2017 Rand Water received communication

from Bushbuckridge Local Municipality informing the organization that they no longer wished for Rand Water to continue with its role as an implementing agent. This has led to cancellation of a significant number of projects in the 2016/17 financial year.

The Board of Rand Water approved that this target be revised to 7.8% due to the curtailment of business in Mpumalanga during the financial year under review.

17. This KPI measures progress made on new Directives issued to Rand Water. This KPI requires submission to the Board. Board determines the performance on this KPI given submissions made to it. In the year under review, Rand Water did not accept any new Ministerial Directives. Therefore measurement of this KPI becomes not applicable.

Rand Water undertook extensive work to develop a strategy and plan for implementation of Phase 2. This extensive work was presented to the Board of Rand Water for approval and submitted to the Department. However, the Department was not in a position to enable the proposed Rand Water implementation plan through inadequate funding and postponement of strategic decisions, in particular, transfer of assets. Based on the abovementioned factors, measurement of this KPI becomes not applicable.

18. Rand Water remains prudent in ensuring that it meets requirements of a changing environment with an optimal staff complement. This KPI measures the total number of permanent and contract jobs created within the organization. In the year under review, Rand Water hired 238 new staff against a target of 50.

In line with national government objectives, job creation is recognised as a critical cog in the economy and ensuring social cohesion and equity. Therefore,

Rand Water plays an important part by creating temporary jobs (indirect) through the work that it undertakes in executing its capital expenditure programme and corporate social initiatives. Rand Water exceeded its target of 5000 by employing 6068 temporary (indirect) jobs.

19. This KPI recognizes Rand Water's training efforts through learnerships, bursaries and graduate programmes. Rand Water has exceeded its target on these three categories. This demonstrates Rand Water's continued good corporate citizenship.

Rand Water's employment equity target is prescribed by legislation. This legislation requires that state owned entities set realistic targets based on, among others, demographic representation. Rand Water has set a target of 51% for females recruited in management and technical positions. Therefore, female representation must be demonstrated in these senior and technical positions. Rand Water surpassed its target with an impressive 61.76%.

20. The staff turnover KPI measures Rand Water's efforts to retain its staff. It is also an indication of the environment in which employees work. Rand Water exceeded its target of 5% with a performance of 1.6%.

The employee engagement survey KPI is undertaken every two years. In the intermediate year corrective steps are undertaken to improve the employee/ employer relationships. In the year under review, Rand Water did not undertake the Employee Engagement Survey.

13. COMPANY SECRETARY AND REGISTERED ADDRESS

The Group Company Secretary is Ms. Makwena Pertunia Mohlabi, duly appointed on 07 September 2009. The following are the registered business and postal addresses of the Group:

Business address:
522 Impala Road
Glenvista
2058

Postal address: PO Box 1127
Glenvista
2000

14. EXTERNAL AUDITORS

The Auditor-General South Africa (AGSA) is the external auditors for the Rand Water Group. In terms of Section 4(3) (a) of the Public Audit Act, No. 25 of 2004, the AGSA opted to audit the Rand Water Group for 2016/17 financial year. It is anticipated that the AGSA will continue in office for the next financial year.

15. ACKNOWLEDGEMENT AND APPRECIATION

The Board of Rand Water would like to take this opportunity to thank the Shareholder, customers, suppliers, bankers, business partners and all other stakeholders for their consistent support to Rand Water.

Our sincere gratitude to all employees of Rand Water and its subsidiaries for their dedication, hard work and commitment that ensured consistency of quality in supplying water and providing excellent service to its customers.

REMUNERATION REPORT

1. REMUNERATION COMMITTEE TERMS OF REFERENCE

The Remuneration Policy is a crucial enabler of Rand Water's business strategy, encouraging sustainable performance based on a values-driven organisational culture, and aligning behaviour with the Group's approach to risk management. The Remuneration Committee (the Committee) is tasked by the Rand Water Board to approve and oversee the implementation of a Remuneration Policy (policy) that will enable the achievement of the business objectives, translate into market related yet affordable performance-linked rewards, and ensure transparent and balanced reward outcomes that align with stakeholder expectations over the short and long term. Ultimately, our policy should enable the attraction and retention of valuable talent.

The Committee is mandated by the Board to oversee all aspects of remuneration in accordance with the approved terms of reference. The terms of reference of the Committee are reviewed annually by the Board. Feedback reports on the decisions taken at Committee meetings are presented to the Board.

The Committee met four times during the year. Attendance is reported in the Corporate Governance framework contained in the Integrated Report.

As in previous years, all remuneration principles and practices stated in the King Code of Governance Principles for South Africa 2009 (King IV Code) are applied.

2. REWARD APPROACH

Rand Water's follows a total rewards approach in support of the organisation's strategic objective to drive a high performance culture. The approach is entrenched in the remuneration practices of the organisation which take into account the life style and life stage of the employees and provides some flexibility in the level of social benefits offered

to employees. The rewards practices aim to enable the organisation to attract, retain, motivate employees and recognise superior performance.

The Remuneration Policy acts as an enabler for the organisation to remunerate its employees fairly and consistently. The principle of internal parity is withheld whereby employees whose work is of equal value are equitably rewarded. In order to attract the skills required by the business from the labour market, Rand Water aims to be externally competitive and to this end, the organisation surveys the external job market and benchmarks salaries and benefits in order to strategically position itself. Efficient administration of rewards ensures that the process is legislative compliant and that the balance of linking of pay to performance whilst maintaining the overall cost of remuneration can be monitored.

3. ELEMENTS OF REMUNERATION

3.1 GUARANTEED REMUNERATION

Guaranteed pay is determined by the evaluation of the jobs utilising the Hay Job Evaluation methodology as well as the classification of the job according to Rand Water job categories. The organisation remunerates according to "basic-plus-benefits" approach for the Bargaining Unit employees and a Total Cost to Company methodology for managerial level staff. It is a condition of employment for permanent employees to belong to the Rand Water Provident Fund, Group Life and Medical Scheme.

3.1.1 Bargaining unit employees

Annual increases for employees falling within this category are based on the negotiated percentages as agreed to in Rand Water's Central Bargaining Forum. The 2016/17 negotiations were successfully concluded within the mandate granted by the Human Resources and Remuneration Committee for the year under review.

3.1.2 Managerial level employees

Employees in the management category receive annual package increases as approved by the Portfolio Integrating Committee. Economic indicators, market surveys and budget availability are factors taken into account in determining the overall increases. The implementation is linked to the performance rating ranges and differentiation of increases is directly linked to this.

Salary survey data and internal market line positioning are referenced in the determination remuneration packages. Internal parity of remuneration and consistent application of the Remuneration Policy is monitored. The annual package structuring process is undertaken following the implementation of annual package increases which were implemented within budget and in line with the approval granted for the year under review.

3.1.3 Chief Executive and Portfolio Integrating

Committee Executives

The remuneration of the Portfolio Integrating Committee members is recommended to the Board for final approval by the Human Resources and Remuneration Committee. The information referenced in granting increases are the performance against the targets, the market surveys, economic indicators, budget availability and any other factors taken into account by the committee.

Chief Executive

The Chief Executive's annual package was increased in line with the determination by the Minister of Water and Sanitation.

3.2 VARIABLE REMUNERATION

Variable Remuneration (Short-term Incentive Scheme)

The variable pay component of the total rewards framework is operationalized through the Short

Term Incentive Scheme which represents "pay at risk" or non-guaranteed pay. The scheme is utilized to drive a high performance culture, motivate employees as well as to reward the achievement of organisational, portfolio and individual performance objectives. The policy was reviewed to align to the Department of Water and Sanitation.

The scheme aligns with financial and strategic performance, is self-funding, and measures are based on the balanced score card dimensions. The targets are approved by the Board and reviewed annually to ensure that the organisation continues to deliver on its mandate and that the business strategy is achieved.

All eligible employees were paid out short term incentive bonuses following the approval by the Human Resources and Remuneration Committee and the Board following the completion of the annual audit.

4. REMUNERATION OF BOARD MEMBERS

4.1 RAND WATER BOARD

Board remuneration is determined by the Department of Water and Sanitation in line with policy. The board fees are advised by the Department and the adjustments were in line with the sizing of water boards and are administered in line with the policy principles and applicable legislation.

4.2 RAND WATER FOUNDATION

The remuneration of the Rand Water Foundation board members is determined by the main Board and the prescripts as determined by the Department of Water and Sanitation. Board remuneration is administered in line with the principles of policy, legislation and tax practices.

RAND WATER GROUP BOARD MEMBERS' AND EXECUTIVE EARNINGS:

Rand Water

Figures in Rand thousand	Fees for Service as Board member	Salary	Other benefits	Performance incentive bonus	Contributions to retirement, medical and life cover benefits	Total 2017	Total 2016
Executive Board Members							
Mr. DKP Sechemane (Chief Executive)	-	3,332	122	1,623	97	5,174	5,061
	-	3,332	122	1,623	97	5,174	5,061
Non-Executive Board Members							
Adv. FM Hashatse (Chairperson)	1,319	-	-	-	14	1,333	1,173
Ms. S Molokoane-Machika (Deputy Chairperson)	847	-	-	-	9	856	710
Ms. BC Bam	714	-	3	-	8	725	584
Mr. R Monyokolo	560	-	3	-	7	570	152
Mrs. NGJ Mbileni	610	-	-	-	7	617	497
Mr. I Mmushi	508	-	-	-	6	514	544
Ms. RA Kenosi	439	-	-	-	6	445	164
Prof. FAO Otieno	520	-	-	-	6	526	446
Mr. D Coovadia JP	497	-	17	-	6	520	425
Mr. LL Makibinyane	555	-	-	-	7	562	535
Ms. L Kaunda	189	-	-	-	3	192	391
Ms. MM Nakene @	-	-	-	-	-	-	125
Mr. N Govender @	-	-	-	-	-	-	114
	6,758	-	23	-	79	6,860	5,860

@ Resigned in the prior financial year

Figures in Rand thousand	Fees for Service as Board member	Salary	Other benefits	Performance incentive bonus	Contributions to retirement, medical and life cover benefits	Total 2017	Total 2016
Executives							
Mr. S Mosai (Chief Operating Officer)	-	2,996	29	1,313	84	4,422	4,169
Ms. M Nyembe (Chief Financial Officer)	-	2,802	76	1,091	79	4,048	3,898
Dr. FM Ngoatje (Group Shared Services)	-	2,356	124	1,032	68	3,580	3,300
Ms. NSN Sithole (Group Governance Executive)	-	2,214	15	971	59	3,259	3,131
Ms. W Mohamed (Strategic Human Capital Executive)	-	2,135	102	936	59	3,232	2,942
Mr. V Kubheka (Group Strategy Executive)	-	2,337	104	1,024	66	3,531	3,382
General Managers							
Mr. B Xaba (GM Strategic Asset Management)	-	2,319	21	1,016	50	3,406	3,181
Prof. H Kasan (GM Scientific Services)	-	2,420	197	1,062	53	3,732	3,535
Mr. M Mkhize (GM Bulk Water Operations)	-	2,809	77	1,231	62	4,179	3,992
Ms. M Letsoalo (GM Marketing)	-	2,139	104	937	52	3,232	3,009
Dr. T Bekker (GM Information Technology)	-	1,923	15	843	45	2,826	2,647
Mr. RS Mathebula (GM Sector Growth and Development)	-	1,794	23	786	39	2,642	2,481
Mr. MJ Manyi (GM Rand Water Academy) @	-	-	-	-	-	-	2,239
	-	28,244	887	12,242	716	42,089	41,906

@ Resigned in the prior financial year.

Rand Water Foundation

Figures in Rand thousand	Fees for Service as Board member	Salary	Other benefits	Performance incentive bonus	Contributions to retirement, medical and life cover benefits	Total 2017	Total 2016
Non-Executive Board Members							
Mr. M Tsheke (Chairperson)	641	-	-	-	8	649	659
Ms. MM Kabi	252	-	-	-	4	256	275
Ms. M Doods	336	-	-	-	5	341	335
Ms. NP Lekubu	211	-	-	-	3	214	233
Mr. ML Mngomezulu	308	-	-	-	4	312	257
	1,748	-	-	-	24	1,772	1,759
Executive							
Ms. M Sekoaila (GM Rand Water Foundation)	-	1,456	54	638	36	2,184	2,027
	-	1,456	54	638	36	2,184	2,027

STATEMENT OF FINANCIAL POSITION AS AT 30 JUNE 2017

Figures in Rand thousand	Note(s)	Group			Rand Water		
		2017	2016 Restated *	2015 Restated *	2017	2016 Restated *	2015 Restated *
Assets							
Non-Current Assets							
Property, plant and equipment	5	19,674,931	17,591,555	14,670,549	19,715,432	17,632,038	14,710,995
Intangible assets	6	402,210	396,980	392,128	402,210	396,980	392,128
Investment in subsidiary	7	-	-	-	7,097	6,547	4,474
Investments	8	458,886	461,650	482,264	458,886	461,650	482,264
Retirement benefit asset	15	10,412	-	-	10,412	-	-
Loans receivable	9	1,313	1,748	956	1,313	1,748	956
		20,547,752	18,451,933	15,545,897	20,595,350	18,498,963	15,590,817
Current Assets							
Inventories	10	409,658	129,734	122,441	409,658	129,734	122,441
Trade and other receivables	11	2,243,619	1,934,664	1,789,865	2,244,458	1,934,422	1,780,310
Loans receivable	9	3,293	3,420	3,621	3,293	3,420	3,621
Cash and cash equivalents	12	805,147	1,470,173	1,154,189	780,199	1,442,742	1,128,770
		3,461,717	3,537,991	3,070,116	3,437,608	3,510,318	3,035,142
Non-current assets held for sale	13	511	417	1,496	511	417	34
Total Assets		24,009,980	21,990,341	18,617,509	24,033,469	22,009,698	18,625,993
Equity and Liabilities							
Equity							
Reserves		162,661	123,252	124,585	162,661	123,252	125,148
Accumulated reserves		15,487,290	13,112,529	10,981,954	15,526,170	13,151,448	11,016,914
		15,649,951	13,235,781	11,106,539	15,688,831	13,274,700	11,142,062

STATEMENT OF FINANCIAL POSITION AS AT 30 JUNE 2017: *CONTINUED*

Figures in Rand thousand	Note(s)	Group			Rand Water		
		2017	2016 Restated *	2015 Restated *	2017	2016 Restated *	2015 Restated *
Liabilities							
Non-Current Liabilities							
Interest bearing borrowings	14	4,414,718	4,418,735	3,672,432	4,414,718	4,418,735	3,672,432
Retirement benefit obligation	15	-	8,938	330,321	-	8,938	330,321
Income received in advance	16	409,113	427,374	441,972	400,977	409,651	418,645
Provision for rehabilitation costs	17	69,187	65,518	60,862	69,187	65,518	60,862
		4,893,018	4,920,565	4,505,587	4,884,882	4,902,842	4,482,260
Current Liabilities							
Trade and other payables	18	3,467,011	3,833,995	3,000,195	3,459,756	3,832,156	2,999,202
Interest bearing borrowings	14	-	-	2,469	-	-	2,469
		3,467,011	3,833,995	3,002,664	3,459,756	3,832,156	3,001,671
Liabilities of disposal groups			-	2,719	-	-	-
Total Liabilities		8,360,029	8,754,560	7,510,970	8,344,638	8,734,998	7,483,931
Total Equity and Liabilities		24,009,980	21,990,341	18,617,509	24,033,469	22,009,698	18,625,993

STATEMENT OF FINANCIAL PERFORMANCE

Figures in Rand thousand		Group		Rand Water	
		2017	2016 Restated *	2017	2016 Restated *
Revenue	19	11,981,155	11,071,870	11,981,155	11,071,870
Cost of sales	20	(7,999,040)	(7,510,871)	(7,999,040)	(7,510,871)
Gross income		3,982,115	3,560,999	3,982,115	3,560,999
Other operating income	21	56,418	60,573	39,769	41,613
Staff costs	22	(1,062,636)	(1,018,774)	(1,048,057)	(1,005,602)
Depreciation	23	(47,851)	(52,750)	(47,823)	(52,714)
Amortisation	24	(14,143)	(10,263)	(14,143)	(10,263)
Other operating expenses	25	(552,285)	(461,021)	(548,530)	(450,895)
Operating income		2,361,618	2,078,764	2,363,331	2,083,138
Finance income	26	194,189	123,971	192,437	123,556
Finance costs	27	(181,046)	(72,160)	(181,046)	(72,160)
Net income for the year		2,374,761	2,130,575	2,374,722	2,134,534

STATEMENT OF COMPREHENSIVE INCOME

Figures in Rand thousand	Group		Rand Water	
	2017	2016 Restated *	2017	2016 Restated *
Net income for the year	2,374,761	2,130,575	2,374,722	2,134,534
Other comprehensive (loss)/income:				
Items that will not be reclassified to net income:				
Remeasurements on net defined benefit liability/asset	36,975	13,505	36,975	13,505
Items that may be reclassified to net income:				
Effects of exchange differences on translating foreign operations	-	563	-	-
Available-for-sale financial assets adjustments	2,434	(15,401)	2,434	(15,401)
Other comprehensive (loss)/income for the year	39,409	(1,333)	39,409	(1,896)
Total comprehensive income	2,414,170	2,129,242	2,414,131	2,132,638

STATEMENT OF CHANGES IN EQUITY

Figures in Rand thousand	Foreign currency translation reserve	Fair value adjustment assets-available-for-sale reserve	Re-measurements on employee benefit obligation	Transfer of function	Total reserves	Accumulated reserves	Total equity
Group							
Opening balance as previously reported	(563)	(16,212)	-	10,557	(6,218)	11,151,195	11,144,977
Adjustments							
Prior period error (refer to note 36)	-	-	-	-	-	(38,438)	(38,438)
Change in accounting policy (refer to note 36)	-	-	130,803	-	130,803	(130,803)	-
Restated* Balance at 01 July 2015 as restated	(563)	(16,212)	130,803	10,557	124,585	10,981,954	11,106,539
Income for the year	-	-	-	-	-	2,130,575	2,130,575
Other comprehensive income	563	(15,401)	13,505	-	(1,333)	-	(1,333)
Total comprehensive income for the year	563	(15,401)	13,505	-	(1,333)	2,130,575	2,129,242
Balance at 01 July 2016	-	(31,613)	144,308	10,557	123,252	13,112,529	13,235,781
Income for the year	-	-	-	-	-	2,374,761	2,374,761
Other comprehensive income	-	2,434	36,975	-	39,409	-	39,409
Total comprehensive income for the year	-	2,434	36,975	-	39,409	2,374,761	2,414,170
Balance at 30 June 2017	-	(29,179)	181,283	10,557	162,661	15,487,290	15,649,951

STATEMENT OF CHANGES IN EQUITY: *CONTINUED*

Figures in Rand thousand	Foreign currency translation reserve	Fair value adjustment assets-available-for-sale reserve	Re-measurements on employee benefit obligation	Transfer of function	Total reserves	Accumulated reserves	Total equity
Rand Water							
Opening balance as previously reported	-	(16,212)	-	10,557	(5,655)	11,186,155	11,180,500
Adjustments							
Prior period error (refer to note 36)	-	-	-	-	-	(38,438)	(38,438)
Change in accounting policy (refer to note 36)	-	-	130,803	-	130,803	(130,803)	-
Restated* Balance at 01 July 2015 as restated	-	(16,212)	130,803	10,557	125,148	11,016,914	11,142,062
Income for the year	-	-	-	-	-	2,134,534	2,134,534
Other comprehensive income	-	(15,401)	13,505	-	(1,896)	-	(1,896)
Total comprehensive income for the year	-	(15,401)	13,505	-	(1,896)	2,134,534	2,132,638
Balance at 01 July 2016	-	(31,613)	144,308	10,557	123,252	13,151,448	13,274,700
Income for the year	-	-	-	-	-	2,374,722	2,374,722
Other comprehensive income	-	2,434	36,975	-	39,409	-	39,409
Total comprehensive income for the year	-	2,434	36,975	-	39,409	2,374,722	2,414,131
Balance at 30 June 2017	-	(29,179)	181,283	10,557	162,661	15,526,170	15,688,831

STATEMENT OF CASH FLOWS

Figures in Rand thousand		Group		Rand Water	
		2017	2016 Restated *	2017	2016 Restated *
Cash flows from operating activities					
		11,526,969	11,006,240	11,507,704	10,985,853
		(9,713,293)	(7,887,928)	(9,689,802)	(7,868,138)
	29	1,813,676	3,118,312	1,817,902	3,117,715
		178,404	119,025	176,652	118,610
		(438,041)	(423,389)	(438,042)	(423,389)
	15	-	(335,944)	-	(335,944)
		1,554,039	2,478,004	1,556,512	2,476,992
Cash flows from investing activities					
	5	(2,220,372)	(2,907,971)	(2,220,362)	(2,907,973)
	5	2,532	1,611	2,532	1,611
	6	(1,787)	(6,339)	(1,787)	(6,339)
		562	(591)	562	(591)
		-	998	-	-
		(2,219,065)	(2,912,292)	(2,219,055)	(2,913,292)
Cash flows from financing activities					
		-	1,004,678	-	1,004,678
		-	(254,406)	-	(254,406)
		-	750,272	-	750,272
		(665,026)	315,984	(662,543)	313,972
		1,470,173	1,154,189	1,442,742	1,128,770
		805,147	1,470,173	780,199	1,442,742

SUMMARY OF PRINCIPAL ACCOUNTING POLICIES AND SIGNIFICANT JUDGEMENTS

1. SUMMARY OF PRINCIPAL ACCOUNTING POLICIES AND SIGNIFICANT JUDGEMENTS

The principal accounting policies and significant judgements and estimates applied in the preparation of these consolidated and separate annual financial statements (annual financial statements) are set out below.

The annual financial statements were authorised for issue by the Board on 28 September 2017.

2. BASIS OF PREPARATION

The annual financial statements have been prepared in accordance with the historical cost convention, except for certain financial instruments, which are measured at fair value.

The annual financial statements are prepared on the basis that the Group will continue to be a going concern. The following principal accounting policies and methods of computation were applied by the Group in the preparation of the annual financial statements for the financial year ended 30 June 2017.

The annual financial statements are presented in Rand thousands; all values are rounded to the nearest thousand Rand, except when otherwise indicated.

2.1 STATEMENT OF COMPLIANCE

The annual financial statements are prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB), the Water Services Act, No. 108 of 1997 (WSA), the Public Finance Management Act, No. 1 of 1999 (PFMA), and where applicable, the South African Companies Act, No. 71 of 2008.

For all financial years up to and including the year ended 30 June 2016, the Group prepared its annual financial statements in accordance

with South African Generally Accepted Accounting Practice (SA GAAP). These annual financial statements, for the year ended 30 June 2017, are the first the Group has prepared financial statements in accordance with IFRS. Accordingly, the Group has prepared financial statements that comply with IFRS applicable as at 30 June 2017, together with the comparative period data for the year ended 30 June 2016. In preparing the financial statements, the Group's opening statement of financial position was prepared as at 1 July 2015, the Group's date of transition to IFRS. Refer to Note 36 for information on how the Group adopted IFRS.

2.2 NEW AND AMENDED STANDARDS NOT YET ADOPTED BY THE GROUP

Annual improvements to IFRS 2014 - 2016

IFRS 9 Financial Instruments 2009

IFRS 9 (2010) supersedes IFRS 9 issued in 2009. However, for annual periods beginning before 1 January 2015, an entity may elect to apply IFRS 9 issued in 2009 instead of applying IFRS 9 (2010).

The Group is still assessing the impact of IFRS 9 on the financial statements.

IFRS 15 Revenue from Contracts with Customers

IFRS 15 specifies how and when an entity will recognise revenue as well as requiring such entities to provide users of financial statements with more informative, relevant disclosures. The standard provides a single, principles-based five-step model to be applied to all contracts with customers. An entity shall apply this standard for annual reporting periods beginning on or after 1 January 2018. Earlier application is permitted.

The Group is still assessing the impact of IFRS 15 on the financial statements.

IFRS 16 Leases

This standard replaces the current guidance in IAS 17 and is a far-reaching change in accounting by lessees in particular.

Under IAS 17, lessees were required to make a distinction between a finance lease (on balance sheet) and an operating lease (off balance sheet). IFRS 16 now requires lessees to recognise a lease liability reflecting future lease payments and a 'right-of-use asset' for virtually all lease contracts. The IASB has included an optional exemption for certain short-term leases and leases of low-value assets; however, this exemption can only be applied by lessees.

For lessors, the accounting stays almost the same. However, as the IASB has updated the guidance on the definition of a lease (as well as the guidance on the combination and separation of contracts), lessors will also be affected by the new standard. Under IFRS 16, a contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. This standard is effective for periods beginning on or after 1 January 2018 with earlier application permitted if IFRS 15 Revenue from Contracts with Customers, is also applied.

The Group is still assessing the impact of IFRS 16 on the financial statements.

2.3 CHANGES IN ACCOUNTING POLICIES, ACCOUNTING ESTIMATES AND ERRORS

Where the Group changes its accounting policy or policies during the accounting period and the change has an effect on the current or any prior period, the Group will disclose the nature of the change in the accounting policy, the reasons why the new accounting policy is applied and the extent and amount of the adjustment for both current and prior periods.

The Group discloses the nature and amount of accounting estimates that has an effect in the current period or which is expected to have an effect in future periods. Revisions to estimates are recognised prospectively.

In correcting prior period errors the Group discloses the nature of the prior period error, the amount of the correction for each prior period error and amount of correction at the beginning of the earliest prior period presented.

3. SIGNIFICANT JUDGEMENTS AND SOURCES OF ESTIMATION UNCERTAINTY

The preparation of the annual financial statements requires the Group's management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and estimates and assumptions of the reported amounts of revenues and expenditures during the reporting period. The determination of estimates requires the exercise of judgement based on various assumptions and other factors such as historical experience, current and expected economic conditions, and in some cases actuarial techniques. Actual results could differ from those estimates.

Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Revisions to estimates are recognised prospectively.

The following key assumptions concerning the future and other key sources of estimation uncertainty at the statement of financial position date, have a risk of causing an adjustment to the carrying amounts of assets and liabilities within the next financial year:

3.1 SPECIAL PURPOSE ENTITY

The Group sponsored the formation of a special purpose entity (SPE), specifically Rand Water Foundation (RWF).

SPEs are consolidated when the substance of the relationship between the Group and the SPE indicates control. As it can sometimes be difficult to determine whether the Group controls an SPE, management makes judgements about its exposure to the risks and rewards, as well as about its ability to make operational decisions for the SPE in question.

Management has applied their judgements in its assessment of the substance of the relationship between the Group and RWF, and concluded that the SPE is controlled by the Group, as such RWF has been consolidated into the financial statements of the Group.

3.2 USEFUL LIVES AND RESIDUAL VALUES

The useful lives and residual values of property, plant and equipment as well as the useful lives of the intangible assets are reviewed at each reporting date. Management's estimation of the useful lives are based on historical trend analyses and other available information. The residual values are management's best estimates based on useful lives as well as other available information.

3.3 WATER USE LICENCE

Where actual costs cannot be derived, management values its water use licence based on the income approach valuation technique. The model determines the estimated future business cash flow earnings derived from a Group of assets, over a 20 year period and apportions earnings to each class of contributory assets. Management uses the weighted average cost of capital as its discount rate.

3.4 IMPAIRMENT OF ASSETS

The Group reviews whether the carrying value of its non-financial assets is recoverable, or whether a reversal of previous impairment losses is required. In making assessments for impairment, management necessarily applies its judgement in allocating assets that do not generate independent cash flows to appropriate cash generating units (CGU), and also in estimating the timing and value of underlying cash flows within the calculation of the recoverable amount.

The calculation of the recoverable amount of a CGU is based on assessments of the higher of the fair value less costs of disposal or value in use. The cash flow projections used in these assessments are subject to the areas of judgement outlined above.

The Group further assesses its financial assets and certain non-financial assets for impairment at each reporting date. In determining whether an impairment loss should be recorded in profit or loss, the Group makes judgements as to whether there is observable data indicating a measurable decrease in the estimated future cash flows from such financial asset.

3.5 ASSESSMENT OF FAIR VALUE

The assessment of fair value is principally used in accounting for impairment testing and the valuation of certain financial assets and liabilities. The fair value of financial instruments traded in active markets (such as available-for-sale securities) is based on quoted market prices at the reporting date. The quoted market price used for financial assets held by the Group is the current bid price.

Fair value less cost to sell is determined based on observable market data or discounted cash flow (DCF) models (and other valuation techniques) using assumptions considered to be reasonable and consistent with those that would be applied by a market participant. Where DCF's are used, the resulting fair value measurements are considered to be at level 3 in the fair value hierarchy as defined in IFRS 13 Fair Value Measurement as they depend, to a significant extent, on unobservable valuation inputs. The determination of assumptions used in assessing the fair value of identifiable assets and liabilities is subjective and the use of different valuation assumptions could have a significant impact on financial results. In particular, expected future cash flows, which are used in discounted cash flow models, are inherently uncertain and could materially change over time. They are significantly affected by a number of factors, together with economic factors such as exchange rates, discount rates and estimates of production costs and future capital expenditure.

Cash flow projections

Cash flow projections are based on financial budgets, incorporating key assumptions as detailed below:

Discount rates

- Cash flow projections used in fair value less costs of disposal impairment models are discounted. To the extent that specific risk factors were not incorporated into the discount rate, adjustments are made to the cash flow projections.

Operating costs, capital expenditure and other operating factors

- Operating costs and capital expenditure are based on financial budgets and internal management forecasts. Cost assumptions incorporate management experience and expectations.

Trade receivables and payables are non-derivative assets and liabilities with fixed or determinable payments that are not quoted in an active market. Trade receivables and payables are measured at amortised cost using the effective interest rate method less an impairments, this are assumed to approximate their fair values.

3.6 POST-EMPLOYMENT BENEFIT OBLIGATION AND PLAN ASSET

The cost of post-employment benefit obligations and the present value of the plan asset are determined using actuarial valuations. An actuarial valuation involves making various assumptions. Due to the complexity of the valuation, the underlying assumptions and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date these and the carrying amount of the liability and plan asset, have been disclosed in note 15 to the annual financial statements.

3.7 PROVISIONS AND CONTINGENT LIABILITIES

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, for which it is probable that an outflow of economic benefits will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation. Provisions are not recognised for future operating losses.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a rate that reflects current market assessments of the time value of money and the risks specific to the obligation. Various estimates and assumptions have been applied by management in arriving at the carrying value of provisions.

Management further relies on input from the Group's lawyers in assessing the probability of items of a contingent nature.

4. ANNUAL FINANCIAL STATEMENTS

4.1 BASIS OF CONSOLIDATION

The consolidated financial statements present the financial position and changes therein, operating results and cash flow information of the Group. The Group comprises Rand Water, its subsidiaries and interests in joint arrangements.

Where necessary, adjustments are made to the results of subsidiaries and joint arrangement to ensure the consistency of their accounting policies with those used by the Group.

Intra-group transactions, balances and unrealised profits and losses between Group companies are eliminated on consolidation. In respect of joint arrangements, unrealised profits and losses are eliminated to the extent of the Group's interest in these entities.

Investment in subsidiaries

Subsidiaries are those entities (including special purpose entities) over which the Group has control. Control is achieved where the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

When the Group ceases to have control, any retained interest in the entity is remeasured to its fair value, with the change in carrying amount recognised in profit or loss. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognised in comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. This may mean that amounts previously recognised in comprehensive income are reclassified to profit or loss.

In Rand Water's separate annual financial statements, investments in subsidiaries are carried at cost less any accumulated impairment.

The cost of an investment in a subsidiary is the aggregate of:

- the fair value, at the date of exchange, of assets given, liabilities incurred or assumed, and equity instruments issued by the company; plus
- any costs directly attributable to the purchase of the subsidiary.

Investments in joint ventures

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

Joint ventures are accounted for using the equity method.

The joint venture's share of losses is recognised to the extent that the cumulative reserves are reduced to nil, except to the extent that the Group has incurred or guaranteed obligations in respect of the joint venture.

Translation of foreign operations

The financial results of all entities that have a functional currency different from the presentation currency of Rand Water are translated into the presentation currency (South African Rand).

Foreign currency transactions are translated into the functional currency of an entity at the prevailing rate of exchange at the transaction date.

Monetary assets and liabilities that are denominated in foreign currencies are translated into the functional currency of an entity at the rate of exchange ruling at the Statement of financial position date. Foreign exchange gains and losses arising on

translation are recognised in the Statement of financial performance.

When a gain or loss on a non-monetary item is recognised directly in equity, any exchange component of that gain or loss is recognised directly in equity. When a gain or loss on a non-monetary item is recognised in profit or loss, any exchange component of that gain or loss is recognised in profit or loss.

Exchange differences on translation of foreign entities are taken directly to other comprehensive income. All translation adjustments recognised directly in other comprehensive income are released to profit or loss upon the disposal of the foreign operation.

Transactions eliminated on consolidation

Intra-Group transactions and balances are eliminated on consolidation, together with any unrealised gains or losses arising on intra-Group transactions. Unrealised gains arising from transactions with joint ventures are eliminated to the extent of the Group's interest in those entities, while unrealised losses are eliminated in the same way, but only to the extent that there is no evidence of impairment.

Business combinations

Acquisitions of businesses are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition-date fair values of the assets transferred by the Group, liabilities incurred by the Group to the former owners of the acquire and the equity interests issued by the Group in exchange for control of the acquire. Acquisition-related costs are generally recognised in profit or loss as incurred, except the costs to issue debt which are amortised as part of the effective interest and costs to issue equity which are included in equity.

The acquiree's identifiable assets, liabilities and contingent liabilities which meet the recognition conditions are recognised at their fair values at acquisition date, except for non-current assets (or disposal Group) that are

classified as held-for-sale and discontinued operations, which are recognised at fair value less costs to sell.

Contingent liabilities are only included in the identifiable assets and liabilities of the acquiree where there is a present obligation at acquisition date.

On acquisition, the Group assesses the classification of the acquiree's assets and liabilities and reclassifies them where the classification is inappropriate for Group purposes. This excludes lease agreements and insurance contracts, whose classification remains as per their inception date.

Non-controlling interest arising from a business combination is measured either at their share of the fair value of the assets and liabilities of the acquiree or at fair value. The treatment is not an accounting policy choice but is selected for each individual business combination, and disclosed in the note for business combinations.

Transfer of functions

Following the Minister's decision to dis-establish Bushbuckridge Water Board and extend Rand Water's area of supply as of 1 April 2014, the Group in application of the provisions in AC101 (IAS 1) Presentation of financial statements adopted the provisions within the GRAP 105 Transfer of functions between entities under common control.

All assets acquired and liabilities assumed in the transfer of function as of the transfer date are measured at their carrying amounts. The difference between the carrying amounts of the assets acquired, the liabilities assumed and the consideration paid to the transferor is recognised in directly in equity for the period.

The entity had a two year period in which to finalise the carrying amounts of assets acquired and liabilities assumed referred to as the measurement period. Measurement period adjustments were recognised as an adjustment to the amount recognised in retained earnings. This two year period expired at the end of the 2016 financial year.

4.2 PROPERTY, PLANT AND EQUIPMENT

The cost of an item of property, plant and equipment is recognised as an asset when it is probable that future economic benefits associated with the item will flow to the Group; and the cost of the item can be measured reliably.

Owned assets

Property, plant and equipment are stated at cost, net of accumulated depreciation and / or accumulated impairment losses, if any. Such cost includes the cost of replacing parts of the property, plant and equipment and borrowing costs for long-term construction projects if the recognition criteria are met and any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management.

Self-constructed assets for production and supply purposes are carried at cost, less any recognised impairment loss. The cost includes the cost of materials, direct labour, borrowing costs, the initial estimate, where relevant, of costs of dismantling and removing the items and restoring the site on which they are located and an appropriate proportion of production overheads. Cost also includes professional fees and, for qualifying assets, borrowing costs capitalised in accordance with the Group's accounting policy. Such costs are classified to the appropriate categories of property, plant and equipment when completed and ready for intended use. Depreciation of these assets, on the same basis as other assets, commences when the assets are ready for their intended use.

Where major components of an item of property, plant or equipment have different useful lives, they are accounted for as separate items of property, plant or equipment and depreciated separately over their respective useful lives. Likewise, when a major inspection is performed, its cost is recognised in the carrying amount of the plant and equipment as a replacement if the recognition criteria are satisfied.

Spare parts, standby and servicing equipment held by the Group, that meets the definition of property, plant and equipment are classified as such. Spare parts and standby equipment that can only be used in connection with a specific item of property, plant and equipment are also accounted for as property, plant and equipment. All other spare parts are accounted for as inventory.

Transfer of assets from customers

Where the Group receives from a customer a transfer of an item of property, plant and equipment, which require an obligation to supply goods to the customer in the future, and it has assessed that the transferred asset meets the definition of an asset, the Group recognises the transferred asset as an item of property, plant and equipment and measures its cost on initial recognition based on its fair value.

Leased assets

The determination of whether an arrangement is, or contains, a lease is based on the substance of the arrangement at the inception date. The arrangement is assessed for whether fulfilment of the arrangement is dependent on the use of a specific asset or assets or the arrangement conveys a right to use the asset or assets, even if that right is not explicitly specified in an arrangement.

Leases of property, plant and equipment, where the Group assumes substantially all the risks and rewards of ownership, are classified as finance leases. Lease payments are accounted for as described in the relevant accounting policy.

Subsequent expenditure

Subsequent expenditure on property, plant and equipment is capitalised only when the expenditure enhances the value or output of the asset beyond original expectations and it can be measured reliably. Costs incurred on repairing and maintaining assets are recognised in the statement of financial performance in the period in which they are incurred.

Depreciation

Depreciation is recognised so as to write off the cost of assets less their residual values over their useful lives, using the straight-line method. Depreciation commences when the asset is available for its intended use by management.

The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

Land and assets under construction are not depreciated. All other property, plant and equipment, including capitalised leased assets, are depreciated on a straight-line basis over their estimated useful lives or the term of the lease, whichever is shorter to their estimated residual value. Major repairs are depreciated over the remaining useful life of the related asset or to the date of the next major repair, whichever is shorter. The estimated useful lives are as follows:

Asset Category	Estimated useful life (years)
Land	Indefinite
Buildings	
- Building structures	50-80
- Building components	10-20
Plant and Machinery	
- Plant structures	80
- Plant components	3-30
- Reservoirs	80
- Dams	40 -100
Pipelines	
- Pipeline structures	25-75
- Pipeline components	15-50
Furniture and fixtures	3-10
Motor vehicles	6-15
Office equipment	3-10
Information technology equipment	3-8

The residual value, useful life and depreciation method of each asset are reviewed at the end of each reporting period. If the expectations differ from previous estimates, the change is accounted for as a change in accounting estimate.

The depreciation charge for each period is recognised in profit or loss.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the statement of financial performance when the asset is derecognised.

4.3 INTANGIBLE ASSETS

Owned

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is their fair value as at the date of acquisition. Following initial recognition, intangible assets are carried at cost less accumulated amortisation and accumulated impairment losses, if any.

Acquired computer software is capitalised on the basis of the costs incurred to acquire and bring into use the specific software. Costs associated with researching or maintaining computer software programmes are recognised as an expense as incurred. Costs that are directly associated with the development of identifiable software products controlled by the Group, that will probably generate economic benefits beyond one year that can be measured reliably, are recognised as intangible assets. Costs include employee costs incurred as a result of developing software and an appropriate proportion of relevant overheads.

The useful life of the servitudes will remain in force as long as the relevant infrastructure underlying the servitude is still in use. A servitude will only become impaired if the infrastructure to which the servitude is linked is derecognised, therefore servitudes are rights granted to the Group for an indefinite period of time.

The estimated useful life of water use licence is estimated based on the relevant contractual agreements. The estimated useful life and amortisation method are reviewed at the end of each reporting period, with the effect of any

changes in estimate being accounted for on a prospective basis.

Service concession arrangement

Where the Group receives from its executive authority a transfer of an item of property, plant and equipment to utilise in the provision or supply of goods and services to a customer, the Group recognises such transferred asset as a right of use intangible asset and measures the transferred asset on initial recognition at its fair value.

Subsequent expenditure

Subsequent expenditure on capitalised intangible assets is capitalised only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure is expensed as incurred.

Amortisation

Intangible assets with finite lives are amortised over their useful economic lives and assessed for impairment whenever there is an indication that the intangible asset may be impaired. Intangible assets with an indefinite useful life are assessed for impairment on an annual basis. The amortisation period and the amortisation method for an intangible asset with a finite useful life are reviewed at least at the end of each reporting period. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are accounted for by changing the amortisation period or method, as appropriate, and are treated as changes in accounting estimates. The amortisation expense on intangible assets with finite lives is recognised in the statement of profit or loss in the expense category consistent with the function of the intangible assets.

Asset category	Estimated useful life (years)
Water use licence	40-60
Servitudes	Indefinite
Computer software	3-15
Right of use	15-80 years

The estimated useful life for the right of use intangible assets are directly linked to the useful life of the related assets.

4.4 LEASES

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

Group as lessor

Rental income derived from operating leases, if not insignificant, is recognised in profit or loss on a straight-line basis over the term of the lease.

Group as a lessee

Finance leases are capitalised at the lease's commencement at the lower of the fair value of the leased equipment and the present value of the minimum lease payments.

Each lease payment is allocated between the liability and finance charges. The corresponding lease obligations, net of finance charges, are included in interest-bearing borrowings. The interest element of the finance cost is charged to the statement of financial performance over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The asset acquired under finance leases are depreciated over the useful life of the asset.

Operating lease payments if material, are recognised on a straight-line basis over the term of the relevant lease.

Lease accounting

The Group follows the guidance in IFRIC 4 Determining whether an Arrangement contains a lease to determine how to account for a supply agreement. This determination requires significant judgement. In making this judgement, the Group evaluates whether the fulfilment of the arrangement is dependent on the use of a specific asset or assets and whether the arrangement conveys a right to use the asset.

4.5 BORROWING COSTS

Interest on borrowings directly relating to the financing of qualifying capital projects under construction is added to the capitalised cost of those projects during the construction phase, until such time as the assets are substantially ready for their intended use or sale which, is when they are capable of commercial production.

The amount of borrowing costs eligible for capitalisation is determined as follows:

Where funds have been borrowed specifically to finance a project, the amount capitalised represents the actual borrowing costs incurred.

Where the funds used to finance a project form part of general borrowings, the amount capitalised is calculated using a weighted average of rates applicable to relevant general borrowings of the Group during the period.

The capitalisation of borrowing costs commences when expenditures for the asset have occurred, borrowing costs have been incurred, and activities that are necessary to prepare the asset for its intended use or sale are in progress. Capitalisation is suspended during extended periods in which active development is interrupted.

Qualifying assets are assets that necessarily take a substantial period of time (more than 12 months) to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

All other borrowing costs are recognised in profit or loss in the period in which they are incurred.

4.6 FINANCIAL INSTRUMENTS

Financial assets, financial liabilities and equity instruments are recognised when a Group entity becomes a party to the contractual provisions of the instruments.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial

liabilities are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognised immediately in profit or loss. Equity investments for which fair value is not determinable, are measured at cost.

FINANCIAL ASSETS

Classification

The Group classifies its financial assets into either the 'available-for-sale' or 'loans and receivables' categories. This classification is dependent on the purpose for which the financial asset is acquired. Management determines the classification of its financial assets at the time of the initial recognition.

Recognition and measurement

Regular purchases and sales of financial instruments are recognised on the trade date, being the date on which the Group becomes party to the contractual provisions of the relevant instrument. Investments are initially recognised at fair value plus transaction costs for all financial assets not carried at fair value through profit or loss. Financial assets carried at fair value through profit or loss are initially recognised at fair value, and transaction costs are expensed in the statement of financial performance.

Financial assets are derecognised when the right to receive cash flows from the investments have expired or have been transferred and the Group has transferred substantially all risks and rewards of ownership. Financial assets at available-for-sale are subsequently carried at fair value. Loans and receivables are subsequently carried at amortised cost using the effective interest method. Gains or losses arising from changes in the fair value of the 'available-for-sale financial assets' category are presented in other comprehensive income in the period in which they arise.

Available-for-sale financial assets

Available-for-sale financial assets are non-derivatives that are either designated as AFS or are not classified as (a) loans and receivables, (b) held-to-maturity investments or (c) financial assets at fair value through profit or loss.

The long term financial instruments held by the Group which are classified as available for sale financial assets are stated at fair value with any resultant gain or loss recognised in other comprehensive income.

Where investments held are interest bearing, interest calculated using the effective interest method is recognised in profit or loss.

The fair value of financial instruments classified as available for sale financial assets is the quoted bid price at reporting date.

Loans and receivables:

Trade and other receivables

Trade receivables are amounts due from customers for goods sold and services rendered in the ordinary course of business. Trade and other receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment.

If collection is expected in one year or less, they are classified as current assets. If not, they are presented as non-current assets.

The prepayment shall be measured at cost which shall be deemed to be the cash amount paid for the goods or services not yet delivered.

The prepayment will be derecognised as the related goods or services are received.

Loans to employees

These financial assets are classified as loans and receivables and are measured initially at fair value and subsequently at amortised cost.

Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, deposits held at call with banks and

investments in money market instruments that are readily convertible to a known amount of cash with original maturities of three months or less, all of which are available for use by the Group unless otherwise stated. Cash and cash equivalents are subsequently measured at amortised cost.

Impairment of financial assets

Loans and receivables are assessed at each statement of financial position date to determine whether objective evidence exists that a financial asset is impaired. A financial asset or a Group 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 and that loss has an impact on the estimated future cash flows of the financial asset or Group of financial assets that can be reliably estimated.

To the extent that the carrying value of an individual or Group of assets exceeds the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the financial asset's original effective interest rate of those assets, an impairment loss is recognised by way of an allowance account in the statement of financial performance.

An impairment is reversed when evidence exists that the impairment has decreased. The reversal does not result in the carrying amount of the financial asset exceeding what the amortised cost would have been had the impairment not been recognised at the date the impairment is reversed. The amount of the reversal is recognised in the statement of financial performance.

Financial liabilities

A financial liability is a contractual obligation to deliver cash or another financial asset to another entity or to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavourable to the entity. They are included in current liabilities, except for maturities greater than 12 months after the statement of financial position date. These are classified as non-current liabilities.

Financial liabilities comprise short-term and long-term interest-bearing borrowings and trade and other payables as well as derivative liabilities.

Financial liabilities (other than derivative liabilities) are subsequently carried at amortised cost and any difference between the proceeds (net of transaction costs) and the redemption value is recognised in the statement of financial performance over the period of the borrowings using the effective interest method. Interest calculated using the effective interest rate method is recognised in profit or loss.

Financial liabilities are derecognised when the associated obligation has been discharged, cancelled or has expired.

Trade and other payables

Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Trade and other payables are classified as current liabilities if payment is due within one year or less (or in the normal operating cycle of the business if longer). If not, they are presented as non-current liabilities. Trade and other payables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method.

Interest-bearing borrowings

Borrowings are recognised initially at fair value, net of transaction costs incurred. Borrowings are subsequently carried at amortised cost; any difference between the proceeds (net of transaction costs) and the redemption value is recognised in the statement of financial performance over the period of the borrowings using the effective interest method.

4.7 INVENTORIES

Inventories comprise finished products, work-in-progress, maintenance spares and stores, raw material and merchandise, and are measured at the lower of cost, determined on a weighted average basis, and net realisable value.

The cost of finished goods and work-in-progress comprises raw materials, direct labour, other direct costs and fixed production overheads, but excludes finance costs. Fixed production overheads are allocated on the basis of normal capacity.

Maintenance spares and consumable stores are expensed to the statement of financial performance as they are utilised.

Net realisable value is the estimated selling price in the ordinary course of business, less the cost of completion and variable selling expenses. Write-downs to net realisable value and inventory losses are expensed in the statement of financial performance in the period in which the write-downs or losses occur.

4.8 IMPAIRMENT

The Group's assets are reviewed annually to determine whether there is any indication that those assets are impaired, or previous impairment has reversed, whenever events or changes in circumstances indicate that the carrying value may not be recoverable. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment or reversal of previous impairment. Recoverable amounts are estimated for individual assets. Where an individual asset cannot generate cash inflows independently, the assets are Grouped at the lowest level for which there is separately identifiable cash flows (cash-generating units). The recoverable amount is determined for the cash-generating unit to which the asset belongs.

An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows cash-generating units (CGUs)

For assets that have indefinite useful lives, the recoverable amount is estimated at each reporting date and whenever there is an indication that the asset may be impaired.

If the recoverable amount of an asset or CGU is estimated to be less than its carrying amount, the carrying amount of the asset or CGU is reduced to its recoverable amount and an impairment loss is recognised in the statement of financial performance.

A previously recognised impairment is reversed insofar as estimates change as a result of an event occurring after the impairment was recognised. An impairment is reversed only to the extent that the asset or CGUs carrying amount does not exceed the carrying amount that would have been determined had no impairment been recognised. A reversal of an impairment is recognised in the statement of financial performance.

Calculation of recoverable amount

Recoverable amount is the higher of fair value less costs of disposal and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognised immediately in profit or loss.

Reversal of impairment

When an impairment loss subsequently reverses, the carrying amount of the asset (or a 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 (or cash-generating unit) in prior years. A reversal of an impairment loss is recognised immediately in profit or loss.

4.9 NON-CURRENT ASSETS HELD-FOR-SALE AND DISPOSAL GROUPS

Non-current assets and disposal groups are classified as held-for-sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the asset (or disposal group) is available for immediate sale in its present condition subject only to terms that are usual and customary for sale of such asset (or disposal group) and its sale is highly probable. Management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

Non-current assets (and disposal groups) classified as held-for-sale are measured at the lower of their carrying amount and fair value less costs to sell. A non-current asset is not depreciated (or amortised) while it is classified as held-for-sale, or while it is part of a disposal group classified as held-for-sale. Interest and other expenses attributable to the liabilities of a disposal group classified as held-for-sale are recognised in profit or loss.

4.10 EMPLOYEE BENEFITS

Short-term service benefits

Short-term employee benefit obligations are measured on an undiscounted basis and are expensed as the related service is provided. A liability is recognised for the amount expected to be paid under the short term cash bonus incentive if the Group has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee, and the obligation can be estimated reliably.

Post-employment benefits

The Group operates defined contribution plans for the benefit of its employees. A defined contribution plan is a pension plan under which the Group pays fixed contributions into a separate entity. The Group 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.

The plan is funded by payments from employees and the Group. The Group's contribution to the funds is recognised as employee benefit expense in the statement of financial performance in the year to which it relates.

The Group does not provide guarantees in respect of the returns in the defined contribution funds and has no further payment obligations once the contributions have been paid.

Long-term service benefits

The Group's net obligation in respect of long-term service benefits, is the amount of future benefit that employees have earned in return for their service in the current and prior periods, after deducting plan assets out of which the obligation is to be settled directly. The obligation is actuarially calculated at reporting date every year, using the projected unit credit method, and is discounted to its present value. The plan assets are measured at fair value which is also actuarially calculated at reporting date. The same discount rate is utilised for both the plan asset and obligation and is based on high quality bonds. Service costs and interest costs are recognised in the statement of financial performance. Re-measurements as a result of the actuarial valuation are recognised in other comprehensive income.

Termination benefits

Termination benefits are payable whenever an employee's employment is terminated before the normal retirement date or whenever an employee accepts voluntary redundancy in exchange for these benefits.

Termination benefits are recognised as an expense when the Group is demonstrably committed, without realistic possibility of withdrawal, to a formal detailed plan to either terminate employment before normal retirement date, or to provide termination benefits as a result of an offer made to encourage voluntary redundancy. If benefits are payable more than 12 months after reporting date then they are discounted to present value.

4.11 INCOME RECEIVED IN ADVANCE

Income received in advance consists of capital contributions from customers (or other entities) for the construction of items of property, plant and equipment are recognised when it is probable that the contribution will be received, future economic benefits will flow to the entity and that these benefits can be measured reliably.

The deferred income relating to these contributions are recognised on the following bases:

- Capital contributions received relating to the construction of items of property, plant and equipment are initially recorded as income received in advance. The contributions are subsequently recognised as revenue over the economic useful life of the related asset once the related service has been performed or the asset is brought into use
- Contributions relating to income are credited to profit or loss when the related expense is incurred.

Income received in advance also include deferred income recognised as a result of items of property, plant and equipment owned by customers or the Executive Authority, but utilised by the Group to generate future economic benefits. The deferred income is recognised in revenue over the economic useful life of the related asset.

4.12 PROVISIONS AND CONTINGENCIES

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events, for which it is probable that an outflow of economic benefits will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation. Provisions are not recognised for future operating losses.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax 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 past 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 Group or a present obligation that arises from a past event but is not recognised because it is not probable that an 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 33.

Environmental restoration and decommissioning obligations

An obligation to incur environmental restoration, rehabilitation and decommissioning costs arises when a disturbance is caused by the development of a sludge disposal site. Such costs arising from the decommissioning of plant and other site preparation work, discounted to their net present value, are provided for and capitalised at the start of each project, as soon as the obligation to incur such costs arises. These costs are recognised in profit or loss over the life of the operation, through the depreciation of the asset and the unwinding of the discount on the provision. Costs for restoration of subsequent site damage which is created on an ongoing basis during production are provided for at its net present value and recognised in the statement of financial performance as 'water purification progresses'.

Changes in the measurement of a liability relating to the decommissioning of plant or other site preparation work (that result from changes in the estimated timing or amount of the cash flow or a change in the discount rate), are added to or deducted from the cost of the related asset in the current period. If a decrease in the liability exceeds the carrying amount of the asset, the excess is recognised immediately in the statement of financial performance. If the asset value is increased and there is an indication that the revised carrying value is not recoverable, an impairment test is performed in accordance with the accounting policy set out above.

4.13 REVENUE

Revenue comprises the fair value of the consideration received or receivable for the sale of goods and rendering of services in the ordinary course of the Group's activities. Revenue is shown, exclusive of value added tax rebates and discounts, after eliminating sales within the Group.

Revenue from the sale of water is recognised in profit or loss when the significant risks and rewards of ownership have been transferred to the buyer. Revenue comprises primarily the net invoiced value of water sales, exclusive of value-added tax, at declared tariffs arising from normal trading activities.

Sale of goods

Revenue from the sale of goods is recognised when the goods are delivered and titles have passed, at which time all the following conditions are satisfied:

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

Such consideration is not recognised as revenue at the time of the initial sale transaction – but is deferred and recognised as revenue when the Group's obligations have been fulfilled.

Rendering of services

Revenue from a contract to provide services is recognised by reference to the stage of completion of the contract. The stage of completion of the contract is determined as follows:

- installation fees are recognised by reference to the stage of completion of the installation, determined as the proportion of the total time expected to install that has elapsed at the end of the reporting period;
- servicing fees included in the price of products sold are recognised by reference to the proportion of the total cost of providing the servicing for the product sold; and
- revenue from time and material contracts is recognised at the contractual rates as labour hours and direct expenses are incurred.

Transfer of assets from customers

The Group receives transfers of assets from customers and assesses whether the transferred item meets the definition of an asset, if so, recognises the transferred asset as property, plant and equipment. A corresponding credit to deferred revenue is made. Revenue is subsequently recognised over the contractual period, in the absence of which revenue is recognised over the useful lives of the transferred assets. In the absence of an ongoing obligation to supply goods in future, contributions are recognised as revenue immediately.

4.14 COST OF SALES

The related cost of providing services recognised as revenue in the current period is included in cost of sales, these cost includes the cost of purchasing water, labour, energy, chemicals, depreciation and amortisation, other income and operating expenses that are directly attributable to the cost of the related sale.

Any write-down of inventories to net realisable value and all losses of inventories or reversals of previous write-downs or losses are recognised in cost of sales in the period the write-down, loss or reversal occurs.

Recoverable projects cost of sales consists of the related cost of providing services recognised as revenue.

4.15 FINANCE INCOME

Interest income from a financial asset is recognised when it is probable that the economic benefits will flow to the Group and the amount of income can be measured reliably. Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount on initial recognition.

4.16 FINANCE COSTS

Finance costs comprise interest payable on borrowings calculated using the effective interest rate method. The interest expense component of finance lease payments is also recognised in profit or loss using the effective interest rate method.

4.17 TAXATION

The Group is tax exempt, Rand Water and Rand Water Services (Pty) Ltd, in terms of Section 10(1)(cA) in terms of the Income Tax Act, No. 58 of 1962 and Rand Water Foundation was also approved as a non-profit organisation, and is exempt from normal income tax.

4.18 SEGMENT REPORTING

A segment is a distinguishable component of the Group that is engaged either in providing products or services (business segment), or in providing products or services within a particular economic environment (geographical segment), which is subject to risks and rewards that are different from those of other segments. The Group has identified reportable segments which have risks and rewards that are different from those of the other segments.

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker (CODM).

The CODM, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the Rand Water Portfolio Intergrated Committee. The Board has determined the operating segments of the Group based on the reports reviewed by the Portfolio Intergrated Committee that are used to make strategic decisions. The Portfolio Intergrated Committee considers the business principally according to the nature of the products and service provided, with the segment representing a strategic business unit. The reportable operating segments derive their revenue primarily from, extraction, production, distribution and selling of potable and non potable water charged to external clients.

4.19 FRUITLESS, WASTEFUL AND IRREGULAR EXPENDITURE

Fruitless and wasteful expenditure

Fruitless and wasteful expenditure is defined as expenditure which was made in vain and would have been avoided had reasonable care been exercised.

Where a transaction, event or condition was undertaken without value or substance and which did not yield any desired results or outcome and careful application, attentiveness and caution was applied to ensure that the probability of a transaction, event or condition not being achieved as planned is being managed to an acceptable level, such transaction, event or condition is recognised as fruitless and wasteful expenditure.

Irregular expenditure

Where expenditure has been incurred that does not comply with any law or regulation the Group recognises that expenditure as irregular expenditure. Irregular expenditure is recognised when it is confirmed and to the extent that the expenditure is recognised in accordance with IFRS.

Irregular expenditure is derecognised when it is either:

- (a) condoned by the relevant authority if no official was found to be liable in law;
- (b) recovered from an official liable in law;
- (c) written-off if it's irrecoverable from an official liable in law; or
- (d) written-off if it's not condoned and not recoverable.

4.20 RELATED PARTIES

The Group is a 100% controlled entity of the Government of South Africa as represented by the Department of Water and Sanitation. As a Schedule 3B Enterprise in terms of the Public Finance Management Act, the Group recognises only those government departments, state-owned entities and other public entities that are within the national sphere of government as related parties.

Key management is defined as being individuals with the authority and responsibility for planning, directing and controlling the activities of the entity. The Group considers the key management personnel to be the board members and executives as detailed in the Remuneration Report.

Close family members of key management personnel are considered to be those family members who may be expected to influence, or be influenced by key management individuals or other parties related to the entity.

Transactions and balances with the related parties as defined by the Group that occurred during the financial period are disclosed as related party transactions or balances.

4.21 EVENTS AFTER REPORTING DATE

Events may occur between the end of the reporting period and the date when the consolidated annual financial statements are authorised for issue which may present information that should be considered in the preparation of financial statements.

Only events that provide further evidence about conditions that existed at the end of reporting period are adjusted for in the consolidated annual financial statements. Non-adjusting events are disclosed in the consolidated annual financial statements accordingly.

NOTES TO THE CONSOLIDATED ANNUAL FINANCIAL STATEMENTS

5. PROPERTY, PLANT AND EQUIPMENT

Group

Figures in Rand thousand	2017			2016			2015		
	Cost	Accumulated depreciation	Carrying value	Cost	Accumulated depreciation	Carrying value	Cost	Accumulated depreciation	Carrying value
Land	13,378	-	13,378	13,378	-	13,378	13,378	-	13,378
Buildings	2,112,888	(670,559)	1,442,329	1,855,491	(563,000)	1,292,491	1,669,494	(481,016)	1,188,478
Plant and machinery	5,084,168	(1,436,024)	3,648,144	4,486,105	(1,344,209)	3,141,896	3,629,522	(1,183,252)	2,446,270
Furniture and fixtures	41,065	(27,452)	13,613	38,643	(27,793)	10,850	34,510	(24,995)	9,515
Motor vehicles	167,487	(65,590)	101,897	168,836	(65,533)	103,303	146,490	(62,088)	84,402
Office equipment	84,788	(59,347)	25,441	74,131	(52,487)	21,644	64,212	(47,725)	16,487
IT equipment	202,289	(168,630)	33,659	183,688	(158,860)	24,828	186,689	(156,942)	29,747
Pipelines	11,158,249	(1,224,163)	9,934,086	9,336,737	(1,082,308)	8,254,429	6,432,760	(989,765)	5,442,995
Assets under construction	4,462,384	-	4,462,384	4,728,736	-	4,728,736	5,439,277	-	5,439,277
Total	23,326,696	(3,651,765)	19,674,931	20,885,745	(3,294,190)	17,591,555	17,616,332	(2,945,783)	14,670,549

Rand Water

Figures in Rand thousand	2017			2016			2015		
	Cost	Accumulated depreciation	Carrying value	Cost	Accumulated depreciation	Carrying value	Cost	Accumulated depreciation	Carrying value
Land	13,378	-	13,378	13,378	-	13,378	13,378	-	13,378
Buildings	2,112,888	(670,559)	1,442,329	1,855,491	(563,000)	1,292,491	1,669,494	(481,016)	1,188,478
Plant and machinery	5,084,168	(1,436,024)	3,648,144	4,486,105	(1,344,209)	3,141,896	3,629,522	(1,183,252)	2,446,270
Furniture and fixtures	41,065	(27,452)	13,613	38,643	(27,793)	10,850	34,510	(24,995)	9,515
Motor vehicles	167,487	(65,590)	101,897	168,836	(65,533)	103,303	146,490	(62,088)	84,402
Office equipment	84,788	(59,347)	25,441	74,131	(52,487)	21,644	64,212	(47,725)	16,487
IT equipment	202,183	(168,630)	33,553	183,564	(158,860)	24,704	186,528	(156,942)	29,586
Pipelines	11,158,249	(1,224,163)	9,934,086	9,336,737	(1,082,308)	8,254,429	6,432,760	(989,765)	5,442,995
Assets under construction	4,502,991	-	4,502,991	4,769,343	-	4,769,343	5,479,884	-	5,479,884
Total	23,367,197	(3,651,765)	19,715,432	20,926,228	(3,294,190)	17,632,038	17,656,778	(2,945,783)	14,710,995

Reconciliation of property, plant and equipment - Group 2017

Figures in Rand thousand	Opening balance	Additions	Disposals	Transfers	Borrowing costs capitalised	Depreciation	Total
Land	13,378	-	-	-	-	-	13,378
Buildings	1,292,491	-	-	258,282	-	(108,444)	1,442,329
Plant and machinery	3,141,896	17,569	(377)	638,818	-	(149,762)	3,648,144
Furniture and fixtures	10,850	2,969	1	(15)	-	(192)	13,613
Motor vehicles	103,303	6,195	(1,945)	521	-	(6,177)	101,897
Office equipment	21,644	4,634	(1)	6,357	-	(7,193)	25,441
IT equipment	24,828	9,182	-	9,434	-	(9,785)	33,659
Pipelines	8,254,429	100,873	(5)	1,714,272	-	(135,483)	9,934,086
Assets under construction	4,728,736	2,078,950	-	(2,652,975)	307,673	-	4,462,384
Total	17,591,555	2,220,372	(2,327)	(25,306)	307,673	(417,036)	19,674,931

Reconciliation of property, plant and equipment - Group 2016

Figures in Rand thousand	Opening balance	Additions	Disposals	Transfers	Borrowing costs capitalised	Depreciation	Closing balance
Land	13,378	-	-	-	-	-	13,378
Buildings	1,188,478	630	-	185,401	-	(82,018)	1,292,491
Plant and machinery	2,446,270	27,646	(429)	785,429	-	(117,020)	3,141,896
Furniture and fixtures	9,515	4,737	(1)	(18)	-	(3,383)	10,850
Motor vehicles	84,402	20,538	(632)	5,210	-	(6,215)	103,303
Office equipment	16,487	4,881	(17)	5,980	-	(5,687)	21,644
IT equipment	29,747	5,327	(84)	(152)	-	(10,010)	24,828
Pipelines	5,442,995	47,873	-	2,882,220	-	(118,659)	8,254,429
Assets under construction	5,439,277	2,796,339	-	(3,880,541)	373,661	-	4,728,736
Total	14,670,549	2,907,971	(1,163)	(16,471)	373,661	(342,992)	17,591,555

Reconciliation of property, plant and equipment - Group 2015

Figures in Rand thousand	Opening balance - as restated	Additions	Prior year adjustments	Disposals	Transfers	Borrowing costs capitalised	Depreciation	Total
Land	13,378	-	-	-	-	-	-	13,378
Buildings	1,149,936	110	970	(193)	114,525	-	(76,870)	1,188,478
Plant and machinery	1,968,546	17,882	3,800	(83)	563,211	-	(107,086)	2,446,270
Furniture and fixtures	8,331	5,059	-	(2)	329	-	(4,202)	9,515
Motor vehicles	72,316	16,600	-	-	110	-	(4,624)	84,402
Office equipment	17,450	2,341	-	-	2,479	-	(5,783)	16,487
IT equipment	23,419	14,409	-	(12)	1,345	-	(9,414)	29,747
Pipelines	4,856,758	7,522	-	-	681,200	-	(102,485)	5,442,995
Assets under construction	4,071,900	2,487,658	(8,020)	-	(1,378,153)	265,892	-	5,439,277
Total	12,182,034	2,551,581	(3,250)	(290)	(14,954)	265,892	(310,464)	14,670,549

Reconciliation of property, plant and equipment - Rand Water 2017

Figures in Rand thousand	Opening balance	Additions	Disposals	Transfers	Borrowing costs capitalised	Depreciation	Total
Land	13,378	-	-	-	-	-	13,378
Buildings	1,292,491	-	-	258,282	-	(108,444)	1,442,329
Plant and machinery	3,141,896	17,569	(377)	638,818	-	(149,762)	3,648,144
Furniture and fixtures	10,850	2,969	1	(15)	-	(192)	13,613
Motor vehicles	103,303	6,195	(1,945)	521	-	(6,177)	101,897
Office equipment	21,644	4,619	(1)	6,357	-	(7,178)	25,441
IT equipment	24,704	9,187	-	9,434	-	(9,772)	33,553
Pipelines	8,254,429	100,873	(5)	1,714,272	-	(135,483)	9,934,086
Assets under construction	4,769,343	2,078,950	-	(2,652,975)	307,673	-	4,502,991
Total	17,632,038	2,220,362	(2,327)	(25,306)	307,673	(417,008)	19,715,432

Reconciliation of property, plant and equipment - Rand Water 2016

Figures in Rand thousand	Opening balance	Additions	Disposals	Transfers	Borrowing costs capitalised	Depreciation	Closing balance
Land	13,378	-	-	-	-	-	13,378
Buildings	1,188,478	629	-	185,401	-	(82,017)	1,292,491
Plant and machinery	2,446,270	27,647	(429)	785,429	-	(117,021)	3,141,896
Furniture and fixtures	9,515	4,737	(1)	(18)	-	(3,383)	10,850
Motor vehicles	84,402	20,538	(632)	5,210	-	(6,215)	103,303
Office equipment	16,487	4,882	(17)	5,980	-	(5,688)	21,644
IT equipment	29,586	5,328	(84)	(152)	-	(9,974)	24,704
Pipelines	5,442,995	47,873	-	2,882,220	-	(118,659)	8,254,429
Assets under construction	5,479,884	2,796,339	-	(3,880,541)	373,661	-	4,769,343
Total	14,710,995	2,907,973	(1,163)	(16,471)	373,661	(342,957)	17,632,038

Reconciliation of property, plant and equipment - Rand Water 2015

Figures in Rand thousand	Opening balance - as reported	Additions	Prior year adjustment	Disposals	Transfers	Borrowing costs capitalised	Depreciation	Total
Land	13,378	-	-	-	-	-	-	13,378
Buildings	1,149,936	110	970	(193)	114,525	-	(76,870)	1,188,478
Plant and machinery	1,968,546	17,882	3,800	(83)	563,211	-	(107,086)	2,446,270
Furniture and fixtures	8,331	5,059	-	(2)	329	-	(4,202)	9,515
Motor vehicles	72,316	16,600	-	-	110	-	(4,624)	84,402
Office equipment	17,450	2,341	-	-	2,479	-	(5,783)	16,487
IT equipment	23,222	14,409	-	(12)	1,345	-	(9,378)	29,586
Pipelines	4,889,417	7,522	(32,659)	-	681,200	-	(102,485)	5,442,995
Assets under construction	4,112,508	2,487,658	(8,020)	-	(1,378,154)	265,892	-	5,479,884
Total	12,255,104	2,551,581	(35,909)	(290)	(14,955)	265,892	(310,428)	14,710,995

Security

As at 30 June 2017 the Group had no assets that were pledged as security. In the 2015 financial year land to the value of R2.6 million was pledged over a mortgage bond (refer to note 14).

Transfers

Transfers includes the transfer of assets between property, plant and equipment, non-current assets held for sale and/or intangible assets.

Borrowing costs capitalised

Figures in Rand thousand	Group			Rand Water		
	2017	2016	2015	2017	2016	2015
Borrowing costs capitalised to qualifying assets	307,673	373,661	266,472	307,950	373,661	266,472
Capitalisation rate used to determine the amount of borrowing costs eligible for capitalisation	9.93 %	9.94 %	9.98 %	9.93 %	9.94 %	9.98 %

Change in estimate

Figures in Rand thousand	Original cost	Depreciation adjustment
Furniture and fixtures	10,512	2,081
Motor vehicles	4,635	706
Computer equipment	8,018	1,171
	23,165	3,958

Depreciation charges for the 2017 financial year includes the above changes in estimates made during the financial year. The asset classes reflected above included assets that were nearing the end of its useful life, but were still in use. Rand Water established that these items of property, plant and equipment would continue to be utilised for further two years and necessitated a review of original useful life and residual values linked to the expected useful life. The change in accounting estimates have been reflected above.

Leased assets

The Group's finance lease contracts consisted of office equipment. The lease contracts came to an end in May 2016 (refer to note 14).

Impairment and reversal of impairment

The carrying amounts of non-financial assets within the scope of IAS 16 are reviewed quarterly and adjusted (if required) and at each reporting date to determine whether there is any indication of impairment.

These assets are also reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. During the 2016 and 2017 reporting periods, there were no indicators that triggered the impairment of any property, plant and equipment item.

Capital expenditure

The Group undertakes a number of capital projects. Total budgeted capital expenditure, including intangible assets, was estimated at R2.7 billion, of which R2.2 billion (excluding borrowing costs) was achieved in the current financial year.

These capital projects are funded partly by external funds and from operations.

Capital commitments

Figures in Rand thousand	Group			Rand Water		
	2017	2016	2015	2017	2016	2015
Contracted for but not provided	2,758,436	3,907,990	4,038,907	2,758,436	3,907,990	4,038,907

The Group is committed in respect of capital expenditure including expected contract price adjustments.

This expenditure will be financed from internal resources and out of externally raised debt.

6. INTANGIBLE ASSETS

Group

Figures in Rand thousand	2017			2016		
	Cost	Accumulated amortisation	Carrying value	Cost	Accumulated amortisation	Carrying value
Right of use asset	175,193	(10,166)	165,027	175,193	(7,037)	168,156
Computer software	193,499	(140,631)	52,868	186,211	(126,465)	59,746
Water use license	165,765	(80,673)	85,092	165,765	(76,521)	89,244
Servitudes	99,223	-	99,223	79,834	-	79,834
Total	633,680	(231,470)	402,210	607,003	(210,023)	396,980

Group

Figures in Rand thousand	2015		
	Cost	Accumulated amortisation	Carrying value
Right of use asset	175,193	(3,909)	171,284
Computer software	163,835	(116,222)	47,613
Water use license	165,765	(72,368)	93,397
Servitudes	79,834	-	79,834
Total	584,627	(192,499)	392,128

Rand Water

Figures in Rand thousand	2017			2016		
	Cost	Accumulated amortisation	Carrying value	Cost	Accumulated amortisation	Carrying value
Right of use asset	175,193	(10,166)	165,027	175,193	(7,037)	168,156
Computer software	193,499	(140,631)	52,868	186,211	(126,465)	59,746
Water use license	165,765	(80,673)	85,092	165,765	(76,521)	89,244
Servitudes	99,223	-	99,223	79,834	-	79,834
Total	633,680	(231,470)	402,210	607,003	(210,023)	396,980

Rand Water

Figures in Rand thousand	2015		
	Cost	Accumulated amortisation	Carrying value
Right of use asset	175,193	(3,909)	171,284
Computer software	163,835	(116,222)	47,613
Water use license	165,765	(72,368)	93,397
Servitudes	79,834	-	79,834
Total	584,627	(192,499)	392,128

Reconciliation of intangible assets - Group 2017

Figures in Rand thousand	Opening balance	Additions	Transfers	Amortisation	Total
Right of use asset	168,156	-	-	(3,129)	165,027
Computer software	59,746	1,787	5,501	(14,166)	52,868
Water use license	89,244	-	-	(4,152)	85,092
Servitudes	79,834	-	19,389	-	99,223
Total	396,980	1,787	24,890	(21,447)	402,210

Reconciliation of intangible assets - Group 2016

Figures in Rand thousand	Opening balance	Additions	Disposals	Transfers	Amortisation	Total
Right of use asset	171,284	-	-	(79)	(3,049)	168,156
Computer software	47,613	6,339	(51)	16,131	(10,286)	59,746
Water use license	93,397	-	-	-	(4,153)	89,244
Servitudes	79,834	-	-	-	-	79,834
Total	392,128	6,339	(51)	16,052	(17,488)	396,980

Reconciliation of intangible assets - Group 2015

Figures in Rand thousand	Opening balance	Additions	Prior year adjustment	Transfers	Amortisation	Total
Right of use asset	174,431	-	-	(98)	(3,049)	171,284
Computer software	49,919	1,198	-	8,564	(12,068)	47,613
Water use licence	113,567	-	(17,118)	-	(3,052)	93,397
Servitudes	73,380	-	-	6,454	-	79,834
Total	411,297	1,198	(17,118)	14,920	(18,169)	392,128

Reconciliation of intangible assets - Rand Water 2017

Figures in Rand thousand	Opening balance	Additions	Transfers	Amortisation	Total
Right of use asset	168,156	-	-	(3,129)	165,027
Computer software	59,746	1,787	5,501	(14,166)	52,868
Water use license	89,244	-	-	(4,152)	85,092
Servitudes	79,834	-	19,389	-	99,223
Total	396,980	1,787	24,890	(21,447)	402,210

Reconciliation of intangible assets - Rand Water 2016

Figures in Rand thousand	Opening balance	Additions	Disposals	Transfers	Amortisation	Total
Right of use asset	171,284	-	-	(79)	(3,049)	168,156
Computer software, other	47,613	6,339	(51)	16,131	(10,286)	59,746
Water use license	93,397	-	-	-	(4,153)	89,244
Servitudes	79,834	-	-	-	-	79,834
Total	392,128	6,339	(51)	16,052	(17,488)	396,980

Reconciliation of intangible assets - Rand Water 2015

Figures in Rand thousand	Opening balance	Additions	Prior year adjustment	Transfers	Amortisation	Total
Right of use asset	174,431	-	-	(98)	(3,049)	171,284
Computer software	49,919	1,198	-	8,564	(12,068)	47,613
Water use license	113,567	-	(16,017)	-	(4,153)	93,397
Servitudes	73,380	-	-	6,454	-	79,834
Total	411,297	1,198	(16,017)	14,920	(19,270)	392,128

Transfers

Transfers includes the transfer of assets between property, plant and equipment and intangible assets and assets held for sale.

Impairment and reversal of impairment

The carrying amounts of non-financial assets within the scope of IAS 38 are reviewed quarterly and adjusted (if required) and at each reporting date to determine whether there is any indication of impairment.

These assets are also reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. During the 2016 and 2017 reporting periods, there were no indicators that triggered the impairment of any intangible asset.

Indefinite useful lives

Servitudes are rights granted to the Group for an indefinite period of time. These servitudes consist of land expropriated by Rand Water containing infrastructure owned by the Group and used in the production of revenue. The life of the servitude will remain in force as long as the relevant infrastructure is still in use. Servitudes are not amortised but are assessed by means of an annual impairment test. The recoverable amount is determined through the results of the value in use and fair value less costs to sell impairment tests. The results of which have indicated that no impairment is required.

Right of use

As part of the transfer of function, the Group recognised a right of use of asset (intangible asset) that is owned by the Department of Water and Sanitation but utilised by the Group to provide goods and services to the customer. A corresponding deferred income was recognised in line with the provisions of IFRIC 12: Service concession arrangements.

Water use license

Rand Water has been authorised in terms of the National Water Act (Act no.36 of 1998), the right to abstract raw water from specific sources in order to provide potable water to its customers in terms of its mandate. The current abstraction points include the Vaal River (Gauteng), Vaalkop dam scheme (North West) and the Sabie River and Sand River (Mpumalanga).

Where actual cost cannot be determined the fair value of the water use license is determined using an income approach valuation technique. The assumptions applied in determining the value of the Mpumalanga water use license include using the weighted average cost of capital (WACC) based on the capital structure of Rand Water to determine the discount rate and the fair value of the assets being the net discounted replacement value at acquisition date.

Other intangible assets

Other intangible assets include computer software and servitudes that has been recognised by the Group as intangible assets in terms of IAS 38.

7. INVESTMENTS IN SUBSIDIARIES

Figures in Rand thousand	Group			Rand Water		
	2017	2016	2015	2017	2016	2015
Equity investment	-	-	-	12,500	12,500	12,500
Impairment of investment	-	-	-	(5,403)	(5,953)	(8,026)
	-	-	-	7,097	6,547	4,474

The equity investment in subsidiary represents the 100% shareholding in Rand Water Services (Pty) Ltd.

During the current financial year the value of the investment was revalued using the net asset value method. As a result an amount of R550 thousand (2016: R2.07 million) was reversed

against the impairment on the investment in Rand Water Services..

8. INVESTMENTS

Available-for-sale

Figures in Rand thousand	Group			Rand Water		
	2017	2016	2015	2017	2016	2015
Bonds	458,886	461,650	482,264	458,886	461,650	482,264

Non-current assets

Figures in Rand thousand	Group			Rand Water		
	2017	2016	2015	2017	2016	2015
Available-for-sale	458,886	461,650	482,264	458,886	461,650	482,264

Fair value information

Rand Water holds an investment of R350 million in the Republic of South Africa R186 stock. Fair values were estimated using the Johannesburg Stock Exchange market rates. The coupon rate is 10.5% which is paid bi-annually. The final tranche of the investment will mature on 21 December 2026.

Rand Water also holds an investment of R100 million in the Republic of South Africa R209 stock. Fair values were estimated using the Johannesburg Stock Exchange market rates. The coupon rate is 6.25% which is paid bi-annually. The final tranche of the investment will mature on 31 March 2036.

Fair value hierarchy of available-for-sale financial assets

The available for sale financial assets are categorised as Level 1 which represents those assets which are measured using unadjusted quoted prices for identical assets.

Level 1

Figures in Rand thousand	Group			Rand Water		
	2017	2016	2015	2017	2016	2015
Bonds	458,886	461,650	482,264	458,886	461,650	482,264

During the 2017 financial year, a fair value adjustment profit of R2.4 million (2016: R15.4 million loss) was recognised in other comprehensive income and R5.5 million (2016: R5.2 million) of the discount/premium on the purchase of the investment bonds was amortised to the statement of financial performance. The Group received coupon payments of R43 million (2016: R43 million) from the investments in the R186 and R209 bonds.

Reconciliation of available-for-sale investment - Group 2017

	Opening balance	Amortisation	Fair value adjustment	Total
Bonds	461,650	(5,198)	2,434	458,886

Reconciliation of available-for-sale investments - Group 2016

	Opening balance	Amortisation	Fair value adjustment	Closing balance
Bonds	482,264	(5,212)	(15,402)	461,650

Reconciliation of available-for-sale investment - Group 2015

	Opening balance	Amortisation	Fair value adjustment	Total
Bonds	483,193	(5,198)	4,269	482,264

Reconciliation of available-for-sale investments - Rand Water 2017

	Opening balance	Amortisation	Fair value adjustment	Total
Bonds	461,650	(5,198)	2,434	458,886

Reconciliation of available-for-sale investments - Rand Water 2016

	Opening balance	Amortisation	Fair value adjustment	Closing balance
Bonds	482,264	(5,212)	(15,402)	461,650

Reconciliation of available-for-sale investment - Rand Water 2015

	Opening balance	Amortisation	Fair value adjustment	Total
Bonds	483,193	(5,198)	4,269	482,264

9. LOANS RECEIVABLE

Employee loans:

Figures in Rand thousand	Group			Rand Water		
	2017	2016	2015	2017	2016	2015
Non-current portion	1,313	1,748	956	1,313	1,748	956
Current portion	3,293	3,420	3,621	3,293	3,420	3,621
	4,606	5,168	4,577	4,606	5,168	4,577

The employee loans represent micro loans granted to employees and is shown net of impairments of R0.1 million (2016: R0.4 million). The loans are unsecured with repayment periods varying from 1 to 3 years, and the closing interest rate is 12,5% (2016: 12,5%). Rand Water is registered with the National Credit Regulator as a credit provider in terms of Section 40 of the National Credit Act, Act 34 of 2005.

10. INVENTORIES

Figures in Rand thousand	Group			Rand Water		
	2017	2016	2015	2017	2016	2015
Raw materials, chemicals and water inventory	373,038	88,944	75,331	373,038	88,944	75,331
Maintenance and consumable stores	36,620	40,790	47,110	36,620	40,790	47,110
	409,658	129,734	122,441	409,658	129,734	122,441

Inventories are shown net of impairment losses amounting to RNil (2016: R7 thousand) recognised in the year.

11. TRADE AND OTHER RECEIVABLES

Figures in Rand thousand	Group			Rand Water		
	2017	2016	2015	2017	2016	2015
Water debtors	1,674,838	1,279,729	1,191,159	1,674,838	1,279,729	1,191,159
Recoverable project debtor	132,627	351,631	392,686	132,627	351,631	392,686
Prepayments	58,238	67,428	122,095	58,238	67,428	122,095
Other receivables	245,848	190,669	74,898	247,360	192,233	74,370
Other VAT receivable	132,068	45,207	9,027	131,395	43,401	-
	2,243,619	1,934,664	1,789,865	2,244,458	1,934,422	1,780,310

Trade receivables are shown net of impairments amounting to R469 million (2016: R322 million) recognised during the year determined by reference to past default experience.

The major contributor to the impairment provision has been from the Mpumalanga region. This has been as a result of the takeover of the former Bushbuckridge Water Board as part of the institutional re-alignment Directive issued by the then Honourable Minister of Water and Sanitation. An amount of R297 million (2016: R214 million) has been provided accordingly for the segment.

12. CASH AND CASH EQUIVALENTS

Figures in Rand thousand	Group			Rand Water		
	2017	2016	2015	2017	2016	2015
Cash and cash equivalents consist of:						
Bank and cash balances	53,039	21,077	126,189	45,199	12,742	100,770
Short term investments	752,108	1,449,096	1,028,000	735,000	1,430,000	1,028,000
	805,147	1,470,173	1,154,189	780,199	1,442,742	1,128,770

Bank and cash balances include positive bank balances, cash on hand and call deposits.

The carrying amount of cash and cash equivalents are considered to represent a reasonable approximation of its fair value, is unrestricted and available for use as and when the need arises.

13. NON-CURRENT ASSETS HELD-FOR-SALE

Figures in Rand thousand	Group			Rand Water		
	2017	2016	2015	2017	2016	2015
Net loss						
Operating expenses	-	-	(90)	-	-	-
Net loss before tax	-	-	(90)	-	-	-
Tax expense	-	-	(13)	-	-	-
Net loss for the year	-	-	(103)	-	-	-
Non-current assets held for sale						
Other assets	511	417	34	511	417	34
Assets of disposal groups						
Cash and cash equivalents	-	-	1,462	-	-	-
Total Non-current assets held for sale	511	417	1,496	511	417	34
Liabilities of disposal groups						
Trade and other payables	-	-	650	-	-	-
Interest bearing borrowings	-	-	1,333	-	-	-
VAT payable	-	-	736	-	-	-
Total liabilities of disposal groups	-	-	2,719	-	-	-

Assets and liabilities of disposal groups

The five year Ghana Urban Water management contract held by Aqua Vitens Rand Limited the 100% owned subsidiary of Vitens Rand Water Services B.V. concluded on 5 June 2011. As the contract had not been renewed the company ceased operations.

On 22 January 2014 the Board resolved that Rand Water Services would sell its 49% share in the joint venture, Vitens Rand Water Services to Vitens Evides International B.V. for 1 Euro. On 7 July 2015 the sale of the 49% shares in Vitens Rand Water Services was finalised and registered with the deeds of transfer in Netherlands. Rand Water Services received R998 thousand (Euro 73.6 thousand) which included R13 for the sale of shares and the balance being full and final settlement of the outstanding loan.

Other assets

Rand Water conducts periodic asset verification and condition assessments on its property, plant and equipment. During the year certain assets have been identified as redundant, no longer in use or reaching the end of their expected useful life. These assets still have a secondary market value and have been approved for disposal via the Rand Water annual auction process that will be held within the next 12 months.

14. INTEREST BEARING BORROWINGS

Held at amortised cost

Figures in Rand thousand	Group			Rand Water		
	2017	2016	2015	2017	2016	2015
Unsecured bonds	4,414,718	4,418,735	3,670,496	4,414,718	4,418,735	3,670,496
Mortgage bond	-	-	2,051	-	-	2,051
Finance lease liability	-	-	2,355	-	-	2,355
	4,414,718	4,418,735	3,674,902	4,414,718	4,418,735	3,674,902

Unsecured bond

The Group has a registered Domestic Medium Term Note programme of R10 billion and currently holds unsecured bond issues against the programme.

As at 30 June 2017, the Group's total borrowing amounted to R4 414 million, as follows:

- RW21 bond issued at a nominal value of R1 724 million redeemable on April 2021 at a fixed coupon of 9.97%;
- RW23 bond issued at a nominal value of R1 231 million redeemable on December 2023 at a fixed coupon of 9.51%
- RW28 bond issued at a nominal value of R1 439 million redeemable on December 2028 at a fixed coupon of 10.25%

The bonds are listed on the Johannesburg Stock Exchange.

Mortgage bond

The Standard Bank Mortgage bond was settled on 3 September 2015. The mortgage bond was secured by Portion 1 of farm Bellevue no 104 JU, White River which had a carrying value of R2.1 million in 2015. Interest payable on the bond was at prime minus 2%.

Finance lease liability

The finance lease liabilities matured in May 2016. These leases were secured by property, plant and equipment of R2.3 million in 2015. The average lease term was 36 months and the interest rate was fixed at 17.09% over the lease term.

Breaches

During the year under review there were no breaches or defaults in respect of interest bearing borrowings. All contractual obligations have been met.

Amortised cost hierarchy of financial liabilities

All financial liabilities are measured at amortised cost and differences between cost and the respective value being recognised in profit and loss.

Reconciliation of interest-bearing borrowings

The table below details changes in the Group's liabilities arising from financing activities, including both cash and non-cash changes for which cash flows were classified in the Group's consolidated statement of cash flows as cash flows from financing activities.

Reconciliation of interest-bearing borrowings - Group 2017

	Opening balance	Amortisation	Closing balance
Unsecured bonds	4,418,735	(4,017)	4,414,718

Reconciliation of interest-bearing borrowings - Group 2016

	Opening balance	Amortisation	Additions	(Net discount)/ premium on issue	Repayments	Closing balance
Unsecured bonds	3,670,495	(6,438)	1,030,000	(25,322)	(250,000)	4,418,735
Finance lease liability	2,355	-	-	-	(2,355)	-
Mortgage bond	2,051	-	-	-	(2,051)	-
	3,674,901	(6,438)	1,030,000	(25,322)	(254,406)	4,418,735

Reconciliation of interest-bearing borrowings - Group 2015

	Opening balance	Amortisation	Additions	(Net discount)/ premium on issue	Repayments	Closing balance
Unsecured bonds	2,505,715	(5,366)	1,140,000	30,146	-	3,670,495
Finance lease liability	4,721	-	-	-	(2,366)	2,355
Mortgage bond	2,115	-	-	-	(64)	2,051
	2,512,551	(5,366)	1,140,000	30,146	(2,430)	3,674,901

Reconciliation of interest-bearing borrowings - Rand Water 2017

	Opening balance	Amortisation	Closing balance
Unsecured bonds	4,418,735	(4,017)	4,414,718

Reconciliation of interest-bearing borrowings - Rand Water 2016

	Opening balance	Amortisation	Additions	(Net discount)/ premium on issue	Repayments	Closing balance
Unsecured bonds	3,670,495	(6,438)	1,030,000	(25,322)	(250,000)	4,418,735
Finance lease liability	2,355	-	-	-	(2,355)	-
Mortgage bond	2,051	-	-	-	(2,051)	-
	3,674,901	(6,438)	1,030,000	(25,322)	(254,406)	4,418,735

Reconciliation of interest-bearing borrowings - Rand Water 2015

	Opening balance	Amortisation	Additions	(Net discount)/ premium on issue	Repayments	Closing balance
Unsecured bonds	2,505,715	(5,366)	1,140,000	30,146	-	3,670,495
Finance lease liability	4,721	-	-	-	(2,366)	2,355
Mortgage bond	2,115	-	-	-	(64)	2,051
	2,512,551	(5,366)	1,140,000	30,146	(2,430)	3,674,901

On 27 November 2015 Rand Water issued R250 million Senior Unsecured 6.842% Fixed Rate Notes. The loan was utilised as part of the general borrowings pool and was settled on 26 February 2016. The movement thereto is reflected in the reconciliation of interest bearing borrowings above.

The amortisation of R4 million (2016: R6.4 million) represents the amortisation of the net discount and premium on the issue of the bonds. The net discount and premium is amortised over the maturity period of the related bond.

Non-current liabilities

Figures in Rand thousand	Group			Rand Water		
	2017	2016	2015	2017	2016	2015
At amortised cost	4,414,718	4,418,735	3,672,432	4,414,718	4,418,735	3,672,432

Current liabilities

Figures in Rand thousand	Group			Rand Water		
	2017	2016	2015	2017	2016	2015
At amortised cost	-	-	2,469	-	-	2,469

Debt repayment schedule

The terms and conditions of outstanding loans were as follows:

Face value

Figures in Rand thousand	Group			Rand Water		
	2017	2016	2015	2017	2016	2015
Unsecured bonds	4,414,718	4,418,735	3,670,495	4,414,718	4,418,735	3,670,495
Mortgage bond	-	-	2,051	-	-	2,051
Finance lease liability	-	-	2,355	-	-	2,355
	4,414,718	4,418,735	3,674,901	4,414,718	4,418,735	3,674,901

Carrying amount

Figures in Rand thousand	Group			Rand Water		
	2017	2016	2015	2017	2016	2015
Unsecured bonds	4,414,718	4,418,735	3,670,495	4,414,718	4,418,735	3,670,495
Mortgage bond	-	-	2,051	-	-	2,051
Finance lease liability	-	-	2,355	-	-	2,355
	4,414,718	4,418,735	3,674,901	4,414,718	4,418,735	3,674,901

	Nominal interest rate	Year of maturity
Unsecured bond: RW21	9.97%	2021
Unsecured bond: RW23	9.51%	2023
Unsecured bond: RW28	10.25%	2028

15. RETIREMENT BENEFIT OBLIGATION

Reconciliation of the retirement benefit liability

Figures in Rand thousand	Group			Rand Water		
	2017	2016	2015	2017	2016	2015
Balance as at 1 July	(340,818)	(330,321)	(345,922)	(340,818)	(330,321)	(345,922)
Interest cost	(30,015)	(28,870)	(27,708)	(30,015)	(28,870)	(27,708)
Current service cost	(8,424)	(9,100)	(9,385)	(8,424)	(9,100)	(9,385)
Benefits paid	14,219	13,036	12,650	14,219	13,036	12,650
Actuarial gain	39,850	14,437	40,044	39,850	14,437	40,044
Balance as at 30 June	(325,188)	(340,818)	(330,321)	(325,188)	(340,818)	(330,321)
Non-current asset	335,600	331,880	-	335,600	331,880	-
Non-current liability	(325,188)	(340,818)	(330,321)	(325,188)	(340,818)	(330,321)
Unfunded (liability) / surplus	10,412	(8,938)	(330,321)	10,412	(8,938)	(330,321)

Reconciliation of the fair value of plan assets

Figures in Rand thousand	Group			Rand Water		
	2017	2016	2015	2017	2016	2015
Balance as at 1 July	331,880	-	-	331,880	-	-
Contribution to the plan asset	-	335,944	-	-	335,944	-
Return on plan asset	20,983	10,158	-	20,983	10,158	-
Benefits paid	(14,219)	(13,036)	-	(14,219)	(13,036)	-
Investment fees	(169)	(254)	-	(169)	(254)	-
Actuarial loss	(2,875)	(932)	-	(2,875)	(932)	-
Balance as at 30 June	335,600	331,880	-	335,600	331,880	-

Defined benefit obligation

The retirement benefit obligation consists of an obligation that Rand Water has to continue to fund a portion of employees' contributions to the Rand Water Medical Scheme after retirement. The scheme is a closed scheme and applies only to those members employed prior to 1 January 2002. The liability is actuarially calculated each year in accordance with the stated accounting policy.

Plan Asset

During the 2016 financial year, the Rand Water Group annuity policy was concluded with an insurer to administer the company's Post-Retirement Medical Aid obligation, where the insurer would pay all policy benefits to the Rand Water Medical Scheme. On the 14 December 2015 Rand Water paid a premium of R335 million, which represented the valuation of the plan asset.

Actuarial Valuation

The most recent actuarial valuation of the plan assets and the present value of the defined benefit plan liability were carried out at 30 June 2017 by external actuaries. The present value of the defined liability, and the related current service cost and past service cost, were measured using the projected credit unit method, and the movements have been reflected in the reconciliations below:

Movements in the net asset/liability for defined benefit obligation recognised in the Statement of Financial Position

Figures in Rand thousand	Group			Rand Water		
	2017	2016	2015	2017	2016	2015
Net liability for defined benefit obligation at beginning of the year	(8,938)	(330,321)	(345,922)	(8,938)	(330,321)	(345,922)
Contribution to the plan asset	-	335,944	-	-	335,944	-
Re-measurements	36,975	13,505	40,044	36,975	13,505	40,044
Current service costs	(8,424)	(9,100)	(9,385)	(8,424)	(9,100)	(9,385)
Net interest expense	(9,032)	(18,712)	(27,708)	(9,032)	(18,712)	(27,708)
Investment fees	(169)	(254)	-	(169)	(254)	-
Benefits paid	-	-	12,650	-	-	12,650
Net asset/(liability) for defined benefit obligation	10,412	(8,938)	(330,321)	10,412	(8,938)	(330,321)

Expense recognised in profit or loss

Figures in Rand thousand	Group			Rand Water		
	2017	2016	2015	2017	2016	2015
Current service cost	8,424	9,100	9,385	8,424	9,100	9,385
Benefits paid	-	-	(12,650)	-	-	(12,650)
Interest cost	30,015	18,966	27,708	30,015	18,966	27,708
Return on plan asset	(20,983)	-	-	(20,983)	-	-
Investment fees	169	254	-	169	254	-
	17,625	28,320	24,443	17,625	28,320	24,443

Income recognised in other comprehensive income

Figures in Rand thousand	Group			Rand Water		
	2017	2016	2015	2017	2016	2015
Actuarial gain on retirement benefit obligation	39,850	14,437	40,044	39,850	14,437	40,044
Actuarial gain on plan asset	(2,875)	(932)	-	(2,875)	(932)	-
	36,975	13,505	40,044	36,975	13,505	40,044

Principal actuarial assumptions:

Discount rate for active members	9.61 %	9.06 %	8.74 %	9.61 %	9.06 %	8.74 %
Discount rate for pensioners	8.67 %	8.56 %	8.74 %	8.67 %	8.56 %	8.74 %
Health care cost inflation	6.97 %	7.11 %	7.29 %	6.97 %	7.11 %	7.29 %
Membership continued at retirement	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %	100.00 %
Expected return on plan asset	9.33 %	8.91 %	- %	9.33 %	8.91 %	- %
Proportion married at retirement	90.00 %	90.00 %	90.00 %	90.00 %	90.00 %	90.00 %
Real discount rate for active members	2.47 %	1.82 %	1.35 %	2.47 %	1.82 %	1.35 %
Spouse age difference	3 years					
Expected retirement age*	63 years					
Pensioner mortality tables**	PA (90) ultimate					

Re-measurements consist of actuarial gains and losses on the post retirement obligation and the plan asset.

The expected rate of return on the plan asset has been based on the weighted average rate between the guaranteed fund and the growth fund as at the date of transfer of the funds in the portfolios.

* Early retirement at age 55 has not been considered in the calculation.

** The Group does not have its own mortality tables, the standard mortality table has been adopted.

Sensitivity analysis

	2017		2016	
	Decrease	Increase	Decrease	Increase
1% increase/decrease in the health care cost assumption on the obligation	24,429	30,166	27,062	33,765
1% increase/decrease in the health care cost assumption on service costs	1,184	1,465	1,376	1,721
1% increase/decrease in the health care cost assumption on interest cost	2,347	2,899	2,452	3,059
A 50% decrease in withdrawal rates	5,720	-	7,467	-
A 1 year reduction in post retirement mortality	4,471	-	7,501	-

The above displays the effect on the liability should the above mentioned assumptions change.

The plan typically exposes the Group to actuarial risks such as: Investment risk, interest rate risk, longevity risk and salary risk as defined below:

Investment risk: The present value of the defined plan obligation is calculated using a discount rate determined by reference to long term government bond yields; if the return on plan asset is below this rate, it will create a plan deficit. Currently the plan has a relatively balanced investment in the Old Mutual Multi Managers and the Guarantees portfolios. Due to the long term nature of the plan liabilities, the board of Rand Water considers it appropriate that a reasonable portion of the plan assets should be invested in the above mentioned portfolios to leverage the return generated by the fund.

Interest rate risk: A decrease in the bond yields will increase the plan liability; however, this will be partially offset by an increase in the return on the plan asset investments.

Longevity risk: The present value of the defined benefit plan liability is calculated by reference to the best estimate of the mortality of plan participants both during and after their employment. An increase in the life expectancy of the plan participants will increase the plan's liability.

Salary risk: The present value of the defined benefit plan liability is calculated by reference to the future salaries of plan active members. As such, an increase in the salary of the plan participants will increase the plan's liability.

The risk relating to the benefit to be paid to the dependants of plan members (widows and orphan benefits) is re-insured by an external insurance company.

No other post-retirement benefits are provided to these employees.

Other retirement benefits

In addition to the post retirement benefit employees are also members of the Rand Water Superannuation Fund; the Rand Water Provident Fund or the South African Municipal Workers' Union National Provident Fund.

The Rand Water Superannuation Fund is currently in the process of voluntary liquidation.

16. INCOME RECEIVED IN ADVANCE

Figures in Rand thousand	Group			Rand Water		
	2017	2016	2015	2017	2016	2015
Non-current liabilities						
Deferred income from service concession arrangement	165,027	168,155	171,283	165,027	168,155	171,283
Deferred income from transfer of asset from customer	141,777	145,565	147,650	141,777	145,565	149,671
Capital contribution from customers	102,309	113,654	123,039	94,173	95,931	97,691
	409,113	427,374	441,972	400,977	409,651	418,645

Income received in advance consists of capital contributions received from customers or other entities for the construction of assets as well as deferred income relating to assets owned by the Bushbuckridge Local Municipality and the Department of Water and Sanitation, which Rand Water utilises in the supply of bulk water to the municipality.

Amortisation of the deferred income to the value of R8.7 million (2016: R9.8 million) has been recognised in other income where the asset is in use. The income is recognised on a straightline basis over the useful life of the asset. The balance of the R9 million in the Group is in respect of grants utilised by Rand Water Foundation for projects undertaken during the year.

17. PROVISION FOR REHABILITATION COSTS

Reconciliation of provision for rehabilitation costs - Group - 2017

Figures in Rand thousand	Opening balance	Interest	Change in estimate	Total
Environmental rehabilitation	65,518	4,701	(1,032)	69,187

Reconciliation of provision for rehabilitation costs - Group 2016

Figures in Rand thousand	Opening balance	Interest	Closing balance
Environmental rehabilitation	60,862	4,656	65,518

Reconciliation of provision for rehabilitation costs - Group - 2015

Figures in Rand thousand	Opening balance	Interest	Change in estimate	Total
Environmental rehabilitation	57,462	4,200	(800)	60,862

Reconciliation of provision for rehabilitation costs - Rand Water - 2017

Figures in Rand thousand	Opening balance	Interest	Change in estimate	Total
Environmental rehabilitation	65,518	4,701	(1,032)	69,187

Reconciliation of provision for rehabilitation costs - Rand Water 2016

Figures in Rand thousand	Opening balance	Interest	Closing balance
Environmental rehabilitation	60,862	4,656	65,518

Reconciliation of provision for rehabilitation costs - Rand Water - 2015

Figures in Rand thousand	Opening balance	Interest	Change in estimate	Total
Environmental rehabilitation	57,462	4,200	(800)	60,862

The rehabilitation cost relates to the sludge waste disposal site at Panfontein. The Group has an obligation to undertake restoration, rehabilitation and environmental work at the end of the sludge disposal sites useful life.

The provision for rehabilitation has been determined using the estimated average future inflation rate as per projections from the major four banks and Bloomberg for a period of four years. The assumptions applied in determining the value of the provision include the estimated useful life of the site, the expected expenditures based on the adopted rehabilitation approach, estimated future inflation rate and pre-tax risk free discount represented by the return on government bonds.

During the current reporting period, Rand Water recognised a R1 million change in estimate which was linked to the changes in inflation rate.

18. TRADE AND OTHER PAYABLES

Figures in Rand thousand	Group			Rand Water		
	2017	2016	2015	2017	2016	2015
Trade payables	2,239,313	1,871,452	1,421,511	2,239,318	1,871,453	1,426,863
Amounts received in advance	252,775	277,032	231,151	252,775	277,032	231,151
VAT payable	-	-	55,931	-	-	55,931
Water demand management fee	85,088	184,171	149,785	85,088	184,171	149,785
Acid Mine Drainage provision	137,015	321,187	392	137,015	321,187	392
Accrued leave pay	89,900	80,685	72,838	89,900	80,685	72,838
Accrued bonus	397,747	384,800	324,970	397,747	384,800	324,970
Other payables	265,173	714,668	743,617	257,913	712,828	737,272
	3,467,011	3,833,995	3,000,195	3,459,756	3,832,156	2,999,202

Trade payables includes retention payments due to suppliers of R 146 million (2016: R519 million). The retention payments are due as and when predetermined project milestones have been met. Due to the nature of the conditions attached to the projects, the timing thereof is not easily determinable and is therefore deemed to be current in nature.

The Water Demand Management (WDM) fee of R85 million (2016: R164.4 million) represents project funds that were ring-fenced to be used for projects to reduce water losses on behalf of customers. The Acid Mine Drainage (AMD) provision of R137 million (2016: R321 million) related to a provision for the AMD component of the raw water tariff that was not billed by the Department of Water and Sanitation. It was subsequently agreed that the WDM and the AMD fee would be refunded to the customers.

19. REVENUE

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Potable water				
- Municipalities	10,952,142	10,096,704	10,952,142	10,096,704
- Mines	527,492	524,901	527,492	524,901
- Industries	41,820	37,520	41,820	37,520
- Direct consumers	211,234	194,555	211,234	194,555
Non-potable water	124,131	97,211	124,131	97,211
Recoverable projects income	124,336	120,979	124,336	120,979
	11,981,155	11,071,870	11,981,155	11,071,870

20. COST OF SALES

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Potable water cost of sales	7,792,702	7,346,791	7,792,702	7,346,791
Non-potable water	123,424	123,624	123,424	123,624
Recoverable projects cost of sales	82,914	40,456	82,914	40,456
	7,999,040	7,510,871	7,999,040	7,510,871
Potable water comprises of:				
Opening water inventory	46,606	37,370	46,606	37,370
Water purchases	4,184,328	4,007,077	4,184,328	4,007,077
Labour	774,639	705,196	774,639	705,196
Energy	1,931,425	1,863,895	1,931,425	1,863,895
Chemicals	289,014	247,926	289,014	247,926
Depreciation	369,185	290,242	369,185	290,242
Amortisation	7,303	7,224	7,303	7,224
Other direct expenses	253,444	248,972	253,444	248,972
Other direct income	(15,102)	(14,505)	(15,102)	(14,505)
Closing water inventory	(48,140)	(46,606)	(48,140)	(46,606)
	7,792,702	7,346,791	7,792,702	7,346,791

21. OTHER OPERATING INCOME

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Profit on sale of property, plant and equipment	1,541	724	1,541	724
Profit on sale of joint venture	-	1,705	-	-
Reversal of impairment in subsidiary	-	-	550	2,073
Other income	54,877	58,144	37,678	38,816
	56,418	60,573	39,769	41,613

22. STAFF COSTS

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Executive board members	7,358	7,088	5,174	5,061
Non-executive board members	8,633	7,619	6,860	5,860
Board members' fees and emoluments	15,991	14,707	12,034	10,921
Salaries	1,270,680	1,150,872	1,262,478	1,143,919
Contributions to defined contribution plan	137,273	124,452	137,273	124,452
Other staff costs	753,844	719,999	751,424	717,566
	2,177,788	2,010,030	2,163,209	1,996,858
Transferred to projects	(339,487)	(284,461)	(339,487)	(284,461)
Transferred to cost of sales	(775,665)	(706,795)	(775,665)	(706,795)
Net staff costs	1,062,636	1,018,774	1,048,057	1,005,602

Other staff costs include the post retirement medical aid benefit current service costs of R8.4 million as at 30 June 2017 (2016: R9.1 million).

Transfers to projects of R339 million (2016: R284 million) represents labour charge outs for temporary and permanent employees to capital and recoverable projects. Transfers to cost of sales of R776 million (2016: R707 million) represents direct labour charges for the production of water revenue recognised directly in cost of sales (see note 20).

23. DEPRECIATION

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Depreciation recognised in other expenses	47,851	52,750	47,823	52,715
Depreciation recognised in cost of sales	369,185	290,242	369,185	290,242
Total depreciation	417,036	342,992	417,008	342,957

Depreciation is split between depreciation recognised in cost of sales, which relates to those items of property plant and equipment that is directly linked to the water purification process and depreciation recognised in other expenses which relates to items of property, plant and equipment for indirect expenses (see note 5 and note 20 respectively).

24. AMORTISATION

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Amortisation recognised in other expenses	14,143	10,263	14,143	10,263
Amortisation recognised in cost of sales	7,303	7,224	7,303	7,224
Total amortisation	21,446	17,487	21,446	17,487

Amortisation is split between amortisation recognised in cost of sales, which relates to those items of intangible assets that is directly linked to the water purification process and amortisation recognised in other expenses which relates to items of intangible assets for indirect expenses (see note 6 and note 20 respectively).

25. OTHER OPERATING EXPENSES

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Other operating expenses includes:				
Bad debt provision	147,472	(3,223)	147,472	(3,223)
Bad debts written off	-	2,313	-	2,323
Consultant fees	40,735	43,575	40,735	43,575
Courses and seminars	26,129	28,107	25,720	27,821
Loss on foreign exchange	-	13	-	-
Insurance costs	29,200	39,094	29,200	39,094
Loss on property, plant and equipment scrapped	1,658	362	1,658	362
Other overheads	256,134	297,682	253,210	288,782
Software licences	28,823	22,446	28,823	22,446
Telephone and cell phone costs	10,959	8,518	10,881	8,380
Travel and accommodation	11,175	22,134	10,831	21,335
	552,285	461,021	548,530	450,895

The credit of R3.2 million for bad debt provision in 2016 is as a result of bad debts provisions in 2015 that were reversed in 2016.

26. FINANCE INCOME

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Interest on investments	133,384	98,146	133,384	98,146
Interest from current accounts	2,965	2,944	1,213	2,529
Interest on trade and other receivables	41,195	17,037	41,195	17,037
Amortised discount on investment	(5,198)	(5,212)	(5,198)	(5,212)
Sundry interest	860	898	860	898
	173,206	113,813	171,454	113,398
Interest on post retirement plan asset	20,983	10,158	20,983	10,158
Total interest income	194,189	123,971	192,437	123,556

Included in finance income is the amortisation of the discount from the available-for-sale financial instrument as detailed in note 8.

Rand Water earned interest on the Post-Retirement Medical Aid Plan Asset of R20.9 million (2016: R10.1 million) (refer to note 15).

Sundry interest primarily includes interest earned on loans to employees and deposits held by service providers.

27. FINANCE COSTS

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Interest on interest bearing borrowings	436,379	374,912	436,379	374,912
Amortised discount on interest bearing borrowings	(4,016)	(6,438)	(4,016)	(6,438)
Other interest paid	56,356	77,347	56,356	77,347
	488,719	445,821	488,719	445,821
Interest capitalised (refer to note 5)	(307,673)	(373,661)	(307,673)	(373,661)
Total finance costs expensed	181,046	72,160	181,046	72,160

Amortised discount on interest bearing borrowings relates to the discount/premium on the interest bearing borrowings as reflected in note 14 which is being amortised over the related bonds maturity period.

Included in other interest paid is R9.3 million that relates to interest on the Water Demand Management fee, R15.4 million relating to the Acid mine drainage fee (refer to note 18) and interest on the Post-retirement Medical Aid Obligation of R30 million (refer to note 15).

28. TAXATION

Reconciliation of the tax expense

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Reconciliation between accounting income and tax expense.				
Net income before taxation	2,374,761	2,130,575	2,374,722	2,134,534
Tax at the applicable tax rate of 28% (2016: 28%)	664,933	596,561	664,922	597,670
Tax effect of adjustments on taxable income				
Tax exempt income	(664,933)	(596,561)	(664,922)	(597,670)
Tax expense	-	-	-	-

Rand Water Services Vitens BV was the only tax paying entity in the Group. In terms of Section 10(1)(cA) read with Section 1(b) of the Income Tax Act 58 of 1962, Rand Water is exempt from income tax. Rand Water Services (Pty) Ltd applied and received tax exemption under the same provisions in the Income Tax Act. Rand Water Foundation was also approved as a non-profit organisation, and is exempt from normal income tax.

29. RECONCILIATION OF NET INCOME TO CASH GENERATED FROM OPERATIONS

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Profit before taxation	2,374,761	2,130,575	2,374,722	2,134,534
Adjustments for:				
Depreciation and amortisation	438,482	360,480	438,454	360,445
Profit on disposal of assets	(1,541)	(724)	(1,541)	(724)
Loss on assets scrapped	1,658	362	1,658	362
Finance income	(194,189)	(123,971)	(192,437)	(123,556)
Finance costs	181,046	72,160	181,046	72,160
Reversal of impairment in subsidiary	-	-	(550)	(2,073)
Movements in retirement benefit obligation	8,424	9,100	8,424	9,100
Movements in rehabilitation provision	3,669	4,656	3,669	4,656
Movement in retirement benefit plan asset	169	254	169	254
Profit on sale of joint venture	-	(1,704)	-	-
Gain on forex translation	-	14	-	-
Changes in working capital:				
Inventories	(279,924)	(7,293)	(279,924)	(7,293)
Trade and other receivables	(308,955)	(153,051)	(310,036)	(154,112)
Trade and other payables	(391,663)	842,052	(397,078)	832,956
Income received in advance	(18,261)	(14,598)	(8,674)	(8,994)
	1,813,676	3,118,312	1,817,902	3,117,715

30. SECONDARY ACTIVITIES

Included in net income for the year are the following net income/(losses) derived from secondary activities, as defined by Section 30 of the Water Services Act, Act 108 of 1997. These activities have been ring fenced in terms of the requirements of Section 42 of the Water Services Act.

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Management consulting, training and other support services	(26,100)	21,440	(26,100)	21,440
Non-potable water supply services	1,711	403	1,711	403
Potable water supply services	360,053	327,261	360,053	327,261
Income on secondary activities	335,664	349,104	335,664	349,104

During the previous financial year, management embarked on a process to review and refine the disclosure note on secondary activities, to ensure that the entity complies with Section 30 of the Water Services Act, and that secondary activities, as defined, have been ring fenced for all periods being reported.

The categories have been derived based on the categories within the Water Services Act as follows:

Management consulting, training and other support services - Qualifies under S30(2)(a) Providing management and other support services in order to promote co-operation in the provision of water services.

Non-potable water supply services - Qualifies under S30(2)(b) & (d) The supply of untreated or non-potable water to end users who do not use the water for household purposes but for industrial use.

Potable water supply services - Qualifies under S30(2)(d)(i) Supply of potable water with permission from the water services authority to a customer for industrial use and qualifies under S30(2)(d)(iii) with permission from the water services authority to act as a water services provider to customers.

31. FAIR VALUE MEASUREMENT

The fair values of financial assets and liabilities, including assets and liabilities of disposal groups, approximates their carrying amounts. The fair values for the Group are as follows:

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Financial Assets				
Available for sale financial assets				
Investment in bonds	458,886	461,650	458,886	461,650
Loans and receivables				
Cash and cash equivalents	805,147	1,470,173	780,199	1,422,742
Loans receivable	4,606	5,168	4,606	5,168
Trade and other receivables	1,970,866	1,760,140	1,977,956	1,761,704
	3,239,505	3,697,131	3,221,647	3,651,264
Financial Liabilities				
Financial liabilities at amortised cost				
Unsecured bond issues	4,414,718	4,418,733	4,414,718	4,418,733
Trade payables	3,195,589	3,542,057	3,188,334	3,540,218
	7,610,307	7,960,790	7,603,052	7,958,951

The information below details the methods and assumptions used in estimating the fair values of financial instruments.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- In the principal market for the asset or liability, or
- In the absence of a principal market, in the most advantageous market for the asset or liability

The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits from the asset's highest and best use or by selling it to

another market participant that would utilise the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

Available-for-sale financial assets

The fair value of available-for-sale financial assets is based on quoted market prices on the Johannesburg Stock Exchange at the reporting date without any deduction for transaction costs.

Trade and other receivables

Trade and other receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment.

Receivables

2,0%-15,5% (2016: 2,0%-15,5%)

Trade and other payables

For payables with a remaining life of less than one year, the nominal amount is deemed to reflect the fair value. All other payables are discounted, using the effective interest method, to determine the fair value.

Loans and borrowings

9.90% - 17.09% (2016: 9.90% - 17.09%)

Interest rates used for determining fair value

The interest rate used to discount estimated cash flows are based on the government yield curve at the reporting date plus an adequate constant credit spread to discount financial instruments.

32. OTHER COMMITMENTS

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Group as lessee				
Minimum lease payments due				
- within one year	1,683	3,102	1,683	3,102
- in second to fifth year inclusive	4,491	3,237	4,491	3,237
- later than five years	-	430	-	430
	6,174	6,769	6,174	6,769

The Group leases a number of office and residential facilities under operating leases. The leases run for periods of between one and three years, with an option to renew the lease after that date. Lease payments are subject to an annual escalation to reflect market rentals. None of the leases include contingent rentals.

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Group as lessor				
The future minimum lease payments are as follows:				
- within one year	2,225	2,929	2,225	2,929
- in second to fifth year inclusive	8,423	8,885	8,423	8,885
- later than five years	8,225	12,425	8,225	12,425
	18,873	24,239	18,873	24,239

The Group leases out a number of properties under operating leases. These property leases do not qualify as investment property as the properties were purchased for future operational use and the related income is incidental in nature. During the year ended 30 June 2017: R1.6 million (2016: R1.6 million) was recognised as rental income in profit or loss. Property leases consist mainly of vacant land and therefore little or no cost has been realised for repairs and maintenance.

Included in the disclosures above are the commitments that have arisen from those arrangements that contain deemed operating leases.

33. CONTINGENCIES

Contingent Asset

The Group has a potential contingent asset of R154 million which arose as a result of a net under billing against certain customers. The net under billing arose due to incorrect meter readings undertaken. The Group is still in negotiation with the relevant customers, collection thereof is still uncertain as of the end of the reporting period.

The Group has a potential contingent asset of R21 million in respect of a capital contribution that was due to Rand Water in 2012. The collection thereof is still uncertain as of the end of the reporting period.

Contingent Liabilities

Legal claims

General claims:

Various proceedings were instituted against the Group during the 2017 financial year. The amounts being claimed from the Group total approximately R753 million. The Group's legal advisors believe that the Group has reasonable defences against the claims and that the probability of loss will be minimal. Accordingly, no provision has been made in the consolidated annual financial statements.

Detail of the claims are as follows:

1. A R10 million claim in respect of property expropriated by Rustenburg Municipality on behalf of Rand Water.
2. A R36 million claim for alleged infringement of a patent in respect of Rand Water's co-generation tender.
3. A R4.4 million being an alleged breach of contract by Rand Water resulting in damages incurred by the claimant.
4. A claim for R26.6 million against Rand Water for alleged lack of payments for work performed in Mpumalanga.
5. A claim in respect of alleged loss of income following the construction of a pipeline within the claimant's property of R8.4 million.
6. A claim for R15 million against Rand Water for purported alleged damages incurred by a service provider.
7. Alleged R650 million claim by a service provider for loss of income over a 10 year period due to the cancellation of contracts that have been entered into by employee party who had no delegation of authority and who removed the cancellation/termination clause unilaterally.
8. The Group also incurred various minor claims totalling approximately R2.5 million.

Guarantees

The Group has contingent liabilities in respect of guarantees given to third parties that amount to R4.7 million (2016: R0.45 million).

34. RELATED PARTIES

The Group has a related party relationship with its subsidiaries and with its executives and board members. As Rand Water is a state-controlled entity, it also has a related party relationship with all other entities within the same sphere of government. Unless otherwise disclosed, all transactions with related parties are on an arms length basis at market related prices.

Transactions with key management personnel

Key management personnel compensations are detailed in the Remuneration Report and total remuneration for the board members and executives are included under staff costs (see note 22).

None of the key management personnel had or has any significant influence within any entity with whom the Group has had significant transactions with.

Subsidiaries	Country of incorporation	Ownership interest
Rand Water Services (Pty) Ltd	South Africa	100%
Rand Water Foundation	South Africa	100%
Joint Venture		
Vitens Rand Water Services BV	Netherlands	49%

Rand Water Foundation is a non-profit company. The company is a special purpose entity as defined.

Rand Water Services held a 49% stake in Vitens Rand Water Services BV which was accounted for as a jointly controlled entity, based in the Netherlands. On 7 July 2015 Rand Water Services disposed of its 49% shareholding in Vitens Rand Water Services for one Euro, and also received as final settlement 75.6 thousand Euro (R998 thousand) of the loan outstanding.

The following transactions were carried out with the subsidiaries:

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Transactions with related parties				
Contribution to subsidiaries	-	-	59,637	62,211
Year-end balances arising from transactions				
Deferred income	-	-	1,596	1,596
Receivables	-	-	9,388	9,844

Group entities

The Group is 100% controlled by the government of South Africa represented by the Department of Water and Sanitation. Rand Water and its subsidiaries are schedule 3B Enterprises in terms of the Public Finance Management Act. The related parties of Rand Water consist mainly of government departments and state-owned enterprises and other public entities in the national sphere of government. The list of such entities and their subsidiaries that fall within the national sphere of Government is provided by National Treasury. The Group is exempt from disclosing balances and transactions with other spheres of Government however, the Group has opted to disclose its balances and transactions with Municipalities due to the nature and materiality of the balances and transactions.

Although Rand Water is 100% controlled by the Department of Water and Sanitation, the Department does not produce a set of consolidated annual financial statements. This function for the purposes of reporting to Parliament is performed by National Treasury.

34. RELATED PARTIES: CONTINUED

Transactions with the Department of Water and Sanitation

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Transactions with related parties:				
Sales of goods and services	765,266	781,344	765,226	778,504
Purchases of goods and services	4,131,224	4,019,815	4,131,224	4,019,815
Contributions received	1,784	-	-	-
Year-end balances arising from transactions				
Allowance for doubtful debts	29,825	21,977	29,825	21,977
Receivables	88,424	236,804	88,423	236,804
Payables	932,540	861,529	932,540	861,529
Deferred income	1,376	1,378	-	-

Payables and receivables are due within 30-60 days from date of invoice. Interest receivable/payable is in accordance with normal market practice.

Transactions with Other public entities

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Transactions with related parties:				
Sales of goods and services	11,270,973	10,813,755	11,270,973	10,797,267
Purchases of goods and services	2,366,783	1,464,559	2,366,783	1,464,559
Statutory liabilities	842,865	789,981	842,865	789,981
Interest received	49,276	3,302	49,276	3,302
Contributions received	1,847	3,643	-	-
Year-end balances arising from transactions				
Allowance for doubtful debts	411,384	285,102	411,384	285,102
Receivables	2,067,184	1,482,281	2,067,184	1,474,390
Payables	193,519	154,903	193,519	154,903
Deferred income	6,750	15,728	-	-

All receivables / payables are due within 30 days from date of invoice. Interest receivable / payable is in accordance with normal market practice.

35. SUBSEQUENT EVENTS

Subsequent to year end, Rand Water received judgement on two matters reported as contingent liabilities in note 33. These two matters are reported as R4.4 million (claim 3) and R26.6 million (claim 4) in the contingent liabilities note, however the judgement handed down totalled approximately R0.9 million and R13.7 million respectively.

The entity has not identified any additional reportable matters that were noted since the end of the financial year.

36. FIRST-TIME ADOPTION OF INTERNATIONAL FINANCIAL REPORTING STANDARDS AND PRIOR YEAR ADJUSTMENTS

Following the issue of *Directive 12: The Selection of an Appropriate Reporting Framework by Public Entities* by the Accounting Standards Board, Rand Water followed the process of selecting an appropriate accounting framework. The required self-assessment was performed and it was determined that Criteria C of the self assessment framework was met.

Rand Water applies a self sustaining model, its main sources of funding are internally generated funds or through external capital providers. The entity acquires little to no funding through government grants or any other form of financial assistance from government and its operations are commercial in nature. Rand Water is a national public entity which has been assigned financial and operational authority to carry on a business activity, as its principle business provides goods and services in accordance with ordinary business principles and is financed fully from sources other than the National Revenue Fund or taxes, levies or other statutory funds. It was concluded that International Financial Reporting Standards (IFRS), as issued by the International Accounting Standards Board, would be adopted as the appropriate accounting framework.

These financial statements, for the year ended 30 June 2017, are the first the Group

has prepared in accordance with IFRS. For periods up to and including the year ended 30 June 2016, the Group prepared its financial statements in accordance with South African Generally Accepted Accounting practice (SA GAAP).

Accordingly, the Group has prepared financial statements which comply with IFRS applicable for periods ending on or after 30 June 2017, together with the comparative period data as at and for the year ended 30 June 2016, as described in the accounting policies. In preparing these financial statements, the Group's opening statement of financial position was prepared as at 1 July 2015, the Group's date of transition to IFRS. This note explains the principal adjustments made by the Group in restating its SA GAAP statement of financial position as at 1 July 2015 and its previously published SA GAAP financial statements as at and for the year ended 30 June 2016.

Exemptions applied

IFRS 1 allows first-time adopters certain exemptions from the retrospective application of certain requirements under IFRS. The Group has not adopted any of the exemptions or allowances under IFRS 1.

Estimates

The estimates at 1 July 2015, at 30 June 2016 and at 30 June 2017 are consistent with those made for the same dates in accordance with SA GAAP (after adjustments to reflect any differences in accounting policies).

Group

Reconciliation of the effects of the adjustments in the Statement of Financial Position as at 30 June 2015

	As previously reported - SA GAAP	Prior year adjustments	IFRS transition adjustments	IFRS restated
Property, plant and equipment	14,733,755	(63,206)	-	14,670,549
Intangible assets	409,246	(17,118)	-	392,128
Trade and other receivables	1,764,475	25,390	-	1,789,865
Cash and cash equivalents	1,154,148	41	-	1,154,189
Total assets	18,061,624	(54,893)	-	18,006,731
Deferred income	(491,197)	49,225	-	(441,972)
Trade and other payables	(2,967,425)	(32,770)	-	(3,000,195)
Accumulated reserves	(11,144,977)	38,438	-	(11,106,539)
Total reserves and liabilities	(14,603,599)	54,893	-	(14,548,706)

Reconciliation of the effects of the adjustments in the Statement of Financial Position as at 30 June 2016

	As previously reported - SA GAAP	Prior year adjustments	IFRS transition adjustments	IFRS restated
Property, plant and equipment	17,666,275	(74,720)	-	17,591,555
Intangible assets	415,200	(18,220)	-	396,980
Trade and other receivables	1,860,917	73,747	-	1,934,664
Cash and cash equivalents	1,470,119	54	-	1,470,173
Total assets	21,412,511	(19,139)	-	21,393,372
Deferred income	(475,776)	48,402	-	(427,374)
Trade and other payables	(3,745,416)	(88,579)	-	(3,833,995)
Accumulated reserves	(13,295,097)	59,316	-	(13,235,781)
Total reserves and liabilities	(17,516,289)	19,139	-	(17,497,150)

Reconciliation of the effect of the adjustments in the Statement of Financial Performance as at 30 June 2016

	Notes	As previously reported - SA GAAP	Prior year adjustments	IFRS transition adjustments	IFRS restated
Revenue	6	10,950,891	120,979	-	11,071,870
Cost of sales	7 & 8	(7,457,471)	(53,400)	-	(7,510,871)
Other operating income	6	180,827	(120,254)	-	60,573
Staff costs	10, 14 & 15	(1,296,920)	291,651	(13,505)	(1,018,774)
Depreciation		(52,749)	-	-	(52,749)
Amortisation		(10,263)	-	-	(10,263)
Other expenses	7 & 10	(227,514)	(233,507)	-	(461,021)
Net finance income	11, 14 & 15	78,157	(26,347)	-	51,810
Net income/(loss)		2,164,958	(20,878)	(13,505)	2,130,575

Reconciliation of Comprehensive Income for the year ended 30 June 2016

	Note	As previously reported - SA GAAP	Prior year adjustments	IFRS transition adjustments	IFRS restated
Net income for the year		2,150,120	(20,878)	(13,505)	2,115,737
Other comprehensive (loss)/ income:					-
Re-measurements through OCI	15	-	-	13,505	13,505
Total comprehensive income		2,150,120	(20,878)	-	2,129,242

Rand Water

Reconciliation of the effects of the adjustments in the Statement of Financial Position as at 30 June 2015

	As previously reported - SA GAAP	Prior year adjustments	IFRS transition adjustments	IFRS restated
Property, plant and equipment	14,774,201	(63,206)	-	14,710,995
Intangible assets	409,246	(17,118)	-	392,128
Trade and other receivables	1,754,920	25,390	-	1,780,310
Cash and cash equivalents	1,128,729	41	-	1,128,770
Total assets	18,067,096	(54,893)	-	18,012,203
Deferred income	(467,870)	49,225	-	(418,645)
Trade and other payables	(2,966,432)	(32,770)	-	(2,999,202)
Accumulated reserves	(11,180,500)	38,438	-	(11,142,062)
Total reserves and liabilities	(14,614,802)	54,893	-	(14,559,909)

Reconciliation of the effects of the adjustments in the Statement of Financial Position as at 30 June 2016

	As previously reported - SA GAAP	Prior year adjustments	IFRS transition adjustments	IFRS restated
Property, plant and equipment	17,666,275	(74,720)	-	17,591,555
Intangible assets	415,200	(18,220)	-	396,980
Trade and other receivables	1,860,917	73,747	-	1,934,664
Cash and cash equivalents	1,470,119	54	-	1,470,173
Total assets	21,412,511	(19,139)	-	21,393,372
Deferred income	(475,776)	48,402	-	(427,374)
Trade and other payables	(3,745,416)	(88,578)	-	(3,833,995)
Accumulated reserves	(13,295,097)	59,316	-	(13,235,781)
Total reserves and liabilities	(17,516,289)	19,140	-	(17,497,150)

Reconciliation of the effect of the adjustments in the Statement of Financial Performance as at 30 June 2016

	Notes	As previously reported - SA GAAP	Prior year adjustments	IFRS transition adjustment	IFRS restated
Revenue	6	10,950,891	120,979	-	11,071,870
Cost of sales	7 & 8	(7,457,471)	(53,400)	-	(7,510,871)
Other operating income	6	159,794	(118,181)	-	41,613
Staff costs	10, 14 & 15	(1,283,748)	291,651	(13,505)	(1,005,602)
Depreciation		(52,714)	-	-	(52,714)
Amortisation		(10,263)	-	-	(10,263)
Other operating expenses	7 & 9	(215,315)	(235,580)	-	(450,895)
Net finance income	11, 12, 14 & 15	77,743	(26,347)	-	51,396
Net income/(loss)		2,168,917	(20,878)	(13,505)	2,134,534

Reconciliation of Comprehensive Income for the year ended 30 June 2016

	Notes	As previously reported - SA GAAP	Prior year adjustments	IFRS transition adjustments	IFRS restated
Net income for the year		2,153,516	(20,878)	(13,505)	2,119,133
Other comprehensive (loss)/ income:					-
Re-measurements through OCI	'15	-	-	13,505	13,505
Total comprehensive income		2,153,516	(20,878)	-	2,132,638

Notes

The prior year adjustments reflected above consist of errors identified and corrected in terms of the previous accounting framework. The IFRS transition adjustments consist of adjustments undertaken as a result of the transition from SA GAAP to IFRS.

Notes to the reconciliation : Statement of Financial Position

36.1 PROPERTY, PLANT AND EQUIPMENT AND INTANGIBLE ASSETS

Property, plant and equipment to the value of R30.7 million was erroneously classified as Intangible assets. The assets have been subsequently reclassified to the correct classes within property, plant and equipment.

36.2 PROPERTY, PLANT AND EQUIPMENT: LEASES

In reviewing its finance and operating leases, the Group identified that finance lease was in fact an operating lease. The amount of R4.7 million (2015: R3.5 million) was re-allocated to prepayments and lease expenses accordingly.

36.3 INTANGIBLE ASSET

In reassessing its useful life of the Rand Water Mpumalanga water use license the Group concluded that the intangible asset has a useful life of 20 years. The amortisation of the water use license has been adjusted accordingly by R3.8 million (2015: R2.1 million).

36.4 PROPERTY, PLANT AND EQUIPMENT AND DEFERRED INCOME

A capital contribution received from a government entity to the value of R53.9 million was incorrectly allocated to Deferred Income as a government grant. Upon investigation it was identified that the contribution was compensation for additional costs incurred to deviate Rand Water's pipeline. The compensation has been accordingly set off against the relevant costs incurred.

36.5 TRADE AND OTHER RECEIVABLES AND TRADE AND OTHER PAYABLES

The Group has re-classified an amount of R64.2 million in 2016 (2015: R24.4 million) from trade and other payables to trade and other receivables. The Group has assessed that it does not have a legally enforceable right to offset recoverable project receivables and payables for the same customer. The amounts due from and to the same customers have been split and re-classified accordingly.

Notes to the reconciliation: Statement of Financial Performance

36.6 REVENUE AND OTHER INCOME RECLASSIFICATION

In reassessing the accuracy and completeness of its revenue classification, the entity has re-classified its revenue from recoverable projects of R120.9 million from other income to revenue.

36.7 COST OF SALES AND OTHER EXPENSES RECLASSIFICATION

In line with the reclassification of recoverable project income from other income to revenue, the recoverable projects cost of sales of R41 million in 2016 has accordingly been reclassified from other expenses to cost of sales.

In reassessing its cost of sales calculation a further R11.2 million has been reclassified from other expenses to cost of sales in the 2016 financial year.

36.8 COST OF SALES: RAND WATER MPUMALANGA

In re-assessing its provision for raw water purchases for Rand Water Mpumalanga, additional provisions of R0.9 million have been raised for the 2016 financial year (2015: R13.3 million).

36.9 STAFF COSTS: DISABILITY GRANTS NOT ALLOCATED

Disability grants received from insurers in respect of payments made to employees to the value of R3.6 million in 2016 (2015: R4.7 million) has been correctly credited to labour costs in the respective financial years.

36.10 STAFF COSTS: LABOUR RECOVERIES

The Group has re-classified its labour charge outs to capital and recoverable projects of R284.4 million in 2017 from other expenses to staff costs.

36.11 INTEREST ON OVERDUE ACCOUNT

Interest receivable of R11.6 million in respect of overdue water accounts for the 2016 financial year has been raised in accordance with the contractual agreement with a customer.

36.12 IMPAIRMENT OF FINANCIAL ASSET

A corresponding provision for R11.6 million for impairment of the financial asset has been raised against the customers overdue account until negotiations have been concluded.

36.13 INTEREST ON WATER DEMAND MANAGEMENT FEE

Additional interest payable of R18.4 million was raised for the water demand management fees payable to customers as a result of an amendment of the interest rate used in the 2016 financial year interest accrual.

36.14 EMPLOYEE BENEFIT OBLIGATION INTEREST

Interest on employee benefit liability and the plan asset have been re-classified to Finance cost and Finance income respectively from Staff Costs.

Notes to the reconciliation: Statement of Other Comprehensive Income

36.15 RE-MEASUREMENTS THROUGH OTHER COMPREHENSIVE INCOME

As a result of the change in accounting policy under IFRS, re-measurements of the defined benefit obligation and plan are recognised in other comprehensive income. The retrospective adjustment has resulted in an accumulated adjustment of R130.8 million up to 30 June 2015 and R13.5 million adjustment in the 2016 financial year. This transfer to other comprehensive income has resulted in a corresponding reduction in net income.

36.16 OTHER RECLASSIFICATIONS

Other minor reclassifications have further been undertaken in order to more accurately present the financial performance and financial position of the Group.

37. IRREGULAR, FRUITLESS AND WASTEFUL EXPENDITURE AND CRIMINAL CONDUCT

For the year under review the Group recorded R8 million worth of expenditure incurred as a result of irregular expenditure and R1.9 million worth of fruitless and wasteful expenditure. No material cases of criminal conduct has been recorded for the year. None of the irregular expenditure incurred in prior years has been condoned in the current financial year. The Group is still in process of obtaining approvals for the condonation of the remaining balance of R14.2 million for irregular expenditure incurred in prior years.

Irregular expenditure: R8.032 million

Details of the current financial year movement is as follows:

Work awarded to supplier in contravention of CIDB regulations R7.9 million:

In the prior financial year, work to the value of R10.5m was awarded to a supplier who was two levels beneath the CIDB limit for award. The irregular expenditure incurred in respect of the contract for the current financial year is R7.9m. The irregular expenditure is still in the process of being condoned.

Work awarded to supplier in contravention of the supply chain management policy R63 thousand:

During the year work to the value of R63 thousand (Rand Water R53 thousand) was awarded to three suppliers which was not in line with the supply chain management policy.

The reconciliation of the balance of the expenditure is as follows:

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Opening balance	14,233	22,861	13,934	21,562
Amounts condoned /recovered/cases closed	(108)	(14,694)	-	(14,694)
Current year movements	8,042	6,066	8,032	6,066
	22,167	14,233	21,966	12,934

The expenditure is included in the following line items:

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Other expenditure	63	3,586	53	3,586
Property, plant and equipment	7,979	2,480	7,979	2,480
	8,042	6,066	8,032	6,066

Fruitless and wasteful expenditure: R1.9 million

Details of the current financial year movement is as follows:

Wasteful expenditure incurred with regards to accommodation expenditure R2.5k:

During the year, accommodation expenses to the value of R2.5k were incurred for accommodation that was not utilised. The matter has been confirmed and the amount has been recovered. This matter has been finalised as at 30 June 2017.

Wasteful expenditure incurred with regards to transport cost R1.5k:

The entity incurred transport costs by a supplier. The expenditure could have been avoided had appropriate levels of communication been undertaken by the organisers. Disciplinary action in line with Rand Water's disciplinary code of conduct has been taken against the relevant employee.

Wasteful expenditure incurred with regards to interest and penalties incurred R1.9 million:

The Group incurred interest and penalties levied as a result of late registration of the Foundation as a VAT vendor and late submission of its VAT returns. The Group is of the opinion that the interest and penalties may as yet be recovered from the South African Revenue Services (SARS) in line with the provisions of the Tax Administration Act and is actively pursuing the matter with the relevant SARS office.

The reconciliation of the balance of the expenditure is as follows:

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Opening balance	15	-	15	-
Amounts condoned/recovered/cases closed	(3)	-	(3)	-
Current year movements	1,862	15	4	15
	1,874	15	16	15
The expenditure is included in the following line items:				
Other expenditure	871	15	4	15
Net interest	991	-	-	-
	1,862	15	4	15

38. SEGMENT REPORT

Operating segment 2017 Income statement items Figures in Rand thousand	Primary Activities Segment (RW)	Rand Water Mpumalanga	Secondary Activities	Total Segments
Revenue from external customers	11,643,887	256,282	80,986	11,981,155
Segment cost of sales	(7,791,432)	(181,925)	(25,683)	(7,999,040)
Other segment income	39,195	363	211	39,769
Segment depreciation and amortisation	(61,240)	(66)	(660)	(61,966)
Income from other segments	-	-	-	-
Segment labour costs	(982,693)	(43,866)	(21,498)	(1,048,057)
Other segment expenses	(455,080)	(84,622)	(8,827)	(548,529)
<i>Material non-cash items included in other segment expenses and cost of sales:</i>				
Provision for doubtful debts	(54,002)	(93,470)	-	(147,472)
Interest revenue attributable to segments	192,437	-	-	192,437
Interest expense attributable to segments	(181,046)	-	-	(181,046)
Reportable segment income/(loss)	2,404,029	(53,834)	24,529	2,374,724

Operating segment 2016 Income statement items Figures in Rand thousand	Primary Activities Segment (RW)	Rand Water Mpumalanga	Secondary Activities	Total Segments
Revenue from external customers	10,742,536	208,354	120,980	11,071,870
Segment cost of sales	(7,357,367)	(113,048)	(40,456)	(7,510,871)
Other segment income	8,594	33,019	-	41,613
Segment depreciation and amortisation	(60,390)	(1,588)	(999)	(62,977)
Income from other segments	(23,858)	-	23,858	-
Segment labour costs	(936,073)	(39,990)	(29,539)	(1,005,602)
Other segment expenses	(385,131)	(25,561)	(40,203)	(450,895)
<i>Material non-cash items included in other segment expenses and cost of sales:</i>				
Provision for doubtful debts	(681)	39,379	(26,105)	12,593
Interest revenue attributable to segments	111,874	11,683	-	123,557
Interest expense attributable to segments	(72,103)	(57)	-	(72,160)
Reportable segment income/(loss)	2,028,081	72,812	33,641	2,134,534

Management reviews segmental information for three specific segments. These segments are organised partially by geographic area and partially by type of services rendered. The separation of the segments is not based on the definitions in the Water Services Act i.e. Section 29 and Section 30 activities but rather based on the manner in which management reviews certain activities that it deems to be primary and secondary in nature. These segments are reviewed within the Rand Water company. As two of the segments were below the quantitative thresholds management has not previously reported these segments, however management believes that the disclosure of this segment provides valuable information to the users of the financial statements.

The primary activities segment (RW) consists of all bulk water supply services in Gauteng undertaken in line with the Water Services Act, these activities also include non potable and potable water supplies to mines, industries and direct consumers. This segment is deemed to be Rand Waters primary business.

The secondary activities segment consists of all activities associated with Rand Waters recoverable projects including projects that are implemented by Rand Water on behalf of government departments, municipalities and other private companies. It further includes water demand management services, operation and maintenance (O&M) contracts and other consulting, training and project management services. These contracts are recoverable in nature and management's intention is to break even on such projects. This segment covers activities across various geographical areas. This segment does not meet the reportable segment criteria, however management believes that the disclosure of this segment provides valuable information to the users of the financial statements.

The Rand Water Mpumalanga segment represents the disestablished Bushbuckridge Water Board which had been effectively integrated at 1 April 2014 into Rand Water. The operations thereof have been ring fenced and is seen as a separate segment. This segment operates its two existing contracts being the supply of bulk potable water to the Bushbuckridge Local Municipality and an operate and maintain (O&M) contract for the Mbombela Municipality. Management reviews this segment as a whole and does not separate its primary from its secondary activity for purposes of segment review.

The segment reconciliations below reconcile total segment profits and loss line items to the Rand Water Group results.

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Other segment income				
Total revenues for reportable segments			39,769	41,613
Other segment revenues			16,649	18,960
			<u>56,418</u>	<u>60,573</u>
Segment labour costs				
Total labour for reportable segments			(1,048,057)	(1,005,602)
Other segment labour costs			(14,579)	(13,172)
			<u>(1,062,636)</u>	<u>(1,018,774)</u>
Other segment expenses				
Total other expenses for reportable segments			(548,529)	(450,895)
Other segment expenses			(3,756)	(10,126)
			<u>(552,285)</u>	<u>(461,021)</u>
Net income				
Total net income/(loss) for reportable segments			2,374,722	2,134,534
Other segment losses			39	(3,959)
			<u>2,374,761</u>	<u>2,130,575</u>

The other segments identified in the reconciliation above consists of the activities of the two subsidiaries, being Rand Water Services and Rand Water Foundation. As these business do not meet any quantitative or qualitative thresholds, these segments are not reportable.

Management currently only reviews the ring fenced income and loss results of the segments and does not review the segment assets or segment liabilities other than the Trade Receivables attributable to each segment.

39. FINANCIAL INSTRUMENTS

Capital Management

The overall objective of the Group's capital management strategy is to maintain a capital base so as to maintain stakeholder and market confidence as well as to sustain future development of the business. The Group considers long-term loans, cash reserves and accumulated income as its capital. Long-term loans and cash reserves are managed through the process of reviewing all associated risks, including liquidity, credit and interest rate risks. It is also the policy of the Group to maintain a debt: equity and interest cover ratio as this plays an important role in the Group's credit rating which in turn impacts positively on the cost of funding. Accumulated funds are managed through a number of initiatives and processes including planning and budgeting for long-term operational growth, capital expansion and maintaining or improving cost efficiencies.

The Group manages the planning of the water revenue process closely as it is the Group's policy to reasonably recover all current and future operational and capital expenditure for its operational existence. The water tariff is regulated by the processes as determined by the Department of Water and Sanitation. The water tariff is developed from sound financial principles and takes into consideration cost drivers as well as the difficult environment of the water industry, including a financial analysis of previous trends and current and future environmental and economic conditions.

A comprehensive capital expenditure programme has been developed which indicates that the Group will require funding of approximately R20.8 billion over the next five years. The Group's policy is to fund the capital expenditure programme through internal resources, that being; accumulated incomes and cash reserves after providing for the Group's liquidity requirements. Additional funding requirements will be funded through the debt capital market and other external funding. The Group's focus is to re-establish itself in the domestic capital markets. The funding plan will also place

more emphasis on moving towards an active portfolio management strategy. This strategy should see the Group introducing new funding instruments that will lead to the achievement of the following objectives:

- establishing liquid benchmark bonds;
- lengthening the maturity profile of the debt portfolio;
- diversifying the investor base;
- matching asset and liabilities cash flows and maturities; and
- minimising the cost of borrowing to within an acceptable level of risk.

In 2010, the Board approved the establishment of the Domestic Medium Term Note (DMTN) programme, which will be used to raise funds through the issuing of commercial paper and medium- to long-term bonds at different rates and terms in the domestic bond market as and when it is required. The programme was registered for R5 billion and subsequently increased to R10 billion.

Group Borrowing Limits

The Group's Funding Plan, together with the required borrowing limits pertaining to the core business requirements for the five years ending 2021, have been submitted to the Shareholder (the Department of Water and Sanitation) and the National Treasury.

Financial risk management

Financial risks are assessed, analysed daily and reported on a monthly basis to the Group Chief Financial Officer, Portfolio Integrated Committee, and the Treasury Committee, Risk committee and the board. The Treasury Committee oversee the operations of the treasury function including, guiding treasury policies, assisting with the overall treasury strategy and objectives while ensuring that the risks concomitant to the treasury function are monitored and managed within the constraints of the treasury policies. The Treasury Committee is responsible for reporting financial risk exposure to the Board of Rand Water, at scheduled Board meeting which undertakes the ultimate responsibility of approving any recommendations made by the Treasury Committee related to risk, policies, procedures and strategies.

The Group's business operations expose it to liquidity, credit, and market risk (comprising foreign currency, commodity and interest rate), which are discussed below. Given the level of volatility in the markets, Treasury continuously manage all risks very closely so as to implement risk mitigating initiatives timeously when required.

Credit risk

Credit risk is the risk that a customer or counterparty to a financial instrument will cause a financial loss for the Group by failing to discharge an obligation. Credit risk arises primarily through the provision of water services and centralised treasury activities.

The Group is primarily exposed to counterparty risk from the supply of water, water related services and centralised treasury activities. Other credit risk activities include outstanding customer balances, cash deposits with financial institutions and from the use of derivative instruments.

The Credit risks can also arise from cash and cash equivalents, trade receivables, investments and derivative financial instruments. These risks are effectively managed in terms of the Board-approved financial risk management framework that specifies the investment and counterparty policies.

The overall objective of the Group's approach to credit risk management is:

- to minimise any losses that could result from counterparty or issuer failure, ensuring the protection of current and future cash reserves; and
- to enhance liquidity by investing in liquid instruments, project and maximise the rate of return on investments.

Trade and other receivables

Exposure to credit risk is influenced mainly by the individual characteristics of the Group's customers.

In monitoring customer credit risk, customers are grouped according to their credit characteristics, including customer type, ageing profile and existence of previous financial difficulties. Customers that are graded as "high risk" are placed on a restricted customer list. Methods used to encourage

timely settlement include the negotiation of payment arrangements, discontinuation or limitation of water supply and the charging of interest on overdue accounts.

Water debtors

The Group's main source of income is derived from the sale of bulk potable water to local municipalities. These customers have entered into Bulk Water Supply Agreement's with the Group and are not required to provide any security. Approximately 84% of the Group's revenue is attributable to sales transactions with six major customers.

Other medium to large entities such as mines and industries have also entered into Water Supply Agreement's with the Group. As water is considered a basic need as well as a critical resource, no credit limits are set on the accounts. These customers are however required to provide security, the value of which, is based on the following criteria; the type of customer, the size of the customer meter and the value of an average months consumption. The security is made up of deposits and demand guarantees from financial institutions that can be exercised against overdue invoices. The collateral held amounts to R26 million (2016: R13 million).

Recoverable project debtors

These debtors comprise mainly government institutions, which fund the various projects. Each project has its own contractual obligations, which are negotiated and agreed upon by the contracting parties before commencement of the project. The Group currently holds an amount of RNil million (2016: R18 million) worth of prepayments from project funders.

Other debtors

Other debtors consist mainly of leases, encroachments, staff and sundry debtors, which are incidental to the nature of the business and its operations. Applicants enter into agreements with the Group. Debtors who do not have agreements in place transact with the Group on a prepayment or cash-on-delivery basis.

The Group has well established credit control procedures to monitor activity on customer accounts and allow for remedial action, should the customer not comply with payment terms. The Group's standard payment terms are 30 days from date of invoice.

Loans receivable

Loans receivable consist of micro loans granted to employees. These loans are unsecured however the credit quality of the loan book has been assessed as a low risk by reference to historical default rates, as loan repayments are deducted directly from the employees salaries. Employees are also required to take out an insurance policy which covers the balance due to the Group in the instance of death or retrenchment. Rand Water is a registered credit provider in terms of Section 40 of the National Credit Act.

Investments

The Group limits its treasury counterparty exposure by dealing only with well-established financial institutions with high credit ratings assigned by international credit-rating agencies. The Group's exposure to counterparty is managed within approved credit limits that are reviewed and approved by the Board on an annual basis. The counterparty limits are expressed as a percentage of the lower of the limits set from; credit rating from rating agencies; or that of the counterparty's Tier One Capital Reserves; or a percentage of the surplus cash.

The Group limits its exposure to credit risk by investing only with counterparties with a minimum long-term rating of "A+ (Zaf)" and short-term rating of "F1 (Zaf)".

The maximum exposure to credit risk with different financial institutions that the Group is exposed to is reflected below. The financial institutions have been grouped based on their long term ratings at reporting date.

Classification	Long term rating	2017	2016
Available-for-sale investment	AA (Zaf)/F1+ (Zaf)	458,886	461,650
Cash and cash equivalents	AAA (Zaf)/F1+ (Zaf)	-	158,000
Cash and cash equivalents	AA+ (Zaf)/V1+ (Zaf)	202,000	622,000
Cash and cash equivalents	AA (Zaf)/F1+ (Zaf)	503,122	203,119
Cash and cash equivalents	A+ (Zaf)/F1+ (Zaf)	-	275,000
Cash and cash equivalents	F1+ (Zaf) / (conduits)	100,000	212,000

Management does not expect any counterparty to fail to meet its obligations in addition no impairment indicators have been identified and hence no impairment of the investments has occurred, during the current and prior years.

Exposure to credit risk

The carrying amount of financial assets (including disposal groups) represents the maximum credit exposure that the entity is exposed to.

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Available for sale financial asset	458,886	461,650	458,886	461,650
Loans and receivables	1,691,875	1,691,875	1,691,347	1,691,347
Cash and cash equivalents	805,147	1,470,173	780,199	1,442,742
	2,955,908	3,623,698	2,930,432	3,595,739

The maximum exposure to credit risk for trade receivables by type of customer is:

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Potable water consumers:				
- Municipalities	1,923,910	1,407,687	1,923,910	1,407,687
- Mines	32,954	35,697	32,954	35,697
- Industries	3,756	3,655	3,756	3,655
- Direct consumers	30,221	21,635	30,221	21,635
Non-potable water consumers	15,070	14,231	15,070	14,231
Recoverable project customers	269,821	458,069	269,821	458,069
Sundry debtors	5,660	2,653	15,048	2,653
	2,281,392	1,943,627	2,290,780	1,943,627

The above balances are shown before impairments.

The Group's most significant customer, a local metro, constitutes R422 million (2016: R356 million) of the trade receivables carrying amount.

The tables below reflect the ageing and impairments in respect of water and recoverable project debtors. The Group numbers include the subsidiaries trade debtors.

Group

	Gross 2017	Impairment 2017	Gross 2016	Impairment 2016
Current	1,003,648	(31,037)	1,161,112	(3,041)
Past due 31 - 60 days	510,362	(17,698)	269,995	(17,004)
Past due 61 - 120 days	245,818	(34,050)	106,621	(5,955)
Past due 121 days	515,905	(385,482)	414,965	(295,333)
Total	2,275,733	(468,267)	1,952,693	(321,333)

Rand Water

	Gross 2017	Impairment 2017	Gross 2016	Impairment 2016
Current	1,003,648	(31,037)	1,161,112	(3,041)
Past due 31 - 60 days	510,362	(17,698)	269,995	(17,004)
Past due 61 - 120 days	245,818	(34,050)	106,621	(5,955)
Past due 121 days	515,905	(385,482)	414,965	(295,333)
Total	2,275,733	(468,267)	1,952,693	(321,333)

The Group has a well-established Credit Management Policy that firmly addresses credit risk management, bad debt management and bad debt recovery procedures. The policy addresses credit control measures which monitor activity on customer accounts and allow for remedial action, should the customer not comply with the Group's standard payment terms.

Stringent controls that have been exercised to curb the late or non-payments include, limitation and discontinuation of water supply, interest on overdue accounts in line with Section 51(b)(i) of the PFMA, monthly reports to National Treasury and the Department of Water and Sanitation and participation in the Provincial Treasury Debt Committee to address defaulting customers and concurrently aid in the recovery process

The Group's level of impairments has increased in the current financial year, compared to 30 June 2016. The major contributor to the higher impairment for both years has been as a result of the takeon of the former Bushbuckridge Water Board. This local municipality has contributed 58% (2016: 63%) of the total impairment for the year.

The movement in the allowance account for impairment in respect of trade and other receivables during the financial year is as follows:

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Balance a 1 July	321,960	325,183	321,612	324,845
Impairment allowance adjustment	240,133	37,675	240,133	37,665
Bad debts written off	(113)	(2,353)	(113)	(2,353)
Reversal of impairment	(92,422)	(38,545)	(92,422)	(38,545)
Balance at 30 June	469,558	321,960	469,210	321,612

The allowance account is used to record impairment losses until the Group is satisfied that no recovery of the amount owing is possible. At that point, the amount considered irrecoverable is written off against the trade receivables account directly.

Impairment losses are recognised based on experience with customers where the Group has sufficient reason to believe that the amounts may not be recovered or who have already been handed over for recovery.

Liquidity risk

Liquidity risk is defined as the risk of failure to meet all financial obligations on a timely basis, when due, and in the right currency without incurring above normal costs. The Group's approach to managing liquidity risk is to ensure it will always have sufficient committed facilities to meet its liabilities when they fall due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation. Hence, the Group maintains a liquidity buffer of R859 million and a redemption fund of R172 million. The liquidity buffer and redemption fund are made up of cash and cash equivalent of R805 million and investments in bonds of R458 million.

During the past financial year, the Rand Water Group's liquidity comprised of money market instruments such as call deposits, negotiable certificates of deposit, as well as liquid debt issues from government. The Group has used the following funding programme to mitigate liquidity risk exposures; the Domestic Medium Term Note programme (The total value of the DMTN programme is R10 billion with R4.3 billion bonds under issue.

Furthermore the Group maintains certain thresholds; minimum requirements of the approved policy to further ensure effective liquidity risk management, which are a combination of available cash, committed and uncommitted bank facilities, minimum cash liquidity buffer and

the redemption fund. Rand Water also produces a "five year cash flow projection" as part of the annual funding plan update. These provide Treasury with a good estimate of the Group's future funding requirements and to ensure that it has sufficient cash on demand, in a form of cash and near cash equivalents, to meet expected operational and capital expenses for a period of 90 days, including the servicing of financial obligations.

As at 30 June 2017 the Group had committed and uncommitted facilities of R13 billion (2016: R13.1 billion):

Committed institutions unutilised	Expiry	Facility amount	Total utilised	Total
Banks	July 2018	1,000,000	-	1,000,000
DMTN		10,000,000	4,394,027	5,605,973
		11,000,000	4,394,027	6,605,973

Uncommitted institutions unutilised	Expiry	Facility amount	Total utilised	Total
Development Finance Institutions		1,000,000	-	1,000,000
Banks	July 2018	1,000,000	-	1,000,000
		2,000,000	-	2,000,000

Committed facilities are those lines of credit where the Group and the financial institution have clearly defined terms and conditions which bind the financial institution to lend the Group funds up to an amount stated in the funding agreement. Interest would be payable at a rate of prime less 100 basis points or alternatively at a rate negotiated through the money market.

Uncommitted facilities represent undrawn lines of credit where the financial institution has an agreement with the Group to make available an amount (up to the maximum specified) in loans on demand from the Group. The Group is under no obligation to actually take out a loan at any particular time.

The Group's liquidity requirements are reviewed on an ongoing basis in order to ensure that access to the required funding is available in an appropriate timeframe. The Group uses cash flow forecasts and maturity gap analyses to assess and monitor its liquidity requirements and risk levels. Cash flow forecasts and maturity gap analyses reports form part of the financial risk report, which is reviewed and analysed by the Treasury Committee on a periodic basis.

The tables below reflect the contractual maturities of financial liabilities for the Group these include interest payments and exclude the impact of netting agreements, the disclosure for Rand Water is the same as the Group with the exception of trade and other payables which is R3 188 334 (2016: R3 540 218).

At 30 June 2017	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years	Total
Unsecured bond issues: RW21	-	-	1,724,027	-	1,724,027
Unsecured bond issues: RW23	-	-	-	1,231,000	1,231,000
Unsecured bond issues: RW28	-	-	-	1,439,000	1,439,000
Trade and other payables	3,195,589	-	-	-	3,195,589

At 30 June 2016	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years	Total
Unsecured bond issues: RW21	-	-	1,724,027	-	1,724,027
Unsecured bond issues: RW23	-	-	-	1,231,000	1,231,000
Unsecured bond issues: RW28	-	-	-	1,439,000	1,439,000
Trade and other payables	3,542,057	-	-	-	3,542,057

Effective interest rate (%)				2017	2016
Unsecured bond issues: RW21				9.97%	9.97%
Unsecured bond issues: RW23				9.51%	9.51%
Unsecured bond issues: RW28				10.245%	10.245%

Market risk

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market prices comprise three types of risk: interest rate risk, foreign currency risk and other price risk such as price risk. The objective of market risk management is to protect the Group's net income against adverse market movements through the active management of interest rate, foreign currency and price risks, within approved policy parameters.

The Group's market risk management is centralised with the Treasury Department and is governed by the Treasury policy, specified within this policy are the parameters that interest rate risk and foreign currency risk, are evaluated from. As with all risk management policies of the Group, the treasury policy resides under the authority of the Board.

Foreign currency risk

The Foreign currency risk arises mainly as a result of the Group's CAPEX and operational expenditure programmes, where goods are imported from foreign countries and are exposed to currency fluctuations.

Rand Water's main objectives of its foreign currency risk policies are:

- To mitigate foreign currency risk exposures;
- To bring certainty about future Rand cash flows where foreign currency is involved; and
- To insulate the Group's statement of comprehensive income against exchange rate fluctuations

All foreign currency risk exposures are hedged within the guidelines of the Board approved Treasury policy and delegation of authority as soon as the supplier agreements are signed. It is the Group's preference to enter into Rand-based supplier agreements, if this can be achieved at an acceptable cost, with no foreign currency risk recourse to Rand Water. If this approach is not cost effective, Rand Water will then hedge on its own financial position with vanilla hedging instruments after careful consideration and analysis of the taxation, financial risk, accounting, operational and system implications.

Interest rate risk

The Interest rate risk refers to the susceptibility of Rand Water's financial position to adverse fluctuations in market interest rates. Rand Water's primary interest rate risk management objective is to protect its funding plan and Asset and Liability Management (ALM) strategies from adverse fluctuations in market interest rates. To achieve this objective, it is the policy of Rand Water to measure and manage its interest rate risk exposure both over the short and long term in order to protect its profits and ensure continued financial sustainability.

The Group manages its interest rate risk by maintaining an appropriate mix between fixed and floating interest rate borrowings and investments.

The interest rate profile of the Group's interest bearing financial instruments, including financial instruments of disposal groups, is as follows:

Figures in Rand thousand	Group		Rand Water	
	2017	2016	2017	2016
Fixed rate instruments				
Financial assets	458,886	461,650	458,886	461,650
Financial liabilities	(4,414,718)	(4,418,733)	(4,414,718)	(4,418,733)
	(3,955,832)	(3,957,083)	(3,955,832)	(3,957,083)
Variable rate instruments				
Financial assets	813,896	1,562,288	794,531	1,532,764
	813,896	1,562,288	794,531	1,532,764

Fair value sensitivity analysis for fixed rate instruments

The Group does not account for any fixed rate financial assets and liabilities at fair value through profit or loss, therefore a change in interest rates at the reporting date would not affect income or loss.

Cash flow sensitivity analysis for variable rate instruments

The Group has used a sensitivity analysis technique that measures the estimated change to profit or loss of an instantaneous increase or decrease of 0.5% - 1.5% (50-150 basis points) in market interest rates, at the reporting date.

The sensitivity analysis below reflects the interest rate impact on the finance cost budget for the 2017 financial year in respect of existing assets and new funding requirements. This analysis assumes that other variables remain constant.

Group

	Income				Equity			
	Increase of 1.5%	Increase of 0.5%	Decrease of 0.5%	Decrease of 1.5%	Increase of 1.5%	Increase of 0.5%	Decrease of 0.5%	Decrease of 1.5%
30 June 2017								
Financial assets	22,219	(1,899)	(3,797)	(7,595)	22,219	1,899	3,797	7,595

	Income				Equity			
	Increase of 1.5%	Increase of 0.5%	Decrease of 0.5%	Decrease of 1.5%	Increase of 1.5%	Increase of 0.5%	Decrease of 0.5%	Decrease of 1.5%
30 June 2016								
Financial assets	46,735	15,578	(15,578)	(46,735)	46,735	15,578	(15,578)	(46,735)

Rand Water

	Income				Equity			
	Increase of 1.5%	Increase of 0.5%	Decrease of 0.5%	Decrease of 1.5%	Increase of 1.5%	Increase of 0.5%	Decrease of 0.5%	Decrease of 1.5%
30 June 2017								
Financial assets	22,219	(1,899)	(3,797)	(7,595)	22,219	1,899	3,797	7,595

	Income				Equity			
	Increase of 1.5%	Increase of 0.5%	Decrease of 0.5%	Decrease of 1.5%	Increase of 1.5%	Increase of 0.5%	Decrease of 0.5%	Decrease of 1.5%
30 June 2016								
Financial assets	46,501	15,500	(15,500)	(46,501)	46,501	15,500	(15,500)	(46,501)



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