WATER RESEARCH COMMISSION

ANNUAL REPORT 2021/2022

OFFICIAL SIGN OFF

It is hereby certified that this Annual Report:
Was approved by the Board of the Water Research Commission with the assistance of the Executive Management.

Considered all relevant legislation, policies, and other mandatory documents applicable to the WRC.

Accurately reflects the performance of the WRC in the 2021/22 financial year.

Dr JB Molwantwa
Chief Executive Officer

Dr NP Mjoli
Chairperson of the Board

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ANNUAL REPORT 2021/2022

WATER
RESEARCH
COMMISSION

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List of abbreviations

AGSA	Auditor-General of South Africa
APP	Annual Performance Plan
CEO	Chief Executive Officer
CFO	Chief Financial Officer
COVID-19	2019 novel coronavirus
CSR	Corporate social responsibility
DSI	Department of Science and Innovation
DWS	Department of Water and Sanitation
GE	Group Executive
GEP	Graduate Employment Programme
HDI	Historically Disadvantaged Institution
ICT	Information And Communication Technology
I&I	Innovation And Impact
IMBR	Immersed Membrane Bioreactor
KPA	Key performance area
MARS	Managed aquifer recharge and storage
NatSilt	National Dam Siltation Strategy Programme
NDP	National Development Plan
NPS	Non-point source (pollution)
NWSMP	National Water & Sanitation Master Plan
NWA	National Water Act
NWRS-2	National Water Resource Strategy 2
PFMA	Public Finance Management Act
PV	Photovoltaic
R&D	Research and Development
RDI	Research, Development, and Innovation
RW	Rand Water
SAB	South African Breweries

SADC	Southern African Development Community
SASTEP	South African Sanitation Technology Enterprise Programme
SER	Society for Ecological Restoration
SERA	Society for Ecological Restoration Africa Chapter
SMME	Small, medium and micro enterprises
SCM	Supply chain management
SDG	Sustainable Development Goal
TIA	Technology Innovation Agency
UW	Umgeni Water
WBE	Wastewater-based epidemiological (surveillance)
WCWSS	Western Cape Water Supply System
WEF	Water–Energy–Food Nexus
WFMF	Women fabric microfiltration
WRA	Water Research Act
WRC	Water Research Commission
WRL	Water Research Levy
YECD	Young Engineers Changemaker Programme

Mr Senzo Mchunu
Minister of Water and Sanitation

"We need as a sector to embrace technological innovations and recognise them as the gamechanger required to secure our water, now and in the future."

Minister's Report

Water distinguishes our planet compared to all the others we know about. While the global supply of available freshwater is more than adequate to meet all current and foreseeable water demands its spatial and temporal distributions are not. Nowhere is this more visible than in South Africa, which is classified as a water scarce country, with an average annual rainfall of only half the global average and the current demand for socio-economic development outstrips the availability.

The right to water and a healthy environment is enshrined in the South African Constitution. Section 24 of the Constitution gives everyone the right to "an environment that is not harmful to their health or wellbeing, while section 27(1) (b) states that: "Everyone has the right to sufficient food and water". Thus, the provision of sanitation and access to and use of water are, therefore, basic rights which need to be realised by the Government working together with all the stakeholders. The work of the Department of Water and Sanitation (DWS) is anchored in these two rights.

A reliable supply of water at an acceptable quantity and quality that's not harmful to human health, livelihoods, development and the environment is essential for the development of South Africa which has a bias to redress the past racial imbalances. The water supply and sanitation sector faces increasing pressure due to the demand for socio-economic development, increased population growth and urbanisation. This is exacerbated by the notable extreme weather patterns which are more frequent and prolonged as a result of climate change impacts. The COVID-19 pandemic added an additional distress to the water challenges. In the past two years, while the globe was affected by the pandemic, the water sector, led by the DWS, responded with emergency water and sanitation provision initiatives. Some of the solutions were temporary; hence more permanent and sustainable solutions are still required.

The National Water and Sanitation Master Plan (launched in 2019), highlights the top priority issues confronting the water sector and seeks to rally all stakeholders to work together to ensure that the country gets ahead of the curve in relation to both current and future challenges, to meet the National Development Plan (NDP) targets and to achieve the Sustainable Development Goals (SGDs). The Master Plan acknowledges the need to employ existing and new innovative scientific principles on a wide scale towards effective water resource planning, management and for evidence-based decision making.

There is, therefore no doubt that science and technology including research, development, and innovation, play a vital role in devising the solutions for a water secure South African future. In this regard, more investment should be committed in developing platforms that support the fast-tracking of technological innovations to applications that benefit our communities meaningfully. We need, as a sector, to embrace technological innovations and recognise them as the needed gamechanger for water security. The sector needs to be open to new ideas and approaches to better manage our resources for a sustainable efficient and effective delivery of water services. At the same time, we require sustained investments in cutting-edge innovative technologies and solutions to revolutionise sanitation which is evidently crippled by old and ageing infrastructure that is overloaded coupled with the costly backlog to provide for the previously marginalised communities and newly developing settlements. Technologies, that can use less water, or no water at all, are the future of our country, the continent, and the global community.

As the leading funder of water research in South Africa and funded through the water research levy, the Water Research Commission (WRC) plays a principal role in many of the country's key research, development and innovation (RDI) initiatives, including, amongst others:

- Developing technologies, guidelines and implementation support tools that enable South Africa to use water resource efficiently and effectively
- Research on land-use impacts on water-linked ecosystems
- Developing and testing tools for efficient and effective use of water in food security
- The development of Early Warning Systems for disaster management
- Scanning the innovation sector for solutions that are ready for application
- Developing, demonstrating and validating appropriate alternative, waterless and off-grid sanitation solutions
- Partnering with key water sector institutions to accelerate innovations to the market
- The management of data and information systems
- Review of relevant guidelines and research and development products to understand where training modules need to be developed for a highly skilled waster sector through knowledge and information dissemination

Scientific research is continuously adding to our knowledge and tools required to achieve a water secure future and we continue to rely on RDI to identify continually evolving options and to inform us of their effectiveness.

The Department will continue to work with the WRC towards innovative, sustainable solutions for the benefit of all South Africans. My gratitude to the WRC Board and Management for ensuring that the South Africa remains at the cutting edge of water and sanitation research.

Mr Senzo Mchunu

Minister of Water and Sanitation

Dr Nozibele Mjoli
WRC Chairperson

"The theme for the symposium was: "Reimagine, Rebuild and Repeat," with a focus on future proofing water."

Chairperson's Report

On behalf of the Board of the Water Research Commission (WRC), I am pleased to report on the activities and performance highlights for 2021/22.

During the year under review the WRC celebrated its 50-year anniversary since its establishment in 1971. The WRC dedicated its Fifth Biennial Symposium to the celebration of this important milestone. It provided a platform for the water sector partners to reflect on the major achievements of the WRC during the past 50 years and identify key research themes that are necessary to achieve water security for South Africa. The theme for the Symposium was: "Reimagine, Rebuild and Repeat", with a focus on future proofing water. The Symposium attracted over 400 national and international participants. Major themes addressed included sustainable development and future proofing water, strategic partnerships, access to financing mechanisms and improved water sector governance.

I am pleased to highlight the following major performance achievements for 2021/22:

- The WRC launched a **seminal publication,** ***WRC@50 – Celebrating a half-century of excellence***, as part of its 50-year anniversary celebration. It provides a critical overview of the WRC's contribution to various water research fields, namely hydrology, water and sanitation services, water law, agriculture, water quality, social sciences, environmental sciences, and climate change.
- **Mitigating dam siltation towards improved water security**: The WRC in partnership with the Department of Water and Sanitation initiated a 3-year National Dam Siltation Management Programme, which aims to ensure that bulk water resource infrastructure is managed in an efficient, effective, and sustainable manner.
- **Contribution to Water RDI agenda in Africa:** In 2019

the WRC was mandated by the Society for Ecological Restoration (SER) to coordinate the establishment of an African Chapter of SER. During the year under review the WRC established the Society for Ecological Restoration Africa Chapter (SERA), which is a non-profit organisation that aims to advance the science, practice, and policy for ecological restoration to sustain biodiversity and promote the rehabilitation and management of degraded ecosystems throughout the Southern African Region. SERA is based in Pietermaritzburg, KwaZulu-Natal, South Africa, at the Wildlands Conservation Trust.

- **Enhancing groundwater security for the Western Cape:** The WRC published a study on the sustainable exploitation of groundwater resources on the West Coast of South Africa. The main outcomes of the study were an improved understanding of the inter-relationships between the Langebaan Road Aquifer and Elandsfontein Aquifer, and the development of an implementation plan for a sustainable managed aquifer recharge and storage scheme to secure water resources within the Western Cape Water Supply System to meet increased water demand.
- **Non-point source pollution from agriculture:** The WRC produced national maps of the spatial distribution of over 200 pesticides which are an essential input in identifying important sources of agricultural chemicals in the country. The study also confirmed the presence of numerous pesticides in surface water in three case study catchments representing different crop types (i.e., maize, sugar cane and subtropical fruit).

I wish to thank the Minister of Water and Sanitation, Deputy Ministers and officials of the Department of Water and Sanitation for their support. My sincere gratitude goes to the members of the WRC Board, WRC Executive Management, staff, stakeholders, researchers, international and national partners for their commitment and support for the WRC research and innovation.

Dr Nozibele Mjoli
WRC Chairperson

Dr Jennifer Molwantwa
Chief Executive Officer

"In 2021/22 the WRC initiated 13 demonstration and pilot projects to move innovations further along the commercialisation chain."

CEO's Report

Water is a unique source of life, comparable only with air, and without which life on Earth is impossible. This finite resource is not distributed equally around the world, and in semi-arid South Africa, the situation is exacerbated by the ever-growing demand which outstrips supply.

Over the past 50 years, the Water Research Commission (WRC) distinguished itself as South Africa's premier research and development funding public entity under the Ministry of Water and Sanitation. The WRC key mandate is to promote, coordinate, cooperate and communicate water research, development and innovation products. This is achieved through the establishment of research needs, stimulation of the needs and funding them according to priority and through the promotion and effective transfer of information and technology while enhancing knowledge and capacity building in the sector.

The 2021/22 financial year saw research, development, and innovation (RDI) focused on the development of a robust water sector that can support socio-economic opportunities for the country while managing South Africa's scarce water resources in a sustainable manner. This is reflected in the total of 371 Research and Development (R&D) projects managed in the financial year across the water resources and ecosystems; water use, wastewater, and sanitation futures; and water utilisation in agriculture disciplines. The Impact and Innovation (I&I) branch shared scientific and technological knowledge across the water sector and translated some of the research products into tangible, accessible and cost-effective solutions for use on the ground. However, the uptake of these products, coupled with limited investment opportunities, remain a challenge that requires government and sector focus to realise the return on investment made towards RDI. The current legislative framework does not support the uptake by the sector, including government departments. Thus, the WRC continues to pursue the relevant authorities, in particular, National Treasury, to create room for the implementation of national development goals using new and innovative technologies (in which the public purse has already invested).

The socio-economic benefits linked to the acceptance and use of new and innovative solutions is envisaged to fast track the country towards achieving the National Development Plan (NDP) targets, the United Nations Sustainable Development Goals (SDGs) and complying with the Southern African Development Countries (SADC) protocol on shared watercourses. The tools, systems, and new ways will ensure a sustainable and secure water future in the context of the extreme weather events resulting from current climate change impacts. The value invested in private, public partnerships will go a long way to ensure socio-economic benefit supported by the scientific evidence-based decision-making.

For science to really succeed we need equal participation by both men and women. Thus, equal access to, participation and leadership in, science, technology and innovation is imperative to achieving gender equality and the empowerment of women and girls. The WRC set transformation targets for RDI participation with an intentional focus on women over and above the inclusion of previously disadvantaged groups. The achievement of 44% women led research projects, of which 40% are African women, points towards a gradual achievement of the 50% participation and leadership of women in the science RDI.

The WRC counted several performance highlights for 2021/22 including:

- the establishment of wastewater-based epidemiological surveillance to track indicator trends of COVID-19 infections as part of the South African Collaborative COVID-19 Environmental Surveillance System (SACCESS) network, which successfully predicted the fourth wave.
- The National Dam Siltation Management Strategy (Nat-Silt) Programme, which is implemented on behalf of the DWS was also launched as a three-year programme which aims to ensure that bulk water resource infrastructure is managed in an efficient, effective, and sustainable manner.
- Studies were also concluded around enhancing water security in the Western Cape and ensuring the microbiological safety of fresh foods.

There were 110 RDI projects initiated during 2021/22, while 113 were finalised during the same period. Community involvement in research was identified as a critical component to broadening the RDI scope. Thus, 135 WRC-funded research projects in 2021/22 had a direct impact on the lives and livelihoods of communities. The 2021/22 project cycle can be translated to total income (including levy and leverage income) of R417 million during 2021/22 made up of 67: 33 (levies: leverage) ration. Thus, the levy remains the Commission's main source of revenue and dictates the commitment to the mandate and contribution towards the national discourse of sustainability linked socio-economic development.

Several partnerships were established during the year under review, including the WRC, Water Institute of Southern Africa and Energy and Water Sector Education and Training Authority (WRC/ WISA/ EWSETA) partnership to facilitate training and skills development in the water sector; and the WRC/ South African Waste Information Centre (SAWIC) and & Built Environment to enhance uptake of WRC solutions and jointly identify water RDI opportunities in the Sarah Baartman District Municipality.

The staff and management of the WRC continued to show resilience and effectiveness under the various pandemic levels and performed in accordance to the set targets for the effective implementation of the mandate. The WRC had a total of 8 appointments and 14 terminations for the financial year under review. Of the 14 terminations, 9 were as a result of fixed term contracts which came to an end. This also included the former CEO, Mr Dhesigen Naidoo. The total headcount for the year reduced from 91 as at 1 April 2021 to 85 as at 31 March 2022.

On behalf of the WRC Management and staff, I register my gratitude to the Department of Water and Sanitation colleagues, the Governing Board on behalf of the Minister of Water and Sanitation for their invaluable and sound guidance in this enterprise.

Dr Jennifer Molwantwa
Chief Executive Officer

Executive Summary

During the year under review, the WRC celebrated its fiftieth anniversary. Over the past 50 years, the Commission has distinguished itself as South Africa's premier funding agency dedicated to water and sanitation research.

"The WRC had a total income (including levy and leverage income) of R417,4 million during 2021/22."

In 2021/22, the WRC continued to support the Department of Water and Sanitation (DWS) in rolling out its National Water and Sanitation Master Plan, by driving research, development and innovation to develop a robust water and sanitation sector that can support socio-economic opportunities for the country while managing South Africa's scarce water resources in a sustainable manner.

In addition to contributing to several Government Outcomes, the WRC's strategic outcome-oriented goals comprise five impact areas based on the operationalisation of the WRC Knowledge Tree, a fundamental guiding framework and corporate planning tool used by the WRC to define, measure and evaluate research impact. The Knowledge Tree speaks to an investment in the multiplier effect, which aims to inform policy and decision-making, contribute to sustainable development solutions, develop products and services for the economy, actively contribute to human capital development, directly empower communities, and enable the national transformation project.

Further, the WRC continues to focus on the development of its impact narrative that provides a pathway from research to impact. This entails a continuous review of current actions and activities as well as the identification of new actions that will ensure impact realisation. The Commission also uses other instruments to achieve its goals, most notably driving community involvement in research, promoting the WRC Lighthouses, and leading innovation and impact.

The WRC addresses the three dimensions of the water and sanitation challenges, namely, new knowledge, human capital and technological solutions. The Commission endeavours in its projects to create a high concentration of activities that support each of these dimensions. An added dimension which the WRC has had to address since 2020 is the novel coronavirus (COVID-19). This pandemic has put a magnifying glass on issues of water security and safe sanitation access. The WRC has been prominent in providing analyses, new knowledge and monitoring and evaluating new systems towards curbing the spread of the virus.

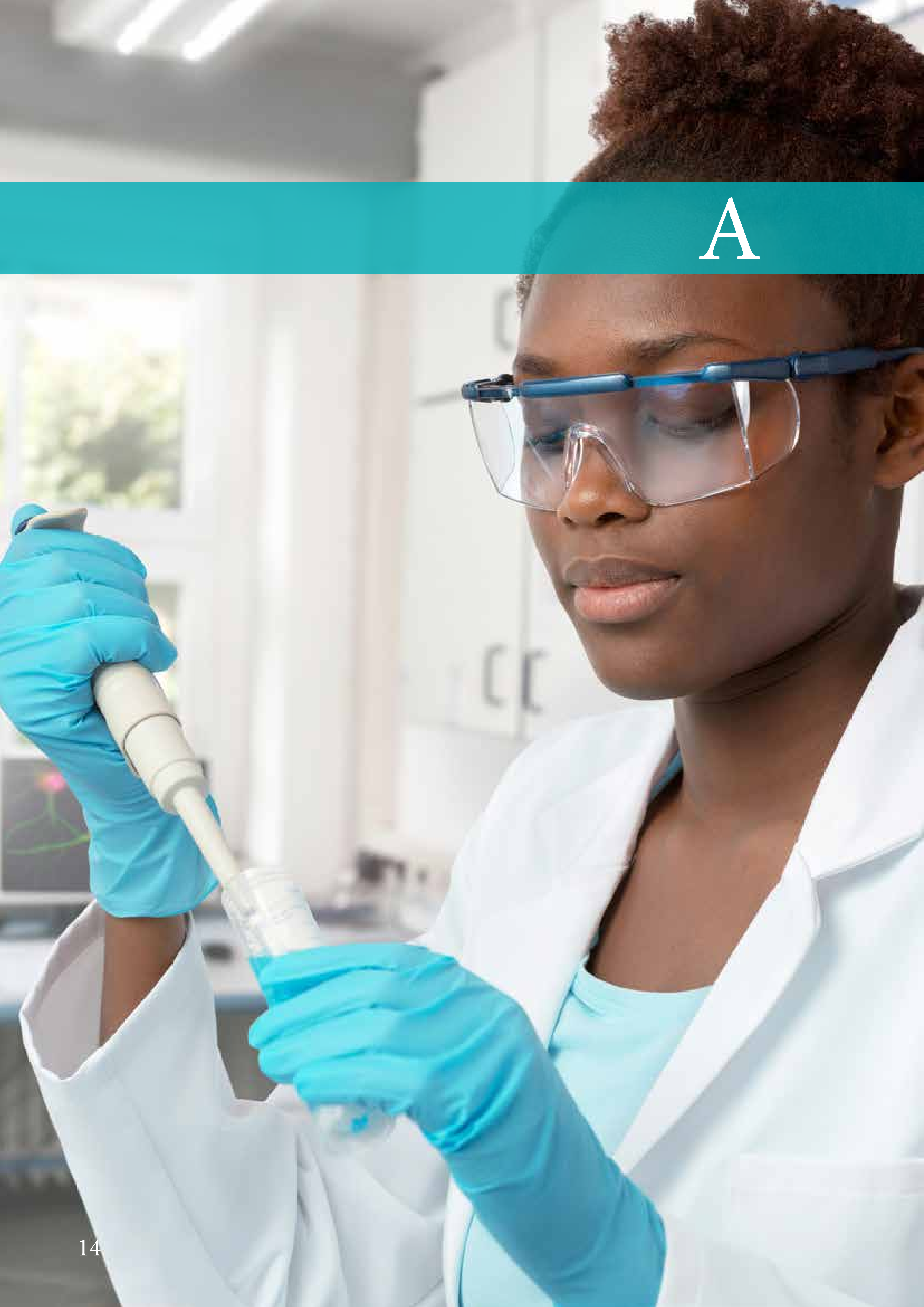
The WRC counted several performance highlights for 2021/22. A number of research projects were concluded in aid of improving services to South African communities. This included the successful launch of a micro-hydropower plant to provide electricity to the rural community of Kwa-Madiba in the Oliver Tambo District of the Eastern Cape. Another project successfully enhanced food security in two villages in the Eastern Cape by integrating water harvesting, vegetable crops, cow dung and bioenergy.

In terms of the WRC's key performance targets, 110 RDI projects were initiated during 2021/22 while 113 were finalised during the same period. Over the past five years the WRC has finalised 472 projects, signifying a noteworthy contribution of knowledge to the sector. The WRC has, in the past few years, broadened its research scope to one that actively involves communities in the research project, and engages key partners to upscale and maintain interventions post-project. A total of 135 WRC research projects in 2021/22 had a direct impact on the lives and livelihoods of communities through water-related interventions and capacity building.

The WRC had a total income (including levy and leverage income) of R417,4 million during 2021/22. Levies made up 67% of the WRC's income during the year under review. With regards to the WRC's financial performance, the Water Research Levy remains the Commission's main source of revenue.

The WRC recognises the need for more innovation and greater partnership to ensure even higher impact contributions to meet South Africa's, Africa's and the world's water and sanitation challenges going into the future. The WRC formalised several new partnerships during 2021/22 that will facilitate training and skills development in the water sector (WISA and EWSETA), enhance uptake of WRC solutions (Sarah Baartman District Municipality) and jointly identify water RDI opportunities (SAWIC &BE: SA Women in Construction and Built Environment).

The WRC achieved an unqualified audit in 2021/22.



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Section A: Strategic Overview

Water is a strategic resource, critical for basic human needs and a driver for powering key economic sectors for the socio-economic benefit of South Africans. Thus, the sustainable management of this scarce and finite resources underpins the wellbeing and prosperity of South Africa and its people. For the water science community, the mandate is to translate research, development, and innovation (RDI) into real solutions to address poverty, inequality, and unemployment, while applying knowledge solutions to advance opportunities to enable economic growth, improve competitiveness and ensure prosperity.

Vision

To have highly informed water decision-making through science and technology at all levels, in all stakeholder groups, and innovative water and sanitation solutions through research and development for South Africa, Africa and the world.

Mission

To be a global water knowledge node and South Africa's premier water knowledge hub active across the innovation value chain that:

- informs policy and decision-making
- creates new products, innovation and services for socio-economic development
- develops human capital in the water and sanitation science sector
- empowers communities and reduces poverty
- supports the national transformation and redress project
- develops sustainable solutions and deepens water and sanitation research and development in South Africa, Africa and the developing world

Values

- A culture of learning and sharing
- Innovation and creativity
- Integrity and fairness
- A spirit of professionalism and service orientation
- Facilitating empowerment and social change
- Good governance

Performance environment

The WRC's performance environment is created on the premise that the crux of the water and sanitation challenge in South Africa is a capacity and capability challenge which requires evidence-based and scientific decision making. The three dimensions addressed by the WRC include new knowledge, human capital, and technological solutions through; funding and facilitation of water RDI; knowledge generation and dissemination and the translation of research and innovation products for the advancement of national water security. The recipients of this knowledge may be higher-education institutions (HEIs), science councils, or private agencies/contractors, as well as the various tiers of government.

There is convergence across the globe that increasing water scarcity on the back of decreased availability, deteriorating quality and impacts of climate change is a crowning global crisis. South Africa is not immune to this. As a response, the WRC heightened its efforts to not only grow scientific and technological knowledge, but to translate this repository of knowledge to tangible, accessible and cost-effective products that provide options for use on the ground.

The second is the WRC's ability to both transform the South African RDI community through the development of researchers from the designated groups and to create further avenues for job creation and entrepreneurship development, which are all restricted by the limited availability of funds. At the same time, technological innovation, improvements in communication, increased collaboration and international partnerships have enhanced our ability as a South African water RDI community to conduct better research, train students at higher levels, and organise for better translation of research into products and services for the economy. These improvements, together with new resources, will guarantee our ability to make a significant difference to South Africa's water fortunes.

Legislative framework

The WRC was established as a body corporate in 1971. The WRC serves as the R&D partner of the sector leader, the Department of Water and Sanitation (DWS), and provides the sector with knowledge and capacity to ensure sustainable management of water resources and enhance water services.

Legislative and policy mandate

The following legislations, policies and related regulation are applicable to the WRC mandate:

LEGISLATION	SECTION	DESCRIPTION
Constitution of the Republic of South Africa Bill of Rights, 1996	Section 16	Freedom of expression and right to academic freedom and freedom of scientific research
	Section 27.1. b	The right to have sufficient access to water
	Part B of Schedule 4	Executive Authority has the responsibility to support and strengthen the capacity of municipalities to manage their own affairs, to exercise their powers and to perform their functions
Water Research Act (Act No. 34 of 1971)	Purpose and mandated objectives of the organisation	a) Promote coordination, cooperation, and communication in the area of water research and development b) Establish water research needs and priorities c) Stimulate and fund water research according to priority d) Promote the effective transfer of information and technology e) Enhance knowledge and capacity building within the water sector
Water Services Act (Act No. 108 of 1997)	Section 156, read in conjunction with Part B of Schedule 4 of the Constitution	To respond to water supply and sanitation needs with research and development that helps to address those needs
National Water Act (Act No. 36 of 1998)	Water resources management	Ensure that South Africa's water resources are protected, used, developed, conserved, managed, and controlled in a sustainable and equitable manner, for the benefit of all persons.
	Pricing strategy	Water use charges, the primary mechanism for the calculation of a charge, payable by some or all raw water users, that is also set for research purposes (water research levy).
	Section 156	Right of access to basic water supply and basic sanitation by setting national standards and norms.
National Water Resource Strategy 2	Chapter 14	a) Empower the implementation of the Strategy and further development of water sciences in South Africa b) Coordinate the development of the National Water R&D Plan

LEGISLATION	SECTION	DESCRIPTION
National Water Resource Strategy 2 (NWRS-2)	Chapter 14	c) Develop appropriate technologies and support the development of relevant centres of excellence in several of the fields of research d) Developed the Ten-Year Water RDI Roadmap that provides a sector-defined, needs-driven research agenda that caters for the public sector (utilities, municipalities), private industry, agriculture, and environmental protection
National Development Plan (NDP)	Government Outcomes 6, 7, 9 and 10	a) Contributing towards achieving Government Outcomes and NDP objectives b) Support water availability through examining and finding solutions for issues related to bulk water supply, and through supporting the development of appropriate regulations regarding water quantity, quality and usage c) Conducting projects addressing water utilisation in agriculture as well as projects focusing on informal settlements and peri-urban communities d) Research focused on improving services, with special emphasis on the delivery of water and sanitation services e) Research in aquatic ecosystem connectivity processes, sustainable utilisation, restoration, global change and biodiversity protection
The National Water & Sanitation Master Plan (NWSMP)	RDI Chapter, Research Chapter	a) To provide strategic direction in respect of the Water RDI Roadmap

Strategic focus

The implementation of the WRC mandate is carried out through the five key strategic areas as illustrated below.

The primary function of the WRC is to:

- Promote coordination, cooperation and communication in the areas of water research and development
- Establish water research needs and priorities
- Stimulate and fund water research according to priority
- Promote the effective transfer of information and technology
- Enhance knowledge and capacity building within the water sector

Figure 1. Five actions of the WRC towards achieving its vision.

The WRC mandate is categorised into six strategic goals illustrated in the knowledge tree (Figure 2) which aims to inform policy and decision-making, contribute to sustainable development solutions, develop products and services for the economic development, actively contribute to human capital development in the water sector, directly empower communities with knowledge and innovations, and support transformation and redress through the work that we fund and do.

The strategic research areas that the WRC invests and funds into are represented below focusing on the core mandate of water security, water quality and dignified sanitation provision while ensuring the nexus links of food and energy security are considered and integrated into research outcomes.

Figure 2. The WRC Knowledge Tree.

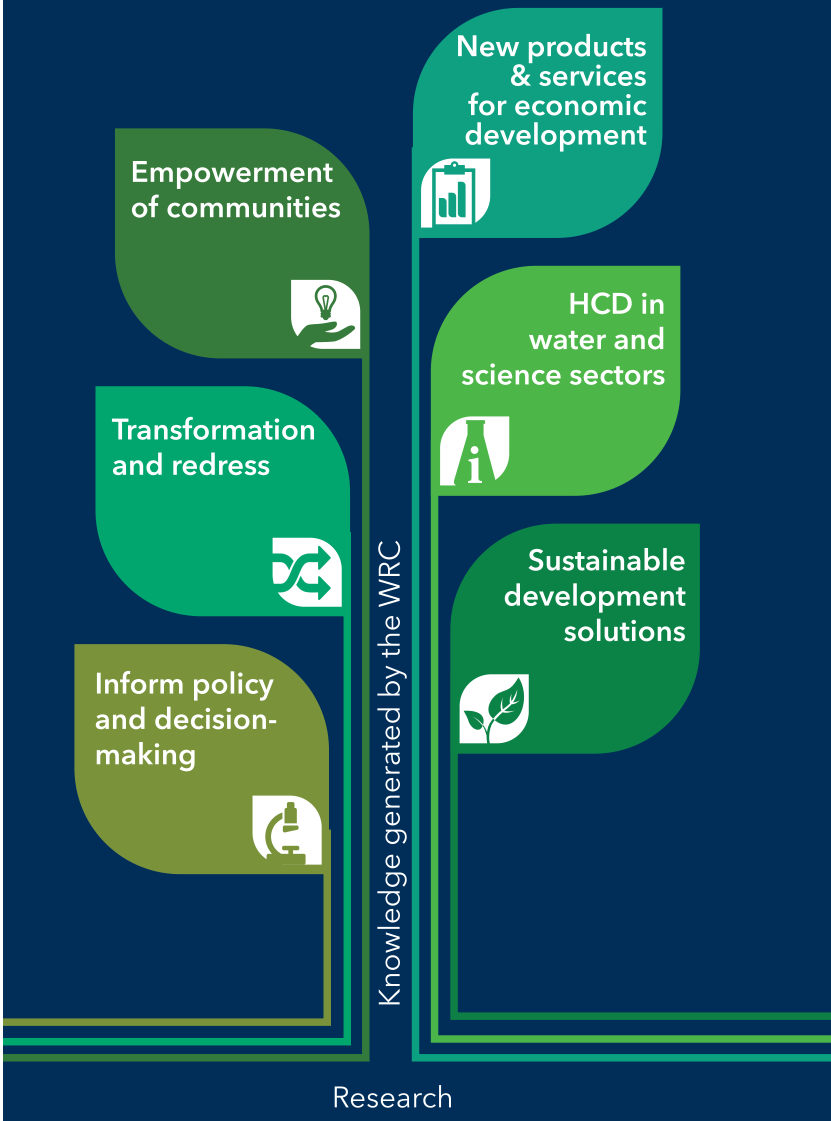


Figure 3. The strategic research areas of the WRC.

The outcomes are built into the research strategy for the sector using programmatic approaches such as lighthouses. The lighthouses elevate the research portfolio consisting of programmes and thrusts and emphasises the inter-relationships, interdependency, and integration of research in the three key strategic areas as illustrated.

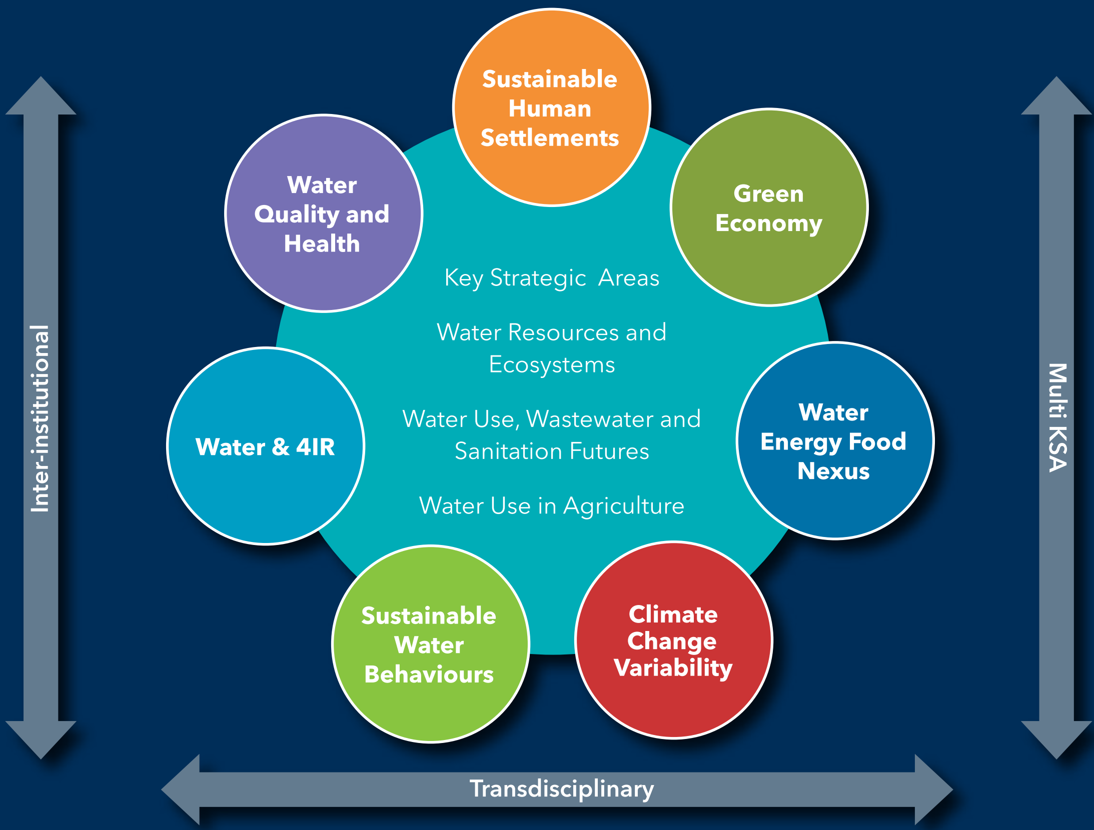


Figure 4. The WRC Lighthouses.

The WRC has a mandate to transfer technology, disseminate knowledge and build capacity in the water sector and does this through Innovation And Impact branch which looks to demonstrate and transfer technology more effectively, disseminate knowledge, enhance skills, training and capacity building to communities and professionals through strengthened stakeholder and strategic partnerships, and finally seeks to position and profiles the organisation as a trusted RDI partner, both nationally and internationally.

WRC's organisational structure

WRC governance framework

In the 2021/22 financial year the WRC operated with the following organisational structure. The structure was approved and budgeted for by the Governing Board. As indicated, the WRC has five functional branches (headed by Group Executives) namely:

- Office of the CEO and Governance
- Research and Development
- Innovation and Impact
- Corporate services
- Finances

The Chief Executive Officer and Group Executives of the WRC:

Dr Jennifer Molwantwa
CEO

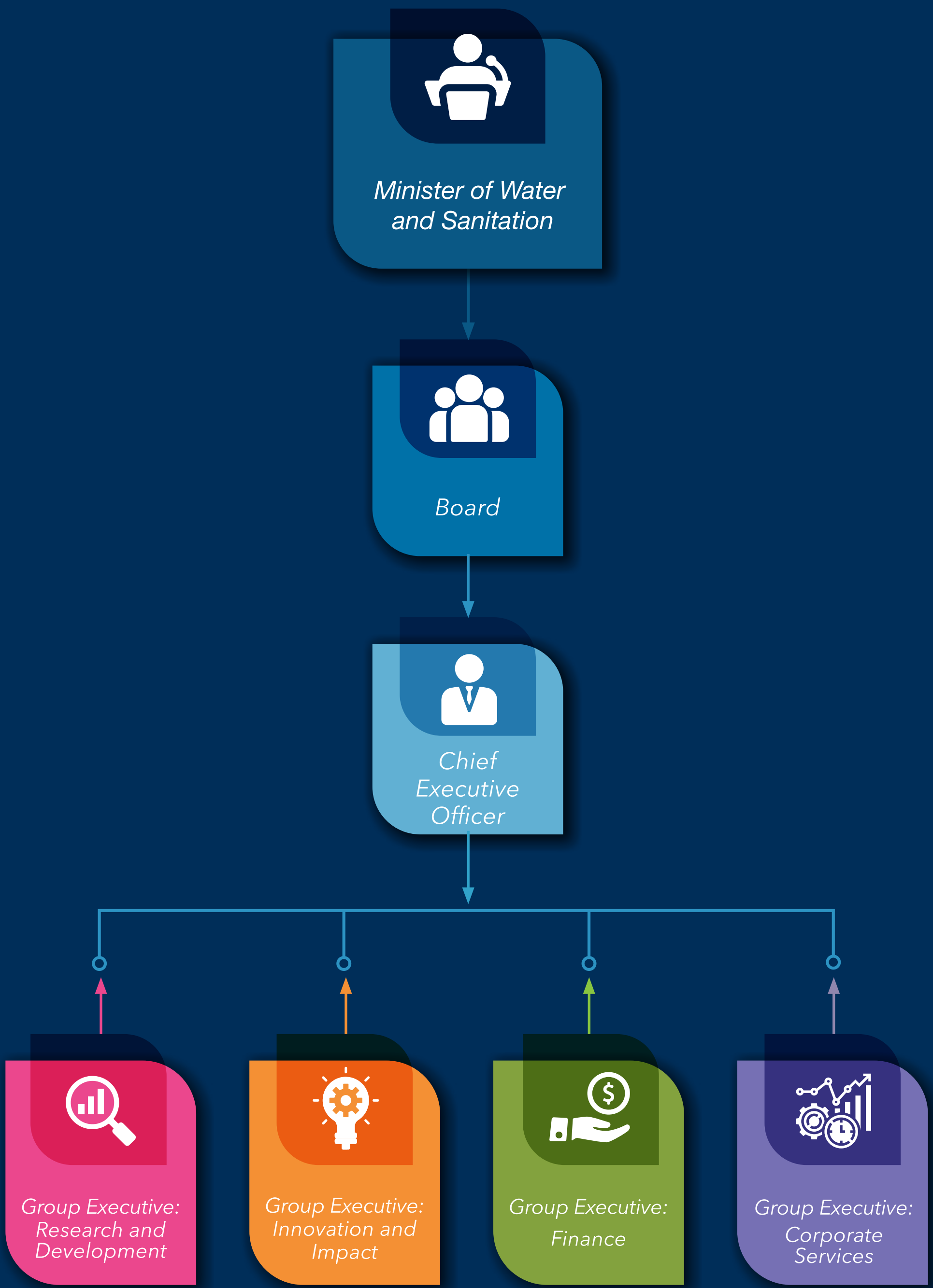
Mr Fazel Ismail
CFO

Ms Reshmili Lutchman
GE: Corporate Services

Dr Mandla Msibi
GE: Innovation and Impact

Dr Stanley Liphadzi
GE: Research and Development

Figure 5. WRC organisational structure.



The following defines the WRC governance framework:

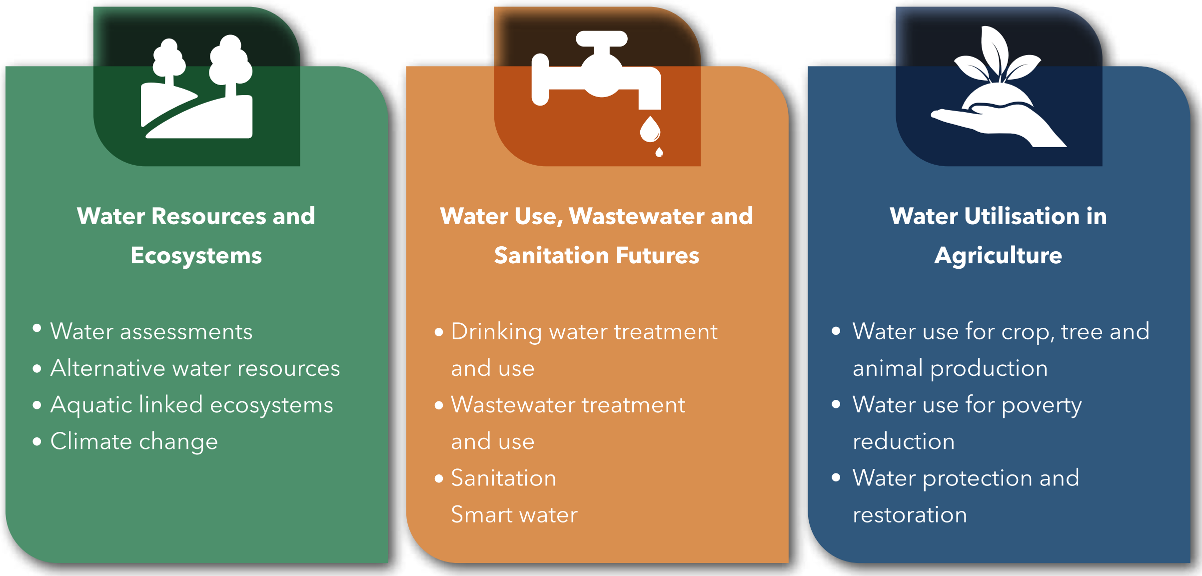
- The Minister of Water and Sanitation is the Executive Authority of the WRC
- The Department of Water and Sanitation is the shareholder representative
- The WRC Board is the Accounting Authority of the WRC
- The Chief Executive Officer (CEO) is the Accounting Officer and a member of the WRC Board
- The Group Executives report directly to the CEO.

The WRC has 84 employees, of which 88% are black.

Research and development (R&D)

This branch focuses on the generation of new knowledge as well as the mechanisms needed to support this, including human capital development and skills development.

Figure 6. The three business divisions in the Research and Development branch of the WRC.



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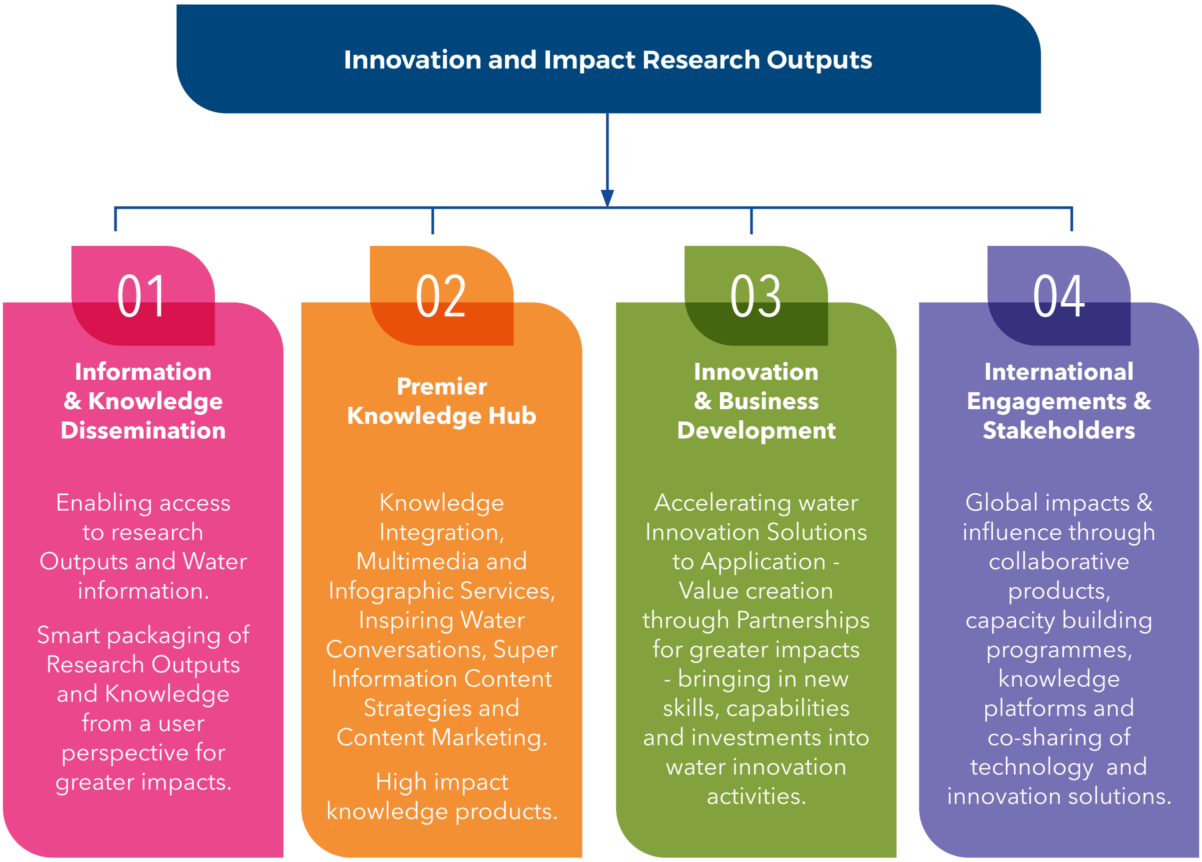
Innovation and Impact

This branch entails a redefined focus on technology, product and industry development, business development and innovation realisation on the one hand, and enabling mechanisms such as knowledge dissemination, communication, and marketing on the other.

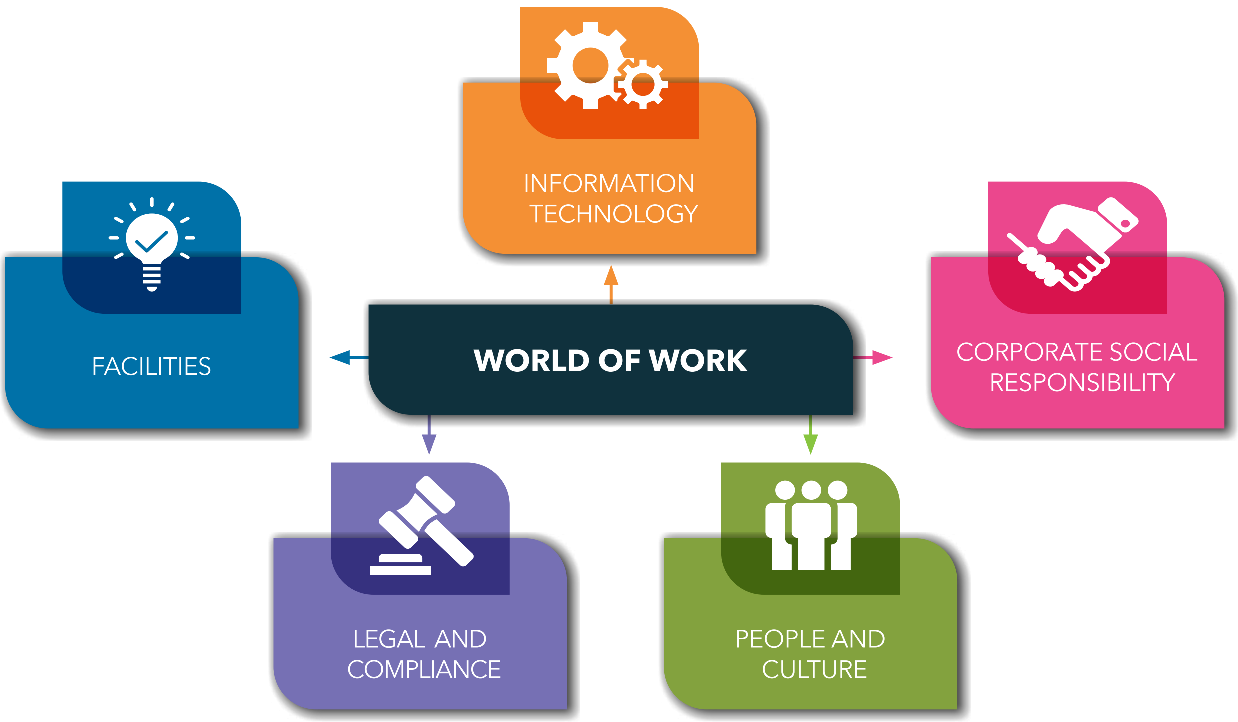
Figure 7. Organisational structure of the Innovation and Impact branch.



Corporate Services

The Corporate Services branch of the WRC focuses on the world of work within the WRC. This includes people and culture, information technology, corporate social responsibility, legal and compliance as well as facilities.

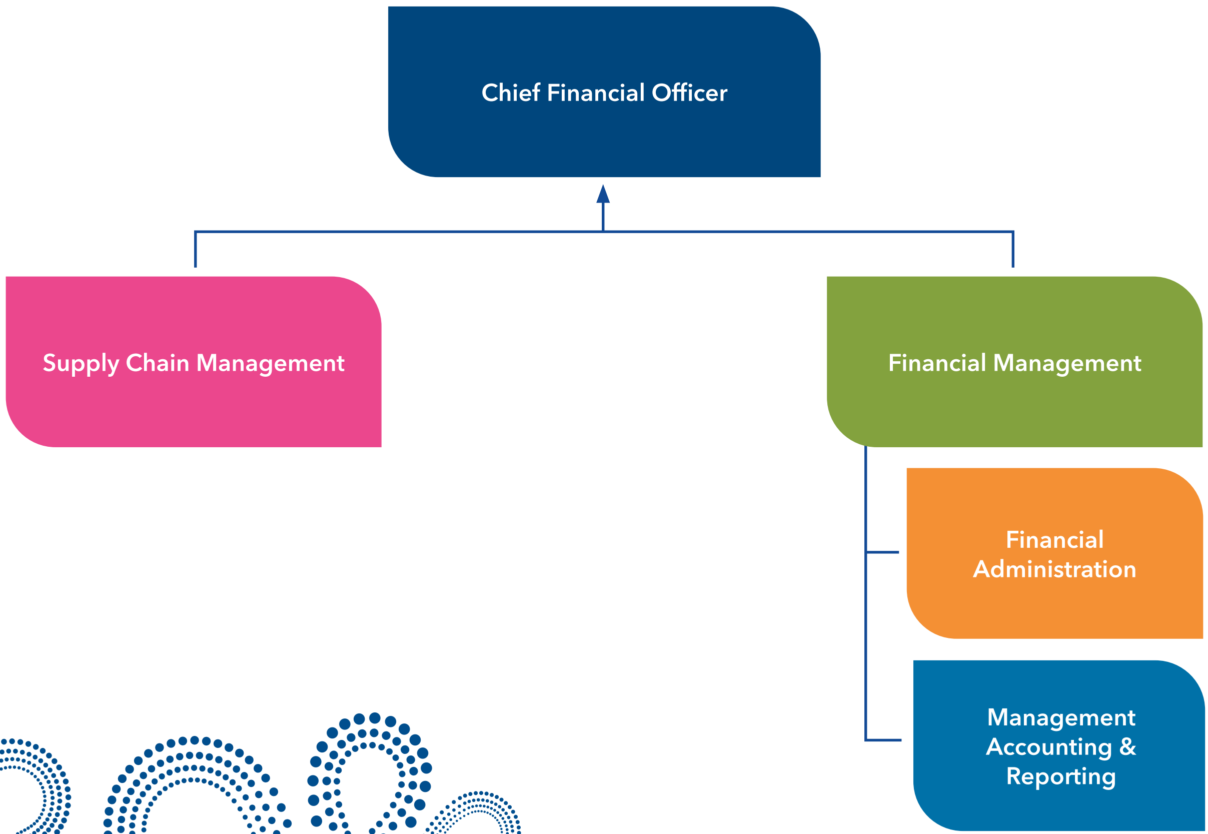
Figure 8. The organisational structure of the Corporate Services branch.

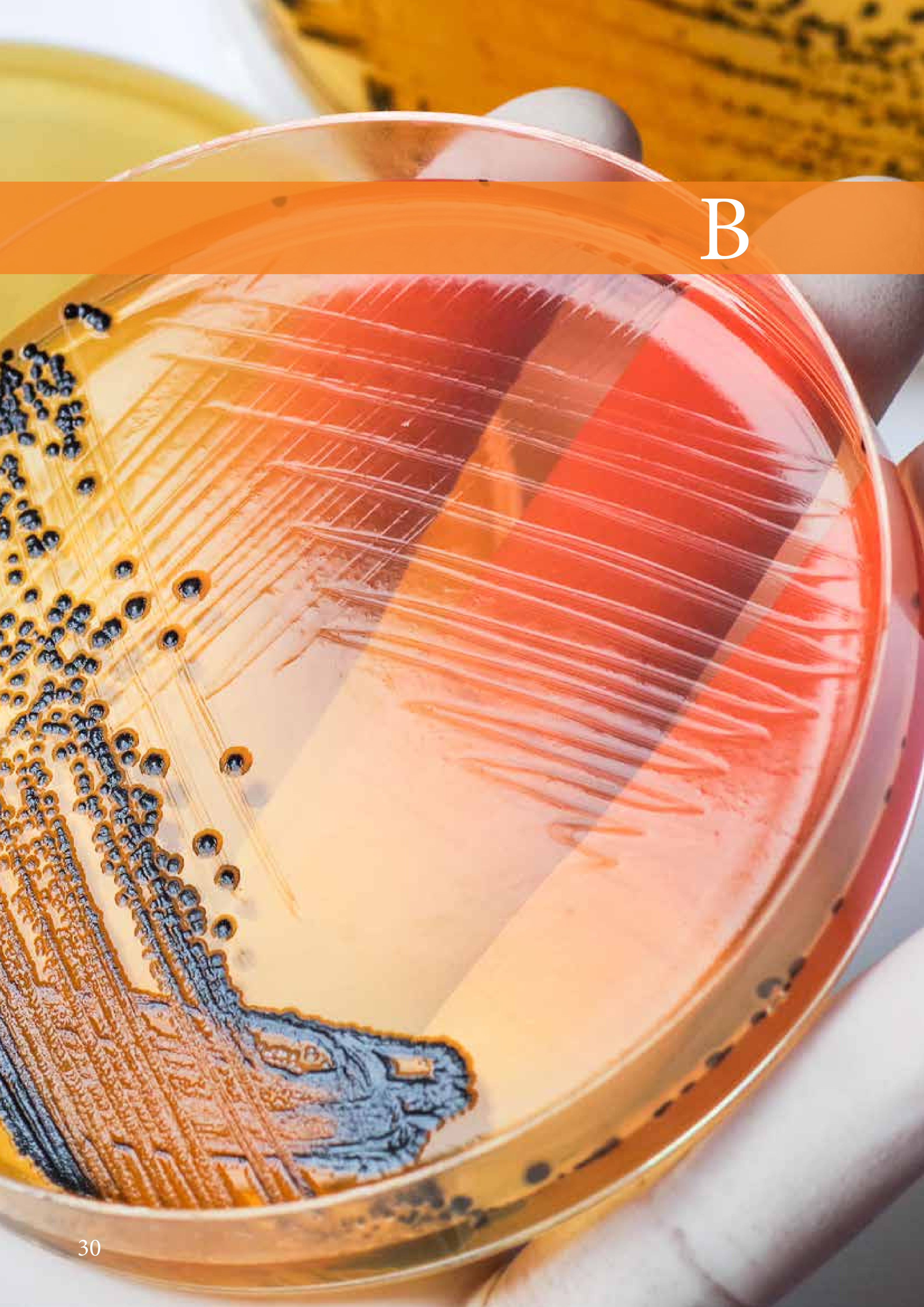


Finance

This branch focuses on improved efficiencies and effectiveness within the WRC's supply chain and the enhancement of financial planning capabilities which will contribute towards creating an appropriately funded and financially stable environment.

Figure 9. The organisational structure of the Finance branch.





B

Section B: Performance Overview

The WRC's key performance areas (KPAs) are based on its strategic context and challenges, as well as specific strategic risk areas as identified by the Board and Executive Management. The WRC has four areas of performance as follows:

1. Research portfolio
2. Impact and partnership
3. Corporate Services
4. Finance
5. Governance

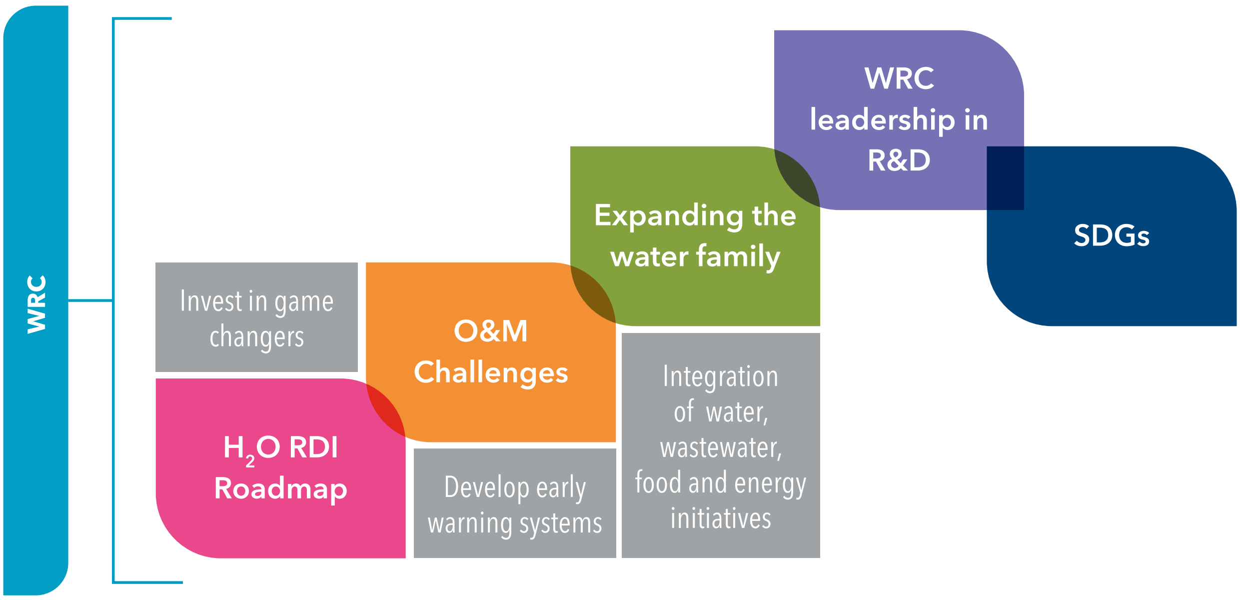
Research portfolio

Ensuring water security and continuous access to water for socio-economic activities of South Africa and the region is a key priority. The R&D branch focuses on the generation of new knowledge and innovation, as well as the mechanisms needed to support this, such as continuously building human capital and the cohort of skills required to support sustainable water management.

The outputs from the R&D interventions generate results in new or adapted technologies and innovations which the WRC provides to the water and related sectors to address specific needs, priorities, opportunities, and challenges. It supports, ensures, and facilitates innovations and technologies that enable uptake along the innovation value chain and ultimately have greater impact. The branch executes its strategy through three key strategic areas: Water Resources and Ecosystems; Water Use, Wastewater and Sanitation Futures; and Water Utilisation in Agriculture. The Water Resources and Ecosystems group provides knowledge, experience, and innovations to meet society's demands for natural resources, environmental and human health and resilience to extreme events. A key strategy is to enhance decision-making for water, environmental and economic security, and societal and environmental resilience to natural and man-made impacts at the local level. The Water Use, Wastewater and Sanitation Futures division provides knowledge and innovation that ensures reliable, affordable, and efficient water use and waste management services in the domestic, industrial, and mining areas to enhance quality of life and contribute to economic growth and improved public and environmental health. The strategic focus in the Water Utilisation in Agriculture strategic area is on increasing the efficiency and productivity of water use for production of food, forage, fibre, and fuel crops; improving food security; reducing poverty and increasing the wealth of people dependent on water-based agriculture; and ensuring sustainable water resource use. The needs and requirements of present and future generations of subsistence, emergent and commercial farmers are addressed through creation and application of water-efficient production technologies, models, and information systems within the following interrelated sub-sectors of agriculture.

The branch continues to support and encourage new research and development initiatives which adequately address these challenges and associated risks. Projects span the innovation value chain. This is achieved through informed stakeholder engagements that seek to balance current and future knowledge needs, often built through a programmatic approach. Co-funding and focused knowledge dissemination of research activities ensures faster uptake from users. During 2021/22, the R&D branch continued to focus on consolidation of the corporate strategy of the WRC linked to national priorities and plans. Significant progress was made in informing policy and decision-making, piloting of novel approaches and processes, new training and skills programmes, improved community involvement and empowerment and significant contributions to the global scientific endeavour. The branch also funded the development of new tools and systems to enhance the country's ability to deal with environmental and economic shocks and to build the required resilience.

Figure 10. Priority areas of focus for the R&D branch.



In the year under review the R&D portfolio achieved the set Annual Performance Plan (APP) targets as tabulated.

Table 2. Research portfolio performance targets for 2021/22.

Objective	Performance Indicator	Achieved 2019/20	Achieved 2020/21	Target 2021/22	Achieved 2021/22	Variance	Comments
Strategic objective: To enhance knowledge across the water knowledge and innovation cycle							
To enhance knowledge through new RDI projects initiated	The number of new RDI projects initiated in the 2021/22 financial year	92	120	75	110	+35	This target was exceeded due to new projects that were initiated mainly in response to the COVID-19 pandemic and the funding received from leverage projects
To maintain a portfolio of RDI projects that enhance water knowledge and the innovation cycle	The total number of RDI projects managed by the WRC in the 2021/22 financial year	344	344	250	371	+121	More projects were initiated while projects planned to be finalised in 2020/21 were carried over to 2021/22.
To complete and finalise RDI projects scheduled in the financial year	The number of research projects completed in the 2021/22 financial year	120	84	84	113	+33	As a result of high demand for knowledge by the water sector, more projects were finalised to avail the research products
Strategic objective: To promote transformation and enhance human capital development							
Growing a more inclusive water and sanitation science community of practice	The total number of project leaders on WRC managed projects that are female	123	n/a	n/a	n/a		
	The total number of WRC managed projects led by female project leaders	n/a	144	85	162	+77	More female project leaders stepped up to lead WRC projects as a result of the Commission's drive for transformation and the initiation of more projects
	The number of new projects led by female project leaders	n/a	57	34	55	+21	More female project leaders were recruited to lead WRC projects, which is the result of the transformation drive of the WRC and the initiation of more new projects
	The total number of project leaders on initiated projects that are female	39	n/a	n/a	n/a		
	The total number of project leaders on WRC projects that are black male	86	n/a	n/a	n/a		

Objective	Performance Indicator	Achieved 2019/20	Achieved 2020/21	Target 2021/22	Achieved 2021/22	Variance	Comments
Strategic objective: To promote transformation and enhance human capital development							
Growing a more inclusive water and sanitation science community of practice	The total number of project leaders on initiated projects that are black male	26	n/a	n/a	n/a		
	The total number of WRC managed projects led by black male project leaders	n/a	108	75	109	+34	More black male project leaders were recruited to lead WRC projects to promote transformation in the water and sanitation S&T sector
	The number of new projects led by black male project leaders	n/a	32	21	34	+13	
	The total number of WRC managed projects led by black female project leaders	n/a	54	35	65	+30	More black female project leaders were recruited to lead WRC projects to promote transformation of the water and sanitation S&T sector
	The total number of female and black project leaders on initiated WRC projects	17	n/a	n/a	n/a		
	The number of new projects led by black female project leaders	n/a	21	16	22	+6	More black female project leaders were recruited to lead WRC projects to promote transformation of the water and sanitation S&T sector
	The total number of WRC-funded projects led by female and black male project leaders	n/a	n/a	160	271	+111	More project leaders were encouraged to lead WRC projects as seen under female and black male project leader categories above
	The total number of new projects led by female and black male project leaders	n/a	n/a	55	89	+34	The WRC and its partners initiated more projects and encouraged project leadership by those from previously disadvantaged groups

Objective	Performance Indicator	Achieved 2019/20	Achieved 2020/21	Target 2021/22	Achieved 2021/22	Variance	Comments
Strategic objective: To promote transformation and enhance human capital development							
Growing a more inclusive water and sanitation science community of practice	The total number of students on WRC managed projects	362 of which 324 were post-docs, and Master's and 28 Honours and others	326	250	376	+126	Due to the drive from the R&D Branch on the research projects as well as the initiation of more research projects, the WRC was able to accommodate more students and emerging project leaders
	The number of students supported on all WRC managed projects: postgraduate students	n/a	304	230	344	+114	
	The number of emerging project leaders on WRC managed projects	n/a	45	18	25	+7	
Strategic objective: To develop innovative products and services for economic development							
To increase the number of new innovations/ products and services produced from WRC research	The number of innovations/products and services produced from WRC research	44	43	24	48	+24	The research outputs generated from WRC-funded research generated more innovations and were verified for use to address water and sanitation challenges in the country

Project highlights under the R&D portfolio

Implementing cleaner energy for rural SA communities

During the financial year under review, the WRC successfully launched a micro-hydropower plant to provide electricity to the rural community of Kwa-Madiba, in the Oliver Tambo District of the Eastern Cape. Funded by the Department of Science and Innovation (DSI), the unit, housed in a retrofitted shipping container next to Thina Falls on the Tsitsa River, provides enough electricity for approximately 50 rural households. This run-of-river modular unit turns the potential energy of flowing water into clean electricity. The plant's intake and headrace are at the top of the falls. Its turbine room and tailrace are located at the bottom. A 450 mm-diameter penstock was drilled through the mountain near the site, linking the headrace with the turbine room. The plant's design allows for rerouting a small quantity of flow for hydropower generation while still maintaining the bulk of the flow over the waterfall. The release from the turbine room is equal to the flow at the intake structure, namely 150 L/s, and thus not a consumptive use. This micro-hydropower plant offers a case study on how a simple technology, which is smartly modernised in a prefabricated containerised unit, can be quickly expedited to very remote settings where electricity is needed but access to the national grid may not be a feasible option.

World first – monitoring COVID-19 in non-sewered settlements

In South Africa, around four million households use pit latrines for their sanitation needs and there is no single metro in South Africa that is 100% sewered. This represents a significant portion of the population that cannot be covered by current efforts to track COVID-19 trends by surveilling wastewater. To address this gap, and understanding that developing countries have cities that have a mixed approach to sanitation technologies, the WRC and the Grundfos Foundation have partnered to develop a water quality–based surveillance tool for non-sewered settlements as part of a city-wide approach that will complement the wastewater surveillance programme and, in turn, provide support to other means of tracking disease outbreaks. Among others, the study successfully determined that the virus' genetic material can be detected in non-sewered locations across South Africa and developed a surveillance approach which could be used by other developing countries. To our knowledge, it is the first large-scale programme undertaken globally that has monitored SARS-CoV-2 in water and sanitation samples collected from non-sewered settlements as means of developing a COVID-19 surveillance tool.

Wastewater-based surveillance of COVID-19

Wastewater-based epidemiological (WBE) surveillance has proven a useful tool in tracking trends regarding COVID-19 infections. As such, it can provide a valuable early warning on the increases in infections, as well as the emergence of new variants. This information can be used as an early epidemiological indicator of COVID-19, especially where community testing is not possible. Since 2020, the WRC, working with researchers, healthcare practitioners and epidemiologists, has formed a multidisciplinary network to evaluate the spread of the novel coronavirus in local communities using WBE. The SACCESS (South African Collaborative COVID-19 Environmental Surveillance System) network is operational in provincial hotspots, using sampling and testing protocols developed in the first phase of the programme. This network facilitates knowledge sharing and capacity building amongst its members, who collaborated to standardise the methodology and sampling methods for the national wastewater surveillance initiative. In 2021/22 WBE surveillance successfully predicted the fourth wave of the COVID-19 pandemic, allowing South African authorities to prepare and act accordingly.

Mitigating dam siltation towards improved water security

Several large dams are steadily losing storage capacity each year due to soil erosion and land clearance, with several smaller farm dams now full to the brim with silt. South African national dam storage capacity loss due to siltation is estimated at 10%. This reduction threatens water security, which threatens food security, ecosystems, and economic progress in the country. One of the efforts aimed at ensuring that this threat is managed is the National Dam Siltation Management Strategy Programme (NatSilt Programme) implemented by the Water Research Commission on behalf of the Department of Water and Sanitation. The three-year programme was launched in 2021/22. The NatSilt Programme aims to ensure that bulk water resource infrastructure is managed in an efficient, effective and sustainable manner to ensure economic growth, social development and poverty eradication. The overall objective of the programme is to develop a strategy that will guide, advise and ensure effective siltation management and related improved storage capacity of 320 large dams in South Africa. The programme has a suite of four sub-projects focusing on different aspects of dam siltation management interventions, and the outcomes of each will be incorporated in the overall strategy. The programme is developing relevant tools, models, frameworks, protocols, guides and plans to assist with the implementation and monitoring of the strategy. The programme's objectives are the development of a siltation management strategy and related tools for large dams in Phase 1, piloting of the draft strategy, models and tools for finalisation in Phase 2, and review and revision towards a final strategy, with relevant models and tools in the final phase.

Enhancing water security in the Western Cape through groundwater

Recent droughts that occurred in the Southern African region (2015–2017) have exacerbated issues of water scarcity and equitable water allocation, particularly in provinces such as the Western Cape. The Western Cape Water Supply System (WCWSS) is currently stretched past its limit. The logical source from which to increase water supply to the West Coast area, which is also supplied from the WCWSS, is deemed to be groundwater. During 2021/22 the WRC published a study that investigated the sustainable exploitation of groundwater resources on the West Coast of South Africa. While the study investigated all four major aquifers in the West Coast area (namely, Langebaan Road, Elandsfontein, Grootwater and Adamboerskraal), particular focus was given to Langebaan Road and Elandsfontein aquifers where major abstraction is taking place and the possible implementation of managed aquifer recharge and storage (MARS) may materialise. The main outcomes of the project were an improved understanding of the inter-relationships of the Langebaan Road Aquifer and Elandsfontein Aquifer, and the implementation plan for a sustainable MARS scheme that should secure a continued, sustainable water resource within the WCWSS to meet increased water requirements.

Ensuring the microbial safety of fresh foods

In many parts of South Africa, river water is used to irrigate crops without any purification step, due to the cost of treatment. This practice, due to high river pollution levels, increases the potential risk of crop contamination and constitutes a food safety risk. A WRC-funded project led by the University of Pretoria focused on determining the occurrence and characteristics of multidrug-resistant human pathogenic bacteria on fresh vegetables (whole, minimally processed and ready-to-eat), most often consumed in the Tshwane and Cape Town metropoles. Among others, results showed that the average coliform counts of fresh vegetables were above the acceptable limit of 2.3 log CFU/g as stipulated in the Department of Health guidelines. One of the most significant findings was that the hygiene indicator bacteria counts were mostly not significantly different between formal and informal markets, with exceptions noted on occasion. It is envisaged that results of this study will contribute to establishing a crop-specific knowledge base which will inform the microbiological guidelines for fresh vegetables produced commercially and on small-scale farms as well as at the point-of-sale (formal and informal traders).

Towards the achievement of the SDGs around water and sanitation

Since the adoption of the United Nations Sustainable Development Goals (SDGs), South Africa has made great strides in unlocking opportunities and devising mechanisms that support the effective implementation of the SDGs. Despite the commendable efforts that have been made, a particular gap was recognised in the country's knowledge and understanding of interlinkages across the goals – how these interactions can be mapped out to provide evidence of possible trade-offs between goals, and opportunities that can accelerate progress and support improved programmatic planning, implementation and monitoring. This knowledge gap is acutely noted in relation to SDG 6, which focuses on water and sanitation. To overcome this gap, the WRC concluded a research project in on mapping water and sanitation interlinkages across the SDGs **(WRC report no. 2933/1/20)**. The involvement of DWS in this project and the final results, showing numerous positive and negative interlinkages, led to the formation of a new task team under the DWS SDG 6 Working Group. This task team focuses specifically on the linkages between SDG 6 (water and sanitation) and the other SDGs. The Working Group has been held up as an example of good practice in how a sector department has taken ownership of and coordinated reporting and implementation of the relevant SDG.

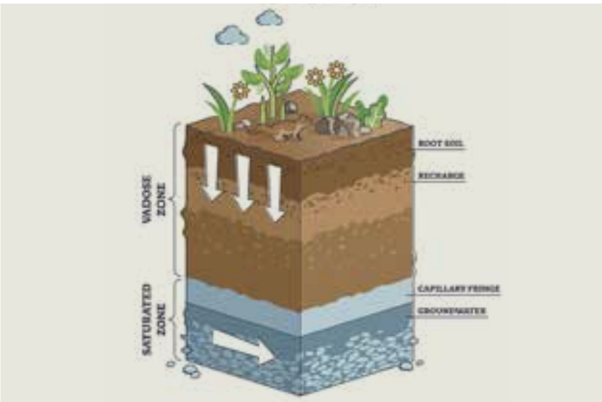
Effectively addressing non-point-source pollution from agricultural sources

Agricultural non-point-source pollution (NPS) plays a major role in the degradation of water quality, particularly with regards to pesticides, nutrients and sediment. It has therefore become increasingly important to address the contributions of NPS pollution in management of water quality, an aspect which is seldom considered in South Africa. The WRC has addressed this gap by funding a number of studies, which, amongst others, have generated a knowledge review of modelling agricultural NPS pollution at multiple scales and developed an integrated modelling approach to prediction of agricultural NPS pollution. As a follow-on to the latter project, the WRC funded a more detailed study on the fate and transport of nutrients in agricultural catchments. Among others, the study, which was concluded during 2021/22, produced national maps of the spatial distribution of estimated use of over 200 pesticides, which are an essential input in identifying important sources of agricultural chemicals in the country. The study also confirmed the presence of numerous pesticides in surface waters in three case study catchments representing different crop types (i.e. maize, sugar cane and subtropical fruit).

Guide towards the safe use of winery wastewater for irrigation

While wine grapes are an important crop in regions such as the Western Cape, wineries produce large volumes of poor-quality wastewater, particularly during the harvest period. In a field study conducted in three different regions the potential of using winery wastewater to irrigate grapevines was investigated. The primary objective of the project was to assess the fitness-for-use of winery wastewater for irrigation of different soil types with varying rainfall quantities and leaching levels, based on vineyard performance in terms of yield and quality under field conditions. Results showed that irrigation of grapevines based on in-field fractional use (augmentation with raw water) of winery wastewater did not have detrimental effects on juice characteristics relating to ripeness parameters and ion content under the prevailing conditions. The project also saw the development of appropriate management guidelines for using augmented winery wastewater as a resource for vineyard irrigation and the refinement of regulations for authorisation of augmented winery wastewater for irrigation of vineyards.

Unearthing new knowledge for improved groundwater management



The vadose zone, also known as the unsaturated zone, comprises the area between the land surface and underlying groundwater aquifers. While the vadose zone is not a source of readily available water for abstraction, it is of great importance in providing water and nutrients that are vital to the biosphere, and is intensively used for the cultivation of plants, construction of buildings and disposal of waste. In the groundwater context, it determines the rate of aquifer replenishment and, in some instances, acts as a buffer that limits contamination from surface or underground pollution sources. In 2021/22, the WRC launched an innovative handbook, titled, *The vadose zone: From theory to practice* **(WRC Report No. TT 869/21)**. The handbook is the product of a series of projects focusing on the role of the vadose zone in the hydrological and geotechnical behaviour of materials, as well as those exacerbated by human impact. The guidebook combines the knowledge of various disciplines, such as hydrology, hydrogeology, engineering geology and others, towards a single resource on this subject. The chapters guide the reader through various aspects of the subsurface, principles of unsaturated flow, the characteristics and functions of the vadose zone and how this information can be applied, for example, in wetland delineation, the protection of groundwater from contaminants and in construction and engineering. This new publication, which confirms South Africa as the knowledge leader on the project, plugs a gap in both theoretical and practical understanding on the processes that govern flow and contaminant transport in the vadose zone.

Low-fouling microfiltration membrane for decentralised sanitation applications

Decentralised sanitation systems have a great potential to address the challenge of providing safe and dignified sanitation to communities. There has been major interest in small-scale immersed membrane bioreactor (IMBR) technology for decentralised sanitation. However, the current commercial IMBR systems are regarded as being unsuited for decentralised sanitation in developing economies. A previous WRC-funded study investigated the use of woven-fabric membranes for small-scale IMBRs. Woven-fabric microfiltration (WFMF) is a locally developed membrane technology that is robust and easy to clean. However, organic fouling poses a major challenge to its application. Accordingly, a follow-up study, published during 2021/22, focused on the development and evaluation of an oleophobic WFMF (OWFMF) membrane, which can repel organics at its surface thereby minimising fouling. The study suggested that the membrane has great potential for decentralised sanitation applications in developing countries.

Promoting food security through the farming of fish

One of the major constraints in South African warm-water aquaculture is low water temperatures associated with cold weather and winter months. To overcome this problem, the use of geothermal hot springs has been proposed as a viable alternative heat source.

During 2021/22 a project was successfully concluded to use a geothermal hot spring located at Brandvlei Correctional Facility, in Worcester, Western Cape, to support aquaculture of Nile tilapia. The project involved the design and installation of two separate single-tank recirculating aquaculture systems of 10 000 L each, that individually maintained a water temperature of 28°C for optimum Nile tilapia aquaculture. This project provides a system design that can be applied at other hot springs in South Africa, which in turn will promote the development of the aquaculture sector while also creating food security and skills development opportunities. Besides the cost-savings advantage, another major benefit of using a heat exchanger for geothermal aquaculture is that the geothermal water does not come into contact with the water of the aquaculture system. This means that even geothermal hot springs with poor water quality can be used, as it would just be the heat that would be harnessed from these springs.

Protecting the environment from the impact of sanitisers and disinfectants

One of the notable unintended consequences of the management of the COVID-19 pandemic is the rapid and wide use of sanitisers and disinfectants to control the spread of SARS-CoV-2. While the important role of these chemicals in stopping the spread of the virus cannot be denied, it has resulted in the unintended increased release of a variety of chemicals into the aquatic environment. The WRC is funding a research project into the fate of these sanitisers and disinfectants in the South African aquatic environment. To advance data and knowledge generation relevant to diverse stakeholders, the WRC, together with the project team, hosted a one-day virtual workshop on 18 February 2022. The purpose of the workshop was to provide a platform for a variety of stakeholders to interact and to develop a strategy that aids in achieving the fine balance of safeguarding human lives while still ensuring proactive protection of life-supporting resources (e.g., water, food, etc.) from the adverse implications of chemical pollution.

Improving food security by integrating water, agriculture and energy

Poverty and food insecurity are endemic in many rural villages where villagers depend on rainfed agriculture and the exploitation of natural resources for household consumption and income generation. A project funded by the WRC and published during 2021/22 sought to assess the potential of integrating water, agriculture and biogas to improve food security in a rural area of the Eastern Cape. The six-year project was undertaken in the villages of Krwakrwa and Upper Ncera. Within the villages, demonstration plots were established to show how water harvesting, vegetable crops, cow dung and bioenergy can be integrated. Thanks to additional funding from the provincial Department of Rural Development and Agrarian Reform, 14 biodigesters – seven in each village – could be installed at households that had their own water storage tanks as well as ready access to cow dung. Project team members helped the households to construct in-field rainwater harvesting (IRWH) basins in their gardens and provided them with seeds and seedlings. Biogas was shown to be a cost-effective, environmentally friendly energy source, as an alternative to electricity or firewood, which can be used for cooking, heating and lighting. The study also confirmed that IRWH, in combination with sound soil management practices (e.g. mulching and cover crops) and bio-slurry application, can be used successfully to improve food production.

Supporting food security by turning brewery waste into spinach

Research funded by the WRC and conducted by a team from Rhodes University led to the launch of a new project by SA Breweries (SAB) to grow spinach from brewery wastewater at its Ibhayi Brewery in the Eastern Cape. The research project used high-rate algal ponding and constructed wetland technology to recover water and harness the nutrient potential that was locked in the brewery effluent. This was done through various applications, including aquaculture, hydroponics, algal biomass production and agriculture. SAB is now applying the innovation at full scale through the development of a commercial 2 000 m2 drip irrigation system that will help a local business sustainably grow spinach in raised beds. The unique value of this project is that the water and nutrient requirements of the crops are fully provided for by the wastewater generated in the brewing process, with no requirement for additional water or fertilizers. The losses from production normally become a waste management liability for a business and, all too frequently, society or the receiving environment.

Growing capacity in the water–energy–food (WEF) nexus

Achieving water, energy and food (WEF) security is a priority for southern Africa, especially under unfavourable climate change, increasing urbanisation, population growth, and advanced ecosystem degradation. Achieving WEF securities will require a collaborative and inclusive approach, which considers the interconnections and interdependencies between the three sectors. The WRC was integral in organising the first WEF nexus masterclass and winter school for southern Africa during 2021/22. These were capacity building initiatives to support early career researchers, postgraduate students, managers and practitioners in understanding nexus thinking as a transformative approach to sustainable natural resources management and socio-economic development.

Innovation and Impact portfolio

The WRC's focus on innovation and impact takes into consideration that as a public entity, the Commission contributes meaningfully to national initiatives designed to improve the lives of South African communities. In addition, there is an ongoing effort to demonstrate the economic and social returns from the WRC's investment in research and development. The Innovation and Impact (I&I) branch operates from the premise that solutions to the country's water and sanitation challenges lie with science-based decision-making, the development and implementation of new innovation technologies, smarter technological choices, and the creation of new water and sanitation products and industries.

Below are highlights of some of the achievements during the 2021/22 financial year.

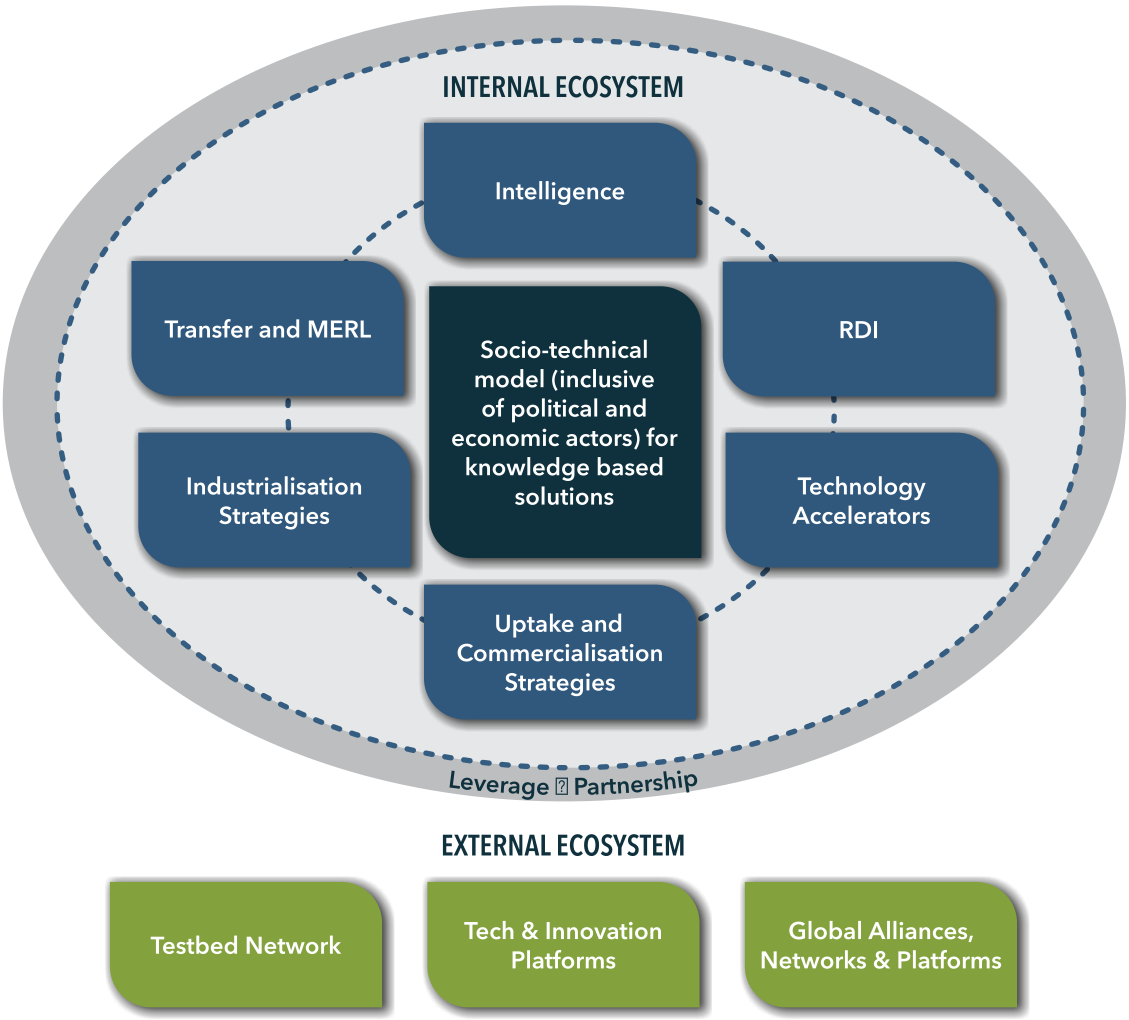
Advancing and inspiring water conversations within the water sector in South Africa, and so building upon the insights, results and examples gleaned from research and development. The WRC's communication and marketing efforts strive to further ensure that water- and sanitation-related knowledge permeate through all sectors of the South African population. This continues to be achieved through various means of engagements, activities, partnerships, and events. A key focus is to ensure that research findings are comprehensive to those who receive them, thereby ensuring knowledge uptake and enabling positive water behaviours.

Table 3. WRC knowledge products, mediums and channels.

KNOWLEDE PRODUCTS		MEDIUM	CHANNELS/ TOUCHPOINTS
Formal Knowledge Products	Knowledge By-Products		
Working papers	Special publications	e-newsletters	Direct mailer
Research reports	Documentaries	Videos	Programme microsites
Knowledge Review	Magazine [Water Wheel]	Events	Website/portal
Ministerial briefs	Media briefs	Posters	Webinar/meeting
Policy briefs	Event reports	Infographics	Knowledge portal
Parliamentary briefs	Speeches	Blogs	Social media
Technical briefs	Concept notes	e-newsletter	Media (print, broadcast, online)
Science briefs	Stakeholder briefing notes	e-newsletter	Internet
Fact sheets	Conference reports	Reports	Internet
Presentations	Press releases	Presentations	Events
Guidelines & training material	Opinion pieces	Guides	Media (print, online)

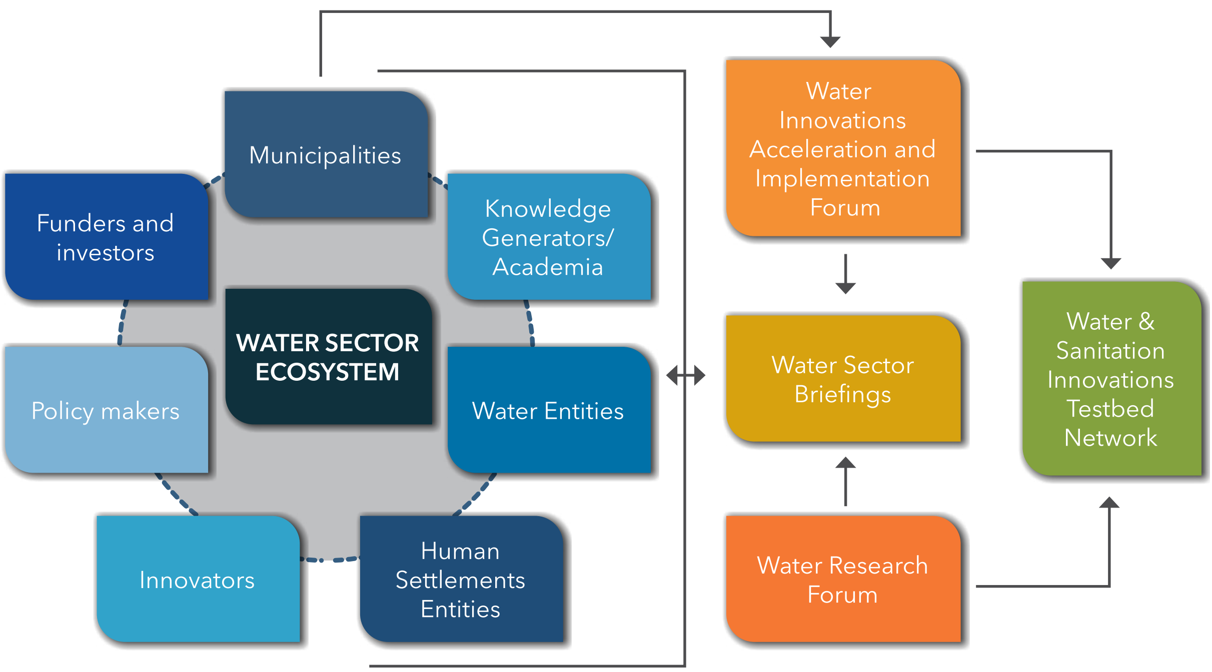
Fast-tracking water innovations to application. The goal of the South African water sector is to provide the public with reliable and safe water supplies while disposing of wastewater safely and in compliance with national water quality regulations. This is being achieved through the creation of a robust and vibrant innovation ecosystem of innovations management that allows the WRC to play a lead and co-ordinating role with strategic sector partners in accelerating innovations and best practice to the market. Through instruments such as the Water Technologies Demonstration Programme (Wader) and the South African Sanitation Technology Enterprise Programme (SASTEP) the WRC is accelerating the business development and technology transfer of new innovations to the market.

Figure 11. WRC Hybrid Innovation Model.



Collaborative partnerships and stakeholder engagement (both local and international) are not only aimed at extending the WRC footprint and profile, but also to enhance the impact of WRC knowledge and innovation products through the multiplier effect. Awareness and access to credible research and innovation products and solutions relevant to the world's water challenges will lead to improved decision-making, and uptake within the water sector. Stakeholder engagement is guided through the Stakeholder Management Framework (Figure 12), and collaborations provide a platform share existing research products and innovations.

Figure 12. The Stakeholder Management Framework of the WRC.



The main objectives of the key performance areas (KPAs) under this portfolio are to develop innovative products and services for economic growth; to drive sustainable development solutions; to inform policy- and decision-making; and to promote transformation and redress in the water and sanitation sector. The WRC managed to achieve all targets set in the APP.

Table 4. Innovation and Impact portfolio performance targets for 2021/22.

Objective	Performance Indicator	Achieved 2019/20	Achieved 2020/21	Target 2021/22	Achieved 2021/22	Variance	Comments
Strategic objective: To promote transformation and redress							
To better enable researchers to participate in WRC funding instruments, specialised contracts, and general water and sanitation management issues	The number of innovations, products and services that have been supported and/or implemented/demonstrated/piloted	18	n/a	n/a	n/a		
	The number of WRC 101 workshops held in the financial year	6	6	6	6	0	None
	The number of WRC Roadshows to rural communities	n/a	4	4	5	+1	WRC's enabling infrastructure supported the use of hybrid platforms. Use of virtual and contact platforms resulted in increased attendance at roadshows
To promote the participation of youth in water and sanitation RDI	A youth strategy approved by Executive	n/a	1	n/a	n/a	0	None
Strategic objective: To drive sustainable development solutions							
To ensure that the WRC increasingly drives sustainable solutions for the water sector by hosting events that promote robust engagement around critical emerging water management issues	The number of WRC dialogues	18	19	12	12	0	None
To promote the uptake and application of sustainable solution by the water sector through broader engagements	The number of conferences/summits with the WRC as a host	2	2	2	2	0	None

Objective	Performance Indicator	Achieved 2019/20	Achieved 2020/21	Target 2021/22	Achieved 2021/22	Variance	Comments
Strategic objective: To inform policy and decision-making							
To influence policy and decision-makers with research-based knowledge	The number of policy briefs produced and distributed to relevant government departments and other entities	14	12	12	12	0	None
	The number of ministerial briefs produced by the WRC and received by the Minister's Office	14	12	12	12	0	None
	The number of Parliamentary briefs produced and disseminated	8	6	6	6	0	None
	The number of working papers produced that support decision-makers with research-based knowledge	8	12	12	12	0	None
To support innovation business incubation services	The number of completed evaluations and IP due diligence reports issued	n/a	8	8	11	+3	The research outputs generated from WRC research generated 3 more IP due diligence reports to address water and sanitation challenges in the country

Objective	Performance Indicator	Achieved 2019/20	Achieved 2020/21	Target 2021/22	Achieved 2021/22	Variance	Comments
Strategic objective: To develop innovative products and services for economic growth							
Establishing a Business Case towards innovation and investment in the water sector	Business Case established	n/a	n/a	1	1	0	None
To develop products and services that are demonstrated in the field or scaled environment	The number of demonstrations and pilots initiated through WADER, SASTEP and the RDI portfolio	n/a	12	12	13	+1	The research outputs generated from WRC research generated 1 more demonstration (verified) for use to address water and sanitation challenges in the country
Strategic objective: To drive sustainable development solutions							
To position the WRC as a competitive and key development partner and leader in water and sanitation RDI globally and a specific focus on Africa	The number of strategic engagements (meetings, dialogues, hosted delegations, country visits) involving international institutions	n/a	5	4	6	+2	The use of virtual platforms allowed for more strategic dialogues with international institutions
To partner with municipality and utility support services and engage in high level sectoral support services	The number of events completed with municipalities and other utility support services	n/a	7	6	6	0	None
Strategic objective: To empower communities							
To ensure that the WRC invests in the multiplier effect by partnering with strategic traditional and non-traditional partners to complement the WRC's mandate on either side of the value chain for water sector and societal impact	The number of workshops held in partnership with other institutions	28	24	24	24	0	None
	The number of agreements signed with partnering institutions	7	15	6	13	+7	The increased focus on water quality due to COVID-19 created a need and opportunities for more strategic partnerships

Highlights in the I&I portfolio

WRC celebrates 50 years with symposium

During 2021/22 the WRC celebrated its 50th anniversary with the Fifth Biennial WRC Symposium, held from 20–22 September 2021. Delegates, who represented research institutions, government departments, NGOs and civil society, actively participated in the plenary sessions, thematic and interactive discussions, as well as the side events. The symposium provided a platform for the sector to reflect on South Africa's water research, development, and innovation journey. Delegates enjoyed a content-rich programme curated by seasoned experts from across the global water sector. The format comprised expert panels, specialist technical sessions and innovative technology demonstrations. This was the first time the Symposium was presented virtually and efforts were made to encourage interactivity on the conference platform via chats and networking sessions, as well as a Question and Answer space.

Providing communities with dignity through next-generation sanitation

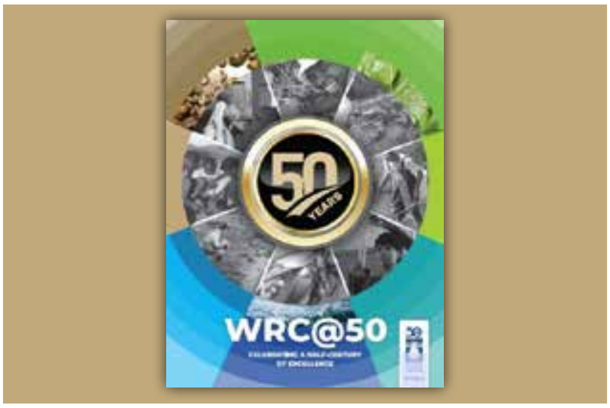
Access to adequate sanitation remains a challenge in South Africa's informal settlements. The WRC, through the South African Sanitation Technology Enterprise Programme (SASTEP), is working with its municipal and innovation partners to introduce next-generation sanitation solutions to provide improved, hygienic, and dignified solutions to address sanitation service delivery backlogs while promoting new sanitation innovations. A SASTEP initiative involving Johannesburg Water and two commercial partners, Enviro Options and WEC Projects, was launched at two informal settlements in Soweto on World Toilet Day 2021 (18 November). The Clear Recirculating Toilet System, installed at the Mofolo North informal settlement, uses a full water cycling process for treatment of the sewage. An advanced unique 'Biofilm-MBR' treatment process is employed as the core technology for treatment, producing a stable and clean effluent that is further disinfected to ensure safety of the effluent for reuse. The NEWgenerator, installed at Time-house Informal Settlement, is a compact, portable, and modular resource recovery machine that eliminates waste while recovering fertilizer nutrients, renewable energy, and clean water. The system uses an anaerobic baffled reactor design followed by a nanomembrane filter, operated at subcritical water flux to extend the longevity of the membrane. A total of 100 households in the two settlements benefited from the sanitation installations.

Towards greener energy to operate wastewater treatment works

During 2021/22 the City of Cape Town became the first municipality in South Africa to install a floating solar photovoltaic (PV) system with partners Floating Solar (Pty) Ltd, the WRC and the University of Cape Town.

The floating solar PV pilot, which was established at the city's Kraaifontein Wastewater Treatment Works, includes a floating solar PV array as well as a ground-mounted PV system to determine evaporation savings and relative energy generation performance of floating solar PV technology. This is an innovative research study where data is being collected over a 12-month period to potentially inform the design of larger utility-scale floating solar PV projects over the next few years through competitive bid processes. The pilot project not only looks at the amount of energy that can be generated by floating panels, but also investigates how much can be generated compared with the ground-mounted panels. The other important pillar of the research is to see what impact the floats have on water evaporation.

WRC – Celebrating 50 years of impact



During 2021/22 the WRC launched the seminal publication, *WRC@50 – Celebrating a half-century of excellence* as part of its 50-year celebration. The book's 14 chapters provide a critical overview of the Commission's contribution to various fields of research including hydrology, water and sanitation services, water law, agriculture, water quality, social sciences, environmental sciences, and climate change. The book starts with a chapter on the history of the WRC, outlining the reasons for its existence. It ends with a critique of the Commission, touching on controversial issues and suggesting future paths that will build on what has already been done. A total of 49 authors contributed to the book chapters. Emphasis is also placed on the WRC's contribution towards the transformation of the South African water and sanitation sector, particularly in the past 20 years.

Sharing knowledge and solutions to improve service delivery

The WRC has been appointed by the Department of Science and Innovation (DSI) through the Technology Innovation Agency (TIA) to support the water and sanitation component of the Viability and Validation of Innovations for Service Delivery Programme (VVISDP). Following this appointment, the WRC established the Water and Sanitation Innovation Transfer Unit (WSITU) that is responsible for managing the programme and undertaking pre-feasibility municipal engagement sessions. A series of VVISDP municipal engagement sessions were held during the last quarter of 2021/22 with some of the municipalities which were selected to participate in the programme, such as Ekurhuleni, City of Tshwane, City of Cape Town, Mbashe, City of Mbombela and eMalahleni municipalities, to discuss, among others, their innovation, technology and service needs.

Contributing to water RDI agendas in Africa

In 2019 the WRC was mandated by the Society for Ecological Restoration to lead and coordinate the process of setting up a chapter in Africa. This was achieved during the 2021/22 financial year. The Society for Ecological Restoration Africa Chapter (SERA) is a non-profit organisation that aims to advance the science, practice, and policy of ecological restoration to sustain biodiversity and to assist with the recovery and management of degraded ecosystems throughout the southern region of Africa. SER Africa is based in Pietermaritzburg, KwaZulu-Natal, South Africa, at the Wildlands Conservation Trust. The past financial year also saw the launch of the Water Institute Alliance (WIA). The Alliance aims to promote interdisciplinary and intersectoral cooperation to improve the overall efficiency and decision-making of integrated water resource management, scientific planning processes and systems in the region.

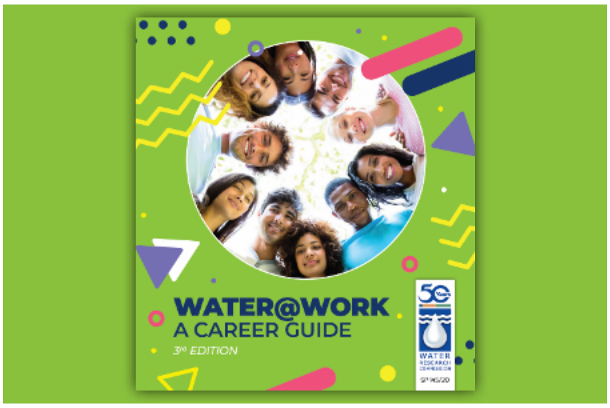
Engaging the previously unengaged stakeholders of the WRC

The WRC, in partnership with the National Institute for Occupational Health (NIOH) Immunology and Microbiology, is conducting studies to understand the occupational exposure to microbiological and chemical contaminants at wastewater treatment works. The findings will inform science-based guidelines and policies to reduce exposure and provide safe working environments. During 2021/22, the South African Municipal Workers Union (SAMWU) was engaged to share the results of the WRC study to date. This included assessment of SARS-CoV-2 presence and fate in wastewater treatment plants, and potential occupational exposure to respiratory and enteric bacterial pathogens in wastewater treatment plants. Educational information was also shared on ways to minimise potential risks of worker exposure to hazardous biological agents present in wastewater during the COVID-19 pandemic and beyond.

New partnerships formed in 2021/22

The WRC formalised several new partnerships during 2021/22 that will facilitate training and skills development in the water sector (WISA and EWSETA), enhance uptake of WRC solutions (Sarah Baartman District Municipality) and jointly identify water RDI opportunities (SAWIC &BE: SA Women in Construction and Built Environment). Additionally, during the year the WRC has affiliated with the SER Africa Chapter and Faecal Sludge Management Alliance (FSMA) to facilitate the WRC and South African contribution to these communities of practice, and to promote uptake of WRC research and innovation products, influence the agenda, and join efforts with other members to enhance the impact of the Commission's work.

Attracting young graduates to the water sector



South African water resources are national assets. We need qualified people to look after and manage these resources for the good of the country and its people. To choose the right career, aspirant water sector employees need to find out what they like and enjoy doing. Then they can decide which careers appeal to them and if their personality matches their career of choice. The third edition of the popular *Water Research Commission Water@ Work Career Guide* was published during 2021/22. The career guide provides a snapshot of careers and work opportunities related to the water sector. More than 60 different career options are described. In addition to providing an overview of the future of skills and work and how it relates to careers in the water sector, the publication provides details about the skills and qualifications needed for different careers across the sector. It also includes useful contact details and highlights options for sourcing funding for studies.

Young Engineers Changemakers Programme (YECP)

The YeCP aims to expose young municipal engineers to a wider set of water and sanitation stakeholders, professionals, experiences and innovations. This three-year programme has been funded by the Department of Science and Innovation since 2019. The second and third cohorts of the Young Engineers Changemakers Programme participated in local site visits from 18 to 22 October 2021 in Gauteng. This stage of the one-year training initiative exposes the municipal engineers to innovative work done locally and helps them obtain a wealth of knowledge by hands-on experience through this phase. The experience gained from this stage of the programme should ideally equip the YECP candidates to influence decision-making for better service delivery at their respective municipalities. The focus of the site visits was innovative water and sanitation solutions supported by the WRC's SASTEP platform. Candidates got to engage with water technology innovators such as the Zambezi slide-on gutter, a rainwater harvesting solution, Loo Afrique's sanitation solutions and the Clear full-recycle toilet system.

Inspiring tomorrow's water solutions today

On 22 and 23 July 2021, the WRC hosted a mini youth summit titled 'WRC50 Golden Circle Code Festival' as a closed two-day dialogue targeted at the top two winners from each of the youth hackathons the WRC has hosted in the past three years. The aim of the event was to provide a capacity building and knowledge transfer platform for the young winners, as relevant mentors from within the WRC, the sector and specialists in technology were invited to share their time and expertise over the two-day period with the aim of assisting them in refining their solutions. As such, the focus of Day 1 of the programme included a facilitated roundtable discussion featuring leads from each participating team, individuals who are enablers of solutions and members of the WRC who provided guidance to the teams from a research science perspective. The second day allowed for hackers and mentees to appraise past solutions, and give sound advice on how these could be refined andmade to be more fit-for-purpose, as a lead up to the finale which took place during the 5th WRC Symposium.

Providing much needed employment experience to young graduates

Over the past financial year over 900 young science, finance, marketing, and environmental graduates and aspiring entrepreneurs joined the Water Graduate Employment Programme (GEP) for a chance to gain some experience and exposure in water-impacted areas of work. The Water GEP matches employers with unemployed graduates looking for internships, learnerships or work experience in the water, sanitation and related sectors. The programme is a short-term, 6 – 8 month initiative supported by the South African Presidency and the Department of Science and Innovation. Over 80 water-related organisations supported the Water GEP in 2021/22. The programme is now moving into the research phase to capture insights that can enable similar programmes to achieve success.

Corporate Services Portfolio

Human Resources and Corporate Social Responsibility

Through the functional areas of Information Technology, People and Culture, Legal and Compliance and Facilities and Corporate Social Responsibility, this branch aimed to create a workplace that is centered around meaning and impact in line with the WRC strategy. This aim was executed through the various strategies linked to these areas, but framed around an agility to the opportunities provided in the external and internal environment.

In the 2021/22 financial year the Corporate Services branch faced many challenges from a lack of resources based on the pause in recruitment, absenteeism due to contracting or being exposed to COVID-19 and other related pandemic related factors. For the first time the impact of the external environment became a significant contributing factor to mental health issues, which lead to this being identified as a strategic risk for the WRC.

Internally, the mid-year changes in leadership and strategic direction impacted the team's strategic direction and a quick re-direction was needed with the uncertainties. However, despite the external and internal factors, the Corporate Services team was able to ensure continued support to the business in all its portfolios.

The WRC's world of work changed drastically in line with the COVID-19 pandemic, and the use of information technology and adaptation excelled throughout the year. In the financial year under review the WRC continued to build on its fortunate position, including the use of virtual tools that could readily be made available to align to a new modality of work. The Commission's employees proved resilient in the transition towards this new modality. Leadership paved the way in adapting the new technology for a new modality. As these changes have become embedded into the operations the WRC will continue to grow and transition with its new capabilities into its overall environment. Continuous improvement and the closing of the gaps in its current systems will remain as a focus in the coming financial years.

The transformation in the workplace due to the COVID-19 pandemic and the fourth industrial revolution and their consequences remains the reason we have continued to be intentional around reinventing our people practices and process in alignment with shifts in our infrastructure technology and spaces within the WRC.

In the financial year under review, the branch continued with its vision to entrench its employee value proposition to influence a meaningful working environment that enabled the evolution and integration of technology, innovation, and people through strategic partnerships. The People and Culture approach during the year focused on re-organising how we work with the intention to build human capital capability, improve service delivery and operational efficiencies.

In the 2021/22 finical year legal and compliance was centered around ensuring a legal advisory framework and a well-defined compliance landscape (integrated into processes) that served to guide decision-making across all levels within the WRC. Overall legal and compliance within the WRC laid a solid foundation for the financial year as we navigated new health and safety regulations together with strict office protocols.

The WRC operates in a 5 Star-certified green building in accordance with the green building rating tools developed by the Green Building Council South Africa and will continue to do so until 2026. Categories covered by the Green Star SA rating tools includes the management of the indoor environment quality, energy, transport, water, materials, land use and ecology, emissions, and innovations. Through the financial year WRC has adopted strict hygiene standards, regular fogging of the office space to ensure that the WRC did not have any reported exposures in the workspace.

As the world starts to recover from two pandemic years while facing an uncertain economic outlook and accelerating disruptions that are translating into permanent changes to the workplace, Corporate Services will continue to bring the innovative solutions in the People & Culture, ICT, Facilities, Legal & Compliance, and Corporate Social Responsibility portfolios.

The KPAs under this portfolio address organisational transformation and focus on the enhancement of effective leadership and an improved level of staff performance, on the one hand, as well as the empowerment of communities as active participants in research projects, on the other hand.

Figure 13. The WRC social enterprise, employee value proposition and stakeholder impact.

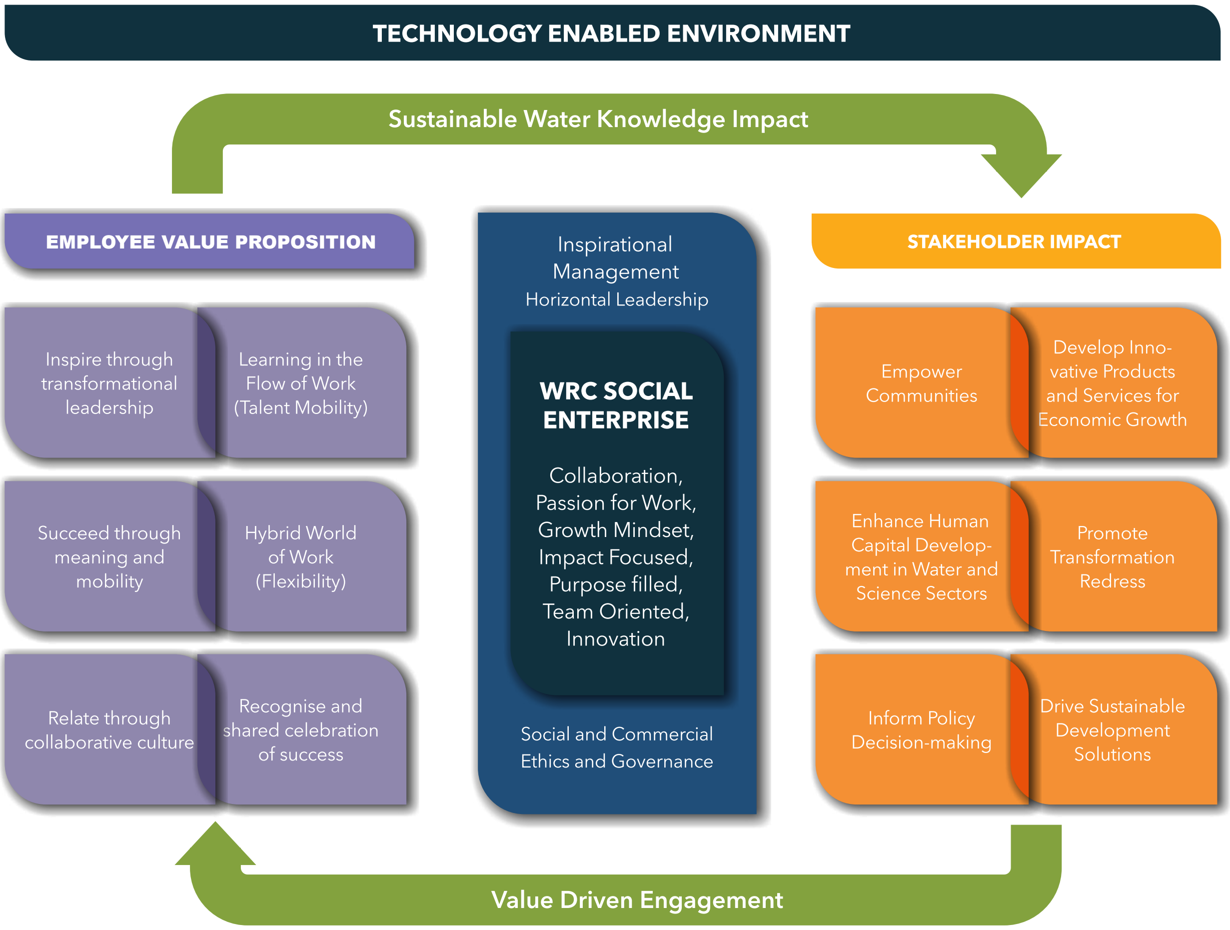


Table 5. Corporate social responsibility targets in 2021/22.

Objective	Performance Indicator	Achieved 2019/20	Achieved 2020/21	Target 2021/22	Achieved 2021/22	Variance	Comments
To ensure social and corporate responsibility	The total number of research and non-research community-based projects managed by the WRC	109	108	70	135	+65	More community-based projects were implemented due to the increased number of new projects. The research teams involved ensured that on project approval the community initiatives were catered for in the project's deliverables
	The number of new community-based research projects managed by the WRC	26	37	49	51	+2	
	The total number of SMMEs on WRC research projects	74	61	55	55	0	None
	The total number of SMMEs on new WRC research projects	11	33	15	25	+10	The WRC was able to fund more SMMEs on research projects which directly supports addressing socio-economic challenges in the country

Table 6. Human resources targets in 2021/22.

Objective	Performance Indicator	Achieved 2019/20	Achieved 2020/21	Target 2021/22	Achieved 2021/22	Variance	Comments
To promote transformation and redress and cultivate a high performance organisational culture	To maintain the minimum the percentage of black, female and employees with a disability at the WRC measured by:						
	The total number of black employees	88%	87%	88%	88%	0	None
	The total number of female employees	62%	62%	52%	57%	+5%	Target has been exceeded due to proportionally higher female appointments
	The total number of employees with a disability	5%	5%	3%	4%	1%	Target exceeded due to increased declared disclosures
To improve employee development and growth	Maintain the number of staff with Master's degrees	22	22	22	22	0	None
	Maintain the number of staff with PhDs	16	16	15	16	+1	1 additional PhD appointment made

B

Financial portfolio

The Finance Portfolio comprises of two functional areas being financial management and supply chain management that provides support services to the WRC operations as follows-

- End to end processing –
  - o payments to service providers
  - o employee compensation and associated transactions
- Financial record keeping and account reconciliations to ensure accuracy of transactions and associated information
- Ensuring compliance with the applicable financial regulations
- Providing financial decision support information including income and expenditure analysis and budget monitoring
- Reporting to various Stakeholders including Shareholder, National Treasury, Board and other Governance structures and Leverage partners.
- Procurement of goods and services and ensuring compliance with the relevant prescripts

During the year under review the Finance Branch operated primarily on a remote basis and was able to successfully provide the requisite support to the rest of the WRC's operations.

In the 2021/22 financial year the Branch had some vacancies that arose in its organisational structure, however, the team refocused its efforts and managed to continue providing the support services. This resulted in the team being stressed and in our view this is not sustainable and will require a review of the staffing structure.

One of the key strategic imperatives for the Finance Portfolio is to ensure that the use of technology to its full potential as this would ideally result in a cost-effective finance service delivery structure which will benefit the WRC in the long term. This would also mean that a lean structure would be able to service the entity.

In line with this vision the core financial system was successfully upgraded from Sage evolution to Sage 200 and with the support from Corporate Services Information Technology division this was seamless.

The biggest benefits of automation within the finance and SCM function include:

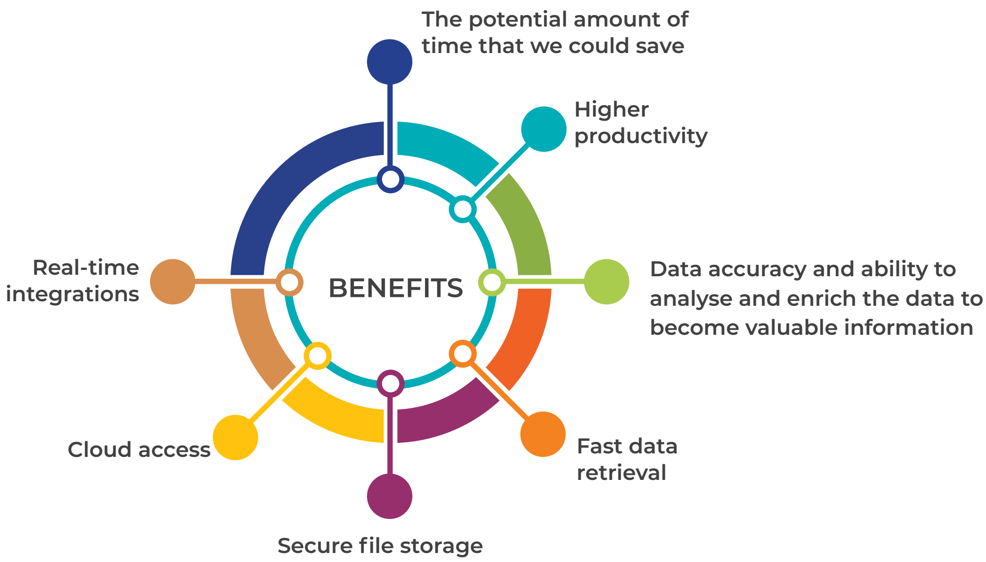


Figure 14. Benefits of automation within the Finance branch.

Going forward there are plans to continue pursuing the automation and digitisation of the finance and supply chain management function.

The objective of this KPA is to enhance the financial sustainability of the organisation by increasing income diversification. The key contributors include improving financial planning and management practices, achieving unqualified audit results through meeting the required accounting and auditing standards and complying with legislative prescripts.

Table 7. Performance against financial targets for 2021/22.

Key performance indicator	Achieved 2019/20	Achieved 2020/21	Target 2021/22	Achieved 2021/22	Variance	Comments
The total amount of leverage income	R65.2 million	R53.46 million	n/a	n/a	n/a	None
Initiate contracts with other organisations that increase leverage funding	6	4	n/a	n/a	n/a	None
Improve response to internal audit results	100%	100%	100% of all internal audit queries fully addressed	100%	n/a	None
Improve response to external audit results	Achieved unqualified audit	Achieved unqualified audit	Unqualified audit report	Achieved unqualified audit	n/a	None
The percentage of previous year's external audit queries fully addressed	100%	100%	100% of all external audit queries fully addressed	100%	n/a	None

B

Summary of financial information

Income sources for the WRC

The Water Research Levy (WRL) is the WRC's main source of revenue. It is receivable in terms of the Water Research Act No. 34 of 1971. The Rand Water Board, Umgeni Water Board and the DWS collect the WRL on behalf of the WRC from various water users based on their water sales volumes.

Leverage income arises when the WRC, in partnership with other organisations, undertakes research and innovation projects where it may or may not also be a co-funder. The leverage-funded component of the WRC operations is an important funding mechanism as the Commission moves to an increased impact portfolio and it enables the WRC to fund more research than it otherwise would be able to.

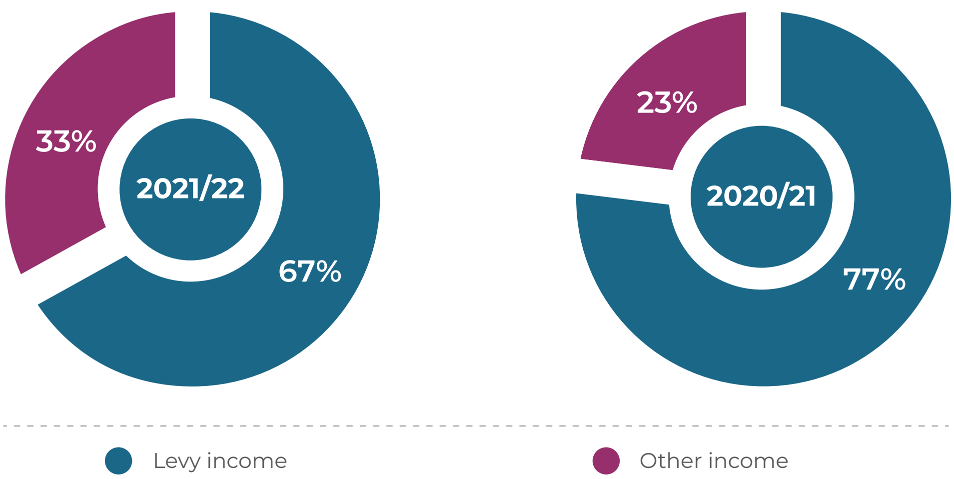
Investment income arises from interest that the WRC earns on the cash resources that it holds in respect of leverage funding as well as working capital management related to levy income that is paid bi-annually by water boards. This income is not a guaranteed source of funds, and the WRC does not rely on it in any significant manner in its long-term financial planning.

Table 8. Revenue collection

	2021/22		
Sources of revenue	Budget (R'000)	Actual amount collected (R'000)	(Over)/Under collection (R'000)
Water Research Levies	275,784	279,626	(3,842)
Leverage	56,128	130,752	(74,624)
Investment income	5,605	6,806	(1,201)
Other income	154	321	(167)
Total	**337,671**	**417,505**	**(79,834)**

Detail explanations have been provided in Note 38 of the Annual Financial Statements (Budget information and explanation of differences) for the variances associated with the WRC's revenue sources.

Figure 15. Income indicators for 2021/22 compared to 2020/21.



**Other sources of income include leverage income*

As can be seen from Figure 15, levy income as a percentage of total income has decreased from 77% to 67%. This is due to an increase in leverage income as there was a considerable uptake of research in the 2021/22 financial year in respect of projects for which activities were postponed due to the restrictions previously imposed by the COVID-19 pandemic, as well as other government entities prioritising actionable projects that impact on youth, students, communities and innovations to support water and sanitation. This resulted in government departments providing funds to various state entities for support and roll-out in order to reduce the impact of the socio-economic effects of the COVID-19 pandemic.

Whilst the 2021/22 financial year was an exceptional year for leverage, it is imperative to note that the Water Research Levy continues to be the WRC's main source of revenue.

Table 9: Expenditure analysis: Comparison of Budget versus Actuals

	2021/22		
Expenditure	Budget (R'000)	Actual expenditure (R'000)	Over)/Under expenditure (R'000)
Fixed costs	12,330	12,270	60
Running costs	15,875	10,561	5,314
Human resources cost	122,836	115,220	7,616
Research, development and innovation cost	178,534	236,230	(57,696)
Corporate expenditure	2,736	2,717	19
Capital expenditure	5,360	713	4,647
Total	337,671	377,711	(40,040)

Explanations for the 2021/22 financial year

Detail explanations have been provided in Note 38 of the Annual Financial Statements (Budget information and explanation of differences), for the variances associated with expenditure. The actual expenditure with regards to running costs, human resource costs and capital expenditure is lower than the budget estimates. These variances are mainly due to savings as a direct consequence of the WRC using cost-effective digital ways of dissemination and promotion, COVID-19 restrictions imposed by government, and delays in improvements on IT projects and other technology infrastructure investments being postponed to the 2022/23 financial year.

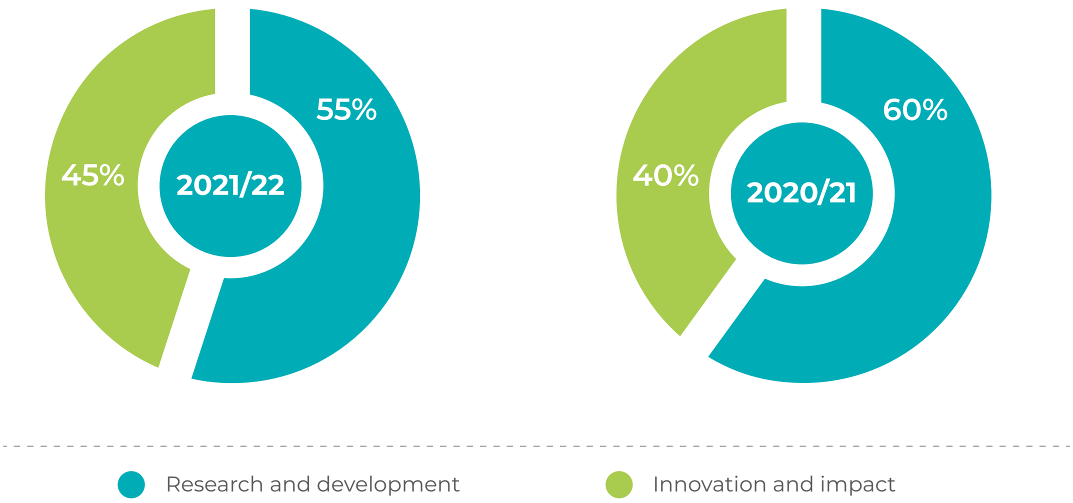
The higher research, development and innovation costs for the 2021/22 financial year was as a direct consequence of the increase in leverage funded projects. The reality is that there are no guarantees regarding availability of funds from research partners (leverage funding) and like other research institutions, the WRC also faces the ongoing uncertainty related to the various phases of the economic and business cycles.

Analysis of research and development expenditure

Table 10. Analysis of research, development and innovation (RDI) expenditure

	2021/22 (actual) (R'000)	2020/21 (actual) (R'000)
Research and Development	128,849	90,543
Innovation and Impact	107,381	60,660
Total	236,230	151,203

Figure 16: Utilisation of research funds

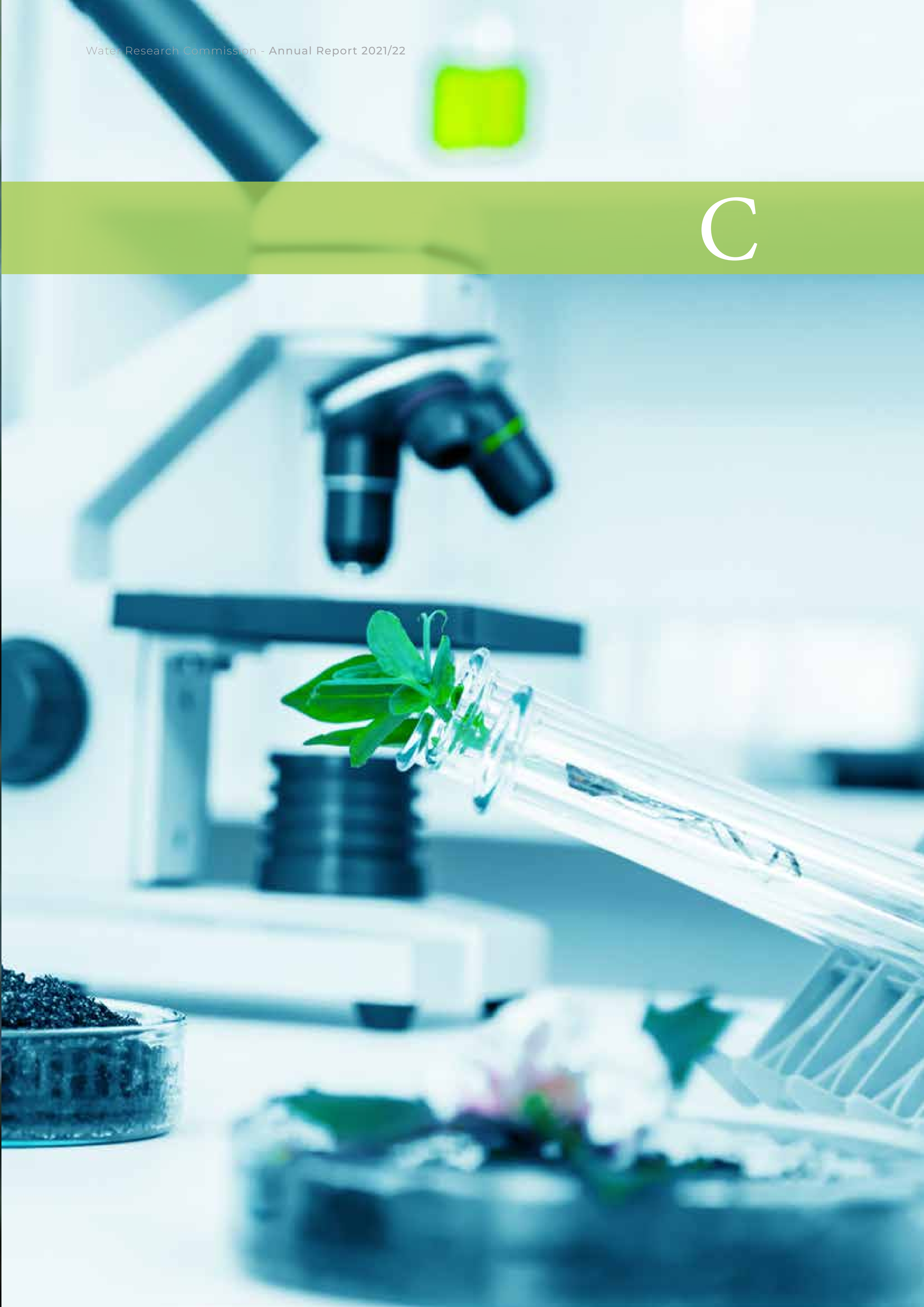


The total research, development and innovation (RDI) costs increased from R151 million to R236 million. This was mainly as a result of the big uptake of research (predominantly leverage) in the 2021/22 financial year in respect of projects for which activities were postponed due to the restrictions previously imposed by the COVID-19 pandemic, as well as securing additional funding due to government departments prioritising actionable projects that impact on youth, students, communities and innovations to support sanitation, and water in order to reduce the impact of the socio-economic effects of the COVID-19 pandemic.

The percentage utilisation of RDI indicates that approximately 45% (compared to 40% in 2020/21) was invested in projects that focused on Innovation and Impact. The WRC has a focus on achieving impact. As a public entity, the Commission forms part of a government that strives to improve the lives of its citizens. The WRC is increasing the emphasis on the need for evidence of economic and social returns from its investment in research. This has the potential to enhance social and economic wellbeing across all sections of society by means of:

- Improving the effectiveness and sustainability of public, private and third sector organisations
- Improving social welfare and cohesion
- Increasing economic prosperity, wealth, and job creation
- Enhancing cultural enrichment and quality of life

Moving to an increased impact portfolio means a major change in the investment strategy that involves pilots and demonstrations of new solutions, which requires larger scale equipment and technology investments at a much higher cost.



C

Section C: Governance

The WRC is governed by the Board as appointed by the Minister in terms of the Water Research Act. The Board is the accounting authority of the WRC and is supported by the Board Secretary. The CEO is the Accounting Officer and is accountable to the WRC Board.

Members of the Board

Dr Nozibele Mjoli
Chairperson

Prof Sibusiso Vil-Nkomo
Vice-Chairperson

Dr Aldo Stroebel

Dr Ntombifuthi Nala

Mr Imraan Patel

Dr Mosidi Makgae

Ms Nompumelelo Msezane

Ms Masaccha Khulekelwe Mbonambi

Dr Jennifer Molwantwa
CEO

Portfolio Committees

Table 11. WRC Board Portfolio Committees

Board & Committee	No. of meetings held	No. of members	Name of members
Board	11*	9	Dr Nozibele Mjoli (Chair) Prof Sibusiso Vil-Nkomo (Vice-Chair) Dr Aldo Stroebel Dr Mosidi Makgae Ms Nompumelelo Msezane Ms Masaccha Khulekelwe Mbonambi Mr Imraan Patel Dr Ntombifuthi Nala Mr Dhesigen Naidoo (CEO) (until 30 September 2021)
Research and Innovation	4	7	Dr Mosidi Makgae (Chairperson) Dr Aldo Stroebel Ms Nompumelelo Msezane Dr Ntombifuthi Nala Mr Imraan Patel Mr Dhesigen Naidoo (CEO) (until 30 September 2021) Dr Jannie Maree (co-opted member)
Human Resources, Social and Ethics	5	5	Ms Nompumelelo Msezane (Chairperson) Dr Mosidi Makgae Ms Nompumelelo Msezane Dr Ntombifuthi Nala Prof Sibusiso Vil-Nkomo Mr Dhesigen Naidoo (CEO) (until 30 September 2021)
Board Exco (also serves as Remuneration Committee)	8**	5	Dr Nozibele Mjoli (Chairperson) Prof Sibusiso Vil-Nkomo Dr Mosidi Makgae Ms Nompumelelo Msezane Mr Dhesigen Naidoo (CEO) (until 30 September 2021)
Audit, Risk and Finance Committee	11 ***	5	Ms Masaccha Mbonambi (Chairperson) Prof Sibusiso Vil-Nkomo Dr Aldo Stroebel Ms Shelly Thomas (co-opted member) Mr Philani Dlamini (co-opted member)

** 4 ordinary meetings were held and 7 special meetings for reporting purposes and due to the recruitment of the new CEO to the WRC.*

*** Additional meetings were held due to the recruitment of the new WRC CEO.*

**** 5 additional meetings were held due to the recruitment of the CAE.*

Board Charter

The Board Charter, which has been developed in alignment with King IV, provides a concise overview of the fiduciary duties and responsibilities of the Board of the WRC, as well as the procedures and structures that will govern how the Board is to function in order to discharge its duties The Board Charter was reviewed during the fourth quarter of the reporting period.

The following Board Committees have been established to assist the Board in discharging its duties. All Committees of the Board are operating in terms of approved terms of references.

- Audit Risk and Finance Committee (ARFC)
- Human Resources, Social and Ethics Committee (HRSEC)
- Board Executive Committee (Board EXCO)
- Research and Innovation Committee (RIC)

Table 12. The Board members

Name of member	Date of appointment	Board meetings	Research and Innovation Committee	HR, Social & Ethics Committee	***Board EXCO	Audit, Risk & Finance Committee
Dr Nozibele Mjoli (Chairperson of the Board)	1 February 2016	11	4	N/A	8	7
Prof Sibusiso Vil-Nkomo (Deputy Chairperson of the Board)	1 February 2016	11	N/A	4	7	11
Ms Nompumelelo Msezane (Chairperson of the HRSEC)	1 February 2016	8	4	5	6	N/A
Mr Imraan Patel	1 February 2016	3	2	N/A	N/A	N/A
Dr Ntombifuthi Nala	1 February 2016	7	3	4	N/A	N/A
Dr Aldo Stroebel	1 February 2016	8	3	N/A	N/A	8
Ms Masaccha Mbonambi (Chairperson of the ARFC)	1 February 2016	8	N/A	N/A	8	11
Ms Mosidi Makgae (Chairperson of the RIC)	1 February 2016	8	4	5	8	N/A
Mr Dhesigen Naidoo	*1 February 2016	6	1	3	N/A	N/A
Dr Jennifer Molwantwa (CEO and ex-officio member)**	**1 April 2022	N/A	N/A	N/A	N/A	N/A

** Appointed as an ex-officio member of this Board*

***Appointed as an ex-officio member of this Board on 1 April 2022.*

****Also serves as a Remuneration Committee*

Remuneration of Board members

Members of the Board are paid an allowance in respect of the performance of their duties. The allowance is determined by the Minister of Water and Sanitation in consultation with the Minister of Finance. Members who are not remunerated are the CEO and the ex-officio member of DWS. Board members are also paid for travel expenses.

Table 13. Remuneration paid to each Board member in 2021/22 (in respect of preparation for and attendance of meetings)

Name	Remuneration (rate per meeting	Total (R)
Dr Nozibele Mjoli (Chairperson)	R2,632	R213,194
Prof Sibusiso Vil-Nkomo (Vice-Chairperson)	R1,990	R131,340
Ms Mpumi Msezane	R1,990	R121,390
Dr Mosidi Elizabeth Makgae	R1,990	R109,450
Dr Ntombifuthi Patience Nala	R1,990	R35,820
Dr Aldo Stroebel	R1,990	R81,590
Ms Masaccha Khulekelwe Mbonambi	R1,990	R123,380
Ms Shelley Thomas (Co-opted member)	R1,990	R49,750
Mr Philani Dlamini (Co-opted member)	R1,990	R57,710
Dr Jannie Maree (Co-opted member)	R1,990	R7,960
Mr Imraan Patel	0	0
Dr Jennifer Molwantwa (CEO)	0	0

Risk Management

The WRC Board is accountable for the process of risk management, which is reviewed regularly. Risk management at the WRC is a continuous process. The WRC has established a risk management framework. The risks presented below have each been assessed in terms of impact and likelihood, i.e., inherent risk exposure. The WRC also identified the existing controls (mitigations) which are in place while assessing the perceived control effectiveness of the identified controls. Each risk was allocated to a risk owner. These risks were also linked to the strategic objectives of the WRC. A risk rating was assigned from both an inherent risk and a residual risk exposure perspective.

The Executive Management and the Board of the WRC undertake the risk assessment annually in November, facilitated by the internal auditors. The WRC reviews the risk register on a quarterly basis and reports its progress to the Audit, Risk and Finance Committee.

Internal control function

To enable it to meet its responsibility to provide reliable financial information, the WRC maintains accounting systems and practices adequately supported by a system of internal controls. These controls are designed to provide reasonable assurance that transactions are concluded in accordance with management authority and that the assets are adequately safeguarded.

The internal audit function monitors the effectiveness and efficiency of the internal control systems, reports their findings, and makes recommendations to management and the Audit, Risk and Finance Committee of the WRC Board, and monitors whether corrective action has been taken.

Internal audit & audit committee

The WRC has an in-house internal audit function which reports to the Audit, Risk and Finance Committee. The WRC internal audit has adopted formal terms of reference as its Internal Audit Charter. The in-house internal audit function prepared a rolling three-year internal audit plan, which on the recommendation of the Audit, Risk and Finance Committee was approved by the Board. The in-house internal audit function reports directly to the Audit, Risk and Finance Committee. For the 2021/22 financial year it performed the following audits:

- Levy income review
- Supply chain management review
- Human resource review
- Risk management review
- Performance information review
- IT Cloud review
- Follow-up reviews on previous internal audit reports issued and the Audit-General report
- Ad-hoc reviews (POPI policy review and the WRC disciplinary processes review)

Table 14. Audit Committee Member details

Name	Qualifications	Internal/ External	Date appointed
Ms Masaccha Mbonambi (Chairperson)	B.Com Accounting, B.Com (Hons), a certificate in Board Governance, certificate in Enterprise Risk Management	External	1 February 2016
Ms Shelley Thomas	CA SA	External	1 November 2017
Mr Philani Dlamini	B.Com Accounting (Hons), CASA, Certified Internal Auditor	External	1 November 2017
Prof Sibusiso Vil-Nkomo	PhD	External	1 February 2016
Dr Aldo Stroebel	PhD, Postdoctoral research at Wageningen University (The Netherlands)	External	1 February 2016
Mr Dhesigen Naidoo	Msc Chemical Pathology	Internal	1 October 2011 until 30 September 2022

Fraud and corruption

The WRC has a zero-tolerance fraud and corruption policy. All fraud and corruption will be investigated and followed up. The application of all remedies falls within the full extent of the law and the implementation of appropriate prevention and detection controls. The WRC has an approved fraud prevention policy and whistle-blowing policy to ensure that the Commission's tolerance to fraud and corruption is integrated into the day-to-day activities of the organisation. Further to that the WRC has a 24-hour ethics hotline hosted by an external service provider. All fraud hotline calls received are reported on a quarterly basis to the Audit, Risk and Finance Committee.

Code of ethics and business conduct

The sustainability of the WRC starts with a value system and a principles-based approach to doing business. This means operating in ways that, at a minimum, meet fundamental responsibilities in the areas of human rights, labour, environment, legal compliance, and anti-corruption. The WRC Code of Ethics and business conduct is aligned to the South African Constitution and is implemented through "The Ten Principles of the UN Global Compact".

By incorporating these principles into strategies, policies, and procedures, and establishing a culture of integrity, the WRC not only upholds the basic responsibilities to its people and the planet, but also ensures the sustainability of the organisation.

The Code of Ethics is the WRC's promise to operate with candour and truthfulness in its dealings and communications. The WRC expects that the organisation will be operated in accordance with the principles set forth in this Code and that all WRC employees, from the members of the Board, the Executive to each individual WRC employee, will be held accountable for meeting these standards.

D

Section D:

WRC Consolidated financial statements

for the year ended 31 March 2022

Contents

Statement of responsibility

and confirmation of accuracy for the Annual Report 2021/22

The Accounting Authority is responsible for the preparation of the public entity's Annual Financial Statements and for the judgements made in this information.

The Accounting Authority is responsible for establishing and implementing a system of internal control designed to provide reasonable assurance as to the integrity and reliability of the Annual Financial Statements.

The external auditors are engaged to express an independent opinion on the Annual Financial Statements of the public entity. The Annual Financial Statements for the year ended 31 March 2022 have been audited by the external auditors and their report is presented on 79 to 82.

The financials set of pp 83 to 144, which have been prepared on the going concern basis, were approved by the Board members on 29 July 2022 and were signed on its behalf by

Dr JB Molwantwa
Chief Executive Officer

Dr NP Mjoli
Chairperson of the Board

Report of the Audit and Risk Committee

We are pleased to present our report for the financial year ended 31 March 2022.

AUDIT, RISK AND FINANCE COMMITTEE RESPONSIBILITIES

The report of the Audit Risk and Finance Committee (Committee) is required by Section 51(1)(a)(ii) of the Public Finance Management Act (as amended) and paragraph 27.1.7 of the Treasury Regulations. The Committee has adopted the formal terms of reference as its Charter, which was approved by the Board. The Committee reports that it has executed its responsibilities in compliance with the Charter and has discharged all of its responsibilities for the year under review.

AUDIT, RISK AND FINANCE COMMITTEE COMPOSITION

The Committee comprised five (5) non-executive members, of which three (3) are members of the WRC Board and two (2) are external members. The Committee comprises persons with a blend of skills, knowledge, and experience necessary to discharge its responsibilities. As at 31 March 2022, the Committee consisted of the following members:

1. Ms Masaccha Mbonambi (Chairperson)
2. Prof Sibusiso Vil-Nkomo
3. Dr Aldo Stroebel
4. Mr Philani Dlamini
5. Ms Shelley Thomas

EFFECTIVENESS OF INTERNAL CONTROLS

The Committee has found that the system of internal control is generally adequate in design, but the effective implementation of the existing controls requires executive intervention and focused efforts for improvement in order to ensure that the WRC achieves its set objectives. The control deficiencies identified by both the Internal Audit and the External Auditors provides the Board with an opportunity to improve, as the system is designed to manage, rather than eliminate the risk of failure and to maximise opportunities to achieve the set objectives.
The Internal Audit (IA) function is responsible for evaluating the control environment and assisting the Committee to fulfill its responsibilities. The IA unit operated satisfactorily during the 2021/22 financial year. The function remained generally effective and objective in executing its mandate, in line with the internal audit charter and internal audit standards.

The three-year rolling and annual internal audit plans were approved by the Committee at the beginning of the financial year under review. The Committee is satisfied that the plan represented a clear alignment with the key risks faced by the WRC and a good balance across the different categories of audits ,i.e. risk based, mandatory, performance, ICT and follow-up audits.

IN-YEAR MANAGEMENT AND QUARTERLY REPORT

The Committee noted the content and quality of financial and non-financial quarterly reports prepared and submitted by the Accounting Officer during the year under review. Certain improvements were proposed and accepted by Management and have been implemented.

Report of the Audit and Risk Committee

EVALUATION OF THE FINANCIAL STATEMENTS AND ANNUAL PERFORMANCE REPORT

The Committee has:

- reviewed and discussed the unaudited and audited Annual Financial Statements and Annual Performance Report included in the Annual Report;
- reviewed changes relating to the Annual Financial Statements and Annual Performance Report;
- reviewed the entity's compliance with legal and regulatory provisions;
- reviewed the Auditor-General of South Africa's (AGSA) management report and management's response thereto.

AUDITOR-GENERAL SOURTH AFRICA

The Committee considered and reviewed the audit implementation plan for the previous financial year. Based on the interaction with management, internal audit reports and the AGSA audit report, the Committee reports that significant matters have been adequately addressed.

The 2021/22 audit was conducted by the AGSA. In consultation with Management, the Committee agreed to the engagement letter, audit plan and the fees for the financial year ended 31 March 2022. The engagement letter was approved by the Board.

The Committee accepts the audit opinion and conclusion expressed by the AGSA on the Annual Financial Statements and the Annual Performance Report.

On behalf of the Audit Risk and Finance Committee

Chairperson of the Audit Risk and Finance Committee

Report of the Auditor-General to Parliament

Report on the audit of the consolidated and separate financial statements

Opinion

1. I have audited the consolidated and separate financial statements of the Water Research Commission (WRC) and its subsidiary (the group) set out on pages 83 to 144, which comprise the consolidate and separate statement of financial position as at 31 March 2022, the consolidated and separate statement of financial performance, statement of changes in net assets, statement of cash flows and statement of comparison of budget and actual amounts for the year then ended, as well as 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 financial position of the group as at 31 March 2022, and their financial performance and cash flows for the year then ended in accordance with the Standards of Generally Recognised Accounting Policies (GRAP) and the requirements of the Public Finance Management Act 1 of 1999 (PFMA).

Basis for 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' International code of ethics for professional accountants (including international Independence Standards) (IESBA code) as well as other 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.

Emphasis of matter

6. I draw attention to the matter below. My opinion is not modified in respect of this matter.

Irregular expenditure

7. As disclosed in note 36 to the financial statements, the WRC incurred irregular expenditure of R12 216 527 as performance bonuses and salary increases were not approved in accordance with the delegations of authority as required by section 56 of the PFMA.

Responsibilities of the accounting authority for the consolidated and separate financial statements

8. The accounting authority is responsibility of the preparation and fair presentation of the consolidated and separate financial statements in accordance with GRAP, 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.

9. In preparing the consolidated and separate financial statements, the accounting authority is responsible for assessing the group'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 appropriate governance structure either intends to liquidate the group or to cease operations, or has not realistic alternative but to do so.

Report of the Auditor-General to Parliament

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

10. 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 the ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated and separate financial statements.

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

Report on the audit of the annual performance report

Introduction and scope

12. In accordance with the Public Audit Act 25 of 2004 (PAA) and the general notice issued in terms thereof, I have a responsibility to report on the usefulness and reliability of the reported performance information against predetermined objectives for selected objectives presented in the annual performance report. I performed procedures to identify material findings but not to gather evidence to express assurance.

13. My procedures address the usefulness and reliability of the reported performance information, which must be based on the public entity's approved performance planning documents. I have not evaluated the completeness and appropriateness of the performance indicators included in the planning documents. My procedures do not examine whether the actions taken by the public entity enabled service delivery. My procedures do not extend to any disclosures or assertions relating to the extent of achievements in the current year or 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.

14. 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 objective presented in the public entity's annual performance report for the year ended 31 March 2022:

Portfolio	Pages in the annual performance report
Research, development and innovation portfolio	33 to 35

15. I performed procedures to determine whether the reported performance information was properly presented and whether performance was consisted 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.

16. I did not find any material findings on the usefulness and reliability of the reported performance information for this objective:
    - Research, development and innovation portfolio

Report of the Auditor-General to Parliament

Other matter

17. I draw attention to the matter below.

Achievement of planned targets

18. Refer to the annual performance report on 31 to 62 for information on the achievement of planned targets for the year and management's explanations provided for the over/under achievement of targets

Report on the audit of compliance and legislation

19. 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.

20. I did not identify any material findings on compliance with the specific matters in key legislation set out in the general notice issued in terms of the PAA.

Other information

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

22. My opinion on the consolidated and separate 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 on it.

23. 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 objective presented in the annual performance report, or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

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

Internal control deficiencies

25. 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 on it. I did not identify any significant deficiencies in internal control.

Auditor - General

Pretoria
30 July 2022

AUDITOR-GENERAL

Annexure – Auditor-general's responsibility for the audit

1. As part of an audit in accordance with the ISAs, I exercise professional judgment 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 on the public entity's compliance with respect to the selected subject matters.

Consolidated and separate financial statements

2. In addition to my responsibility for the audit of the consolidated and separate financial statements as described in this 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 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 ability of the Water Research Commission 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 my opinion on the financial statements. My conclusions are based on the information available to me at the date of this auditor's report. However, future events or conditions may cause 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 determine 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 solely 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 provide the accounting authority with a statement that I have complied with relevant ethical requirements regarding independence and communicate with them all relationships and other matters that may reasonably be thought to bear on my independence and, where applicable, actions taken to minimise threats or safeguards applied.

Statements of Financial Position

for the year ended 31 March 2022

		Group		WRC	
		2022	2021	2022	2021
	Note(s)	R	R	R	R
Assets					
Current assets					
Receivables	3	113,072,859	53,382,689	113,066,095	53,375,964
Cash and cash equivalents	4	310,306,400	300,323,629	310,277,542	300,293,167
Total current assets		**423,379,259**	**353,706,318**	**423,343,637**	**353,669,131**
Non-current assets					
Property, plant and equipment	5	5,785,073	7,888,123	5,785,073	7,888,123
Intangible assets	6	3,512,568	3,704,877	3,512,568	3,704,877
Investment in wholly controlled entity	7	-	-	1	1
Receivables	3	1,221,743	1,164,764	1,221,743	1,164,764
Total non-current assets		**10,519,384**	**12,757,764**	**10,519,385**	**12,757,765**
Total assets		**433,898,643**	**366,464,082**	**433,863,022**	**366,426,896**
Liabilities					
Current liabilities					
Finance lease obligation	8	62,894	570,717	62,894	570,717
Operating lease liability	9	8,723,727	8,900,199	8,723,727	8,900,199
Payables	10	184,114,204	154,678,966	184,114,204	154,678,966
Accrual – leave and service bonus (13th cheque)	11	10,395,506	9,289,434	10,395,506	9,289,434
Provision for performance bonus	12	10,950,190	10,322,076	10,950,190	10,322,076
Provision for settlement fees	13	452,860	-	452,860	-
Revolving credit facility	4	196,557	162,842	196,557	162,842
Total current liabilities		**214,895,938**	**183,924,234**	**214,895,938**	**183,924,234**
Non-current liabilities					
Finance lease obligation	8	-	62,894	-	62,894
Employee benefit obligation	14	3,480,742	4,047,692	3,480,742	4,047,692
Total non-current liabilities		**3,480,742**	**4,110,586**	**3,480,742**	**4,110,586**
Total liabilities		**218,376,680**	**188,034,820**	**218,376,680**	**188,034,820**
Net assets					
Accumulated surplus/ (accumulated deficit)		215,521,963	178,429,262	215,486,342	178,392,076
Total net assets		**215,521,963**	**178,429,262**	**215,486,342**	**178,392,076**

Statement of Financial Performance

for the year ended 31 March 2022

		Group		WRC	
		2022	2021	2022	2021
	Note(s)	R	R	R	R
Revenue from exchange transactions					
Leverage Income	15	130,752,173	73,651,170	130,752,173	73,651,170
Other Income	15	312,222	139,774	312,222	139,774
Investment revenue	15	6,806,405	5,303,926	6,806,405	5,303,926
Total revenue from exchange transactions		**137,870,800**	**79,094,870**	**137,870,800**	**79,094,870**
Revenue from non-exchange transactions					
Water research levies	16	279,625,422	265,578,717	279,625,422	265,578,717
Total revenue from non-exchange transactions		**279,625,422**	**265,578,717**	**279,625,422**	**265,578,717**
Total revenue		**417,496,222**	**344,673,587**	**417,496,222**	**344,673,587**
Expenditure					
Depreciation and amortisation	17	2,972,975	4,387,038	2,972,975	4,387,038
Impairment losses and write-offs	18	21,418	1,582	21,418	1,582
Employee-related costs	19	113,088,061	101,424,616	113,088,061	101,424,616
Finance costs	20	533,799	537,331	533,799	537,331
General expenses	21	14,917,697	9,517,619	14,916,132	9,515,200
Lease rental on operating lease	22	10,894,259	11,024,352	10,894,259	11,024,352
Interest and penalties recovered	23	-	(968)	-	-
Repairs and maintenance		146,729	189,086	146,729	189,086
Research development and innovation	24	236,230,197	151,202,261	236,230,197	151,202,261
Total expenditure		**378,805,135**	**278,282,917**	**378,803,570**	**278,281,466**
Surplus from operating activities		**38,691,087**	**66,390,670**	**38,692,652**	**66,392,121**
Gains and (losses) on sale of assets	25	8,925	-	8,925	-
Actuarial gains/(losses)	14	(1,607,311)	71,199	(1,607,311)	71,199
Surplus for the year		**37,092,701**	**66,461,869**	**37,094,266**	**66,463,320**

Statements of Changes in Net Assets

for the year ended 31 March 2022

	Accumulated surplus	Total net assets
	R	R
Group		
Balance at 1 April 2020	111,967,393	111,967,393
Changes in net assets		
Surplus for the year	66,461,869	66,461,869
Balance at 31 March 2021	**178,429,262**	**178,429,262**
Balance at 1 April 2021	178,429,262	178,429,262
Changes in net assets		
Surplus for the year	37,092,701	37,092,701
Balance at 31 March 2022	**215,521,963**	**215,521,963**

WRC		
Balance at 1 April 2020	111,928,756	111,928,756
Changes in net assets		
Surplus for the year	66,463,320	66,463,320
Balance at 31 March 2021	**178,392,076**	**178,392,076**
Balance at 1 April 2021	**178,392,076**	**178,392,076**
Changes in net assets		
Surplus for the year	37,094,266	37,094,266
Balance at 31 March 2022	**215,486,342**	**215,486,342**

Statements of Cash Flows

for the year ended 31 March 2022

		Group		WRC	
		2022	2021	2022	2021
	Note(s)	R	R	R	R
Cash flows from operating activities					
Receipts					
Cash receipts from customers		352,872,901	347,039,769	352,872,705	347,038,075
Investment income		7,169,992	5,782,171	7,169,992	5,782,171
Payments					
Cash paid to suppliers		(343,338,434)	(281,319,372)	(343,336,634)	(281,318,340)
Net cash flows from operating activities	29	**16,704,459**	**71,502,568**	**16,706,063**	**71,501,906**
Cash flows used in investing activities					
Proceeds from sale of property, plant and equipment		23,381	-	23,381	-
Purchase of property, plant and equipment		(362,278)	(73,473)	(362,278)	(73,473)
Purchase of intangible assets		(350,411)	(39,006)	(350,411)	(39,006)
Cash flows used in investing activities		**(689,308)**	**(112,479)**	**(689,308)**	**(112,479)**
Cash flows used in financing activities					
Employee benefit obligation – Contributions by WRC		(2,663,926)	-	(2,663,926)	-
Finance lease payments		(614,850)	(614,850)	(614,850)	(614,850)
Cash flows used in financing activities		**(3,278,776)**	**(614,850)**	**(3,278,776)**	**(614,850)**
Effect of exchange rate movement on cash balances		(2,787,319)	(11,492,069)	(2,787,319)	(11,492,069)
Net increase in cash and cash equivalents		**9,949,056**	**59,283,170**	**9,950,660**	**59,282,508**
Cash and cash equivalents at beginning of the year		300,160,787	240,877,617	300,130,325	240,847,817
Cash and cash equivalents at end of the year	4	**310,109,843**	**300,160,787**	**310,080,985**	**300,130,325**

Statements of Comparison of Budget and Actual Amounts

for the year ended 31 March 2022

		Budget on cash basis				
	Note(s)	Approved budget	Adjustments	Final budget	Actual amounts on comparable basis	Difference between final budget and actual
	38	R	R	R	R	R
Revenue from exchange transactions	15					
Leverage Income		56 ,128,294	-	56,128,294	130,752,173	(74,623,879)
Other Income		144,689	8,813	153,502	321,146	(167,644)
Investment revenue	15	4,185,198	1,420,079	5,605,277	6,806,405	(1,201,128)
Total revenue from exchange transactions		60,458,181	1,428,892	61,887,073	137,879,724	(75,992,651)
Revenue from non-exchange transactions	16					
Water research levies		271,859,804	3,924,182	275,783,986	279,625,422	(3,841,436)
Total revenue from non-exchange transactions		**271,859,804**	**3,924,182**	**275,783,986**	**279,625,422**	**(3,841,436)**
Total revenue		**332,317,985**	**5,353,074**	**337,671,059**	**417,505,146**	**(79,834,087)**
Expenditure						
Fixed costs		12,330 ,337	-	12 ,330,337	12,269,899	60,438
Running costs		17,153,250	(1, 278,057)	15 ,875,193	10,561,304	5,313,889
Human resource costs		122,835,977	-	122,835,977	115,219,810	7,616,167
Research, development and expenditure		171,902,522	6,631,131	178,533,653	236,230,197	(57,696,544)
Corporate expenditure		2,736,449	-	2,736,449	2,716 ,795	19,654
Capital expenditure		5,359,450	-	5,359,450	712,689	4,646,761
Total expenditure		332,317,985	5,353,074	337,671,059	377,710,694	(40,039,635)
Actual amounts on Comparable Basis as Presented in the Budget and Actual Comparative Statement		**-**	**-**	**-**	**39,794,452**	**(39,794,452)**

Refer to note 38 for explanations for material differences between budget and actual amounts and for explanations for the movement from the approved budget to the final budget.

Refer to note 39 for a reconciliation of budget surplus/deficit with the surplus/deficit in the Statement of Financial Performance.

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1. Presentation of Annual Financial Statements

The annual financial statements have been prepared in accordance with the Standards of Generally Recognised Accounting Practice (GRAP), issued by the Accounting Standards Board in accordance with Section 91(1) of the Public Finance Management Act (Act 1 of 1999).

These annual financial statements have been prepared on an accrual basis of accounting and are in accordance with historical cost convention as the basis of measurement, unless specified otherwise. They are presented in South African Rand.

These financial statements have been prepared based on the expectation that the economic entity will continue to operate as a going concern for at least the next 12 months.

A summary of the significant accounting policies, which have been consistently applied in the preparation of these annual financial statements, are disclosed below.

These accounting policies are consistent with the previous period.

1.1 Consolidation

Consolidated financial statements

Consolidated annual financial statements are the annual financial statements of an economic entity in which the assets, liabilities, net assets, revenue, expenses and cash flows of the controlling entity and its controlled entities are presented as those of a single economic entity.

The entity determines whether it is a controlling entity by assessing whether it controls the other entity. The entity controls another entity when it is exposed, or has rights, to variable benefits from its involvement with the other entity and has the ability to affect the nature and amount of those benefits through its power over the other entity.

Accounting requirements

The entity as controlling entity prepares consolidated annual financial statements using uniform accounting policies for like transactions and other events in similar circumstances. Adjustments are made, when necessary, to the financial statements of the controlled entity to bring their accounting policies in line with those of the controlling entity.

Consolidation of a controlled entity begins from the date the entity obtains control of the other entity and cease when the entity loses control of the other entity.

Consolidation procedures

Consolidated financial statements:

- Combine like items of assets, liabilities, net assets, revenue, expenses and cash flows of the controlling entity with those of its controlled entities.
- Offset (eliminate) the carrying amount of the controlling entity's investment in each controlled entity and the controlling entity's portion of net assets of each controlled entity.
- Eliminate in full intra-economic entity assets, liabilities, net assets, revenue, expenses and cash flows relating to transactions between entities of the economic entity. Intra-economic entity losses may indicate an impairment that requires recognition in the consolidated financial statements.

Measurement

The entity includes the revenue and expenses of a controlled entity in the consolidated annual financial statements from the date it gains control until the date when the entity ceases to control the controlled entity. Revenue and expenses of the controlled entity are based on the amounts of the assets and liabilities recognised in the consolidated annual financial statements at the acquisition date.

Reporting dates

The financial statements of the entity as controlling entity and its controlled entities used in the preparation of the consolidated financial statements are prepared as at the same reporting date. When the end of the reporting dates of the controlling entity is different from that of a controlled entity, the controlled entity prepares, for consolidation purposes, additional financial statements as of the same date as the financial statements of the controlling entity unless it is impracticable to do so. When

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the financial statements of a controlled entity used in the preparation of consolidated financial statements are prepared as of a date different from that of the controlling entity, adjustments are made for the effects of significant transactions or events that occur between that date and the date of the controlling entity's financial statements. In any case, the difference between the end of the reporting date of the controlled entity and that of the controlling entity is no more than three months.

1.2 Significant judgements and sources of estimation uncertainty

In preparing the annual financial statements, management is required to make estimates and assumptions that affect the amounts represented in the annual financial statements and related disclosures. Use of available information and the application of judgement is inherent in the formation of estimates. Actual results in the future could differ from these estimates which may be material to the annual financial statements. Significant judgements include:

Receivables

The economic entity assesses its trade receivables for impairment at the end of each reporting period. In determining whether an impairment loss should be recorded in surplus or deficit, management makes judgements as to whether there is observable data indicating a measurable decrease in the estimated future cash flows from a financial asset.

Where impairment indicators arise, these receivables are individually assessed for impairment. Accounts outstanding for 120 days and more are fully impaired. Whilst these accounts are being followed up, past experience has indicated that accounts outstanding for such long periods are seldom recovered.

All other receivables which are not individually assessed and do not fall in the category of 120 days and more, are grouped together and assessed.

Fair value estimation

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

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

Impairment testing

The entity assesses its receivables for impairment at the end of each reporting period. In determining whether an impairment loss should be recorded in surplus or deficit, the entity makes judgements as to whether there is any observable data indicating a measurable decrease in the estimated future cash flows from the financial asset.

The economic entity reviews and tests the carrying value of assets when events or changes in circumstances suggest that the carrying amount may not be recoverable. Assets are grouped at the lowest level for which identifiable cash flows are largely independent of cash flows of other assets and liabilities. If there are indications that impairment may have occurred, estimates are prepared of expected future cash flows for each group of assets. Expected future cash flows used to determine the value in use of tangible assets are inherently uncertain and could materially change over time.

Useful lives and residual values

The entity reassesses the useful lives and residual values of property, plant and equipment on an annual basis. In reassessing the useful lives and residual values of property, plant and equipment management considers the condition and use of the individual assets, to determine the remaining period over which the asset can and will be used.

Employee benefit obligations (Medical aid scheme)

The present value of the post-retirement obligation depends on a number of factors that are determined on an actuarial basis using a number of assumptions. The assumptions used in determining the net cost (income)

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include the discount rate. Any changes in these assumptions will impact the carrying amount of post-retirement obligations.

The appropriate discount rate is determined at the end of each year. This is the interest rate that should be used to determine the present value of estimated future cash outflows expected to be required to settle the post retirement obligations. The discount rate that reflects the time value of money is best approximated by reference to market yields at the reporting date on government bonds. Where there is no deep market in government bonds with a sufficiently long maturity to match the estimated maturity of all the benefit payments, the entity uses current market rates of the appropriate term to discount shorter term payments, and estimates the discount rate for longer maturities by extrapolating current market rates along the yield curve.

Other key assumptions for post-retirement obligations are based on current market conditions. Additional information is disclosed in note 14.

Effective interest rate

The economic entity used the prime interest rate to discount future cash flows.

Impairment of receivables

On receivables an impairment loss is recognised in surplus and deficit when there is objective evidence that it is impaired. The impairment is measured as the difference between the carrying amount and the present value of estimated future cashflows discounted at the original effective interest rate.

1.3 Property, plant and equipment

Property, plant and equipment are tangible non-current assets (including infrastructure assets) that are held for use in the production or supply of goods or services, rental to others, or for administrative purposes, and are expected to be used during more than one period.

The cost of an item of property, plant and equipment is recognised as an asset when:

- it is probable that future economic benefits or service potential associated with the item will flow to the economic entity; and
- the cost of the item can be measured reliably.

Property, plant and equipment is initially measured at cost.

The cost of an item of property, plant and equipment is the purchase price and other costs attributable to bring the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Trade discounts and rebates are deducted in arriving at the cost.

Where an asset is acquired through a non-exchange transaction, its cost is its fair value as at date of acquisition. Where an item of property, plant and equipment is acquired in exchange for a non-monetary asset or monetary assets, or a combination of monetary and non-monetary assets, the asset acquired is initially measured at fair value (the cost). If the acquired item's fair value was not determinable, it's deemed cost is the carrying amount of the asset(s) given up.

When significant components of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

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

The initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located is also included in the cost of property, plant and equipment, where the entity is obligated to incur such expenditure, and where the obligation arises as a result of acquiring the asset or using it for purposes other than the production of inventories.

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Recognition of costs in the carrying amount of an item of property, plant and equipment ceases when the item is in the location and condition necessary for it to be capable of operating in the manner intended by management. Property, plant and equipment is carried at cost less accumulated depreciation and any impairment losses. Property, plant and equipment are depreciated on the straight-line basis over their expected useful lives to their estimated residual value.

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

Item	Depreciation method	Average useful life
Furniture and fixtures	Straight-line	3 – 10 years
Motor vehicles	Straight-line	5 years
Office equipment	Straight-line	3 – 7 years
Computer equipment	Straight-line	3 – 10 years
Leasehold improvements	Straight-line	Years according to lease term
Finance lease assets	Straight-line	Years according to lease term

Each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item is depreciated separately.

The residual value, useful life and depreciation method applied to an asset is reviewed at least at the end of each reporting date. If the expectations differ from previous estimates, the change is accounted for as a change in an accounting estimate.

The depreciation charge for each period is recognised in surplus or deficit unless it is included in the carrying amount of another asset.

Items of property, plant and equipment are derecognised when the asset is disposed of or when there are no further economic benefits or service potential expected from the use of the asset.

The gain or loss arising from the derecognition of an item of property, plant and equipment is included in surplus or deficit when the item is derecognised. The gain or loss arising from the derecognition of an item of property, plant and equipment is determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item.

1.4 Intangible assets

An asset is identifiable if it either:

- is separable, i.e. is capable of being separated or divided from an entity and sold, transferred, licensed, rented or exchanged, either individually or together with a related contract, identifiable assets or liability, regardless of whether the entity intends to do so; or
- arises from binding arrangements (including rights from contracts), regardless of whether those rights are transferable or separable from the economic entity or from other rights and obligations.

An intangible asset is recognised when:

- it is probable that the expected future economic benefits or service potential that are attributable to the asset will flow to the economic entity; and
- the cost or fair value of the asset can be measured reliably.

Where an intangible asset is acquired through a non-exchange transaction, its initial cost at the date of acquisition is measured at its fair value as at that date. Intangible assets are carried at cost less any accumulated amortisation and any impairment losses.

Expenditure on research (or on the research phase of an internal project) is recognised as an expense when it is incurred.

An intangible asset arising from development (or from the development phase of an internal project) is recognised when:

- it is technically feasible to complete the asset so that it will be available for use or sale.
- there is an intention to complete and use or sell it.

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- there is an ability to use or sell it.
- it will generate probable future economic benefits or service potential.
- there are available technical, financial and other resources to complete the development and to use or sell the asset.
- the expenditure attributable to the asset during its development can be measured reliably.

An intangible asset is regarded as having an indefinite useful life when, based on all relevant factors, there is no foreseeable limit to the period over which the asset is expected to generate net cash inflows or service potential. Amortisation is not provided for these intangible assets, but they are tested for impairment annually and whenever there is an indication that the asset may be impaired. For all other intangible assets amortisation is provided on a straight-line basis over their useful life.

The amortisation period and the amortisation method for intangible assets are reviewed at each reporting date.

Reassessing the useful life of an intangible asset with a finite useful life after it was classified as indefinite is an indicator that the asset may be impaired. As a result the asset is tested for impairment and the remaining carrying amount is amortised over its useful life.

Internally generated brands, mastheads, publishing titles, customer lists and items similar in substance are not recognised as intangible assets.

Internally generated goodwill is not recognised as an intangible asset.

Amortisation is provided to write down the intangible assets, on a straight-line basis, to their residual values as follows :

Item	Depreciation method	Average useful life
Computer software, other	Straight-line	3 – 18 years

Intangible assets are derecognised:

- on disposal; or
- when no future economic benefits or service potential are expected from its use or disposal

1.5 Investment in wholly controlled entity

Group financial statements

Investments in the controlled entity are consolidated in the economic entity's financial statements. Refer to the accounting policy on Consolidations Note 1.1

WRC financial statements

In the entity's separate financial statements, the investment in the wholly controlled entity are carried at cost less any accumulated impairment in accordance with the Standard of GRAP on Financial instruments.

The cost of an investment in a controlled entity 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 entity; plus
- any costs directly attributable to the purchase of the controlled entity

The entity applies the same accounting for each category of investment. The entity recognises a dividend or similar distribution in surplus or deficit in its separate financial statements when its right to receive the dividend or similar distribution is established.

Investments in the controlled entity that are accounted for in accordance with the accounting policy on Financial instruments in the consolidated financial statements, are accounted for in the same way in the controlling entity's separate financial statements.

1.6 Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or a residual interest of another entity.

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A financial asset is any asset that is:
- cash;
- a residual interest of another entity; or
- a contractual right to receive cash or another financial asset from another entity or to exchange financial assets or financial liabilities with another entity under conditions that are potentially favourable to the entity.

A financial liability is any liability that is a contractual obligation to:
- deliver cash or another financial asset to another entity; or
- exchange financial assets or financial liabilities under conditions that are potentially unfavourable to the entity.

A residual interest is any contract that manifests an interest in the assets of an entity after deducting all of its liabilities.

Classification

The entity has the following types of financial assets (classes and category) as reflected on the face of the statement of financial position or in the notes thereto:

Class	Category
Receivables	Financial asset measured at amortised cost
Cash and cash equivalents	Financial asset measured at fair value

The entity has the following types of financial liabilities (classes and category) as reflected on the face of the statement of financial position or in the notes thereto:

Class	Category
Payables	Financial liability measured at amortised cost
Finance lease obligation	Financial liability measured at amortised cost
Accruals	Financial liability measured at amortised cost

Initial recognition

The entity recognises a financial asset or a financial liability in its statement of financial position when the entity becomes a party to the contractual provisions of the instrument. The entity recognises financial assets using trade date accounting.

Initial measurement of financial assets and financial liabilities

The entity measures a financial asset and financial liability initially at its fair value plus transaction costs that are directly attributable to the acquisition or issue of the financial asset or financial liability.

Subsequent measurement of financial assets and financial liabilities

All financial assets and financial liabilities are measured after initial recognition using the following categories:
- Financial instruments at fair value
- Financial instruments at amortised cost
- Financial instruments at cost

All financial assets measured at amortised cost, or cost, are subject to an impairment review.

Financial Instruments at fair value

Cash and cash equivalents

Cash and cash equivalents comprise cash on hand and demand deposits, and other short-term highly liquid investments that are readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These are initially and subsequently recorded at fair value.

Loans

These include loans to and from wholly controlled entities and loans to employees. It is recognised initially at fair value plus direct transaction costs and subsequently measured at amortised cost.

Receivables

Receivables are measured at initial recognition at fair value and are subsequently measured at amortised cost using the effective interest rate method.

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Payables

Payables are initially measured at fair value and are subsequently measured at amortised cost, using the effective interest rate method.

Fair value measurement considerations

The fair values of listed investments are based on current bid prices. If the market for a financial asset is not active, the entity establishes fair value by using valuation techniques. These include the use of recent arm's length transactions, reference to other instruments that are substantially the same, discounted cash flow analysis, and option pricing models making maximum use of market inputs and relying as little as possible on entity specific inputs.

Gains and losses

A gain or loss arising from a change in the fair value of a financial asset or financial liability measured at fair value is recognised in surplus or deficit.

For financial assets and financial liabilities measured at amortised cost or cost, a gain or loss is recognised in surplus or deficit when the financial asset or financial liability is derecognised or impaired, or through the amortisation process.

Impairment and uncollectibility of financial assets

The entity assesses at the end of each reporting period whether there is any objective evidence that a financial asset or group of financial assets is impaired.

For amounts due to the entity, significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy and default of payments are all considered indicators of impairment.

If there is objective evidence that an impairment loss on financial assets measured at amortised cost has been incurred, the amount of the loss is measured as the difference between the asset's carrying amount and 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. The carrying amount of the asset is reduced through the using of an allowance account. The amount of the loss is recognised in surplus or deficit.

If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised, the previously recognised impairment loss is reversed by adjusting an allowance account. The reversal does not result in a carrying amount of the financial asset that exceeds 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 surplus or deficit.

Derecognition

Financial assets

The entity derecognises financial assets using trade date accounting.

The entity derecognises a financial asset only when:

- the contractual rights to the cash flows from the financial asset expire, are settled or waived;
- the entity transfers to another party substantially all of the risks and rewards of ownership of the financial asset; or
- the entity, despite having retained some significant risks and rewards of ownership of the financial asset, has transferred control of the asset to another party and the other party has the practical ability to sell the asset in its entirety to an unrelated third party, and is able to exercise that ability unilaterally and without needing to impose additional restrictions on the transfer. In this case, the entity
  - derecognises the asset; and
  - recognises separately any rights and obligations created or retained in the transfer.

On derecognition of a financial asset in its entirety, the difference between the carrying amount and the sum of the consideration received is recognised in surplus or deficit.

Financial liabilities

The entity removes a financial liability (or a part of a financial liability) from its statement of financial position when it is extinguished – i.e. when the obligation specified in the contract is discharged, cancelled, expires or waived.

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The difference between the carrying amount of a financial liability (or part of a financial liability) extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognised in surplus or deficit.

Presentation

Interest relating to a financial instrument or a component that is a financial liability is recognised as revenue or expense in surplus or deficit.

Offsetting of financial instruments

A financial asset and a financial liability are only offset and the net amount presented in the statement of financial position when the entity currently has a legally enforceable right to set off the recognised amounts and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

1.7 Statutory receivables

Identification

Statutory receivables are receivables that arise from legislation, supporting regulations, or similar means, and require settlement by another entity in cash or another financial asset.

Carrying amount is the amount at which an asset is recognised in the statement of financial position.

The cost method is the method used to account for statutory receivables that requires such receivables to be measured at their transaction amount, plus any accrued interest or other charges (where applicable) and, less any accumulated impairment losses and any amounts derecognised.

Nominal interest rate is the interest rate and/or basis specified in legislation, supporting regulations or similar means.

The transaction amount for a statutory receivable means the amount specified in, or calculated, levied or charged in accordance with, legislation, supporting regulations, or similar means.

Recognition

The economic entity recognises statutory receivables as follows:

- if the transaction is an exchange transaction, using the policy on Revenue from exchange transactions;
- if the transaction is a non-exchange transaction, using the policy on Revenue from non-exchange transactions (Taxes and transfers); or
- if the transaction is not within the scope of the policies listed in the above or another Standard of GRAP, the receivable is recognised when the definition of an asset is met and, when it is probable that the future economic benefits or service potential associated with the asset will flow to the entity and the transaction amount can be measured reliably.

Initial measurement

The economic entity initially measures statutory receivables at their transaction amount.

Subsequent measurement

The economic entity measures statutory receivables after initial recognition using the cost method. Under the cost method, the initial measurement of the receivable is changed subsequent to initial recognition to reflect any:

- interest or other charges that may have accrued on the receivable (where applicable);
- impairment losses; and
- amounts derecognised.

Impairment losses

The economic entity assesses at each reporting date whether there is any indication that a statutory receivable, or a group of statutory receivables, may be impaired.

Derecognition

The economic entity derecognises a statutory receivable, or a part thereof, when:

- the rights to the cash flows from the receivable are settled, expire or are waived;
- the economic entity transfers to another party

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substantially all of the risks and rewards of ownership of the receivable; or

- the economic entity, despite having retained some significant risks and rewards of ownership of the receivable, has transferred control of the receivable to another party and the other party has the practical ability to sell the receivable in its entirety to an unrelated third party, and is able to exercise that ability unilaterally and without needing to impose additional restrictions on the transfer. In this case, the entity:
  - derecognises the receivable; and
  - recognises separately any rights and obligations created or retained in the transfer.

The carrying amounts of any statutory receivables transferred are allocated between the rights or obligations retained and those transferred on the basis of their relative fair values at the transfer date. The entity considers whether any newly created rights and obligations are within the scope of the Standard of GRAP on Financial Instruments or another Standard of GRAP. Any difference between the consideration received and the amounts derecognised and, those amounts recognised, are recognised in surplus or deficit in the period of the transfer.

1.8 Leases

A lease is classified as a finance lease when it transfers substantially all the risks and rewards incidental to ownership. A lease is classified as an operating lease when it does not transfer substantially all the risks and rewards incidental to ownership.

Finance leases – lessee

Finance leases are recognised as assets and liabilities in the statement of financial position at amounts equal to the fair value of the leased property or, if lower, the present value of the minimum lease payments. The corresponding liability to the lessor is included in the statement of financial position as a finance lease obligation.

The discount rate used in calculating the present value of the minimum lease payments is the interest rate on debt owing to the lessor.

Minimum lease payments are apportioned between the finance charge and reduction of the outstanding liability. The finance charge is allocated to each period during the lease term so as to produce a constant periodic rate on the remaining balance of the liability.

Any contingent rents are expensed in the period in which they are incurred.

Operating leases – lessee

Operating lease payments are recognised as an expense on a straight-line basis over the lease term. The difference between the amounts recognised as an expense and the contractual payments are recognised as an operating lease asset or liability.

1.9 Impairment of assets

Cash-generating assets are assets managed with the objective of generating a commercial return. An asset generates a commercial return when it is deployed in a manner consistent with that adopted by a profit-oriented entity.

Non-cash generating assets are assets other than cash generating assets.

Identification

The economic entity assesses at each reporting date whether there is any indication that a cash-generating asset may be impaired. If any such indication exists, the economic entity estimates the recoverable amount of the asset (for all cash generating assets) and the recoverable service amount (for all non-cash generating assets).

Recognition and measurement (individual asset)

If the recoverable amount of a cash-generating asset is less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount. This reduction is an impairment loss. An impairment loss is recognised immediately in surplus or deficit.

If, the recoverable service amount of a non-cash-generating asset is less than its carrying amount, the carrying amount of the asset shall be reduced to its recoverable service amount. That reduction is an impairment loss.

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After the recognition of an impairment loss, the depreciation (amortisation) charge for the cash-generating asset is adjusted in future periods to allocate the cash-generating asset's revised carrying amount, less its residual value (if any), on a systematic basis over its remaining useful life.

1.10 Employee benefits

Employee benefits are all forms of consideration given by an entity in exchange for service rendered by employees.

Short-term employee benefits

Short-term employee benefits are employee benefits (other than termination benefits) that are due to be settled within twelve months after the end of the period in which the employees render the related service.

When an employee has rendered a service to the entity during a reporting period, the entity recognises the cost in the period in which the service was rendered equal to the undiscounted amount of short-term employee benefits expected to be paid in exchange for that service. The expected cost of compensated absences is recognised as an expense as the employees render services that increase their entitlement or, in the case of non-accumulating absences, when the absence occurs. The entity measures the expected cost of accumulating compensated absences as the additional amount that the entity expects to pay as a result of the unused entitlement that has accumulated at the reporting date.

The entity recognises the expected cost of bonus, incentive and performance related payments when the entity has a present legal or constructive obligation to make such payments as a result of past events and a reliable estimate of the obligation can be made. A present obligation exists when the entity has no realistic alternative but to make the payments.

Post-employment benefits

Post-employment benefits are employee benefits (other than termination benefits) that are payable after the completion of employment.

Post-employment benefits: Defined contribution plans

Defined contribution plans are post-employment benefit plans under which the entity pays fixed contributions into a separate entity (a fund) and will have no legal or constructive obligation to pay further contributions if the fund does not hold sufficient assets to pay all employee benefits relating to employee service in the current and prior periods.

When an employee has rendered a service to the entity during a reporting period, the entity recognises the contribution payable to a defined contribution plan in exchange for that service:

- as a liability (accrued expense), after deducting any contribution already paid. If the contribution already paid exceeds the contribution due for service before the reporting date, the entity recognises that excess as an asset (prepaid expense) to the extent that the prepayment will lead to, for example, a reduction in future payments or a cash refund; and
- as an expense, unless another Standard requires or permits the inclusion of the contribution in the cost of an asset.

Post-employment benefits: Defined benefit plans

Defined benefit plans are post-employment benefit plans other than defined contribution plans.

The present value of a defined benefit obligation is the present value, without deducting any plan assets (if any), of expected future payments required to settle the obligation resulting from employee service in the current and prior periods.

The amount recognised as a defined benefit liability is the net total of the following amounts:

- the present value of the defined benefit obligation at the reporting date;
- minus the fair value at the reporting date of plan assets (if any) out of which the obligations are to be settled directly;
- plus, any liability that may arise as a result of a minimum funding requirement

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The amount determined as a defined benefit liability may be negative (an asset). The entity measures the resulting asset at the lower of:

- the amount determined above; and
- the present value of any economic benefits available in the form of refunds from the plan (if any) or reductions in future contributions to the plan. The present value of these economic benefits is determined using a discount rate which reflects the time value of money.

Any adjustments arising from the limit above are recognised in surplus or deficit.

The entity determines the present value of defined benefit obligations and the fair value of any plan assets (if any) with sufficient regularity such that the amounts recognised in the financial statements do not differ materially from the amounts that would be determined at the reporting date.

The entity recognises the net total of the following amounts in surplus or deficit, except to the extent that another Standard requires or permits their inclusion in the cost of an asset:

- current service cost;
- interest cost:
- the expected return on any plan assets and on any reimbursement rights;
- actuarial gains and losses;
- past service cost;
- the effect of any curtailments or settlements; and
- the effect of applying the limit on a defined benefit asset (negative defined benefit liability).

Actuarial valuations are conducted on an annual basis by independent actuaries separately for each plan (if any). The results of the valuation are updated for any material transactions and other material changes in circumstances (including changes in market prices and interest rates) up to the reporting date.

The entity recognises gains or losses on the curtailment or settlement of a defined benefit plan, when the curtailment or settlement occurs. The gain or loss on a curtailment or settlement comprises:

- any resulting change in the present value of the defined benefit obligation; and
- any resulting change in the fair value of the plan assets (if any).

When it is virtually certain that another party will reimburse some or all of the expenditure required to settle a defined benefit obligation, the right to reimbursement is recognised as a separate asset. The asset is measured at fair value. In all other respects, the asset is treated in the same way as plan assets. In surplus or deficit, the expense relating to a defined benefit plan is presented as the net of the amount recognised for a reimbursement.

Actuarial assumptions

Actuarial assumptions are unbiased and mutually compatible.

Financial assumptions are based on market expectations, at the reporting date, for the period over which the obligations are to be settled.

The rate used to discount post-employment benefit obligations (both funded and unfunded) reflect the time value of money. The currency and term of the financial instrument selected to reflect the time value of money is consistent with the currency and estimated term of the post-employment benefit obligations.

Post-employment benefit obligations are measured on a basis that reflects:

- estimated future salary increases;
- the benefits set out in the terms of the plan (or resulting from any constructive obligation that goes beyond those terms) at the reporting date; and
- estimated future changes in the level of any state benefits that affect the benefits payable under a defined benefit plan, if, and only if, either:
  - those changes were enacted before the reporting date; or
  - past history, or other reliable evidence, indicates that those state benefits will change in some predictable

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manner, for example, in line with future changes in general price levels or general salary levels.

Assumptions about medical costs take account of estimated future changes in the cost of medical services, resulting from both inflation and specific changes in medical costs.

1.11 Provisions and contingencies

A provision is a liability of uncertain timing or amount. A liability is a present obligation of the entity arising from past events, the settlement of which is expected to result in an outflow from the entity of resources embodying economic benefits or service potential.

A contingent liability is:

- a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non occurrence of one or more uncertain future events not wholly within the control of the entity; or
- a present obligation that arises from past events but is not recognised because it is not probable that an outflow of resources embodying economic benefits or service potential will be required to settle the obligation or the amount of the obligation cannot be measured with sufficient reliability.

A contingent asset is a possible asset that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity.

Contingent assets and contingent liabilities are not recognised.

A provision is recognised when:

- there is a present obligation (legal or constructive) as a result of a past event;
- it is probable that an outflow of resources embodying economic benefits or service potential will be required to settle the obligation; and
- a reliable estimate can be made of the amount of the obligation.

The amount recognised as a provision is the best estimate of the expenditure required to settle the present obligation at the end of the reporting period.

Where the effect of time value of money is material, the amount of a provision is the present value of the expenditures expected to be required to settle the obligation.

The discount rate is a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability.

Where some or all of the expenditure required to settle a provision is expected to be reimbursed by another party, the reimbursement is recognised when it is virtually certain that reimbursement will be received when the obligation is settled. The reimbursement is treated as a separate asset. The amount recognised for the reimbursement will not exceed the amount of the provision.

Provisions are reviewed at the end of each reporting period and adjusted to reflect the current best estimate. If it is no longer probable that an outflow of resources embodying economic benefits or service potential will be required to settle the obligation, the provision is reversed.

Where discounting is used, the carrying amount of a provision increases in each period to reflect the passage of time. This increase is recognised as an interest expense. A provision is used only for expenditures for which the provision was originally recognised.

Provisions are not recognised for future operating surplus/(deficit). If an entity has a contract that is onerous, the present obligation (net of recoveries) under the contract is recognised and measured as a provision.

1.12 Commitments

Items are classified as commitments when an entity has committed itself to future transactions that will normally result in the outflow of cash.

Disclosures are required in respect of unrecognised contractual commitments.

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Commitments for which disclosure is necessary to achieve fair presentation should be disclosed in a note to the financial statements.

General commitments relate to contractual obligations that the WRC entered into before year end.

Research project commitments comprise of research projects approved for funding by the WRC executive management and include those for which contracts have been signed at year end and those that are in the process of being signed.

1.13 Revenue from exchange transactions

Revenue is the gross inflow of economic benefits or service potential during the reporting period when those inflows result in an increase in net assets, other than increases relating to contributions from owners.

Revenue from exchange transactions refers to revenue that accrued to the entity directly in return for services rendered/goods sold, the value of which approximates the consideration received or receivable. An exchange transaction is one in which the entity receives assets or services, or has liabilities extinguished, and directly gives approximately equal value (primarily in the form of goods, services or use of assets) to the other party in exchange.

Measurement

Revenue is measured at the fair value of the consideration received or receivable and represents the amounts receivable for goods and services provided in the normal course of business, net trade discounts and volume rebates, and value added tax.

Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction.

Sale of goods

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

- the entity has transferred to the purchaser the significant risks and rewards of ownership of the goods;
- the entity 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 or service potential associated with the transaction will flow to the entity; and
- the costs incurred or to be incurred in respect of the transaction can be measured reliably.

Rendering of services

When the outcome of a transaction involving the rendering of services can be estimated reliably, revenue associated with the transaction is recognised by reference to the stage of completion of the transaction at the reporting date. The outcome of a transaction can be estimated reliably when all the following conditions are satisfied:

- the amount of revenue can be measured reliably;
- it is probable that the economic benefits or service potential associated with the transaction will flow to the entity;
- the stage of completion of the transaction at the reporting date can be measured reliably; and
- the costs incurred for the transaction and the costs to complete the transaction can be measured reliably.

When the outcome of the transaction involving the rendering of services cannot be estimated reliably, revenue is recognised only to the extent of the expenses recognised that are recoverable.

The WRC receives leverage income from various sources which is used for research. Revenue received from clients in respect of contracts for undertaking research is recognised by reference to the stage of completion on individual projects. This revenue is recognised in the accounting period in which the research expenditure is incurred.

Interest, royalties, dividends and rental income

Revenue arising from the use by others of entity assets yielding interest, royalties, dividends and rental income is recognised when:

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for the year ended 31 March 2022

- it is probable that the economic benefits or service potential associated with the transaction will flow to the entity, and
- the amount of the revenue can be measured reliably.

Interest is recognised, in surplus or deficit, using the effective interest rate method.

Rental income is recognised on the accrual basis in accordance with the substance of the relevant agreements.

1.14 Revenue from Non-Exchange Transactions

Revenue comprises gross inflows of economic benefits or service potential received and receivable by an entity, which represents an increase in net assets, other than increases relating to contributions from owners.

Non-exchange transactions are transactions that are not exchange transactions. In a non-exchange transaction, an entity either receives value from another entity without directly giving approximately equal value in exchange, or gives value to another entity without directly receiving approximately equal value in exchange.

Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable willing parties in an arm's length transaction.

The Department of Water and Sanitation, and the Rand and Umgeni Water Boards collect levy income on behalf of the WRC. The rate of the levy is approved by the Minister of Water and Sanitation on an annual basis. Revenue recognition of levy income represents amounts receivable from the Department of Water and Sanitation, Rand and Umgeni Water Board.

1.15 Borrowing costs

Borrowing costs are interest and other expenses incurred by an entity in connection with the borrowing of funds.

Borrowing costs are recognised as an expense in the period in which they are incurred.

1.16 Translation of foreign currencies

Foreign currency transactions

A foreign currency transaction is recorded, on initial recognition in Rands, by applying to the foreign currency amount the spot exchange rate between the functional currency and the foreign currency at the date of the transaction.

At each reporting date :

- foreign currency monetary items are translated using the closing rate;
- non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction; and
- non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined.

Exchange differences arising on the settlement of monetary items or on translating monetary items at rates different from those at which they were translated on initial recognition during the period or in previous annual financial statements are recognised in surplus or deficit in the period in which they arise.

When a gain or loss on a non-monetary item is recognised directly in net assets, any exchange component of that gain or loss is recognised directly in net assets. Conversely, when a gain or loss on a non-monetary item is recognised in surplus or deficit, any exchange component of that gain or loss is recognised in surplus or deficit.

Cash flows arising from transactions in a foreign currency are recorded in Rands by applying to the foreign currency amount the exchange rate between the Rand and the foreign currency at the date of the cash flow.

1.17 Research and development expenditure

Expenditure on research is recognised as an expense when it is incurred.

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for the year ended 31 March 2022

1.18 Fruitless and wasteful expenditure

Section 1 of the PFMA defines fruitless and wasteful expenditure as expenditure which was made in vain and would have been avoided had reasonable care been exercised.

All expenditure relating to fruitless and wasteful expenditure is recognised as an expense in the statement of financial performance in the year that the expenditure is incurred.

If the expenditure is recoverable it is treated as an asset until it is recovered from the responsible person or written off as irrecoverable in the statement of financial performance.

1.19 Irregular expenditure

Irregular expenditure is defined in section 1 of the PFMA as expenditure other than unauthorised expenditure, incurred in contravention of; or that is not in accordance with a requirement of any applicable legislation, including -

(a) the PFMA; or

(b) WRC supply chain management policy; or

(c) National Treasury Regulations.

Irregular expenditure that was incurred and identified during the current financial year and which was condoned before year end and/or before finalisation of the financial statements must also be recorded appropriately in the irregular expenditure register. In such an instance, no further action is required with the exception of updating the note to the financial statements.

Irregular expenditure that was incurred and identified during the current financial year and for which condonement is being awaited at year end must be recorded in the irregular expenditure register. No further action is required with the exception of updating the note to the financial statements. Where irregular expenditure was incurred in the previous financial year and is only condoned in the following financial year, the register and the disclosure note to the financial statements must be updated with the amount condoned.

Irregular expenditure that was incurred and identified during the current financial year and which was not condoned by the National Treasury or the relevant authority must be recorded appropriately in the irregular expenditure register. If liability for the irregular expenditure can be attributed to a person, a debt account must be created if such a person is liable in law. Immediate steps must thereafter be taken to recover the amount from the person concerned. If recovery is not possible, the accounting officer or accounting authority may write off the amount as debt impairment and disclose such in the relevant note to the financial statements. The irregular expenditure register must also be updated accordingly. If the irregular expenditure has not been condoned and no person is liable in law, the expenditure related thereto must remain against the relevant programme/expenditure item, be disclosed as such in the note to the financial statements and updated accordingly in the irregular expenditure register.

All expenditure relating to irregular expenditure is recognised as an expense in the statement of financial performance in the year that the expenditure is incurred.

1.20 Conditional grants and receipts

Revenue received from conditional grants, donations and funding are recognised as revenue to the extent that the entity has complied with any of the criteria, conditions or obligations embodied in the agreement. To the extent that the criteria, conditions or obligations have not been met a liability is recognised.

1.21 Income tax expense

WRC is exempt from income tax in terms of section l0(l)(cA)(ii) of the Income Tax Act, 1962 (No 58 of 1962).

1.22 Budget information

The annual financial statements and the budget are not on the same basis of accounting therefore a reconciliation between the statement of financial performance and the budget have been included in the annual financial statements. Refer to note 39.

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for the year ended 31 March 2022

1.23 Related parties

The economic entity operates in an economic sector currently dominated by entities directly or indirectly owned by the South African Government. As a consequence of the constitutional independence of the three spheres of government in South Africa, only entities within the national sphere of government are considered to be related parties.

Key management are those individuals responsible for planning, directing and controlling the activities of the economic entity, including those charged with the governance of the economic entity in accordance with legislation, in instances where they are required to perform such functions.

Close members of the family of a person are considered to be those family members who may be expected to influence, or be influenced by, that management in their dealings with the economic entity.

Only transactions with related parties not at arm's length or not in the ordinary course of business are required to be disclosed.

1.24 Events after the reporting date

Events after the reporting date are those events, both favourable and unfavourable, that occur between the reporting date and the date when the financial statements are authorised for issue. Two types of events can be identified:

- those that provide evidence of conditions that existed at the reporting date (adjusting events after the reporting date); and
- those that are indicative of conditions that arose after the reporting date (non-adjusting events after the reporting date).

The economic entity will adjust the amount recognised in the financial statements to reflect adjusting events after the reporting date once the event occurred.

The economic entity will disclose the nature of the event and an estimate of its financial effect or a statement that such estimate cannot be made in respect of all material non-adjusting events, where non-disclosure could influence the economic decisions of users taken on the basis of the financial statements.

Notes to the Consolidated and Separate Annual Financial Statements

2. New standards and interpretations

Standards and interpretation effective in the current year

In the prior year, the entity chose to early adopt the following standards and interpretations that are effective for the current financial year and that are relevant to its operations:

- GRAP 20: Related Parties – Effective from 1 April 2021

These amendments did not have a material impact on the Annual Financial Statements.

Standards and Interpretations early adopted

The entity chose to early adopt the following standards and interpretations

- GRAP 1: Presentation of Financial Statements – Effective from 1 April 2023
- GRAP 104: Financial Instruments – Effective from 1 April 2025

These amendments did not have a material impact on the Annual Financial Statements.

3. Receivables

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Receivables from non-exchange transactions				
Receivables: Water Research Levies	97,822,129	46,198,992	97,822,129	46,198,992
VAT receivable	139	100	-	-
Receivables from exchange transactions				
Receivables: Other	13,176,966	3,012,259	13,177,646	3,012,939
Deposits	1,229,848	1,172,069	1,222,543	1,164,764
Prepaid expenses	2,066,320	4,164,033	2,066,320	4,164,033
	114,295,402	**54,547,453**	**114,288,638**	**54,540,728**
Impairment on deposit	(800)	-	(800)	-
	114,294,602	**54,547,453**	**114,287,838**	**54,540,728**
Non-current	1,221,743	1,164,764	1,221,743	1,164,764
Current	113,072,859	53,382,689	113,066,095	53,375,964
	114,294,602	**54,547,453**	**114,287,838**	**54,540,728**

Included in receivables from non-exchange transactions for the economic entity (group) is a statutory receivable in respect of VAT amounting to R139 (2021: R100), which was reclassified from receivables from exchange transactions.

Notes to the Consolidated and Separate Annual Financial Statements

Receivables pledged as security

No receivables were pledged as security for any financial liability.

Credit quality of receivables

None of the receivables defaulted during the year under review. Management considers that all of the above financial assets are of good credit quality. The maximum exposure to credit risk at the reporting date is the fair value of each class of receivable mentioned above. The fair value approximates the carrying amount of the balances due to their short-term maturity.

Receivables

All the receivables as reflected above represent receivables from exchange transactions, except for Receivables: Water research levies and the VAT receivable, which represents receivables from non-exchange transactions.

Where impairment indicators arise, these receivables are individually assessed for impairment.

During the evaluation of recoverability of receivables, it became apparent that the full amount will be recoverable for the respective debtors. The fair value is thus equal to the full amount receivable as at year-end.

The recoverable amount of the debtors is equal to their fair value.

None of the financial assets that are fully performing have been renegotiated in the last year.

The economic entity has not reclassified any financial assets from cost or amortised cost to fair value, or from fair value to cost or amortised cost during the current or prior year.

Receivables past due not impaired

Receivables are all considered for impairment.

At 31 March 2022, R7,305 (2021: R NIL) were past due but not impaired for the Group. Deposits made by a customer in terms of section 104(1) d of Municipal Systems Act (MSA) is refundable, free of interest, on termination of the supply of services, provided that all outstanding amounts have been settled in terms of the property. On the termination of the service agreement, the deposit held by the City shall be refunded, provided that the customer has paid the account in full. In respect of Erf 706, the account has been paid in full, and therefore the Municipality has no alternative but to refund the deposit held, accordingly no impairment has been made.

For the current and prior financial year no receivables were past due but not impaired for the WRC.

Receivables impaired

At 31 March 2022 a deposit of R800 (2021: R NIL) was impaired and provided for in the WRC and the economic entity.

Reconciliation of provision for impairment losses on receivables

There was no movement in the provision for impaired receivables. Receivables are generally written off when there is no expectation of recovery.

Notes to the Consolidated and Separate Annual Financial Statements

The maximum exposure to credit risk at the reporting date is the fair value of each class of loan mentioned above. The economic entity does not hold any collateral as security.

GRAP 104 states that a financial asset is past due when a counterparty has failed to make a payment when contractually due. None of the receivables listed above are past due. As a result, no provision has been made for impairment.

4. Cash and cash equivalents

4.1 Cash and cash equivalents comprise:

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Cash on hand	1,966	1,326	1,966	1,326
Balances with banks	166,837,174	157,845,252	166,808,316	157,814,790
Short term deposits	143,467,260	142,477,051	143,467,260	142,477,051
Total cash and cash equivalents included in current assets	**310,306,400**	**300,323,629**	**310,277,542**	**300,293,167**
Revolving credit facility	(196,557)	(162,842)	(196,557)	(162,842)
Total cash and cash equivalents included in current liabilities	**(196,557)**	**(162,842)**	**(196,557)**	**(162,842)**
Net cash and cash equivalents	**310,109,843**	**300,160,787**	**310,080,985**	**300,130,325**

Credit quality of bank balances and short term deposits, excluding cash on hand

Management considers that all of the above cash and cash equivalents categories are of good quality by reference to external credit ratings. The maximum exposure to credit risk at the reporting date is the fair value of each class of cash and cash equivalents mentioned above. The fair value approximates the carrying amount of the balances.

All cash and cash equivalents held by the entity are available for use.

The cash and cash equivalents are not pledged as security for financial liabilities.

Financial assets at fair value

The entity has not reclassified any financial assets from cost or amortised cost to fair value, or from fair value to cost or amortised cost during the current or prior year.

Fair value hierarchy of financial assets at fair value

For financial assets recognised at fair value, disclosure is required of a fair value hierarchy which reflects the significance of the inputs used to make the measurements.

Notes to the Consolidated and Separate Annual Financial Statements

The fair value hierarchy have the following levels:

- Level 1 represents those assets which are measured using unadjusted quoted prices in active markets for identical assets.
- Level 2 applies inputs other than quoted prices that are observable for the assets either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3 applies inputs which are not based on observable market data.

There were no significant transfers into or out of level 1, 2 or 3 for the years presented.

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Level 1				
Cash and cash equivalents	310,306,400	300,323,629	310,277,542	300,293,167

Notes to the Consolidated and Separate Annual Financial Statements

5. Property, plant and equipment

5.1 Balances at year end and movements for the year

Group and WRC	Leasehold improvements	Motor vehicles	Furniture and fixtures	Office equipment	Computer equipment	Total
	R	R	R	R	R	R
Reconciliation for the year ended 31 March 2022 – Group and WRC						
Balance at 1 April 2021						
At cost	10,208,859	300,391	4,565,512	2,782,967	5,980,639	**23,838,368**
Accumulated depreciation and impairment	(4,852,786)	(300,391)	(4,050,950)	(2,132,412)	(4,613,706)	**(15,950,245)**
Net book value	**5,356,073**	**-**	**514,562**	**650,555**	**1,366,933**	**7,888,123**
Movements for the year ended 31 March 2022						
Additions	-	-	18,496	26,872	316,910	**362,278**
Depreciation	(1,068,605)	-	(173,308)	(314,687)	(873,655)	**(2,430,255)**
Impairments losses and write-offs	-	-	-	(2,060)	(18,558)	**(20,618)**
Disposals	-	-	-	-	(14,455)	**(14,455)**
Property, plant and equipment at end of year	**4,287,468**	**-**	**359,750**	**360,680**	**777,175**	**5,785,073**
Closing balance at 31 March 2022						
At cost	10,208,859	300,391	4,584,008	2,805,635	6,223,221	**24,122,114**
Accumulated depreciation and impairment	(5,921,391)	(300,391)	(4,224, 258)	(2,444,955)	(5,446,046)	**(18,337,041)**
Net book value	**4,287,468**	**-**	**359,750**	**360,680**	**777,175**	**5,785,073**

The reconciliation above is the same for the economic entity (Group) and the WRC.

Computer Equipment

- The impairment loss amounting to R18,558 is in respect of damaged computer equipment
- The disposal amounting to R14,455 is in respect of a stolen laptop with a carrying value of R7,717 and a laptop with a carrying value of R6,738 was sold.
- Compensation to the value of R63,620 was received from third parties (Old Mutual Insurance) in respect of the above laptops that were either stolen or damaged during the 2021/22 financial year.
- Repairs amounting to R2,762 were incurred in respect of laptops that were broken.

Notes to the Consolidated and Separate Annual Financial Statements

Office Equipment

During the asset verification, it was identified that an item of office equipment was missing. This was investigated further and could not be found subsequently and as a result the asset, with a carrying value of R2 060 needed to be written off (derecognised). Appropriate consequence management will be implemented in this regard.

Group and WRC	Leasehold improvements	Motor vehicles	Furniture and fixtures	Office equipment	Computer equipment	Total
	R	R	R	R	R	R
Reconciliation for the year ended 31 March 2021 – Group and WRC						
Balance at 1 April 2020						
At cost	10,208,859	300,391	4,576,426	2,713,945	6,551,061	**24,350,682**
Accumulated depreciation and impairment	(3,781,652)	(300,391)	(3,164,775)	(1,573,745)	(3,870,835)	**(12,691,398)**
Net book value	**6,427,207**	**-**	**1,411,651**	**1,140,200**	**2,680,226**	**11,659,284**
Movements for the year ended 31 March 2021						
Additions	-	-	1,000	72,473	-	**73,473**
Depreciation	(1,071, 134)	-	(896, 507)	(562,118)	(1,313, 293)	**(3,843,052)**
Impairment loss recognised in surplus or deficit	-	-	(1, 582)	-	-	**(1,582)**
Property, plant and equipment at end of year	**5,356,073**	**-**	**514,562**	**650,555**	**1,366,933**	**7,888,123**
Closing balance at 31 March 2021						
At cost	10,208,859	300,391	4,565,512	2,782,967	5,980,639	**23,838,368**
Accumulated depreciation and impairment	(4, 852,786)	(300,391)	(4,050,950)	(2,132,412)	(4,613,706)	**(15,950,245)**
Net book value	**5,356,073**	**-**	**514,562**	**650,555**	**1,366,933**	**7,888,123**

The reconciliation above is the same for the economic entity (Group) and the WRC.

The impairment loss amounting to R1 582 is in respect of assets that were broken amounting to R788 and assets not found on the premises amounting to R794.

Notes to the Consolidated and Separate Annual Financial Statements

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
5.2 Pledged as security				
None of the assets were or are pledged as security.				
5.3 Assets subject to finance lease (Net carrying value)				
Office equipment	279,573	559,146	279,573	559,146
5.4 Property, plant and equipment fully depreciated and still in use (Cost)				
Furniture and fixtures	94,471	94,471	94,471	94,471
Office equipment	1,050,957	1,055,213	1,050,957	1,055,213
Computer equipment	2,070,340	1,411,720	2,070,340	1,411,720
Motor vehicles	300,391	300,391	300,391	300,391
	3,516,158	**2,861,795**	**3,516,158**	**2,861,795**

Included in the fully depreciated assets for computer equipment for the 2021/22 financial year is an amount of R796 584 in respect of computer equipment that were fully depreciated as their warranty expired and has been replaced with new assets that were delivered in April 2022. In the 2022/23 financial year a strategy will be developed in respect of these assets to determine if they will be sold, donated or kept for spares.

A register containing the information required by the PFMA is available for inspection.

Notes to the Consolidated and Separate Annual Financial Statements

6. Intangible assets

6.1 Reconciliation of changes in intangible assets

	Computer software	Total
	R	R
Reconciliation for the year ended 31 March 2022 – Group and WRC		
Balance at 1 April 2021		
At cost	7,414,630	7,414,630
Accumulated amortisation and impairment	(3,709,753)	(3,709,753)
Net book value	**3,704,877**	**3,704,877**
Movements for the year ended 31 March 2022		
Additions	350,411	350,411
Amortisation	(542,720)	(542,720)
Intangible assets at end of period	**3,512,568**	**3,512,568**
Closing balance at 31 March 2022		
At cost	7,372,335	7,372,335
Accumulated amortisation and impairment	(3,859,767)	(3,859,767)
Net book value	**3,512,568**	**3,512,568**

The reconciliation above is the same for the economic entity (Group) and the WRC.

	Computer software	Total
	R	R
Reconciliation for the year ended 31 March 2021 – Group and WRC		
Balance at 1 April 2020		
At cost	7,375,625	7,375,625
Accumulated amortisation and impairment	(3,165,768)	(3,165,768)
Net book value	**4,209,857**	**4,209,857**
Movements for the year ended 31 March 2021		
Additions	39,006	39,006
Amortisation	(543,986)	(543,986)
Intangible assets at end of period	**3,704,877**	**3,704,877**
Closing balance at 31 March 2021		
At cost	7,414,630	7,414,630
Accumulated amortisation and impairment	(3,709,753)	(3,709,753)
Net book value	**3,704,877**	**3,704,877**

The reconciliation above is the same for the economic entity (Group) and the WRC.

Notes to the Consolidated and Separate Annual Financial Statements

6.2 Pledged as security

None of the intangible assets are pledged as security. Amortisation of Intangible Assets is included in Depreciation and Amortisation as reflected in the Statement of Financial Performance.

	Group		WRC	
	2022	2021	2022	2021
6.3 Other Information	R	R	R	R
Fully amortised intangible assets still in use	-	1,992,401	-	1,992,401

7. Investment in wholly controlled entity

7.1 Investment in wholly controlled entity comprise the following balances

Investment in Erf 706 Rietfontein	-	-	1	1

The carrying amount of the investment in the controlled entity is shown net of impairment losses. The carrying amount of the investment is reflected at its nominal share capital value of R1.

The WRC holds 100% of the ordinary shares in Erf 706 Rietfontein (Pty) Ltd, a property company. The main business of the company was to own the immovable property known as Erf 706 Rietfontein. The property was disposed of in the 2019/20 financial year.

In a meeting held on 26 May 2022, the Board approved the deregistration of ERF 706 Rietfontein (Pty) Ltd.

Controlled entity pledged as security

The investment is not pledged as security.

Notes to the Consolidated and Separate Annual Financial Statements

8. Finance lease obligation

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Minimum lease payments due				
Within one year	63,023	614,850	63,023	614,850
In second to fifth year	-	63,023	-	63,023
	63,023	677,873	63,023	677,873
less: future finance charges	(129)	(44,262)	(129)	(44,262)
Present value of minimum lease payments	**62,894**	**633,611**	**62,894**	**633,611**
Present value of minimum lease payments due:				
- Within one year	62,894	570,717	62,894	570,717
- In second to fifth year	-	62,894	-	62,894
	62,894	**633,611**	**62,894**	**633,611**
Current liabilities	62,894	570,717	62,894	570,717
Non-current liabilities	-	62,894	-	62,894
	62,894	**633,611**	**62,894**	**633,611**

It is the economic entity's policy to lease certain computer equipment under finance leases. The finance leases are effective for a period of thirty-six (36) months and the average effective borrowing rate is 13,5% (2021:13.5%).

Interest rates are fixed at the contract date. All leases have fixed repayments and no arrangements have been entered into for contingent rent.

Defaults and breaches

The entity did not default on any interest or capital portions in respect of any of the finance leases.

9. Operating lease liability

9.1 Balance at year end

Operating lease liability	8,723,727	8,900,199	8,723,727	8,900,199

9.2 Minimum operating lease liability payments

Within 12 months	10,655,204	9,940,964	10,655,204	9,940,964
Between 12 – 60 months	36,616,447	47,274,976	36,616,447	47,274,976
	47,271,650	**57,215,940**	**47,271,650**	**57,215,940**

Notes to the Consolidated and Separate Annual Financial Statements

The WRC entered into a ten-year lease agreement during the 2016/17 financial year with Lynnwood Bridge Office Park (Pty) Ltd whereafter the tenancy is subject to renewal at the landlord's discretion. The monthly lease payments comprise the following based on area occupied:

- rental of the two (2) floors in the building escalated at 7.5% per annum over the lease period
- rental of ninety (90) parking bays escalated at 7.5% per annum over the lease period
- operating costs escalated at 8.5% per annum over the lease period
- rates and taxes pro-rated according to area occupied

The WRC entered into a three-year lease agreement during the 2019/20 financial year with Apex Business Systems to lease five printers, whereafter the printers will be returned to Apex Business Systems.

No contingent rent is payable and there are no restrictions on the lease.

10. Payables

10.1 Payables from exchange transactions comprise:

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Income received in advance	128,119,386	126,587,840	128,119,386	126,587,840
Payables	52,215,139	23,583,915	52,215,139	23,583,915
Accruals	3,779,679	4,507,211	3,779,679	4,507,211
	184,114,204	**154,678,966**	**184,114,204**	**154,678,966**

Revenue received from clients in respect of contracts for undertaking science and technology research is recognised by reference to the stage of completion on individual projects. Income received in advance is therefore recognised as leverage income in the statement of financial performance when research deliverables are realised and achieved in respect of projects funded by leverage funded partners.

The entity did not default on interest or capital on any payables. None of the items attached to the payables were renegotiated during the period under review.

The maximum exposure to credit risk at the reporting date is the fair value of the payables above. The fair value of the payables approximates the carrying amount of the balances due to their short-term maturity.

Notes to the Consolidated and Separate Annual Financial Statements

11. Accruals – leave and service bonus (13th Cheque)

Reconciliation of accruals – leave and service bonus (13th cheque – Group and WRC 2022)

	Accrual for leave	Accrual for service bonus	Total
Opening Balance	9,289,434	-	9,289,434
Additions	10,313,705	-	10,313,705
Utilised during the year	(7,532,034)	-	(7,532,034)
Payments during the year	(2,682,085)	-	(2,682,085)
Re-measurement	1,006,486	-	1,006,486
Total	**10,395,506**	**-**	**10,395,506**

The reconciliation above is the same for the economic entity (Group) and the WRC.

Reconciliation of accruals – leave and service bonus (13th cheque – Group and WRC 2021)

	Accrual for leave	Accrual for service bonus	Total
Opening Balance	7,162,227	7,661	7,169,888
Additions	9,127,072	-	9,127,072
Utilised during the year	(6,206,581)	-	(6,206,581)
Payments during the year	(1,529,738)	(14,479)	(1,544,217)
Re-measurement	736,454	6,818	743,272
Total	**9,289,434**	**-**	**9,289,434**

The reconciliation above is the same for the economic entity (Group) and the WRC.

Accruals are made for the number of accumulated leave days at the reporting date at the applicable salary rate. In line with the conditions of employment these accumulated leave days may be used by staff in lieu of days off or paid out in cash.

Three employees were appointed on a cost-plus-benefits basis. These employees were entitled to a service bonus (13th cheque). Accruals were made for the payment of service bonuses which was paid to employees annually on their birthdays. There are no employees remaining on the cost-plus-benefits basis at year-end.

There is no expected reimbursement in respect of the provisions.

Notes to the Consolidated and Separate Annual Financial Statements

12. Provision for performance bonus

12.1 Reconciliation of provision for performance bonus

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Balance at 1 April	10,322,076	9,660,279	10,322,076	9,660,279
Additions	10,950,190	10,322,076	10,950,190	10,322,076
Payments during the year	(10,322,067)	(9,660,279)	(10,322,067)	(9,660,279)
Balance at 31 March	**10,950,190**	**10,322,076**	**10,950,190**	**10,322,076**

The WRC may, at its discretion, encourage and reward performance by means of annual performance bonuses. Employees are eligible for a performance bonus, subject to approval, in terms of the WRC Performance Management Policy approved by the Board of the WRC. Performance bonuses are measured annually for the period 1 April – 31 March of the ensuing year and performance bonuses are paid when approved to qualifying employees.

13. Provision for settlement fees

Legal Proceedings	452,860	-	452,860	-

During the 2021/22 financial year a former employee of the Water Research Commission (WRC) resigned citing constructive dismissal, upon which the matter was referred to the Commission for Conciliation, Mediation and Arbitration (CCMA) for conciliation and arbitration. The parties were able to reach a settlement without the need for arbitration and on 5 May 2022, the CCMA confirmed the settlement agreement by issuing an award of R452,860 in favour of the former employee.

14. Employee benefit obligation

14.1 Medical aid scheme

Defined Benefit Plan

The WRC has made provision for a medical aid scheme covering retired employees and active employees before 1 April 2008. This fund is actuarially valued on an annual basis using the projected unit credit method. The Scheme was last actuarially valued at 31 March 2022.

The WRC carries the legal and related financial obligation to subsidise (100% subsidy level), of the medical aid benefit of certain of its employees in retirement. As such, the WRC's post-retirement medical aid obligation represents a long dated, uncapped and unfunded liability which, if not pro-actively managed, represents a significant systematic employee benefit and financial risk to the institution. It is on this basis and in terms of prudent practice that the management of the WRC initiated a formal strategy in 2008 to manage the long dated, uncapped and unfunded costs and risks associated with its post-retirement medical aid liability as follows:

Notes to the Consolidated and Separate Annual Financial Statements

- The WRC closed the subsidy/benefit to new recruits to the WRC as of 1 April 2008.
- The WRC employed the professional services of an independent consultant and actuary to value the quantum of the liability (i.e. risk ring fencing) and/or buy out (i.e. liability capping) the disclosed liability in order to manage the WRC's exposure to the associated costs and risks. In the 2010/2011 financial year, the WRC offered voluntary buy outs to all in service members. Members that did not accept the buyout offer and the pensioners already receiving the benefit have had the liability ring fenced through an insurance cover administered by Momentum Group Limited.

14.1.1 The amounts recognised in the statement of financial position are as follows:

Carrying value

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Present value of the defined benefit obligation-partly funded	(37,869,911)	(38,832,313)	(37,869,911)	(38,832,313)
Fair value of plan assets	34,389,169	34,784,621	34,389,169	34,784,621
Employee benefit asset/ (obligation) recognised	**(3,480,742)**	**(4,047,692)**	**(3,480,742)**	**(4,047,692)**

Movement for the year – medical aid fund

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Opening balance	(4,047,692)	(3,697,390)	(4,047,692)	(3,697,390)
Contributions by employer	2,663,926	-	2,663,926	-
Net expense recognised in the statement of financial performance	(2,096,976)	(350,302)	(2,096,976)	(350,302)
	(3,480,742)	**(4,047,692)**	**(3,480,742)**	**(4,047,692)**

Notes to the Consolidated and Separate Annual Financial Statements

Net expense recognised in the statement of financial performance – medical aid fund

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Interest cost	4,134,576	3,983,550	4,134,576	3,983,550
Actuarial (gains) losses	1,607,311	(71,199)	1,607,311	(71,199)
Expected return on plan assets	(3,644,911)	(3,562,049)	(3,644,911)	(3,562,049)
	2,096,976	**350,302**	**2,096,976**	**350,302**

The interest cost reflects the reducing discounting period from one year to the next (i.e. the unwinding of the discount rate over time) and allows for actual benefit payments.

Actuarial gains and losses arise when actual experience differs from the assumptions made at the previous valuation (e.g. actual medical contribution increases higher than those assumed will lead to an actuarial loss).

The expected return on plan assets is restated for actual benefit payments from the plan assets and contributions from the company.

Reconciliation of the defined benefit obligation

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Opening balance	38,832,313	36,756,305	38,832,313	36,756,305
Interest Cost	4,134,576	3,983,550	4,134,576	3,983,550
Benefits paid	(3,795,103)	(3,726,290)	(3,795,103)	(3,726,290)
Actuarial losses/(gains)	(1,301,875)	1,818,748	(1,301,875)	1,818,748
	37,869,911	**38,832,313**	**37,869,911**	**38,832,313**

The liabilities were valued using the Projected Unit Credit Method. The liability in respect of current continuation members is fully accounted for. It is assumed that the continuation members will remain on the Discovery Health Classic Saver plan post retirement.

Notes to the Consolidated and Separate Annual Financial Statements

Reconciliation of the plan assets

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Opening Balance	34,784,621	33,058,915	34,784,621	33,058,915
Expected return	3,644,911	3,562,049	3,644,911	3,562,049
Actuarial gains (losses)	(2,909,186)	1,889,947	(2,909,186)	1,889,947
Contributions by employer	2,663,926	-	2,663,926	-
Benefits paid	(3,795,103)	(3,726,290)	(3,795,103)	(3,726,290)
	34,389,169	**34,784,621**	**34,389,169**	**34,784,621**

The WRC holds an annuity insurance policy with Momentum in respect of the benefits, which guarantees increases in benefits paid in terms of the policy to a maximum of CPI.

The WRC has a partially funded plan. The balance is to be funded by the WRC through company contributions.

This policy meets the definition of a "qualifying insurance policy" stated in paragraph .115 of GRAP25, which sets out that the fair value of the policy is deemed to be the present value of the related obligations.

This is the same methodology as per the previous valuation.

The plan asset was valued using the same methodology as the liabilities for continuation members, but assuming increases equal to inflation only, as this represents the obligation that is covered by the policy.

Key assumptions used

The financial assumptions, which is the same for the economic entity and the WRC, at the current and previous valuation dates are shown below:

	Group and WRC	
	2022	2021
	R	R
Financial Valuation assumptions		
Discount rates used	10,69%	10,65%
Medical contribution inflation	7,99%	8,21%
Net discount rate for calculating liabilities	**2,50%**	**2,25%**
Expected return on assets	10,69%	10,65%
Inflation	6,49%	6,71%
Net discount rate for calculating assets	**3,95%**	**3,69%**

Notes to the Consolidated and Separate Annual Financial Statements

Financial Valuation Assumptions

GRAP 25 requires that the financial assumptions shall be based on market expectations, at the reporting date, for the period over which the obligations are to be settled. The assumptions used are based on statistics and market data as at 31 March 2022 and are consistent with the requirements of GRAP 25.

Discount Rate Assumption

The discount rate required by GRAP 25 should be set with reference to a high-quality corporate bond. In countries where there is no deep market in such bonds, the market yield on government bonds should be used. The discount rate that reflects the time value of money is best approximated by reference to market yields at the reporting date on government bonds. The discount rate has been set by using the average yields from the zero-coupon government bond curve with a duration of between 7 and 12 years. The recommended discount rate is 10.69%. The source is the Johannesburg Stock Exchange through INET BFA IRESS data service.

Future Inflation Assumption

The general inflation assumption is used as the base rate for determining the rate at which the future healthcare subsidies will increase.

An estimate of the market's pricing of inflation was made by comparing the yields on index-linked government bonds and longterm government bonds with a duration of between 7 and 12 years. The implied inflation assumption is therefore 6.49% per annum for future inflation. The source is the Johannesburg Stock Exchange through I net BFA data service.

The inflation assumption used for the previous valuation was 6.71%

Future Medical Subsidy Inflation Assumption

The medical aid plan contributions are assumed to increase annually with medical contribution inflation. Increases have historically been above general inflation limits, so the previously adopted assumption of long-term inflation plus 1.5% was applied.

The implied medical inflation assumption is therefore 7.99% per annum. The source is the Johannesburg Stock Exchange through INET BFA IRESS data service.

Net Discount Rate to Value Liabilities

The net discount rate for medical subsidy inflation is assumed to be 2.5% p.a. (Derived from a discount rate of 10.69% and the expected medical subsidy inflation rate of 7.99%).

The net discount rate as per the previous valuation was 2.25% p.a.

Net Discount Rate to Value Assets

The net discount rate for general inflation is assumed to be 3.95% p.a. (Derived from a discount rate of 10.69% and the expected general inflation rate of 6.49%).

The net discount rate as per the previous valuation was 3.69% p.a.

Notes to the Consolidated and Separate Annual Financial Statements

Demographic Valuation Assumptions

Estimates (actuarial valuation assumptions) are also required to be made about demographic variables (such as employee turnover and mortality).

The demographic assumptions were retained from the previous years' valuation and these assumptions are as follows:

- ***Post-retirement Mortality***

  The post-retirement mortality assumption is based on the PA (90) mortality tables, rated down two years. This assumption is consistent with that of the previous valuation.

- ***Age of Spouse***

  The current valuation uses the actual spouses' ages. This assumption is consistent with that of the previous valuation.

- ***Continuation of Membership and Family Profile***

  There are currently 36 continuation members. There was one termination over the valuation period. The continuation members include one disability child member from former employees who is over the age of 21.

Sensitivity Analysis

The results of the valuation are dependent on the underlying assumptions made. The assumptions present the best estimate of future experience. The actual cost of the long-service award benefits will however be dependent on the actual experience.

The sensitivity of the main results to changes in the medical inflation rate, discount rate and mortality table have been estimated. The changes in the 31 March 2022 Defined Benefit Obligation, Plan Asset and projected Interest Cost are reflected below.

The tables below illustrate the likely impact on results after certain changes to the underlying assumptions. These values are determined by assuming that all other relevant assumptions remain constant. These tables set out the impact on results relating to changes of the following assumptions (in isolation) – all other assumptions are to be held constant:

- The discount rate (1% increase and decrease);
- Mortality (1 year increase and decrease).
- The medical inflation rate (1% increase and decrease).

The sensitivity analysis is the same for the economic entity and the WRC.

Notes to the Consolidated and Separate Annual Financial Statements

Discount rate	Discount rate R	Discount rate -1% (R)	Discount rate +1% (R)
Defined benefit obligation	37,869,911	40,808,144	35,298,664
Projected interest cost	3,835,445	3,760,804	3,894,302
Plan asset	34,389,169	36,841,497	32,266,604

Mortality	**PA (90) – 2**	**PA (90)-1**	**PA (90) + 1**
Defined benefit obligation	37,869,911	39,435,265	36,328,234
Projected interest cost	3,835,445	4,002,751	3,670,669
Plan asset	34,389,169	35,699,067	33,090,973

Medical Inflation rate	**Inflation rate**	**Inflation rate**	**Inflation rate**
Defined benefit obligation	37,869,911	35,200,823	40,871995
Projected interest cost	3,835,445	3,552,183	4,154,292
Plan asset	34,389,169	32,126,632	36,919,532

Employee Statistics	**31 March 2022**	**31 March 2021**	**Difference**
Continuation members			
Number	36	37	(1)
Average Age	76.40	75.80	0.60
Average Subsidy (R per month)	8,785	8,532	253

Developments since the previous valuation

The average subsidy at 31 March 2022 included a provision for an increase implemented by Discovery at 1 July 2021. The average subsidy is expected to increase to R9 479 per month in October 2022.

There were no other significant developments over the valuation period relating to the benefits or membership.

Notes to the Consolidated and Separate Annual Financial Statements

Contributions

The medical aid premiums used for the current and previous valuations are summarised below:

	Main member	Adult dependent	Child dependent
1 January 2020 to 1 July 2021	5,954	5,633	1,188
1 July 2021 to 30 September 2022*	6,309	5,966	1,268
1 October 2022	6,810	6,441	1,358

Discovery Health has indicated that the Scheme rates will increase by 7,9% as set out above on 1 October 2022. This is in line with the assumption contained in the valuation.

Amounts for the current and previous four years for the economic entity and the WRC are as follows:

	2022	2021	2020	2019	2018
	R	R	R	R	R
Defined benefit obligation	(37,869,911)	(38,832,313)	(36,756,304)	(42,477,696)	(40,030,373)
Plan assets	34,389,169	34,784,621	33,058,915	37,144,587	33,828,948
Net employee benefit asset/(liability)	(3,480,742)	(4,047,692)	(3,697,390)	(5,333,109)	(6,201,425)
Net expense recognised in the statement of financial performance	2,096,976	350,302	831,900	2,864,657	2,439,176

Notes to the Consolidated and Separate Annual Financial Statements

15. Revenue from exchange transactions

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Leverage Income	130,752,173	73,651,170	130,752,173	73,651,170
Other Income	312,222	139,774	312,222	139,774
Investment revenue (Note 15.1)	6,806,405	5,303,926	6,806,405	5,303,926
Total revenue from exchange transactions	**137,870,800**	**79,094,870**	**137,870,800**	**79,094,870**

Leverage income is recognised on the basis of research deliverables being realised in respect of projects funded by leverage funded partners.

15.1 Investment revenue

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Bank and fixed deposits	6,805,727	5,303,926	6,805,727	5,303,926
Study grants	678	-	678	-
	6,806,405	**5,303,926**	**6,806,405**	**5,303,926**

16. Revenue from non-exchange transactions

Water research levies	279,625,422	265,578,717	279,625,422	265,578,717

17. Depreciation and amortisation

Depreciation	2,430,255	3,843,052	2,430,255	3,843,052
Amortisation	542,720	543,986	542,720	543,986
Total depreciation and amortisation	**2,972,975**	**4,387,038**	**2,972,975**	**4,387,038**

The comparative figures have been restated in order to disclose Impairment losses separately in note 18.
Included in the depreciation and amortisation above, is the impact of the change in estimate of useful lives as reflected in note 41.

Notes to the Consolidated and Separate Annual Financial Statements

18. Impairment losses and write offs

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Property, plant and equipment	20,618	1,582	20,618	1,582
Deposits	800	-	800	-
Total impairment losses and write-offs	**21,418**	**1,582**	**21,418**	**1,582**

19. Employee related costs

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Basic salary	95,002,427	85,327,113	95,002,427	85,327,113
Cellphone Allowance	778,499	-	778,499	-
Merit Bonus	10,950,190	10,322,076	10,950,190	10,322,076
Directors Emoluments	931,584	809,742	931,584	809,742
Workmen's compensation – Department of Labour	411,217	405,423	411,217	405,423
Skills Development Levies	1,041,987	696,082	1,041,987	696,082
Company contributions – UIF	184,000	157,845	184,000	157,845
Company contributions – other	-	42,571	-	42,571
Leave and bonus accrual	3,788,157	3,663,764	3,788,157	3,663,764
	113,088,061	**101,424,616**	**113,088,061**	**101,424,616**

20. Finance costs

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Employee benefit obligations	489,665	421,501	489,665	421,501
Finance leases	44,134	115,830	44,134	115,830
Total finance costs	**533,799**	**537,331**	**533,799**	**537,331**

Notes to the Consolidated and Separate Annual Financial Statements

21.General expenses

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Auditors remuneration	2,067,516	890,052	2,067,516	890,052
Bank charges	79,863	76,063	78,298	74,324
Catering costs	39,952	36,612	39,952	36,612
Cleaning	350,783	374,954	350,783	374,954
Consumables	132,805	18,513	132,805	18,513
Corporate social responsibility	195,656	85,921	195,656	85,921
Insurance	242,125	202,414	242,125	202,414
IT expenses	6,733,919	3,513,845	6,733,919	3,513,845
Motor vehicle expense	28,996	3,876	28,996	3,876
Postage and courier	64,057	10,805	64,057	10,805
Printing and stationery	53,009	38,136	53,009	38,136
Professional fees	541,221	598,362	541,221	597,682
Promotions	66,364	137,233	66,364	137,233
Recruitment costs	108,659	194,959	108,659	194,959
Security	584,317	573,080	584,317	573,080
Settlement fees	452,860	-	452,860	-
Staff training, including leadership	1,202,009	299,025	1,202,009	299,025
Staff welfare	28,343	11,953	28,343	11,953
Storage costs	27,808	25,312	27,808	25,312
Subscriptions and membership fees	591,395	727,847	591,395	727,847
Telephone and fax	404,848	896,864	404,848	896,864
Travel – local	68,254	7,387	68,254	7,387
Utilities	852,938	794,406	852,938	794,406
Total general expenses	**14,917,697**	**9,517,619**	**14,916,132**	**9,515,200**

Notes to the Consolidated and Separate Annual Financial Statements

22. Lease rentals on operating lease

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Rent payable in respect of Lynnwood Bridge	10,902,738	10,283,622	10,902,738	10,283,622
Rent payable in respect of additional parking	-	45,540	-	45,540
Operating lease liability – Straight-lining of lease	(176,473)	546,134	(176,473)	546,134
Rental of equipment	167,994	149,056	167,994	149,056
	10,894,259	**11,024,352**	**10,894,259**	**11,024,352**

23. Interest and penalties recovered

Interest and penalties recovered	-	968	-	-

Interest and penalties were levied by the South African Revenue Services (SARS) after conducting a VAT audit. This was previously considered irrecoverable in terms of section 223(3) of the Tax Administration Act No 28 of 2011 but was recovered from SARS in the 2019/20 (R12,210) and 2020/21 (R968) financial years respectively.

24. Research, development and innovation

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Research, development and innovation costs	220,838,402	143,662,088	220,838,402	143,662,088
Media and marketing (printing and publishing)	2,460,401	2,398,732	2,460,401	2,398,732
Workshops and conferences	7,971,759	2,999,308	7,971,759	2,999,308
Other research related costs	3,695,386	1,926,272	3,695,386	1,926,272
Patent registrations	180,158	175,369	180,158	175,369
Local travel: Research related meetings	850,380	34,034	850,380	34,034
International travel: Research related meetings	154,731	(3,952)	154,731	(3,952)
Catering: Research related meetings	78,980	10,410	78,980	10,410
	236,230,197	**151,202,261**	**236,230,197**	**151,202,261**

25. Gains and (losses) on sale of assets

Property, plant and equipment	8,925	-	8,925	-

Notes to the Consolidated and Separate Annual Financial Statements

26. Operating Surplus

Operating surplus for the year is stated after accounting for the following:

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Operating lease charges				
Premises				
· *Contractual amounts*	10,726,265	10,875,296	10,726,265	10,875,296
Equipment	-	-	-	-
· *Contractual amounts*	167,994	149,056	167,994	149,056
	10,894,259	**11,024,352**	**10,894,259**	**11,024,352**
Amortisation on intangible assets	542,720	543,986	542,720	543,986
Depreciation, impairment losses and write-offs on property, plant and equipment	2,448,813	3,844,634	2,448,813	3,844,634
Employee costs	113,088,061	101,424,616	113,088,061	101,424,616
Research, development and innovation costs	236,230,197	151,202,261	236,230,197	151,202,261

27. Taxation

No provision has been made for Income taxation as the economic entity is exempt from company income tax in terms of Section 10(l)(cA)(i) of the Income Tax Act.

28. Auditors' Remuneration

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Fees – external auditors	1,325,116	771,717	1,325,116	771,717
Fees – internal auditors	742,400	118,335	742,400	118,335
	2,067,516	**890,052**	**2,067,516**	**890,052**

Notes to the Consolidated and Separate Annual Financial Statements

29. Cash generated from (used in) operations

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Surplus for the year	**37,092,701**	**66,461,869**	**37,094,266**	**66,463,320**
Adjustments for:				
Finance costs	533,799	537,331	533,799	537,331
Depreciation and amortisation expense	2,972,975	4,387,038	2,972,975	4,387,038
Impairment losses and write-offs	21,418	1,582	21,418	1,582
Actuarial gains and losses	1,607,311	(71,199)	1,607,311	(71,199)
Movements in operating lease assets and accruals	(176,473)	546,133	(176,473)	546,133
Non-cash movement in leave and bonus accrual	1,106,072	2,119,546	1,106,072	2,119,546
Foreign exchange (profit)/loss on foreign bank accounts	2,787,320	11,492,069	2,787,320	11,492,069
Non-cash movement in performance bonus provision	628,114	661,797	628,114	661,797
Gains and losses on disposal of non-current assets	(8,925)	-	(8,925)	-
Non-cash movement in provision for settlement fee	452,060	-	452,060	-
Change in working capital:				
Adjustment for decrease/ (increase) in receivables	(59,746,470)	(13,649,462)	(59,747,111)	(13,651,575)
Adjustment for (decrease)/ increase in payables	29,434,557	(984,136)	29,435,237	(984,136)
Net cash flows from operations	**16,704,459**	**71,502,568**	**16,706,063**	**71,501,906**

30. Commitments

General commitments	15,024,666	10,901,464	15,024,666	10,901,464
Research project commitments	334,902,790	255,645,798	334,902,790	255,645,798
Total commitments	**349,927,456**	**266,547,262**	**349,927,456**	**266,547,262**

General commitments relate to contractual obligations that the WRC entered into before 31 March 2022.

At year-end, research project commitments comprise projects approved by the executive management and include those for which contracts have been signed at year end (R256,736,150), those that were signed after year end (R47,620,000) and contracts that are in the process of being signed by all contracting parties but for which terms and conditions have been agreed upon (R30,546,640).

Notes to the Consolidated and Separate Annual Financial Statements

The comparative year has been restated by R344,114 represented by in an increase in the research commitments of R2,123,889 and a decrease in general commitments of R1,779,775.

The decrease in the general commitments of R1,779,775 relates to professional events management companies that were appointed on a panel for the organisation of planned conferences at a management fee based on the cost of the events. A reliable estimate of the commitment cannot be made as there is uncertainty in respect of the cost associated with the events, and this uncertainty has been exacerbated by the restrictions imposed by COVID-19 regulations.

31. Related Parties

31.1 Relationships

Controlled entity — ERF 706 Rietfontein (Pty) Ltd; Refer to note 7.

31.2 Related party transactions and balances

Related party balances	WRC	
	2022	2021
Amounts included in Trade receivable (Trade Payable) regarding related parties	R	R
ERF 706 Rietfontein (Proprietary) Limited	-	680

Secretarial fees of R680 incurred during the current year was paid by the Water Research Commission on behalf of ERF 706 Rietfontein.

	Group and WRC	
	2022	2021
	R	R
Outstanding levy income (Debtor at year end)		
Department of Water and Sanitation	-	10,007,754
Rand Water Board	88,075,052	27,092,425
Umgeni Water Board	9,747,072	9,098,808
Related party transactions		
Levy Income		
Department of Water and Sanitation	123,875,981	120,093,050
Rand Water Board	116,197,294	109,239,733
Umgeni Water Board	39,552,147	36,245,934

Notes to the Consolidated and Separate Annual Financial Statements

WRC derives its main source of income (Water research levy) from the Department of Water and Sanitation and the two Water Boards in terms of the Water Research Act. The Department of Water and Sanitation, Rand Water and Umgeni Water Board collect levy income on behalf of the WRC. The rate of the levy is approved by the Minister of Water and Sanitation on an annual basis.

The Department of Water and Sanitation pays WRC the water research levy on a monthly basis in accordance with the agreement. The two Water Boards are invoiced bi-annually upon which they pay the WRC.

The WRC and the Department of Water and Sanitation reports to the Minister of Water and Sanitation as their Executive Authority.

Compensation to directors and other key management are disclosed separately in note 32.

32. Emoluments of Executive management, Board members (Non-executive) and Co-opted Board Sub-Committees members

The emoluments are the same for the economic entity and the WRC.

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Total Emoluments				
Fees for services as board members (non-executive)	816,164	738,369	816,164	738,369
Fees for co-opted board sub-committee members	115,420	71,640	115,420	71,640
Basic salary	27,097,782	25,506,146	27,097,782	25,506,146
Bonuses and performance payments	3,446,850	2,913,959	3,446,850	2,913,959
Other allowances	413,710	-	413,710	-
	31,889,927	**29,230,114**	**31,889,927**	**29,230,114**

Notes to the Consolidated and Separate Annual Financial Statements

Executive 2022	Basic Salary	Bonuses and performance payments	Other allowances*	Total remuneration
Mr DP Naidoo – CEO (Contract ended: 30 September 2021)	2,197,090	522,717	1,190	2,720,998
Mr F Ismail – CFO	3,155,523	367,942	13,090	3,536,555
Dr MS Liphadzi	3,119,971	363,796	13,090	3,496,857
Ms R Lutchman	2,833,446	330,387	13,090	3,176,923
Dr M Msibi	2,832,971	330,331	192,649	3,355,951
Dr S Adams	2,512,246	302,693	13,090	2,828,029
Mr JN Bhagwan	2,556,759	308,057	13,090	2,877,905
Dr V Naidoo	2,469,812	287,986	115,152	2,872,950
Prof NS Mpandeli	2,240,124	261,204	13,090	2,514,417
Ms K Jonas	1,758,868	205,088	13,090	1,977,046
Ms N Viviers (Appointed: 1 July 2021)	1,420,972	166,650	13,090	1,600,711
	27,097,782	**3,446,850**	**413,710**	**30,958,343**

** Allowances for cellphone and acting, where applicable, is disclosed under other allowances*

Executive 2021	Basic Salary	Bonuses and performance payments	Other allowances*	Total remuneration
Mr DP Naidoo – CEO	4,057,407	461,109	-	4,518,516
Mr F Ismail – CFO	2,856,017	324,575	-	3,180,592
Dr MS Liphadzi	2,823,839	320,918	-	3,144,757
Ms R Lutchman	2,564,510	291,447	-	2,855,957
Dr M Msibi	2,564,079	291,398	-	2,855,477
Dr S Adams	2,349,550	267,017	-	2,616,567
Mr JN Bhagwan	2,418,043	283,977	-	2,702,020
Dr V Naidoo	2,235,390	254,043	-	2,489,433
Prof NS Mpandeli	2,027,502	230,418	-	2,257,920
Ms K Jonas	1,609,809	189,057	-	1,798,866
	25,506,146	**2,913,959**	**-**	**28,420,105**

Notes to the Consolidated and Separate Annual Financial Statements

Board members (Non-executive) 2022	Members' fees	Other fees	Total
Dr NP Mjoli – Chairperson	213,194	-	213,194
Prof SV Nkomo – Deputy Chairperson	131,340	-	131,340
Dr ME Makgae	109,450	-	109,450
Ms MK Mbonambi	123,380	-	123,380
Ms N Msezane	121,390	-	121,390
Dr NP Nala	35,820	-	35,820
Dr A Stroebel	81,590	-	81,590
	816,164	**-**	**816,164**

Board members (Non-executive) 2021	Members' fees	Other fees	Total
Dr NP Mjoli – Chairperson	186,872	-	186,872
Prof SV Nkomo – Deputy Chairperson	137,310	-	137,310
Dr ME Makgae	117,410	-	117,410
Ms MK Mbonambi	95,520	-	95,520
Ms N Msezane	71,640	-	71,640
Dr NP Nala	57,710	267	57,977
Dr A Stroebel	71,640	-	71,640
	738,102	**267**	738,369

Co-opted board sub-committee members 2022	Members' fees	Other fees	Total
Mr P Dlamini	57,710	-	57,710
Ms S Thomas	49,750	-	49,750
Dr J Maree	7,960	-	7,960
	115,420	**-**	**115,420**

Co-opted board sub-committee members 2021	Members' fees	Other fees	Total
Mr P Dlamini	31,840	-	31,840
Ms S Thomas	35,820	-	35,820
Dr J Maree	3,980	-	3,980
	71,640	**-**	**71,640**

Notes to the Consolidated and Separate Annual Financial Statements

33. Defined contribution plans

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Medical fund scheme				
Contribution	4,213,801	4,183,994	4,213,801	4,183,994

Defined contribution plan – Medical fund:

All eligible employees are members of the defined contribution scheme. The funds are governed by the Medical Schemes Act, 1998 (Act No 131 of 1998). No plan assets are held by the entity to fund this obligation. The above contributions have been included as part of the personnel cost expense.

Included in the contributions above is an amount of RO (2021: R28,579) that was contributed by the Water Research Commission (employer) to the medical fund scheme. These contributions are in respect of the employees that have been appointed on the cost plus benefits basis.

Pension fund scheme

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Pension fund scheme				
Contribution	8,461,833	8,148,907	8,461,833	8,148,907

Defined contribution plan – Pension fund:

The WRC has a pension fund scheme covering all employees in the form of a defined contribution fund. Alexander Forbes Life is managing the Umbrella Fund Scheme on behalf of the WRC.

The effect of this is that the WRC has no liability other than the defined contributions payable to the fund on a monthly basis. No liability can arise due to any adverse market conditions. The above contributions have been included as part of the personnel cost expense.

Included in the contributions above is an amount of RO (2021: R13,331) that was contributed by the Water Research Commission (employer) to the pension and provident fund scheme. These contributions are in respect of the employees that have been appointed on the cost-plus-benefits basis.

Notes to the Consolidated and Separate Annual Financial Statements

34. Financial Instruments Disclosure

Categories of financial instruments

Financial assets

Group – 2022	At fair value	At amortised cost	Total
Receivables	-	112,228,143	112,228,143
Cash and cash equivalent	310,306,400	-	310,306,400
	310,306,400	**112,228,143**	**422,534,543**

Financial Liabilities

Group – 2022	At fair value	At amortised cost	Total
Payables	-	184,114,205	184,114,205
Revolving credit facility	196,557	-	196,557
Finance lease obligations	-	62,894	62,894
Accruals – leave and bonus	-	10,395,506	10,395,506
	196,557	**194,572,605**	**194,769,162**

Financial assets

Group – 2021	At fair value	At amortised cost	Total
Receivables	-	50,383,320	50,383,320
Cash and cash equivalent	300,323,629	-	300,323,629
	300,323,629	**50,383,320**	**350,706,949**

Financial Liabilities

Group – 2021	At fair value	At amortised cost	Total
Payables	-	154,678,966	154,678,966
Revolving credit facility	162,842	-	162,842
Finance lease obligations	-	633,611	633,611
Accruals – leave and bonus	-	9,289,434	9,289,434
	162,842	**164,602,011**	**164,764,853**

Notes to the Consolidated and Separate Annual Financial Statements

Financial assets

WRC – 2022	At fair value	At amortised cost	Total
Receivables	-	112,221,518	112,221,518
Cash and cash equivalent	310,277,542	-	310,277,542
	310,277,542	**112,221,518**	**422,499,060**

Financial Liabilities

WRC – 2022	At fair value	At amortised cost	Total
Payables	-	184,114,205	184,114,205
Revolving credit facility	196,557	-	196,557
Finance lease obligations	-	62,894	62,894
Accruals – leave and bonus	-	10,395,506	10,395,506
	196,557	**194,572,605**	**194,769,162**

Financial assets

WRC – 2021	At fair value	At amortised cost	Total
Receivables	-	50,376,695	50,376,695
Cash and cash equivalent	300,293,167	-	300,293,167
	300,293,167	**50,376,695**	**350,669,862**

Financial Liabilities

WRC – 2021	At fair value	At amortised cost	Total
Payables	-	154,678,966	154,678,966
Revolving credit facility	162,842	-	162,842
Finance lease obligations	-	633,611	633,611
Accruals – leave and bonus	-	9,289,434	9,289,434
	162,842	**164,602,011**	**164,764,853**

Receivables above do not include prepayments and VAT receivable due to the fact that it is not a financial asset.

Notes to the Consolidated and Separate Annual Financial Statements

35. Risk management

35.1 Liquidity risk

The economic entity's risk to liquidity is a result of the funds available to cover future commitments. The economic entity manages liquidity risk through an ongoing review of future commitments and credit facilities. The table below analyses the economic entity's financial liabilities and net-settled derivative financial liabilities into relevant maturity groupings based on the remaining period at the statement of financial position to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows.

Group at 31 March 2022	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years
Trade and other payables	184,114,205	-	-	-
Finance lease obligation	62,894	-	-	-
	184,177,099	**-**	**-**	**-**

Group at 31 March 2021	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years
Trade and other payables	154,678,966	-	-	-
Finance lease obligation	570,717	62,894	-	-
	155,249,683	**62,894**	**-**	**-**

WRC at 31 March 2022	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years
Trade and other payables	184,114,205	-	-	-
Finance lease obligation	62,894	-	-	-
	184,177,099	**-**	**-**	**-**

WRC at 31 March 2021	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years
Trade and other payables	154,678,966		-	-
Finance lease obligation	570,717	62,894	-	-
	155,249,683	**62,894**	**-**	**-**

Notes to the Consolidated and Separate Annual Financial Statements

35.2 Credit risk

Credit risk consists mainly of cash deposits, cash equivalents and trade debtors. The entity only deposits cash with major banks with high quality credit standing and limits exposure to any one counter-party.

Financial assets exposed to credit risk at year end were as follows:

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Financial Instrument				
Corporation for Public Deposits	143,467,260	142,477,051	143,467,260	142,477,051
Bank balances	166,837,174	157,845,252	166,808,316	157,814,790

These balances represent the maximum exposure to credit risk.

35.3 Market Risk

35.3.1 Interest rate risk

Due to the nature and extent of the economic entity's investments, the economic entity is not unduly exposed to interest rate risks.

Deposits attract interest at rates that vary with prime. The entity's policy is to manage interest rate risk so that fluctuations in variable rates do not have a material impact on the financial results.

At year end, financial instruments exposed to interest rate risk were as follows:

- Balances with banks
- Deposits with the Corporation for Public Deposits.

35.3.2 Foreign exchange risk

The economic entity does not hedge foreign accounts receivables, foreign accounts payables or derivative market instruments.

The bank accounts below, denominated in foreign currency, are held on behalf of leverage funded partners. The WRC is exposed to foreign currency risk to the extent that a devaluation in the foreign currency, reduces the amount available in respect of projects already entered into by the WRC with service providers in South African Rands.

Notes to the Consolidated and Separate Annual Financial Statements

Foreign currency exposure at statement of financial position date

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Current assets				
Cash and cash equivalents, USD 6,064,383 (2021: 4,300,557)	87,286,483	62,626,860	87,286,483	62,626,860
Cash and cash equivalents, Euro 760,731 (2021: 240,888)	12,071,732	4,111,725	12,071,732	4,111,725

35.3.3 Price risk

Due to the nature and extent of the economic entity's investments, the economic entity is not unduly exposed to price risks as investments are held in cash and deposits.

36. Irregular expenditure

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Opening balance	-	2,003,530	-	1,792,542
Add: Irregular expenditure in respect of current year	3,929,313	-	3,929,313	-
Add: Irregular expenditure identified in the current year relating to previous financial years	8,287,214	-	8,287,214	-
Less: Amounts condoned	-	(2,003,530)	-	(1,792,542)
Closing balance	**12,216,527**	**-**	**12,216,527**	**-**

Irregular Expenditure identified in the current year comprises: Approval of performance bonuses and salary increases not in accordance with the delegation of authority	**12,216,527**	**-**	**12,216,527**	**-**

Irregular expenditure 2021/22 financial year and 2020/21 financial year

- **Approval of performance bonuses and salary increases not in accordance with the delegations of authority**

Performance bonuses and salary increases were not approved by the delegated authority in line with the WRC's Delegations of Authority.

The impact of the performance bonuses for the 2019/20 financial year (R4 701 120), 2020/21 financial year (R2 913 959) and 2021/22 financial year (3 446 851) has been disclosed as irregular expenditure. The impact of the salary increase for the 2019/20 financial year (R225 719), 2020/21 financial year (R446 416) and 2021/22 financial year (R482 462) has been disclosed as irregular expenditure.

Notes to the Consolidated and Separate Annual Financial Statements

Possible irregular expenditure under assessment

- **Non-compliance with recruitment and selection policy**

The report of the Public Protector, as issued in January 2022, noted an irregular appointment. The WRC is in the process of implementing the remedial actions recommended by the Public Protector. The Commission will be engaging National Treasury to determine if this constitutes irregular expenditure with an estimated amount of R4 401 890.

- **Foreign suppliers**

Paragraph 2 of the Treasury Instruction Note 7 (2017/18) requires a SBD 1 form to be obtained from foreign suppliers in order to verify tax compliance prior to award. Due to the suppliers being fully web-based (online) with no physical presence in South Africa, it was impractical to obtain the forms. The WRC is engaging National Treasury for guidance in respect of this matter. Possible irregular expenditure of R43 789 is subject to determination.

Irregular expenditure condoned in the 2020/21 financial year

The irregular expenditure amounting to R2 003 530 incurred during prior years (2017/18, 2018/19 and 2019/20) was condoned by National Treasury during the 2020/21 financial year.

Consequence management
Appropriate consequence management will be considered in line with the National Treasury Framework on Irregular Expenditure.

37. Fruitless and wasteful expediture

	Group		WRC	
	2022	2021	2022	2021
	R	R	R	R
Opening balance	29,342	165,724	29,342	165,724
Less: Amounts written off	(29,342)	-	(29,342)	-
Less: Reversal of interest and penalties		(136,382)	-	(136,382)
Closing balance	**-**	**29,342**	**-**	**29,342**

Fruitless and wasteful expenditure: 2021/22

There was no fruitless and wasteful expenditure incurred during the 2021/22 financial year. The fruitless and wasteful expenditure amounting to R29 342 was approved for write off by the Board on 29 July 2021 in line with the National Treasury framework.

Fruitless and wasteful expenditure: 2020/21

There was no fruitless and wasteful expenditure incurred during the 2020/2021 financial year.

Notes to the Consolidated and Separate Annual Financial Statements

38. Budget information and explanation of differences

Material changes from the approved budget to the final budget

The changes between the approved and final budget are a consequence of reallocations within the approved budget.

Material differences between the final budget and actual amounts

Leverage Income

The WRC has exceeded its annual target in respect of leverage income with approximately R74.62 million which is mainly due to:

- R39.6 million in respect of new leverage funded projects commencing in the financial year due to government departments prioritising actionable projects that impact on youth, students, communities and innovations to support sanitation and water . This resulted in government departments providing funds to various state entities for support and roll-out in order to reduce the impact of the socio-economic effects of the COVID-19 pandemic.

  This includes the following projects:

  - Water GEP (R32 million)
  - Gates/UKZN/WRC Partnership (R5.2 million) for the development and piloting of the water graduate employment programme for unemployed graduates to set up a Global Centre of Sanitation at UKZN, Presidency Youth Employment Support for Graduates in Water sector and UNDP to support grassroots innovations for COVID-19
  - Flanders (R1.1 million) for water security and climate resilience in Giyani and GIZ
  - EWSETA (R1.3 million) for additional bursary support

- The actual deliverables exceeded the budget deliverables resulting in the generation of additional leverage income to the value of R35.02 million.

Due to the slowdown of the effects of COVID-19 and activities starting to return to normal, there was a big uptake of research in the 2021/22 financial year in respect of projects for which activities were postponed due to the restrictions previously imposed by the pandemic. Budgets were expended faster as an initial conservative estimate was made for demonstration and research projects roll out due to COVID-19, but due to vaccination rollout and the Omicron variant being less impactful on lockdown protocol, it led to researchers and innovators commencing projects quicker than expected.

Interest received

The WRC has exceeded its annual target in respect of interest income by R1.2 million which is primarily as a result of higher interest income earned due to higher cash holdings during the period under review.

Levy income

The R3.84 million positive variance in levy income is as a result of actual water sales volumes generated by the Water Boards, being higher than anticipated.

Notes to the Consolidated and Separate Annual Financial Statements

Running costs

The variance in running costs of R5.31 million results from actual expenditure that is lower than the budget.
The budget variance is mainly as a result of the following:

- Savings and delays in IT related software and maintenance costs which is mainly as a result of postponement of the WRC website, social internet, and the monthly software costs associated with the automation of procurement processes, savings on printer usage due to the WRC not returning to the office as originally planned and savings on the payments in respect of the BMS related to contract support and maintenance as well as licenses for all users of BMS.
- Savings in promotions and publicity and some other costs due to the WRC using cost effective digital ways of dissemination and promotion.
- Delays in consultancy and professional fees.

Human resource costs

The variance in human resource costs (R7.62 million) results from actual expenditure that is lower than the budget and is mainly as a result of the following:

- Savings in training and employee development expenditure to the value of R974k.
- Delays in the filling of vacancies (R4.4 million) due to the freeze that was placed on the filling of vacant positions, in an attempt to be financially prudent.
- Lower top-up payments in respect of the Employee Benefit Obligation than anticipated (R1.7 million) due to timing differences as medical increases will only be implemented in October 2022.

Research, development and innovation

The research, development and innovation variance of R57.70 million results from actual expenditure that is higher than the budget and can be broken down as follows:

- Research costs related to leverage projects of some R71.08 million which was previously not included in the budget. These costs are funded externally and reflected as leverage income.
- Overall savings in other research related costs of R13.38 million which includes printing and publishing (R2.5 million), promotion of research outputs (R3.6 million), workshops and conferences (R8.3 million), saving of (R760k) which is mainly due to the remote working during the financial year as required to comply with lock down and COVID-19 processes and an overspend of RI.8 million on research, sponsorships and grants due to the slow down of the effects of COVID-19.

Capital expenditure

The variance in capital expenditure of R4.6 million results from actual expenditure that is lower than the budget and is as a result of some savings due to improvements on IT projects and other technology infrastructure investments being postponed to the 2022/23 financial year.

Notes to the Consolidated and Separate Annual Financial Statements

39. Reconciliation between budget and statement of financial performance

Reconciliation of budget surplus/deficit with the surplus/deficit in the statement of financial performance:

	2022
	R
Net surplus per the statement of financial performance	37,092,701
Adjusted for:	
Depreciation and amortisation	2,972,975
Impairment losses and write-offs	21,418
Actuarial (gains)/losses	1,607,311
Employee benefit payments	(2,663,926)
Interest on employee benefit obligation	489,665
Non-cash movement in accrual – leave and bonus	1,106,072
Operating lease: Movement in straight-lining of operating leases	(176,473)
Capital expenditure incurred	(712,689)
Fixed costs – rental of equipment	(570,716)
Non-cash movement in provision for performance bonus	628,114
Net surplus per approved budget	**39,794,452**

40. Going concern

We draw attention to the fact that at 31 March 2022, the entity had an accumulated surplus/(deficit) of R215 486 342 and that the entity's total assets exceeds its liabilities by R215 486 342.

Management has assessed the existing and anticipated effects of COVID-19 on the company's activities and the appropriateness of the use of the going concern basis and after consideration the financial statements have been prepared on the basis of accounting policies applicable to a going concern. This basis presumes that funds will be available to finance future operations and that the realisation of assets and settlement of liabilities, contingent obligations and commitments will occur in the ordinary course of business.

Notes to the Consolidated and Separate Annual Financial Statements

41. Change in accounting estimates

The WRC has reassessed the useful lives of property, plant and equipment and intangible assets which resulted in changes to certain assets' remaining useful lives within property, plant and equipment and Intangible assets.

The effect of this revision has decreased the depreciation and ammortisation charge for the current period by R658 139 for property, plant and equipment and R11 825 for intangible assets with a corresponding increase of R658 139 for property, plant and equipment and R11 825 for intangible assets for future periods.

	Previously assessed useful life	Reassessed useful life	Financial impact on current and future depreciation
Property, plant and equipment			
Furnitures and Fixtures	3 – 10 years	3 – 10 years	236,042
Office equipment	3 – 5 years	3 – 7 years	242,317
Computer Equipment	3 – 10 years	3 – 10 years	179,781
			658,139
Intangible Assets			
Computer Software	3 – 10 years	3 – 18 years	11,825

42. Contingent liabilities and contingent assets

No continent liabilities were identified that require disclosure in the financial statements.

43. Events after the reporting period

During the 2021/22 financial year a former employee of the Water Research Commission (WRC) resigned citing constructive dismissal, upon which the matter was referred to the Commission for Conciliation, Mediation and Arbitration (CCMA) for conciliation and arbitration. The parties were able to reach a settlement without the need of arbitration and on the 5 May 2022, the CCMA confirmed the settlement agreement, by issuing an award of R452,860 in favour of the former employee. The annual financial statements have been adjusted accordingly.

During the 2021/22 financial year there was an internal disciplinary dispute. The incumbent was found not guilty, however, resigned and referred the matter to the CCMA for Conciliation/ Arbitration on 25 January 2022 on the basis of constructive dismissal. Subsequent to year-end the incumbent has withdrawn the dispute at the CCMA.

Research project commitments comprise projects approved by the executive management and include those that were signed after year end (R47,620,000) and contracts that are in the process of being signed by all contracting parties but for which terms and conditions have been agreed upon (R30,546,640).

In a meeting held on 26 May 2022 the Board approved the deregistration of ERF 706 Rietfontein (Pty) Ltd. No further events after the reporting date were identified that require adjustment or disclosure in the financial statements.

B-BBEE Compliance Performance Information

The B-BBEE Compliance Performance Information is disclosed in terms of the Annual Report Guide for Schedule 3A and 3C Public Entities as updated by National Treasury in August 2022.

Has the Public Entity applied any relevant Code of Good Practice (B-BBEE Certificate Levels 1 – 8) with regards to the following:		
Criteria	Response Yes / No	Discussion
Determining qualification criteria for the issuing of licences, concessions or other authorisations in respect of economic activity in terms of any law?	No	This criteria is not applicable to the Water Research Commission (WRC) and therefore no measures are required to ensure compliance.
Developing and implementing a preferential procurement policy?	Yes	
Determining qualification criteria for the sale of state-owned enterprises?	No	This criteria is not applicable to the WRC and therefore no measures are required to ensure compliance.
Developing criteria for entering into partnerships with the private sector?	Yes	
Determining criteria for the awarding of incentives, grants and investment schemes in support of Broad Based Black Economic Empowerment?	No	This criteria is not applicable to the WRC and therefore no measures are required to ensure compliance.

In the 2020/21 financial year, the WRC submitted the relevant documentation to the B-BBEE Commission, however it must be noted that this was the Commission's first ever submission and, unfortunately, the WRC was not able to meet the 30-day submission timeline requirement and also received a non-compliant BBBEE certificate, resulting in non-compliance with section 13 (G) (1) of the B-BBEE Act and 12(2) of the B-BBEE Regulation.

In respect of the 2021/22 financial year, the independent B-BBEE assessment and verification process was underway for the required annual submission to the Commission. The WRC has developed an internal action plan to achieve full compliance with the BBBEE Act and the BBBEE Regulation and based on its plan expects to accomplish this by the 2023/24 financial year.

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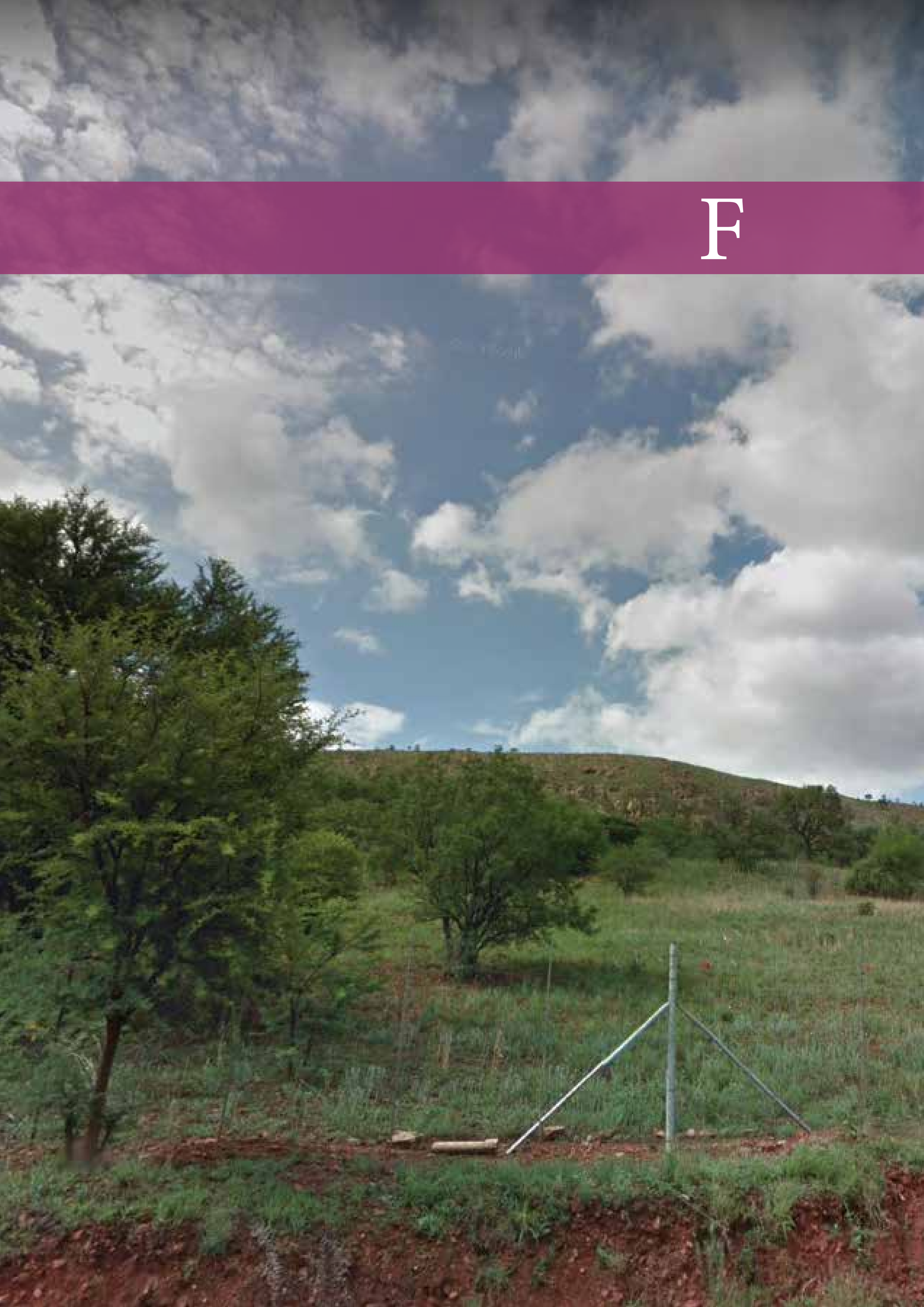

Section F:

ERF SEWE NUL SES RIETFONTEIN (PROPRIETARY) LIMITED

for the year ended 31 March 2022

Contents

The annual financial statements as set out in pages 153 to 173, which have been prepared on a liquidation basis, were approved by the Board of Directors on 29 July 2022, and was signed on its behalf by:

Dr JB Molwantwa
Director

Dr NP Mjoli
Director

General Information

Country of Incorporation and Domicile	South Africa
Legal form of entity	The main business of the company was to own the immovable property known as Erf 706 Rietfontein and supplementary to the aim of the Water Research Commission to place the property at the disposal of the WRC as their main place of business. The immovable property was disposed of. In a meeting held on 26 May 2022, the Board approved the deregistration of Erf 706 Rietfontein.
Directors	Dr JB Molwantwa Dr NP Mjoli
Postal Address	Private Bag X03 Gezina 0003
Controlling Entity	Water Research Commission
Bankers	ABSA Bank
Auditors	Auditor-General of South Africa
Company Registration Number	1984/003566/07

Directors' Report

1. General Review

In order for stakeholders to review the business and operations of the company for the reporting period in general, the Directors draw attention to the statements of financial position, financial performance, changes in net assets and cash flows attached. These statements clearly reflect the business of the company, its results and state of affairs.

The Companies Act, 71 of 2008 requires that the Directors report on any material facts or circumstances which occurred between the reporting date and the date of their report. The material matters and circumstances that occurred during the period under review are contained in the specific matters below.

2. Specific Matters

The main aim of the company was that of owning immovable property known as Erf 706 Rietfontein, including all permanent improvements and to use the property for the purpose of promoting the operations of the Water Research Commission.

The disposal of the Marumati Building ("the Property") owned by Erf 706 Rietfontein (Pty) Ltd, was finalised on the 12 July 2019. This disposal of the property, including the relocation of the Water Research Commission offices, effectively means that the company is not able to continue its main business of renting property for use by the Water Research Commission.

In a meeting held on 26 May 2022 the Board approved the deregistration of Erf 706 Rietfontein (Pty) Ltd.

No shares were allotted or issued by the company during the period under review. The entity is wholly owned by the Water Research Commission.

No dividends were paid or declared during the period under review and we have no recommendation to make in respect of dividends.

3. Directors

Directors and certain members of staff of the Water Research Commission managed the business of the company. No third party was involved in managing the entity.

The directors of the Company in office at the date of this report are as follows:

Dr JB Molwantwa Appointed 1 April 2022
Dr NP Mjoli
Mr DP Naidoo's term as director came to an end during the period under review.

4. Secretary

The company' secretary is Rene Vorster.

Report of the auditor-general

to Parliament on ERF 706 Rietfontein (Pty) Ltd

Report on the audit of the financial statements

Opinion

1. I have audited the financial statements of ERF 706 Rietfontein (Pty) Ltd set out on pages 153 to 173, which comprise the statement of financial position as at 31 March 2022, statement of financial performance, statement of changes in net assets and statement of cash flow for the year ended, as well as the notes to the financial statements, including a summary of significant accounting policies.

2. In my opinion, the financial statements present fairly, in all material respects, the financial position of ERF 706 Rietfontein (Pty) Ltd as at 31 March 2022, and the financial performance and cash flows for the year ended in accordance with Generally Recognised Accounting Practice (GRAP).

Basis for 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 financial statements section of my report.

4. I am independent of the public entity in accordance with the International Ethics Standards Board for Accountants' International code of ethics for professional accountants (including International Independence Standards) (IESBA code), as well as other 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.

Material uncertainty relating to going concern

6. I draw attention to the matter below. My opinion is not modified in respect of this matter.

7. As disclosed in note 15 to the financial statements, the entity disposed of immovable property in a prior year, which was the primary source of revenue. This indicates that a material uncertainty exists that may cast significant doubt on the entity's ability to continue as a going concern.

Responsibilities of the accounting authority for the financial statements

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

9. In preparing the financial statements, the accounting authority is responsible for assessing the public entity'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 appropriate governance structure either intends to liquidate the public entity or to cease operations, or has no realistic alternative but to do so.

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

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

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

Performance information reporting

12. As the public entity was dormant for the year under review, no work was performed on the audit of performance information.

Audit of compliance with legislation.

13. As the public entity was dormant for the year under review, no work was performed on the audit of compliance with legislation.

Other information

14. The ERF 706 Rietfontein (Pty) Ltd accounting authority is responsible for the other information. The other information comprises the information included in the annual report, which includes the director's report, the audit committee's report and the company secretary's certificate, as required by the Companies Act. The other information does not include the financial statements and the auditor's report.

15. My opinion on the financial statements does not cover the other information and I do not express an audit opinion or any form of assurance conclusion thereon.

16. In connection with my audit, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements, or our knowledge obtained in the audit, or otherwise appears to be materially misstated.

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

Internal control deficiencies

18. I considered internal control relevant to my audit of the financial statements; however, my objective was not to express any form of assurance thereon. I did not identify any significant deficiencies in internal control.

Auditor - General

Pretoria
30 July 2022

AUDITOR-GENERAL

Annexure:
Auditor-general's responsibility for the audit

1. As part of an audit in accordance with the ISAs, I exercise professional judgment and maintain professional scepticism throughout my audit of the financial statements.

Financial statements

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

- identify and assess the risks of material misstatement of the financial statements whether due to fraud or error; design and perform audit procedures responsive to those risks; and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or the override of internal control.
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the 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 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 ability of the ERF 706 Rietfontein (Pty) Ltd 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 my 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 the public entity to cease operating as a going concern.
- evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and determine whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

Communication with those charged with governance

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

4. I also provide the accounting authority with a statement that I have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on my independence and, where applicable, actions taken to eliminate threats or safeguards applied.

Statements of Financial Position

for the year ended 31 March 2022

	Notes	2022	2021
		R	R
Assets			
Current assets			
Receivables	3	7,444	7,405
Cash and cash equivalents	4	28,858	30,462
Total current assets		**36,302**	**37,867**
Total assets		**36,302**	**37,867**
Net assets and liabilities			
Liabilities			
Current liabilities			
Payables from exchange transactions	5	680	680
Total liabilities		**680**	**680**
Net assets			
Share capital	6	1	1
Accumulated surplus		35,621	37,186
Total net assets		**35,622**	**37,187**
Total net assets and liabilities		**36,302**	**37,867**

Statement of Financial Performance

for the year ended 31 March 2022

	Notes	2022	2021
		R	R
Revenue from exchange transactions		-	-
Revenue from non-exchange transactions		-	-
Total revenue		**-**	**-**
Expenditure			
General expenses	7	1,565	2,419
Interest and penalties recovered	8	-	(968)
Total expenditure		**1,565**	**1,451**
Deficit from operating activities		**(1,565)**	**(1,451)**
Taxation	9	-	-
Deficit for the year		**(1,565)**	**(1,451)**

Statement of Changes in Net Assets

for the year ended 31 March 2022

	Share capital	Accumulated surplus/ (deficit)	Total
	R	R	R
Balance at 1 April 2020	1	38,637	38,638
Changes in net assets			
Deficit for the year	-	(1,451)	(1,451)
Balance at 31 March 2021	**1**	**37,186**	**37,187**
Balance at 1 April 2021	**1**	**37,186**	**37,187**
Changes in net assets			
Deficit for the year	-	(1,565)	(1,565)
Balance at 31 March 2022	**1**	**35,621**	**35,622**
Note	*6*		

Statement of Cash Flows

for the year ended 31 March 2022

	Notes	2022	2021
		R	R
Cash flows from operating activities			
Receipts			
Cash receipts from customers		196	1,694
Payments			
Cash paid to suppliers		(1,800)	(1,032)
Net cash flows from operating activities	**10**	**(1,604)**	**662**
Net (decrease)/ increase in cash and cash equivalents		**(1,604)**	**662**
Cash and cash equivalents at beginning of the year		30,462	29,800
Cash and cash equivalents at end of the year	**4**	**28,858**	**30,462**

Accounting Policies

for the year ended 31 March 2022

1. Presentation of Annual Financial Statements

The annual financial statements have been prepared in accordance with the accounting policies below which considers the Standards of Generally Recognised Accounting Practice (GRAP), issued by the Accounting Standards Board (ASB) with regard to the basic recognition, measurement and disclosure requirements, taking into account the circumstances that will impact the amounts that will be recovered or settled, where relevant.

The company has disposed of its immovable property of which the transfer was finalised on 12 July 2019 and as a result will not be able to continue as a going concern. These financial statements have therefore been prepared on a liquidation basis of accounting and are in accordance with the historical cost convention as the basis of measurement, unless specified otherwise. They are presented in South African Rand. In a meeting held on 26 May 2022 the Board approved the deregistration of Erf 706 Rietfontein (Pty) Ltd.

A summary of the significant accounting policies, which have been consistently applied in the preparation of these financial statements, are disclosed below.

These accounting policies are consistent with the previous period.

1.1 Going concern assumption

These financial statements were not prepared on a going concern basis due to Erf 706 Rietfontein (Pty) Ltd ceasing its operating activities. Accordingly, assets are measured at their liquidation values (representing the impaired values thereof and) liabilities are measured at their exit values. The going concern difficulties faced by the entity are further explained in note 15.

Judgement is required in determining whether a change in the carrying value of assets and liabilities is needed. When the going concern assumption is no longer appropriate, it is also necessary to consider whether the change in circumstances leads to the creation of additional liabilities or trigger clauses in debt contracts leading to the reclassification of certain debts as current liabilities.

1.2 Significant judgements and sources of estimation uncertainty

In preparing the annual financial statements, management is required to make estimates and assumptions that affect the amounts represented in the annual financial statements and related disclosures. The use of available information and the application of judgement is inherent in the formation of estimates. Actual results in the future could differ from these estimates which may be material to the annual financial statements. Significant judgements include:

Receivables/Held to maturity investments and/or loans and receivables

The entity assesses its receivables for impairment at the end of each reporting period. In determining whether an impairment loss should be recorded in surplus or deficit, the company makes judgements as to whether there is observable data indicating a measurable decrease in the estimated future cash flows from a financial asset.

The impairment for receivables is calculated on a portfolio basis, based on historical loss ratios, adjusted for national and industry-specific economic conditions and other indicators present at the reporting date that correlate with defaults on the portfolio. These annual loss ratios are applied to loan balances in the portfolio and scaled to the estimated loss emergence period.

Accounting Policies

for the year ended 31 March 2022

Fair value estimation

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

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

Impairment testing

The entity assesses its receivables for impairment at the end of each reporting period. In determining whether an impairment loss should be recorded in surplus or deficit, the entity makes judgements as to whether there is observable data indicating a measurable decrease in estimated future cash flows from financial assets.

The recoverable amounts of individual assets have been determined based on the higher of value-in-use calculations and fair values less costs to sell. These calculations require the use of estimates and assumptions. It is reasonably possible that the assumptions may change which may then impact our estimations and may then require a material adjustment to the carrying value of tangible assets.

The entity reviews and tests the carrying value of assets when events or changes in circumstances suggest that the carrying amount may not be recoverable. Assets are grouped at the lowest level for which identifiable cash flows are largely independent of cash flows of other assets and liabilities. If there are indications that impairment may have occurred, estimates are prepared of expected future cash flows for each group of assets. Expected future cash flows used to determine the value in use of tangible assets are inherently uncertain and could materially change over time.

1.3 Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

A financial asset is any asset that is:
- cash;
- a residual interest of another entity; or
- a contractual right to receive cash or another financial asset from another entity or to exchange financial assets or financial liabilities with another entity under conditions that are potentially favourable to the entity.

A financial liability is any liability that is:
- deliver cash or another financial asset to another entity; or
- exchange financial assets or financial liabilities under conditions that are potentially unfavourable to the entity.

Classification

The entity has the following types of financial assets (classes and category) as reflected on the face of the statement of financial position or in the notes thereto:

Class	Category
Receivables from exchange transactions	Financial asset measured at amortised cost
Cash and cash equivalents	Financial asset measured at fair value

Accounting Policies

for the year ended 31 March 2022

The entity has the following types of financial liabilities (classes and category) as reflected on the face of the statement of financial position or in the notes thereto:

Class	Category
Payables from exchange transactions	Financial liability measured at amortised cost
Other financial liabilities	Financial liability measured at amortised cost

Initial recognition

The entity recognises a financial asset or a financial liability in its statement of financial position when the entity becomes a party to the contractual provisions of the instrument.

The entity recognises financial assets using trade date accounting.

Initial measurement of financial assets and financial liabilities

The entity measures a financial asset and financial liability initially at its fair value plus transaction costs that are directly attributable to the acquisition or issue of the financial asset or financial liability.

Subsequent measurement of financial assets and financial liabilities

All financial assets and financial liabilities are measured after initial recognition using the following categories:

- Financial instruments at fair value
- Financial instruments at amortised cost
- Financial instruments at cost

Financial instruments at fair value

Cash and cash equivalents

Cash and cash equivalents comprise cash on hand and demand deposits, and other short-term highly liquid investments that are readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These are initially and subsequently recorded at fair value.

Financial instruments at amortised cost

Receivables

Receivables are measured at initial recognition at fair value and are subsequently measured at amortised cost using the effective interest rate method.

Payables

Payables are initially measured at fair value, and are subsequently measured at amortised cost, using the effective interest rate method.

Fair value measurement considerations

The fair values of listed investments are based on current bid prices. If the market for a financial asset is not active, the entity establishes the fair value by using valuation techniques. These include the use of recent arm’s length transactions, reference to other instruments that are substantially the same, discounted cash flow analysis, and option pricing models making maximum use of market inputs and relying as little as possible on entity specific inputs.

Accounting Policies

for the year ended 31 March 2022

Impairment and uncollectibility of financial assets

The entity assesses at the end of each reporting period whether there is any objective evidence that a financial asset or group of financial assets is impaired.

All financial assets measured at amortised cost, or cost, are subject to an impairment review. Appropriate allowances for estimated irrecoverable amounts are recognised in surplus or deficit when there is objective evidence that the asset is impaired. Significant financial difficulties of the debtor, probability that the debtor will enter bankruptcy or financial reorganisation, and default or delinquency in payments are considered indicators that the trade receivable is impaired. The allowance recognised is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows discounted at the effective interest rate computed at initial recognition.

The carrying amount of the asset is reduced through the use of an allowance account, and the amount of the deficit is recognised in surplus or deficit within operating expenses. When a trade receivable is uncollectible, it is written off against the allowance account for trade receivables. Subsequent recoveries of amounts previously written off are credited against operating expenses in surplus or deficit.

If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised, the previously recognised impairment loss is reversed by adjusting an allowance account. The reversal does not result in a carrying amount of the financial asset that exceeds 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 surplus or deficit.

Derecognition

Financial assets

The entity derecognises financial assets using trade date accounting.

The entity derecognises a financial asset only when:
- the contractual rights to the cash flows from the financial asset expire, are settled or waived;
- the entity transfers to another party substantially all of the risks and rewards of ownership of the financial asset; or
- the entity, despite having retained some significant risks and rewards of ownership of the financial asset, has transferred control of the asset to another party and the other party has the practical ability to sell the asset in its entirety to an unrelated third party, and is able to exercise that ability unilaterally and without needing to impose additional restrictions on the transfer. In this case, the entity :
  - derecognise the asset; and
  - recognise separately any rights and obligations created or retained in the transfer.

On derecognition of a financial asset in its entirety, the difference between the carrying amount and the sum of the consideration received is recognised in surplus or deficit.

Financial liabilities

The entity removes a financial liability (or a part of a financial liability) from its statement of financial position when it is extinguished – i.e. when the obligation specified in the contract is discharged, cancelled, expires or is waived.

Accounting Policies

for the year ended 31 March 2022

The difference between the carrying amount of a financial liability (or part of a financial liability) extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognised in surplus or deficit.

1.4 Statutory Receivables

Identification

Statutory receivables are receivables that arise from legislation, supporting regulations, or similar means, and require settlement by another entity in cash or another financial asset.

Carrying amount is the amount at which an asset is recognised in the statement of financial position.

The cost method is the method used to account for statutory receivables that requires such receivables to be measured at their transaction amount, plus any accrued interest or other charges (where applicable) and, less any accumulated impairment losses and any amounts derecognised.

Nominal interest rate is the interest rate and/or basis specified in legislation, supporting regulations or similar means.

The transaction amount for a statutory receivable means the amount specified in, or calculated, levied or charged in accordance with, legislation, supporting regulations, or similar means.

Recognition

The entity recognises statutory receivables as follows:

- if the transaction is an exchange transaction, using the policy on Revenue from exchange transactions;
- if the transaction is a non-exchange transaction, using the policy on Revenue from non-exchange transactions (Taxes and transfers); or
- if the transaction is not within the scope of the policies listed in the above or another Standard of GRAP, the receivable is recognised when the definition of an asset is met and, when it is probable that the future economic benefits or service potential associated with the asset will flow to the entity and the transaction amount can be measured reliably.

Initial measurement

The entity initially measures statutory receivables at their transaction amount.

Subsequent measurement

The entity measures statutory receivables after initial recognition using the cost method. Under the cost method, the initial measurement of the receivable is changed subsequent to initial recognition to reflect any:

- interest or other charges that may have accrued on the receivable (where applicable);
- impairment losses; and
- amounts derecognised.

Derecognition

The entity derecognises a statutory receivable, or a part thereof, when:

- the rights to the cash flows from the receivable are settled, expire or are waived;
- the entity transfers to another party substantially all of the risks and rewards of ownership of the receivable; or

Accounting Policies

for the year ended 31 March 2022

- the entity, despite having retained some significant risks and rewards of ownership of the receivable, has transferred control of the receivable to another party and the other party has the practical ability to sell the receivable in its entirety to an unrelated third party, and is able to exercise that ability unilaterally and without needing to impose additional restrictions on the transfer. In this case, the entity:
  - derecognise the receivable; and
  - recognise separately any rights and obligations created or retained in the transfer.

The carrying amounts of any statutory receivables transferred are allocated between the rights or obligations retained and those transferred on the basis of their relative fair values at the transfer date. The entity considers whether any newly created rights and obligations are within the scope of the Standard of GRAP on Financial Instruments or another Standard of GRAP. Any difference between the consideration received and the amounts derecognised and, those amounts recognised, are recognised in surplus or deficit in the period of the transfer.

1.5 Tax

Current tax assets and liabilities

Current tax for current and prior periods is, to the extent unpaid, recognised as a liability. If the amount already paid in respect of current and prior periods exceeds the amount due for those periods, the excess is recognised as an asset.

Current tax liabilities (assets) for the current and prior periods are measured at the amount expected to be paid to (recovered from) the tax authorities, using the tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax assets and liabilities

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

A deferred tax liability is recognised for all taxable temporary differences, except to the extent that the deferred tax liability arises from the initial recognition of an asset or liability in a transaction which at the time of the transaction, affects neither accounting surplus nor taxable profit (tax loss).

A deferred tax asset is recognised for all deductible temporary differences to the extent that it is probable that taxable surplus will be available against which the deductible temporary difference can be utilised. A deferred tax asset is not recognised when it arises from the initial recognition of an asset or liability in a transaction at the time of the transaction, affects neither accounting surplus nor taxable profit (tax loss).

A deferred tax asset is recognised for the carry forward of unused tax losses and unused STC credits to the extent that it is probable that future taxable surplus will be available against which the unused tax losses and unused STC credits can be utilised.

As the entity will not be able to continue to operate as a going concern or generate any further income due to the disposal of its primary source of income, the immovable property known as ERF 706 Rietfontein, it is improbable that future taxable profits will be available against which the deductible temporary differences can be utilised thus no deferred tax asset is recognised.

Accounting Policies

for the year ended 31 March 2022

Tax expenses

Current tax and deferred taxes are charged or credited to net assets if the tax relates to items that are credited or charged, in the same or a different period, to net assets.

1.6 Share Capital

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities.

1.7 Contingencies

Contingent assets and contingent liabilities are not recognised. Contingencies are disclosed in note 12.

1.8 Revenue

Revenue is the gross inflow of economic benefits or service potential during the reporting period when those inflows result in an increase in net assets, other than increases relating to contributions from owners.

Revenue from exchange transactions refers to revenue that accrued to the entity directly in return for services rendered/ goods sold, the value of which approximates the considerations received or receivable. An exchange transaction is one in which the entity receives assets or services, or has liabilities extinguished, and directly gives approximately equal value (primarily in the form of goods, services or use of assets) to the other party in exchange.

Non-exchange transactions are transactions that are not exchange transactions. In a non-exchange transaction, an entity either receives value from another entity without directly giving approximately equal value in exchange, or gives value to another entity without directly receiving approximately equal value in exchange.

Measurement

Revenue is measured at the fair value of the consideration received or receivable and represents the amounts receivable for goods and services provided in the normal course of business, net trade discounts and volume rebates, and value added tax.

Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction.

Revenue from a non-exchange transaction shall be measured at the amount of the increase in net assets recognised by the entity.

1.9 Related parties

A related party is a person or entity with the ability to control or jointly control the other party, or exercise significant influence over the other party, or vice versa, or an entity that is subject to common control, or joint control.

The entity follows the guidance of GRAP 20 to identify related party relationships, transactions and balances and the disclosures on those identified.

The entity is exempt from disclosure requirements in relation to related party transactions if that transaction occurs within normal supplier and/or client/recipient relationships on terms and conditions no more or less favourable than those which it

Accounting Policies

for the year ended 31 March 2022

is reasonable to expect the entity to have adopted if dealing with that individual entity or person in the same circumstances and terms and conditions are within the normal operating parameters established by that reporting entity's legal mandate.

1.10 Events after the reporting date

Events after the reporting date are those events, both favourable and unfavourable, that occur between the reporting date and the date when the financial statements are authorised for issue. Two types of events can be identified:

- those that provide evidence of conditions that existed at the reporting date (adjusting events after the reporting date); and
- those that are indicative of conditions that arose after the reporting date (non-adjusting events after the reporting date).

The entity will adjust the amounts recognised in the financial statements to reflect adjusting events after the reporting date once the event occured.

The entity will not adjust the amounts recognised in its financial statements to reflect non-adjusting events after the reporting date.

If non-adjusting events after the reporting date are material, the entity discloses the nature and an estimate of the financial effect or a statement that such an estimate cannot be made.

Notes to the Annual Financial Statements

for the year ended 31 March 2022

2. New standards and interpretations

2.1 Standards and interpretations effective in the current year

In the prior year, the entity chose to early adopt the following standards and interpretations that are effective for the current financial year and that are relevant to its operations:

- GRAP 20: Related Parties – Effective from 1 April 2021

These amendments did not have a material impact on the Annual Financial Statements.

2.2 Standards and Interpretations early adopted

The entity has chosen to early adopt the following standards and interpretations:

- GRAP 1: Presentation of Financial Statements – Effective 1 April 2023

These amendments did not have a material impact on the Annual Financial Statements.

3. Receivables

	2022 R	2021 R
Receivables from non-exchange transactions		
VAT receivable	139	100
Receivables from exchange transactions		
Deposits	7,305	7,305
	7,444	**7,405**

Included in receivables from non-exchange is a statutory receivable in respect of VAT amounting to R139 (2021: R100). Included in receivables from exchange is a financial asset in respect of deposits amounting to R7 305 (2021: R7 305).

Receivables pledged as security

No receivables were pledged as security for any financial liability.

Credit quality of receivables

Management considers that all the above financial assets are of good credit quality. The maximum exposure to credit risk at the reporting date is the fair value of each class of receivables mentioned above.

The fair value of the receivables approximates the carrying amount of the balances due to their short-term maturity. The receivables represent deposits that will become due and receivable on demand and therefore no change is required in the carrying value of the assets.

None of the receivables that are fully performing have been renegotiated in the last year.

Notes to the Annual Financial Statements

for the year ended 31 March 2022

Receivables past due but not impaired

Receivables are all considered for impairment. At 31 March 2022, R7 305 (2021: R NIL) was past due but not impaired.

Deposits made by a customer in terms of section 104(1) d of Municipal Systems Act (MSA) is refundable, free of interest, on termination of the supply of services, provided that all outstanding amounts have been settled in terms of the property.

In respect of Erf 706, the account has been paid in full, and therefore the municipality has no alternative but to refund the deposit held, accordingly no impairment has been made.

Receivables impaired

As of 31 March 2022, trade and other receivables of R NIL (2021: R NIL) were impaired and provided for.

The amount of the provision was R NIL as of 31 March 2022 (2021: R NIL).

GRAP 104 states that a financial asset is past due when a counter party has failed to make a payment when contractually due. None of the receivables listed above is past due. As a result, no provision has been made for impairment.

4. Cash and cash equivalents

4.1 Cash and cash equivalents consist of:

	2022	2021
	R	R
Bank balances	28,858	30,462

Fair value hierarchy of financial assets at fair value

For financial assets recognised at fair value, disclosure is required of a fair value hierarchy which reflects the significance of the inputs used to make the measurements.

The fair value hierarchy has the following levels:

- Level 1 represents those assets which are measured using unadjusted quoted prices in active markets for identical assets.
- Level 2 applies inputs other than quoted prices that are observable for the assets either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3 applies inputs which are not based on observable market data.

Level 1

	2022	2021
	R	R
Cash and cash equivalents	28,858	30,462

Notes to the Annual Financial Statements

for the year ended 31 March 2022

Credit quality of bank balances and short-term deposits, excluding cash on hand

Management considers that the above cash and cash equivalents category is of good credit quality. The maximum exposure to credit risk at the reporting date is the fair value of the cash and cash equivalents mentioned above.

The fair value of the cash and cash equivalents approximates the carrying amount of the balances. This balance represents highly liquid funds that is available for use by the entity at any point in time. The entire cash and cash equivalents balance held by the entity is available for use.

The entity has not reclassified any financial assets from cost or amortised cost to fair value, or from fair value to cost or amortised cost during the current or prior year.

Cash and cash equivalents pledged as collateral

The cash and cash equivalents are not pledged as security for any financial liabilities.

5. Payables from exchange transactions

	2022	2021
	R	R
Trade payables	680	680

Secretarial fees of R680 was paid by the Water Research Commission on behalf of ERF 706 Rietfontein.

The maximum exposure to credit risk at the reporting date is the fair value of the payables above. The fair value of the payables approximates the carrying amount of the balances due to their short-term maturity.

The entity did not default on interest or capital on any payables.

None of the terms attached to the payables were renegotiated in the period under review. The entity has not reclassified the categories of any financial liabilities during the financial year.

Notes to the Annual Financial Statements

for the year ended 31 March 2022

6. Share Capital

	2022 R	2021 R
Authorised		
4 000 Ordinary shares of Rl each	4,000	4,000
Issued		
1 Ordinary shares of Rl each	1	1

100% of the shares are owned by the Water Research Commission.

7. General expenses

	2022 R	2021 R
Bank Charges	1,565	1,739
Professional fees	-	680
Total general expenses	**1,565**	**2,419**

8. Interest and penalties recovered

	2022 R	2021 R
Interest and penalties recovered	-	968

Interest and penalties were levied by the South African Revenue Services (SARS) after conducting a VAT audit. This was previously considered irrecoverable in terms of section 223(3) of the Tax Administration Act No 28 of 2011, but was recovered from SARS in the 2019/20 (R12,210) and 2020/21 (R968) financial years respectively.

9. Taxation

No provision has been made for tax as the entity has no taxable income. As at 31 March 2022 there is an assessed loss of R1 345 006.

Notes to the Annual Financial Statements

for the year ended 31 March 2022

10. Cash (used in) generated from operations

	2022	2021
	R	R
Deficit for the year	(1,565)	(1,451)
Change in working capital:		
Receivables from exchange transactions	(39)	1,433
Payables from exchange transactions	-	680
Net cash flows from operations	**(1,604)**	**662**

11. Related Parties

	2022	2021
Relationships		
Holding company: Water Research Commission		
Related Party Balances		
Amounts included in Receivable (Payable) regarding related parties		
Water Research Commission: Payable	(680)	(680)

Secretarial fees of R680 was paid by the Water Research Commission on behalf of ERF 706 Rietfontein.

12. Contingencies

No contingencies existed at year end of which management was aware.

Notes to the Annual Financial Statements

for the year ended 31 March 2022

13. Financial instruments disclosure

Categories of financial instruments

Financial assets

2022	At fair value	At amortised cost	Total
Receivables from exchange transactions	-	7,305	7,305
Cash and cash equivalents	28,858	-	28,858
	28,858	**7,305**	**36,163**

Financial Liabilities

2022	At fair value	At amortised cost	Total
Payables from exchange transactions	-	680	680

Financial assets

2021	At fair value	At amortised cost	Total
Receivables from exchange transactions	-	7,305	7,305
Cash and cash equivalents	30,462	-	30,462
	30,462	**7,305**	**37,767**

Financial Liabilities

2021	At fair value	At amortised cost	Total
Payables from exchange transactions	-	680	680

The entity has not reclassified any financial assets from cost or amortised cost to fair value, or from fair value to cost or amortised cost during the current or prior year.

VAT payable/receivable is not included in the disclosure above due to the fact that it is not a financial asset/liability.

Notes to the Annual Financial Statements

for the year ended 31 March 2022

14. Risk management

14.1 Liquidity risk

Prudent liquidity risk management implies maintaining sufficient cash and credit facilities in order to have sufficient funding available to meet financial demands.

The entity's risk to liquidity is a result of the funds available to cover future commitments. Liquidity risk is the risk that a company may be unable to meet short term financial demands. The entity manages liquidity risk through an ongoing review of future commitments and credit facilities.

In a meeting held on 26 May 2022 the Board approved the deregistration of ERF 706 Rietfontein (Pty) Ltd. As the entity is not expected to continue to operate as a going concern, the entity has sufficient cash resources and does not expect any significant future commitments. The liquidity risk is thus regarded as low. Refer to note 15.

Market risk

Interest rate risk

As the entity has no significant interest-bearing assets, the entity's income and operating cash flows are substantially independent of changes in market interest rates.

Credit risk

Credit risk consists mainly of cash deposits, cash equivalents and trade debtors. The entity only deposits cash with major banks with high quality credit standing and limits exposure to any one counter-party.

Financial assets exposed to credit risk at year end were as follows:

Financial Instrument

	2022	2021
	R	R
ABSA Bank	28,858	30,462
Receivables	7,305	7,305

15. Going concern

These financial statements were not prepared based on the expectation that the entity will be able to continue to operate as a going concern. The disposal of the primary source of income, the immovable property known as ERF 706 Rietfontein was finalised on 12 July 2019, as a result ERF 706 Rietfontein will not be able to offer and provide office accommodation to the WRC or other potential tenants and would therefore not be able to continue as a going concern in the forseeable future. In a meeting held on 26 May 2022, the Board approved the deregistration of ERF 706 Rietfontein (Pty) Ltd.

Notes to the Annual Financial Statements

for the year ended 31 March 2022

16. Fruitless and wasteful expenditure

There was no fruitless and wasteful expenditure incurred in the current and prior financial year.

17. Irregular expenditure

Reconciliation of irregular expenditure

	2022	2021
	R	R
Opening balance	-	210,988
Less: Amounts condoned – prior period	-	(210,988)
Irregular expenditure closing balance	-	-

There was no irregular expenditure incurred during the 2021/22 financial year. The irregular expenditure amounting to R210,988 was condoned by National Treasury during the 2020/21 financial year.

18. Events after the reporting date

In a meeting held on 26 May 2022 the Board approved the deregistration of ERF 706 Rietfontein (Pty) Ltd.

No further events or circumstances arising after the reporting date have come to the attention of management that would require adjustments to or disclosure in the financial statements.

Income Tax Computation

	2022
	R
Deficit before tax	(1,565)
Assessed loss brought forward	(1,343,441)
Assessed loss at year end	**(1,345,006)**
Tax thereon @ 28%	-

Notes

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