

Leadership & Employee Development

Enabling People

Umgeni Water has cascaded its strategy through a system of linked and cascaded scorecards from organisational level to divisional and employee level. Further entrenchment of this system in the past year has ensured that all employees have a line of sight to the strategy and are motivated in the knowledge that their individual and collective contributions are fundamental to organisational performance. In support of this Umgeni Water has continued to ensure human resources policies and plans that are enabling to its employees.

Workforce Retention, Recruitment & Turnover

Umgeni Water employment conditions remain conducive to the attraction and retention of employees.

In the past year there were one hundred and fourteen (114) new recruits, whilst fifty one (51) employees left the organisation. Turnover at six and half percent (6.5%) remained below the industry benchmark of thirteen percent (13%).

The organisation's diverse range of employee benefits coupled with employee training and development opportunities continue to create conducive conditions for employment and retention.

The continued attraction, engagement and retention of employees have helped ensure the organisation has the proper calibre of employees in place.

Skills Development

Umgeni Water has an integrated and holistic human resources development system in place which enables all employees to identify opportunities for upgrading their skills in line with the requirements of the organisation's strategy and suite of performance scorecards, cascaded from Boardroom to Shopfloor level. Employees can advance along a predetermined career path with development steps captured in individual development plans.

The set of human resources development options that are in place are:

- Training and development,
- Assisted education,
- Bursaries for scarce skills,
- Graduate trainees and internships, and
- Learnerships.

Training and Development

The training provided to employees is aligned to Individual Development Plans, including both technical and behavioural competencies. In the past year, training was provided in the following areas:

- Construction Contract law,
- Supply Chain management,
- Financial management,
- Technical Report Writing,
- Information & Communication technology,
- Engineering Design, Artisan,
- Process Control, Hydraulics, Automotive, Electrical and Power management, Hazardous materials, Machinery, and Operations Management.
- Quality, Safety, Health and Environmental Management

Employees were further afforded opportunities to attend a diverse range of conferences, seminars and workshops that provided them with the necessary exposure to enhance their growth and development.

To promote a culture of learning, employees are motivated to develop to their full potential by embarking on further education programmes.

Employee Assisted Education

The organisation is committed to continuous employee growth and development and, as such, provides assisted education to its permanent employees. As at 30 June 2010, forty nine (49) employees took advantage of the Assisted Education Scheme, enabling them to enhance their qualifications and excel in work deliverables, whilst increasing their opportunities for career progression.

Bursaries for Scarce Skills

Umgeni Water continued with its bursary programme and in 2009/2010 sponsored a total of eight students in disciplines of Civil Engineering and Financial Accounting. The programme further offers successful bursars the opportunity for placement as Graduate Trainees in the organisation, for a two-year period, following which, following due process, they may be offered permanent positions where vacancies exist.

Graduate Trainees and Intern Pool

Umgeni Water develops and mentors students as part of two separately designed student programmes:

Work Integrated Learning:

This twelve-month mentorship programme targets newly qualified students and enables them to apply academic course material to practical testing. Umgeni Water currently has nine (9) In-service trainees.

Graduate Trainee Programme:

Based on the guidelines provided by the South African Council for Natural Scientific Professions, this twenty-four month mentorship programme is designed to provide experiential learning to newly qualified honours graduates, including exposure to organisational culture and business processes. Umgeni Water currently has seven (7) graduate trainees that are being developed in science, engineering, water, and wastewater process operations. These interns and graduates are empowered with the necessary exposure, competencies and skills for their future careers and certification as professionals.

Learnerships

Umgeni Water together with ESETA entered into a partnership with Further Education Colleges to take forward the Learnerships Programme in the fields of Instrument, Electrical and Mechanical engineering and Water and Wastewater Treatment Works Processes. Fifty-one (51) learners are contracted for the Learnerships and eighteen mentors and coaches nominated by line managers for the implementation of the programme.

Performance and Remuneration

Umgeni Water continues to enhance delivery through its employee performance management system that is aligned to its strategy performance system. As such, employees contract to provide agreed deliverables that are part of the suite of scorecards that operationalise the organisation's strategy.

Performance feedback has therefore become an increasingly rigorous process in the organisation, enabling the organisation to pay for performance, and contribute to engaged, motivated and aligned employees.

Labour Relations

The organisation maintained its collective agreement with its major labour union (NEHAWU) who met the collective rights threshold and this continues to facilitate an effective and cooperative relationship between management and labour. Sixty-five percent (65%) of the total workforce are members of NEHAWU. The year was marked with no industrial action and the wage negotiations were concluded successfully without a strike, despite strained economic conditions.

Human Resource Governance System

Umgeni Water continued with implementation of its new Human Resources Information System that would improve the speed, accuracy and reliability

of all human resources data, and ensure effective management and strategic decision making.

HIV/AIDS Management

The management of HIV/AIDS remains a priority area of Umgeni Water's Wellness Programme. Holistic and comprehensive approaches to HIV and AIDS management are in place covering awareness, prevention and support.

The organisation was responsive to the National HIV Counselling and Testing Campaign that the country embarked on during the year. There was unprecedented participation in testing programmes, with 270 employees testing their status in the past year.

Thirty (30) employees, representing 3.4% of the organisation's total workforce, tested positive. The organisation continued to collaborate with its medical fund institution in management and support of affected employees.

Occupational Health & Safety

The organisation remains mindful of the link between a healthy workforce work and optimal work performance and in the past year continued to create a workplace free of fatalities, injuries and diseases.

Umgeni Water has ongoing programmes for occupational health, which are aligned and compliant with Occupational Health and Safety Act and

Leadership & Employee Development continued

standards, and assists employees in the following areas:

- Provision of preventative health education,
- First aider training at all workstations,
- Provision of guidance and counseling,
- Administration of an employee assistance programme,
- Health supervision, including minor ailment treatment and referrals where necessary,
- Maintenance of health records under strict confidentiality,
- Workplace observation and intervention if circumstances become hazardous to health,
- Periodic examinations and testing, and
- Provision of all possible help to the injured at work until fullest possible recovery has been achieved.

Programmes continue to be developed and improved in accordance with national and international best practice and standards.

The DIFR for 2009/2010 was 0.2 (2009: 0.32) (**Figure 23**). The reduction may be attributed to the organisation's drive to align its operational processes with the ISO 18000 standard, as part of which, a systematic and detailed review of safety standards and compliance was undertaken across all sites.

Employment Equity

Umgeni Water endorses equal employment opportunities and fair treatment and is committed to having a fully diverse and representative workforce at all occupational categories and levels in terms of the demographic profile of the economically active population of KwaZulu-Natal.

The organisation encourages inclusiveness with regards to human resources practices, irrespective of race, gender, nationality or religious affiliation.

In 2009/2010, the Employment Equity Plan was reviewed and new targets were set for the five year business cycle. Progress against these continues to be monitored. Employee and Board Director profiles are shown in **Tables 16 and Table 17** respectively.



Figure 23: Disabling Injury Rate

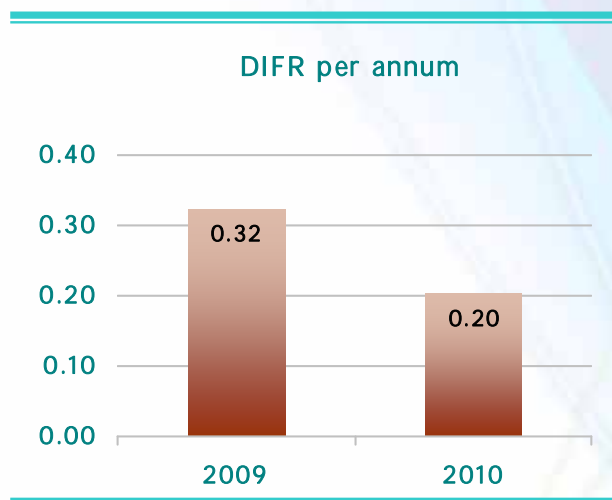


Table 16: Employee Breakdown by Race and Gender for Parent Company in 2009/2010

Grade	Female					Male				
	African	Indian	Coloured	White	Total	African	Indian	Coloured	White	Total
1-2	0	0	0	0	0	1	0	0	0	1
3-4	1	1	1	1	4	2	1	0	0	3
5-6	4	4	0	3	11	13	21	3	15	52
7-8	35	12	3	4	54	43	19	4	18	84
9-12	80	21	6	7	114	142	42	10	23	217
13-17	10	4	0	0	14	188	3	1	0	192
Total	130	42	10	15	197	389	86	18	56	549
%	17.4%	5.6%	1.3%	2.0%	26.4%	52.1%	11.5%	2.4%	7.5%	73.6%

Table 17: Board Directors Race and Gender in 2009/2010

Gender	African	Indian	Coloured	White	Total
Female	6	1	0	0	7
Male	3	3	0	1	7

Operational Resiliency & Optimisation

Leveraging ICT To Support Systems Integrity & Governance

Umgeni Water finalised its strategy for Information and Communication Technology and in the past year focused on implementing the key projects that would enhance information communication, whilst securing and maintaining the integrity of the organisation's vital information systems.

Key programmes in 2009/2010 were:

Metering and Billing

Umgeni Water completed the bulk of its metering and billing system upgrade project in the past year. This soon to be completed project will enhance water balancing, notably, improving the efficiencies and accuracy of billing and recovery.

Access Control

Work on a second phase of the access control system was undertaken in the year to extend the electronic access control system to all remaining organisational sites. Successful completion of this project would enable more effective employee access throughout Umgeni Water's operations, as well as, enhance management control of employee time and attendance.

Upgrade of Server Infrastructure

An upgrade of Umgeni Water's server infrastructure commenced during the year, to ensure that the information technology infrastructure is sufficiently resilient to help reduce system downtime and operating costs. This upgrade will further provide more stable

infrastructure, allow for growth of business systems and increase the throughput of applications. Coupled with this is consolidation of the database which will optimise systems performance.

Wireless Infrastructure

Umgeni Water embarked on a wireless network rollout which will strengthen and improve the efficiency of its existing communications network. The rollout has commenced with remote sites, notably, a pilot project at the Mtwalume Water Treatment Works, which will be followed by rollout to the rest of the sites.

Human Resources Management Information System

Umgeni Water has made significant progress with its new human resources management information system which is intended to provide efficiency and integrity of data and further improve integration of human resources and payroll information. Work will be completed in the coming year.

Laboratory Management Information System upgrade

An upgrade of the Laboratory Management Information System is underway. The upgraded system will allow for a fully integrated and automated laboratory management system that will enhance scalability by adapting to the new trends and legislation to support Umgeni Water's business. Work in progress included documentation of the existing business processes.

Business Intelligence

Umgeni Water commenced establishment of a business intelligence dashboard for its operations. This solution will enable operational sites to access accurate and timely data

and information for key decision-making at sites

Asset Management System Upgrade

Umgeni Water is in the process of upgrading its current asset management system to keep abreast with new technology in the market. This project has also allowed Umgeni Water to establish a consolidated asset management system with business process alignment that addresses the requirements of all identified stakeholders. The agility of the system will ensure that Umgeni Water maximises the lifespan of its assets and mitigates asset management risks within the organisation.

Governance of ICT

An assessment of the information, communications and technology (ICT) framework in the organisation has been undertaken to align it to the King III governance principles. This will ensure that information systems at Umgeni Water are better aligned to the strategy, which incorporates risk and governance, and provides shared solutions, including those for expenditure optimisation and financial management, risk management, disaster recovery, continuity of operations, and resource management.

Assuring Product Quality through Accredited Laboratory Testing

Product Quality, Customer Satisfaction and Safe-guarding Public Health

Umgeni Water's Laboratory facilities continue to play a critical role in enabling the organisation meet statutory obligations and achieve product quality to ensure customer satisfaction and safe-guard public health.

The organisation's laboratory mix comprises three reputable ISO/IEC 17025 accredited laboratory facilities, equipped with modernised and efficient technology, and resourced with a skilled team of scientists and technicians.

This has enabled water quality testing to be undertaken 365 days a year covering all water and wastewater treatment works, as well as relevant monitoring of both upstream and downstream components of the water value chain.

The organisation has been able to safeguard public health using reputable test results as a diagnostic tool in support of:

- Compliance with drinking water standards,
- Compliance with wastewater and effluent discharge limits,
- Water and wastewater treatment works process optimisation,
- Raw water quality / catchment health assessments,

- Operational environmental impact assessment monitoring,
- Water quality and environmental assessments for new infrastructure developments, and
- Core water related research and development.

In the past year, Umgeni Water undertook physical, chemical and microbiological testing on a daily basis, covering all sites and generating an average of 12,000 analyses each month.

In addition to timely validation and release of these results, the laboratory continues to provide a vital cog in activating the incident management protocol in the event of any water quality breach.

Operational Resiliency and Optimisation through Maintaining ISO/IEC 17025 Accreditation

Umgeni Water achieved ISO/IEC 17025 accreditation of its laboratories as far back as 1994 and has continue to improve and maintain this status through results that are accurate, traceable and reproducible, conforming to national and international best practice. Confidence in our systems is obtained through audit of controls by external accreditation body SANAS, which assesses the extent to which the laboratory has fulfilled requirements, including:

- Employing qualified and skilled staff,
- Providing a safe working environment,
- Using appropriate scientific instruments that are properly calibrated and maintained,

- Developing & implementing a quality management system,
- Adopting or developing valid test methods,
- Adopting good sampling procedures,
- Developing & implementing accurate recording and reporting procedures, and
- Developing & implementing adequate quality assurance procedures.

Supporting and Partnering Municipalities and other Water Utilities in Product Quality and Community and Environmental Sustainability

True to its strategic intent Umgeni Water continues to partner with municipalities, as well as other Water Utilities to provide analytical knowledge and laboratory services. The past year's initiatives are shown in **Table 18**.

Umgeni Water is also a key partner in a Task Team set up with DWA, Msunduzi Municipality, eThekweni Metro and the Dusi Umgeni Conservation Trust (DUCT) to assist in improving the water quality in the Msunduzi River.

Weekly reports on faecal bacteria in rivers are provided to the local municipalities in Pietermaritzburg, alerting the municipalities to broken sewers and prompting their action to warn downstream communities/users of potential health risks.

Umgeni Water further utilises its pathogen detection facility to monitor for cholera and typhoid in support of the Department of Health's incident management initiatives in the province.

Operational Resiliency & Optimisation continued

Table 18: Support and Partnerships with Municipalities and Water Utilities

Benefiting Municipality/Water Utility	Services Provided
uMgungundlovu DM	<ul style="list-style-type: none"> sampling, analysis and reporting of results training in sampling, laboratory analysis and blue drop system training of twenty-three (23) process controllers
Sisonke DM	<ul style="list-style-type: none"> sampling, analysis and reporting of results training in sampling, laboratory analysis and blue drop system setting up of a basic water testing laboratory
Ugu DM	<ul style="list-style-type: none"> analysis and reporting
iLembe DM	<ul style="list-style-type: none"> training of twelve (12) process controllers
uThukela Water	<ul style="list-style-type: none"> laboratory analysis
Mhlathuze Water	<ul style="list-style-type: none"> laboratory analysis
OR Tambo DM	<ul style="list-style-type: none"> assessment of laboratory proficiency
Amatola Water	<ul style="list-style-type: none"> accreditation training
Cape Metropolitan Municipality	<ul style="list-style-type: none"> accreditation training
Bostwana Water Utility	<ul style="list-style-type: none"> accreditation training

Toxicity testing is undertaken on wastewater discharges, to protect aquatic life, and in raw water abstractions, water treatment works and distribution systems to screen for potentially toxic algae and protect drinking water systems. Umgeni Water also monitors its wastewater treatment works sludge for parasitic worms.

Water Quality Testing Research and Development

Umgeni Water is currently engaged in the following water testing research initiatives that enhances its statutory monitoring capabilities:

- An assessment of Oestrogen hormone levels upstream and downstream of Darvill Wastewater Treatment Works,

- Development of a method for the rapid detection of aquatic toxicity using fluorescent bacteria,
- Collaboration with the Water Research Commission on use of diatoms in biomonitoring,
- A research initiative on parasitic protozoa in catchment areas,



- Development of Quality Control and Assurance Guideline for South African Toxicity Testing Laboratories, in partnership with other institutions,
- Investigation of more robust analysis of ammonia in potable water disinfected using chloramination, with the offer of water treatment solutions as an outcome of this work, and
- Successful review and implementation of the latest technology for monitoring the Chemical Oxygen Demand (COD) in wastewater and industrial effluents. This new technique has improved accuracy, reproducibility and speed and availability of results, as well as reduced risk to laboratory employees due to lower comparable exposure to toxic reagents.

Leveraging Science & Technology to Enhance Water Treatment

Umgeni Water has in place an innovation, research and development programme that aims to promote and support a culture of innovation and applied research in the organisation. It is intended to be implemented in collaboration with government stakeholders, universities, science, engineering and technology institutions as well as the private sector.

The intended outcome is creation of knowledge, innovation and social and technology development that would contribute to the improvement of the quality of life of all people.

Projects in the 2009/2010 Programme Included:

- Evaluation of Direct Up-flow Filters for Potable Water Treatment,
- Demonstration of a Real Time Flow Forecasting Model for Receiving Streams,
- Evaluation of High-rate Clarifiers,
- Development and Evaluation of the Durban University of Technology Water Treatment System for Drinking Water Provision in Remote Rural Areas,
- Automatic Raw Water Quality Ozone Dosing Control System,
- Quantifying the Effects of Coagulant Type and Dosages on Water Treatment Works Filter Performance,
- Pilot Plan investigation into wastewater effluent reclamation at Darvill Wastewater Treatment Works using membrane bioreactors as a pre-treatment option,



Operational Resiliency & Optimisation continued

- Durban Heights filter pilot plant investigation to improve filter performance, and
- Investigating development of a nanostructured photocatalytic membrane, as a cost effective component in solar radiation-based treatment systems, for converting surface or wastewater to drinking water.

Assuring Quality ISO Certification Programme

Umgeni Water embarked on a programme during the year to design, develop and implement an organisation-wide quality management system framework in order to align all current organisational processes with a systems model approach.

Umgeni Water's core systems comprise:

- Water and Wastewater Operations,
- Water Quality Management,
- Water Infrastructure Asset Management,
- Water Infrastructure Planning,
- Water Infrastructure Development,
- Billing and Metering,
- Financial and Treasury Management,
- Human Resources Management,
- Environmental Management,
- Supply Chain Management,
- Information and Communications Technology,
- Stakeholder Relationship Management,
- Research and Development,
- Legal & Statutory Compliance and Governance,

- Risk Management and Fraud Risk Prevention, and
- Strategy and Organisational Performance.

This initiative will ensure a suite of suitably applied ISO systems in the organisation, comprised of ISO 9001, ISO 14001 and OHSAS 18001. Existing accredited or certified systems in the organisation, notably the ISO 17025 Laboratory Accreditation system and Water Treatment Works ISO 9001 system, will be integrated into this suite.

Significant progress was made during the year, including:

- Setting up the institutional framework for organisation-wide collaboration for the implementation,
- Consolidation of the many separate operational sites ISO 9001 systems into one single and effective system,
- Substantial progress with aligning water and wastewater operational systems to the OHSAS 18001 framework, that would enable the organisation to seek certification against this framework in the coming year, and
- Sizeable completion of the process of policy and procedures review aligned to ISO 9001 at all other organisational sites.

The organisation has set itself key timeframes for full implementation and is scheduled to complete ISO 9001 alignment by December 2010, followed by OHSAS 18001 alignment in 2011, and ISO 14001 alignment in 2012.

Successful completion of this programme will ensure Umgeni Water has in place effective processes for implementation, monitoring, and evaluation of performance in a continuous improvement loop, which will ensure the integrity of all organisational outputs.