Towards circular water use

Integrated Annual Report
2017/2018

TCTA
A new word for water

TCTA'S GENERAL INFORMATION

Registered Name of the Public Entity:	Trans-Caledon Tunnel Authority
Registered Office Address:	Stinkhout Wing, Tuinhof Building, 265 West Avenue, CENTURION
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Email Address:	info@tcta.co.za
Website Address:	www.tcta.co.za
External Auditor's Information:	Ernst & Young Inc. 102 Rivonia Road SANDTON 2196
Banker's Information:	Standard Bank of South Africa Ltd 12 Church Square, PRETORIA, 0002
Company Secretary:	Vacant since 5 March 2018

Towards circular water use

Integrated Annual Report
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TCTA
A new word for water

Towards circular water use

The theme of this Annual Report looks to the future of water management, and originated from our aspiration to contribute to thought leadership in the sector. The concepts, however, are all based on existing technologies and practices, implemented at a utility scale, somewhere in the world.

Of all natural resources, water is arguably the one being recycled most, on a global scale, as a natural process. Since our earliest origins, humanity has relied on the natural water cycle, of evaporation, precipitation and run-off, to provide it with a supply of fresh water. In this arrangement, we have used water in a linear way: We captured precipitation, treated it to be fit for use, and subsequently released it into the sea or another water course, leaving it to nature to recycle. But increasingly, both on a global and a local scale, our reliance on nature's fresh water supply is becoming tenuous. Three dynamics are at play: Demand is beginning to exceed what is usually available, human activity pollutes ever more of the available resources, and the availability is being affected by an unusual climate.

We are now faced with an imperative to emulate the natural water cycle, to produce fresh water, as required. The means to do this, exists in a mature form, and is already in use in many parts of the world. Advanced water treatment technologies are being used to remove the salt and other impurities from seawater or wastewater, to produce fresh water, independent of rainfall. This practice enables a repeatable, circular use of water.

A time of crisis can trigger a step-change in innovation; prolonged water shortages have led to the adoption of circular water use practices on a national scale (e.g. Israel, Singapore), a city scale (e.g. Windhoek, Beaufort West), and a business or domestic scale (e.g. numerous hotels and households in Cape Town, that have largely reduced their reliance on the water grid). Such adaptation has a far-reaching impact on the viability of existing water tariff structures and regulation, amongst others.

Circular water use also highlights the powerful inter-relatedness between water and energy; energy is required to produce fresh water from an unusable water source, or to convey the water to where it is required. Elevated water, on the other hand, is a convenient form of energy storage.

These are precursors to a new way of thinking about water management. TCTA is preparing for a key role in this exciting future.

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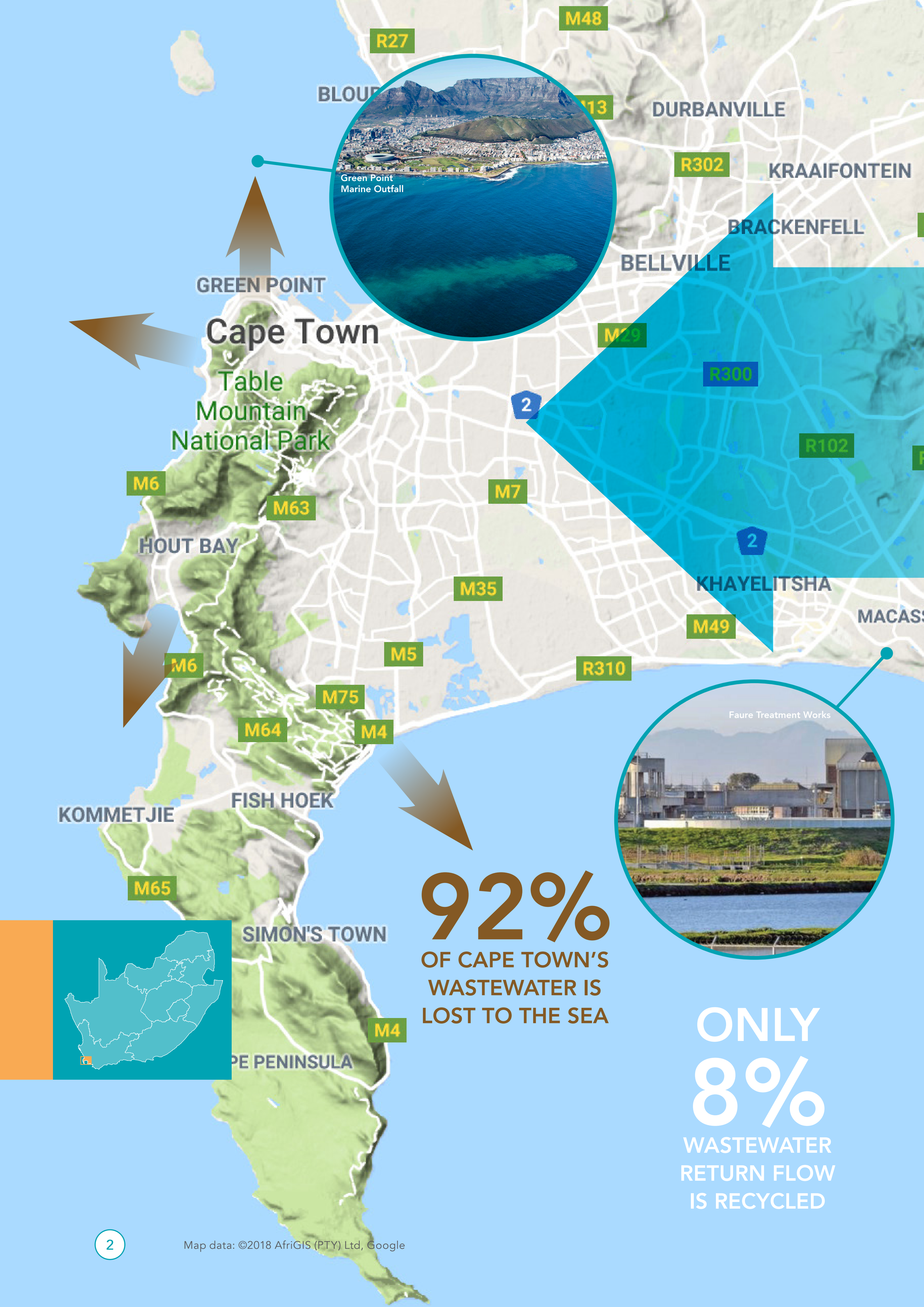


Map data: ©2018 AfriGIS (PTY) Ltd, Google

Our current thinking...

The Western Cape Water Supply System, as it is now, reflects linear water use. The system captures water in fifteen dams, some 900 billion litres when they are all full, located mostly in the mountains or to the west of the mountains, in the Breede river catchment. Twelve water treatment plants are used to clean some 330 billion litres each year for potable use, and some 422 pump stations, 24 reservoirs and 11,000 km of pipeline reticulate the water to 650,000 service connections. Thereafter, some 9,300 km of sewer pipeline conveys the return flow to wastewater treatment plants, after which it is discharged into the sea, completing the linear use process. Only 8% of the return flow is recycled, for non-potable use by golf clubs, farms, industry and commercial developments; the remaining 92% is lost to the sea.

For it to be reliable, a linear water system requires ample storage and consistent dam in-flows. The Cape has neither: At 236kl storage per capita, the reserve is well below the threshold for water scarcity. Compounding this, severe, multi-year droughts have become more frequent occurrences. The case for circular water use seems compelling.

Mr Gugile Nkwinti, MP
Minister of Water and Sanitation

STATEMENT BY THE MINISTER OF WATER AND SANITATION

I wish to congratulate the Board and management of the Trans-Caledon Tunnel Authority (TCTA), past and present, for the invaluable contribution they have made to the achievement of developmental goals, over more than three decades, through the diligent implementation of bulk water infrastructure projects. In years to come, the dams and transfer schemes TCTA have built, will serve as an enduring legacy, demonstrating what can be achieved through innovative project financing, tariff-based funding, and efficient, large-scale construction.

A legacy is best-served by continued progress and achievement which, in the immediate timeframe, will require clear thinking and our best efforts. The water sector, and the Department of Water and Sanitation in particular, is in an urgent need of a strategic turn-around, and to be brought back to a state of good health. During the next Medium-Term Strategic Framework period of 2019 to 2024, we will need to refocus our efforts and redirect our resources to the areas of greatest impact in order to re-create a sector that could deliver comprehensively on our constitutional obligations.

This journey will be guided by a five-pillar turn-around strategy, which I have recently envisioned for more granular unpacking, wherein we will establish both an authority and a regulator of national water resources and services, adopt a value-chain approach, adhere to the new sector master plan, and progress substantially with institutional rationalisation and alignment. TCTA will play a key role in this endeavour as a vehicle for institutional reform, as a node of leadership, and as a source of scarce capacity and skill.

Certainly, our challenges are not limited to sector reform, but also stem from a changing landscape. On a global scale, and also in South Africa, water resources are increasingly under stress from both human pressure and climate change; existing water supply systems are reaching their limit, and a changing climate is eroding the long-held yield projections of those systems. We are now compelled to adopt new ways of thinking about water: what value we place on it, how we use it, what assurance of supply is worth, and where we are willing to source it from.

The causal factors underpinning the on-going water crisis in the Western Cape and adjoining regions, are an indicator of a new normal. As a sector, we need to internalise the lessons to be learned from this crisis, and ensure that we will be better prepared for the future. In this era, where advanced water treatment technologies have matured, and can be applied on a large scale, a major economic hub should not face an existential threat, due to insufficient water security. Again, TCTA is well-placed to provide thought-leadership and innovation in the development of alternative water resources, in areas such as funding models, the operation and maintenance of impaired-water treatment plants, potable reuse and large-scale seawater desalination.

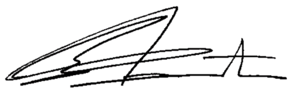
I foresee a bright future for TCTA; its long track record of implementation, purposeful business model and exemplary governance will serve it well in the challenging years ahead. Furthermore, through its ability to raise significant finance for bankable projects, and manage huge debt prudently, TCTA will continue to play a crucial role in the development of water infrastructure.

I know also that TCTA has long served the social transformation agenda. This will continue through the leveraging of capital project resources to bring socio-economic development and capacity building to the communities affected by their projects.

I want to thank the Board of TCTA, under the leadership of the Chairperson, Ms Zodwa Manase, for its diligent and steadfast guidance, during the year in review. As its tenure comes to an end, I wish the Board every success in the period ahead and express the hope that its leadership will continue to inspire the management and staff of TCTA, and motivate them throughout the year.

Finally, I want us all to reflect for a moment on the importance of what we do in managing the most essential of all resources, vital to the existence of all humanity. It is this profound realisation that should galvanise us when the times are tough and our resolve may be waning.

It is what should inspire us to be the best we can be, when countless citizens depend upon us.



Mr Gugile Nkwinti, MP
Minister of Water and Sanitation

Zodwa Manase
Chairperson of the Board

FOREWORD BY THE CHAIRPERSON OF THE BOARD

It is an honour to be writing this foreword to the 31st annual report of the Trans-Caledon Tunnel Authority, (TCTA). This is an organisation that has served South Africans well over the past three decades, and holds every promise to continue doing so for many years to come. The TCTA remains to be a valuable vehicle of the State, by helping to fulfil the Constitutional obligation of ensuring the right of all people to have access to sufficient water.

Last year, as TCTA marked its 30th anniversary, we reflected upon the exemplary track record of the organisation in raising finance for large-scale water infrastructure of national importance, and the subsequent implementation of such projects. In this role, TCTA has contributed immensely to the continued water security of the entire country: The major economic hubs, the nodes of power generation, agriculture and beyond. With Phase 2 of the Lesotho Highlands Water Project now underway, which will increase the augmentation of the Vaal River System from 780 to 1,200 giga-litres per annum by 2025, as well as Phase 2 of the Mokolo-Crocodile Water Augmentation Project, which will enable the development of the Waterberg coalfields for power generation and for export, TCTA remains firmly entrenched in the niche role it has filled since 1986.

However, there are movements underway in the water security landscape, to which we are compelled to respond. The confluence of several trends are diminishing our national per-capita water availability; as water demand edges upward on the back of population and economic growth, especially in the metropolitan areas, climate uncertainty is slowly eroding confidence in the assured yield of the surface water systems. This dynamic emerged very clearly over the past three years, especially in the south-western parts of our country, and justifiably there is concern that this may have become the new normal. At the same time, there is evidence that the opportunities for building new dams are limited;

seventeen of our nineteen river systems are extensively developed, and existing dams already hold 66% of the mean annual run-off of all our rivers.

But even when all our dams are full, they still hold less than 900 kilo-litres per capita, which is well below the water scarcity threshold of 1,000 kilo-litres per capita. Our surface water system no longer has the capacity to provide an adequate assurance of supply, which reveals our vulnerability to drought conditions. Looking ahead, augmentation will be required through the reclamation and reuse of waste water, and where possible, seawater desalination. Simultaneously, water conservation and demand management will need to bring down our consumption per unit of economic output.

I foresee that these fundamental shifts will change the composition of our project portfolio; demand for the dams and pipelines we have typically been implementing in the past, will progressively decline, and be replaced by projects for large-scale wastewater treatment plants. Already, we are seeing the first of this new generation of projects, in the rehabilitation of Acid Mine Drainage on the Witwatersrand, an emerging business niche for TCTA.

This presents an opportunity to expand the role of TCTA beyond the initial planning and construction phases of a project, and to develop the capacity for a comprehensive asset life-cycle approach. With large-scale water reclamation or desalination plants being more complex to operate and maintain than dams or pipelines, it is usually necessary to either outsource such services, or to develop the internal capacity. In exploring the latter, TCTA has assessed strategic options whereby the required competencies and knowledge could be transferred during a short-term contract. In the medium term, TCTA will develop the capability to finance, build and operate the infrastructure of alternative water resources.

Surely, the role of TCTA in national water security is in the process of being redefined.

Taking a view from the perspective of Board oversight, I am proud of the good progress TCTA has made towards a sustainable future, during the year under review. The incorporation of changes to the TCTA business model made it more resilient to external shocks and discontinuity, and positioned it for entry into new areas of opportunity.

I would like to express the sincere appreciation of the Board to both the former Minister, Nomvula Mokonyane, and the new Minister, Gugile Nkwinti, for their support of TCTA, and for the guidance provided during the course of the year. Timely ministerial directives bear evidence of their ongoing trust in the ability of TCTA to deliver on strategic project mandates, and to be deployed more extensively, towards accelerating the pace of water infrastructure delivery.

On behalf of the Board, I wish to express our appreciation of the partnership with the Department of Water and Sanitation, reflecting upon a year in which we collaborated on the sector Master Plan initiative, and others. Together, we will always be more than the sum of our parts, in an enhanced institutional framework.

I wish to thank the former Chairperson of the Board, Ms Montla Hlahla, for her contribution and leadership, my fellow Directors of the Board for their dedication, hardwork and collegiality during a year. I thank the Executive Management and staff of TCTA for their hard-work and diligence, and especially the former and current acting CEOs, Leonard Radzuma and Ola Busari, respectively, for their steering the organisation in the right direction.

Zodwa Manase
Chairperson of the Board

STATEMENT OF RESPONSIBILITY AND CONFIRMATION OF ACCURACY OF THE INTEGRATED ANNUAL REPORT

To the best of our knowledge and belief, we confirm the following:

- all information and amounts disclosed in the Integrated Annual Report are consistent with the annual financial statements audited by Ernst & Young Inc.;
- the Integrated Annual Report is complete, accurate and is free from any omissions;
- the Integrated Annual Report has been prepared in accordance with the guidelines on annual reports as issued by National Treasury and incorporates elements of the "G4 Sustainability Report Guidelines" issued by the Global Reporting initiative;
- the Annual Financial Statements (Part F) have been prepared in accordance with the International Financial Reporting Standards;
- the Accounting Authority is responsible for the preparation of the annual financial statements and for the judgments made;
- the Accounting Authority is responsible for establishing and implementing a system of internal control, which has been designed to provide reasonable assurance as to the integrity and reliability of the performance information, the human resources information and the annual financial statements, and
- external auditors are engaged to express an independent opinion on the annual financial statements.

In our opinion, the Integrated Annual Report fairly reflects the operations, performance information, human resources information and financial affairs of the entity for the financial year ended 31 March 2018.

The Board of Directors approved the Annual Performance Report on 26 April 2018 and the annual financial statements on 30 August.

Yours faithfully

Ola Busari
Acting Chief Executive Officer
Date: 31 August 2018

Zodwa Manase
Chairperson of the Board
Date: 31 August 2018

ABOUT THE INTEGRATED ANNUAL REPORT

The Trans-Caledon Tunnel Authority presents this Integrated Annual Report for the period 1 April 2017 to 31 March 2018 as our principal medium of communication to our stakeholders on this continuing journey to create sustainable value for water users.

The primary purpose of the Integrated Annual Report is to give assurance to:

- the Shareholder, represented by the Minister of Water and Sanitation and overseen by the Parliamentary Portfolio Committee on Water and Sanitation, that TCTA is performing its functions in accordance with the Notice of Establishment and directives; and

- the lenders and investors, to indicate that the proceeds of funding are used in accordance with the purpose for which they are provided and that TCTA is in a position to meet its financial obligations.

In the short to medium-term TCTA adds value by raising funds for projects, ensuring that the infrastructure delivers water when required by users, is built within budget and to specification. TCTA also ensures that all the aspects relating to the implementation of projects, particularly the environmental and social dimensions, are satisfactorily addressed. Over the long-term, the organisation ensures that debt is managed in such a manner that it is affordable and sustainable as well as within regulatory requirements.

The deliverables, inherent in current project directives, as well as flowing from the Notice of Establishment are reviewed on a yearly basis. This exercise results in a Shareholder's Compact between the Minister and the Board of TCTA, which maps out the predetermined objectives for the financial year. TCTA is required to report against these objectives in the Annual Performance Report (refer to Part B). The Shareholder's Compact and the subsequent Corporate Plan are drawn up in accordance with Treasury Regulations for Departments, Constitutional Institutions and Public Entities.

All TCTA projects are implemented on behalf of the Department of Water and Sanitation; this information on project progress and the outstanding liability are consolidated into the Department's Annual Report.

Colesberg
Gariepdam
Aliwal North
Gariep Dam wall
THE EQUIVALENT OF
5.8
ELECTRICITY UNITS PER CUBIC METRE
OF WATER IS LOST WHEN THE WATER FLOWS TO THE SEA LEVEL FROM 1265m
9
10
Nieu-Bethesda
Queenstown
Cradock
Graaff-Reinet
Mount Zebra National Park
6
Alice
Ea
4.5
ELECTRICITY UNITS PER CUBIC METRE
OF WATER REQUIRED FOR DESALINATION AT SEA LEVEL
10
Grahamstown
2
Port Elizabeth
Jeffreys Bay
St Francis Bay
Nelson Mandela Bay Stadium

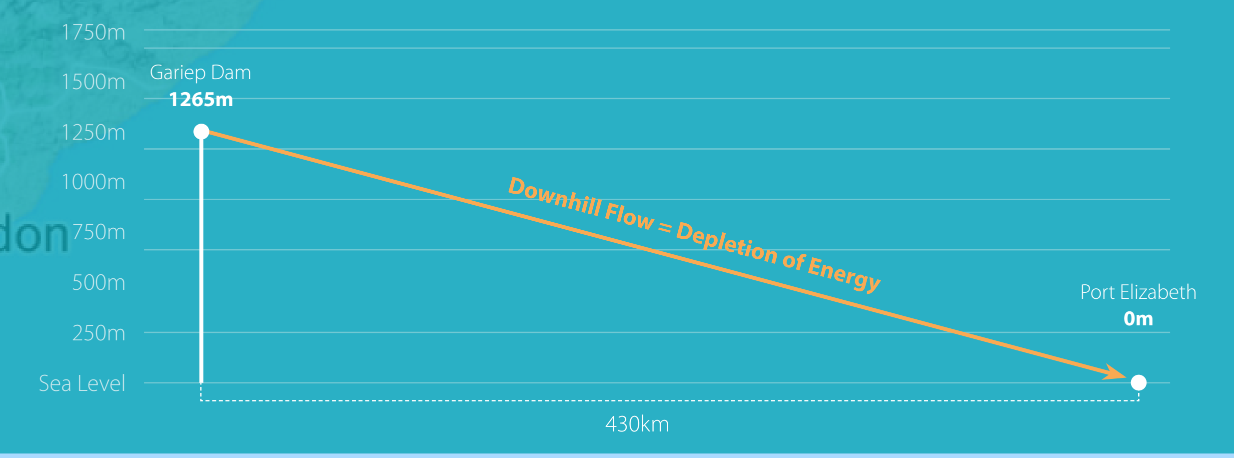
Gariep Dam to Port Elizabeth

The supply of water to Port Elizabeth from the Gariep Dam, via the Orange-Fish tunnel, is a vital supply to the coastal metropolitan area. Yet, it is interesting to note that the inland water supply comes from an elevation of 1,265m above sea level, which means that each cubic metre of water in the Gariep Dam contains potential energy of 5.8 electricity units, relative to sea level, after allowing for real world inefficiencies. By comparison, the desalination of seawater will consume 4.5 electricity units for every cubic metre of fresh water produced.

Why is this comparison relevant? Whereas the existing supply from Gariep Dam to the coast makes sense today, a future dispensation may require a greater supply to Mangaung or Gauteng, via the Caledon River, in which case Port Elizabeth could replace the deficit through seawater desalination and reuse, and so adopt a more circular water use. Natural water resources, already at a similar elevation as the two major economic hubs, could be retained on the inland plateau. Such an arrangement would benefit from a national system tariff, to allow a more fair dispensation.

This example of a hypothetical future dispensation illustrates two of the inter-dependencies between water and energy. Whereas this relationship has long been understood and managed, it will become much more important to water managers in the future, when energy will increasingly be used to treat unusable water, and convey it to the point of consumption.

Elevation



PART A: STRATEGIC OVERVIEW

Map data: ©2018 AfriGIS (PTY) Ltd, Google

Ola Busari
Chief Executive Officer (acting)

CHIEF EXECUTIVE OFFICER'S REPORT

In keeping with the year before, the 2017-18 financial year posed many challenges to TCTA, but I am pleased to report that TCTA has endured, and emerged more resilient, thanks to the guidance from the Board, and the dedicated effort of our staff and management. This overview presents the performance of the organisation within the framework of the key objectives outlined by the Board for the financial year under review, and agreed with the Minister through the Shareholder's Compact.

During 2017-18, TCTA once more affirmed its value proposition by contributing to the nation's economic growth and social well-being. This is being achieved through an integrated approach to the implementation of predominantly off-budget water infrastructure, which involves the progression of projects to a state of bankability, the procurement of project funding and implementation services, overall coordination, followed by the long-term management of debt on a ring-fenced basis. This core part of our business model has been refined over three decades.

The reporting year brought severe revenue disruptions, largely emanating from the weakened financial state of the Department of Water and Sanitation, which translated into project implementation challenges. This situation gave rise to the exploration of financial sustainability mechanisms, aimed at enhancing the resilience of the TCTA business model to withstand external revenue disruptions.

Despite the difficult circumstances, TCTA still made progress on the planning and implementation of several projects, attaining some vital milestones, across the portfolio of government's developmental priorities:

- **Olifants River Water Resources Development Project - Phase 2B (ORWRDP-2B)**
  This project will augment water supply to municipal consumers in the Mogalakwena Municipality and platinum producers. Implementation preparation has progressed to having the design and tender documentation complete. Long-standing funding challenges are now being resolved through an

alternative funding strategy, with the potential support of the DBSA, although offtake arrangements remain a challenge.

- **Mokolo-Crocodile Water Augmentation Project - Phase 2A (MCWAP-2A)**
  The strategic project supports the development of Waterberg Coal Fields, as encompassed by the first Strategic Integrated Project (SIP-1) of the Presidential Infrastructure Co-ordinating Commission, and enables flue-gas desulfurisation at the Medupi Power Station. Progress has been made towards obtaining environmental authorisation, and the appointment of an engineering professional service provider (PSP) for design and construction supervision, although much slower than anticipated, due to funding challenges in respect of the former, and procurement approval challenges in the case of the latter. The funding impasse was finally unlocked during January 2018, and Board indicated that the PSP appointment could be approved, pending the outcome of the guidance of the Auditor-General (AG) of South Africa and an independent legal opinion.

  A further potential hurdle is that the project design capacity may again be reviewed, at the request of National Treasury, partly due to fiscal constraints, and possible changes in water demand, stemming from power generation decisions.

- **Acid Mine Drainage - Long Term Solution (AMD-LTS)**
  This strategic project is on the critical path of ensuring water security in the Gauteng region. An increased salt load in the Vaal River System (VRS), caused by the release of saline water from the plants of the Short-term Intervention (STI), requires dilution by fresh water releases from the Vaal Dam. This interim state is not sustainable, and will be remedied when the AMD-STI release is desalinated by the AMD-LTS plant. Until the supply from Phase 2 of the Lesotho Highlands Water Project is secured in 2025, water security in Gauteng will be at risk. This risk will be mitigated, within a truncated timeframe, with the completion of the AMD-LTS project. The vital importance of this project is therefore clear.

  The aim during 2017-18 was to procure the engineering PSP, and commence with the Environmental Impact Assessment (EIA). Similar to the case of MCWAP-2A, procurement approvals have not flowed as expected, and the appointment of the PSP had to be pushed out to 2018-19, pending guidance from the Auditor-General and an independent legal opinion. The EIA was also delayed, being partially dependent on the work of the PSP. Some elements, such as field data collection, could commence independently, but further progress will require inputs from the engineering optimisation report.

  The financial woes of DWS impacted on the AMD-LTS project as well, placing the two-thirds fiscal funding contribution into question. Should this result in a funding shortfall, the deficit would need to be carried into future years, and attract a compounding effect.

- **Berg River - Voëlvlei Augmentation Scheme (BRVAS)**
  This project in the drought-stricken Western Cape will divert water from the Berg River to the Voëlvlei Dam, and hence increase the yield of the latter by 23 million m3 per annum. DWS expectations that the scheme should be completed within 2019-20, required TCTA to explore an alternative implementation method, whilst retaining an acceptable risk framework. Accordingly, a Design-Build procurement approach is now being followed, which promises to reduce the implementation timeframe by a year, resulting in water delivery by June 2021. BRVAS will therefore provide relief to the Western Cape in the medium-term, in accordance with the reconciliation strategy for the Western Cape Water Supply System (WCWSS), of April 2016.

  Activity during 2017-18 was mainly in stakeholder engagement, to establish role demarcations with DWS and the City of Cape Town, and gaining an understanding of the project within the larger Western Cape Water Supply System, as well as the procurement of the PSP contractor, whose contract award will be concluded in the 2018-19 financial year.

- **uMzimvubu River Water Project (MRWP)**
  This project in the rural Eastern Cape aims to provide a stimulus for the regional economy, through the development of water resources in the Mzimvubu river catchment, leading to domestic water provision, irrigated agriculture, hydropower generation and job creation. Since being directed to procure funding and implement the project, TCTA has progressed with project preparation activities, conducted due diligence on earlier work, engaged key stakeholders and had an interim project charter approved by the Board in November 2017. Project implementation activities are now on hold, pending role clarification between TCTA and DWS, and the securement of funding.

- **Olifants River Water Resources Development Project - Phase 2C (ORWRDP-2C)**
  The project comprises a 40 km pipeline from De Hoop dam, plus a pump station, and has substantially been completed up to dry commissioning. The tie-in on the first 10 km of the pipeline now enables raw water supply to the De Hoop Water Treatment Works, which will allow much-needed water supply to settlements in the Nebo Plateau area. TCTA's aim for 2017-18 was to complete construction and achieve the Ready-for-Operation milestone. Pursuit of this objective was frustrated by extensive pipe repairs being made by the contractor, as well as the absence of infrastructure to receive the water, caused by unresolved institutional arrangements. The current forecast is that the pipeline will be ready for trial operation early in 2018-19.

- **Kriel Off-take**
  This is our smallest project, consisting of a 3 km pipeline linking the town of Kriel to the KWSAP Duvha pipeline, as well as an upgrade of the town's water treatment works, which will improve the redundancy of the water supply. TCTA was directed to plan, design and manage the project, with construction services provided by DWS. During 2017-18, financial challenges within DWS impacted on the project working capital, resulting in delays in construction as well as the procurement of long-lead items. In mitigation of this setback, TCTA has now taken over the procurement of the long-lead items, and it is anticipated that the project will be completed in the course of 2018-19.

Beyond infrastructure development, TCTA also performs the key functions of operating and maintaining assets, raising project finance, and managing the redemption of such debt in the long term.

During 2017-18, TCTA continued to oversee the operation and maintenance (O&M) of the AMD treatment plants in the Western, Central and Eastern Basins of the Witwatersrand. Challenges in respect of contract award approvals for the Central and Eastern basin plants required TCTA to engage directly with operations during the period October 2017 to April 2018, after which the issues were resolved. Sibanye Gold continues to operate and maintain the Western basin.

One of our key performance indicators is maintaining the AMD water level below the Environmental Critical Level in the Central and Eastern basins. This was achieved in the Eastern basin, but untimely pump failures and sporadic cable theft caused the target not to be met in the Central basin.

TCTA also continued with the long-standing operation and maintenance of the Delivery Tunnel North of the Lesotho Highlands Water Project. During the review period, TCTA complied with all O&M obligations, and ensured the delivery of 780 million m3 of water at the Ash River Outfall, as per the agreed schedule. TCTA has also commenced with the planning and procurement for the scheduled tunnel inspection, due at the end of 2018.

Despite a number of diverse challenges being encountered on the project finance front, largely as a result of perceptions of the governance of state-owned entities and DWS revenue disruptions, as well as increasing complexity of institutional and off-take arrangements, TCTA remains a credible borrower. As at the end of 2017-18, all project debt was within approved borrowing limits, and all debt servicing was on track.

TCTA staff and management can be proud of our contribution to the sector during the past year, and of the progress made towards the twin goals of access to water for all South Africans, and an environment that is not harmful to health or wellbeing. As a responsible corporate citizen, we will continue to build on our track record of infrastructure project delivery, but always cognisant of the impact it may have on our community partners and the environment. Having recently adopted a Corporate Social Investment strategy, TCTA aims to accelerate its contributions to the socio-economic development and empowerment of rural communities, especially those affected by our projects.

Finally, as the expiry of its term in November approaches, I thank the Board for its guidance and, in particular, the Chairpersons, current and former, Ms Zodwa Manase and Ms Monhla Hlahla, respectively, for their leadership. I am grateful to the staff and management of TCTA, who have applied a sustained effort in the midst of new and often unanticipated challenges during the year.

Our organisation has demonstrated a resilience that will serve it well into the years to come. That experience is valuable, as we explore the potential reconfiguration of our business model for effectively expanding our horizons in developing alternative water resources for the nation, and as we ready ourselves for the institutional realignment initiative related to the planned water infrastructure agency.

I have every confidence that TCTA will take meaningful strides forward during the year ahead, ever pursuant of a unity of purpose, and excellence, in all its endeavours.

Ola Busari
Chief Executive Officer (acting)

OUR STRATEGIC GOALS

Our corporate goals are aligned with the strategic agenda of the government, in the context of the TCTA mandate and the expected deliverables. The strategic goals of TCTA are as follows:

- deliver on Ministerial directives relating to the planning, financing and implementation of bulk raw water infrastructure, within specifications, agreed timelines and budget.
- operate the business, its projects and processes in a cost-effective manner, conscious of the imperatives of public finance management.
- ensure that all project activities facilitate social transformation and build sustainable communities, by providing jobs and empowering women, the youth and the disabled.
- ensure the continuous availability of high-calibre human capital for delivering on its organisational mission into the future.
- build the knowledge and capability of the organisation to support other water institutions, in pursuit of greater efficiencies in overall water management and water services delivery.

OUR MEDIUM-TERM STRATEGY

RESPONDING TO A CHANGING LANDSCAPE

To ensure its long-term relevance in the water sector, TCTA needs to remain aware of shifts in the strategic landscape that will require it to adapt, reposition and refresh its value proposition. One anticipated shift in the landscape is the decline in demand for large-scale surface water infrastructure, and the growing demand for alternative water resource infrastructure.

As a water-scarce country with a large population to serve and being heavily reliant upon surface water resources, South Africa is especially vulnerable to prolonged drought. This vulnerability was clearly exposed by the 2015/16 national drought, which continues in the Northern, Western and Eastern Cape provinces even in 2018. This underscores the national imperative to improve the resilience of our water resources.

Over several decades, our surface water systems have been extensively developed, through dams and large inter-basin transfer schemes. Today, very little scope for further development remains, and the water balance in most basins is either marginal or in deficit. It is becoming clear that, in the medium to long term, new water resources that are not directly dependent upon run-off or dam inflows will need to be developed. This is especially pertinent in the basins surrounding the major economic hubs of Gauteng, the Western Cape and KwaZulu-Natal, where significant deficits will develop by 2025. Addressing these shortfalls will require extensive desalination of seawater, or the rehabilitation and reuse of impaired water, such as municipal run-off or mine water. Whereas water scarcity is now a sporadic constraint on economic growth, it will become ever more prevalent over the course of the next decade.

This anticipated future state presents both an imperative and an opportunity to TCTA. Since inception, TCTA has focused on the financing and implementation of national water infrastructure, specifically large dams and pipelines. If TCTA remains entrenched in the development of surface water infrastructure, and does not build the capacity to develop a new service offering, it faces a likely decline in relevance in the domestic water sector.

TCTA has long been cognisant of these dynamics, and initiated the development of a knowledge hub in desalination in 2011. Our decision to invest in desalination was not arbitrarily taken at the time. The desalination of seawater, and the use of similar technology and delivery models to rehabilitate impaired water sources (that is, water reuse), has long been recognised as a strategically important practice in the quest for greater water resilience, especially in urban settings. Using mature technologies, it allows access to an inexhaustible water resource, and mitigates the environmental impact of waste water on a significant scale. From an economic perspective, it brings a scalability and assurance of supply which allows water to become regarded as a renewable economic commodity, instead of as a scarce natural resource. Desalination (and reuse) is much more than a response to drought.

The knowledge hub strives to learn the key lessons from desalination and reuse projects elsewhere, to gain an understanding of what constitutes best practice, and to develop the ability to inculcate those lessons into the first large-scale projects in South Africa, through an advisory platform or conduit. The objective is to avoid some of the expensive pitfalls encountered by other projects in the world. Through desk research, the hosting of seminars, the development of papers and presentations, and undertaking study tours and site visits, the knowledge hub has developed noteworthy insight in technical and strategic areas such as project site selection, demand side risk mitigation, optimal plant design and the integration of desalination with pre-existing water and energy infrastructure.

TCTA is currently entrusted with the implementation of the first extra-large class (beyond 50 mega-litres per day capacity) desalination plant in South Africa, which will rehabilitate about 180 Ml/day of acidic mine water to a potable or industrial standard. Whereas the Acid Mine Drainage project will differ in many areas from a seawater desalination plant, the similarities will also be significant, in terms of the contracting method, the technology families, and the challenge to optimise energy consumption. The scale and complexity of the Acid Mine Drainage project will bring about significant learning, which could be leveraged into a coastal project. As an established implementer of economically viable water infrastructure, TCTA will be well-placed to become the foremost implementer of large-scale desalination and reuse projects on behalf of the State.

TCTA VISION 2022

Motivated by the idea of making an optimal contribution within a vibrant, dynamic and efficient water sector, we are exploring ways in which we could expand our strategic business horizons, and capacitate the organisation for the challenges posed by the water sector in the next five years. Accordingly, TCTA has adopted a vision for 2022, to be achieved through three strategic thrusts: portfolio growth, operational excellence, and an expansion in initiatives aimed at socio-economic transformation.

The business portfolio of TCTA will be grown through a more proactive conversion of the visible project pipeline into implementation projects, and through the expansion of TCTA's role into alternative water resource infrastructure as articulated in the preceding section. In particular, in water-stressed regions, studies indicate an emerging shift towards infrastructure to treat impaired or marine water resources to a potable standard. In essence, the future portfolio will contain progressively fewer surface water projects, and more acid mine drainage, desalination and reuse projects. In anticipation of this shift, TCTA is making a substantial investment in capacity-building, as alluded to previously.

The organisation will pursue operational excellence in all aspects of its business, to enable the delivery of the wider spectrum of projects with greater agility and performance-centred professionalism, supported by efficient business processes and an integrated technology platform. As a project entity, upscaling procurement agility is central to our medium-term strategy with a focus on significantly enhancing turn-around time and the overall supply chain decision-making process. Also, building on our systems initiative on enterprise resource planning and treasury management, TCTA plans to automate and integrate its technologies, processes information and people in a seamless manner.

Simultaneously, through the procurement landscape, and through corporate social investment, TCTA is facilitating socio-economic transformation among historically disadvantaged groups, especially in the vicinity of its infrastructure projects. In doing this, the organisation has the dual aim of having a tangible development impact in communities, while maintaining a high-integrity institutional bid system.

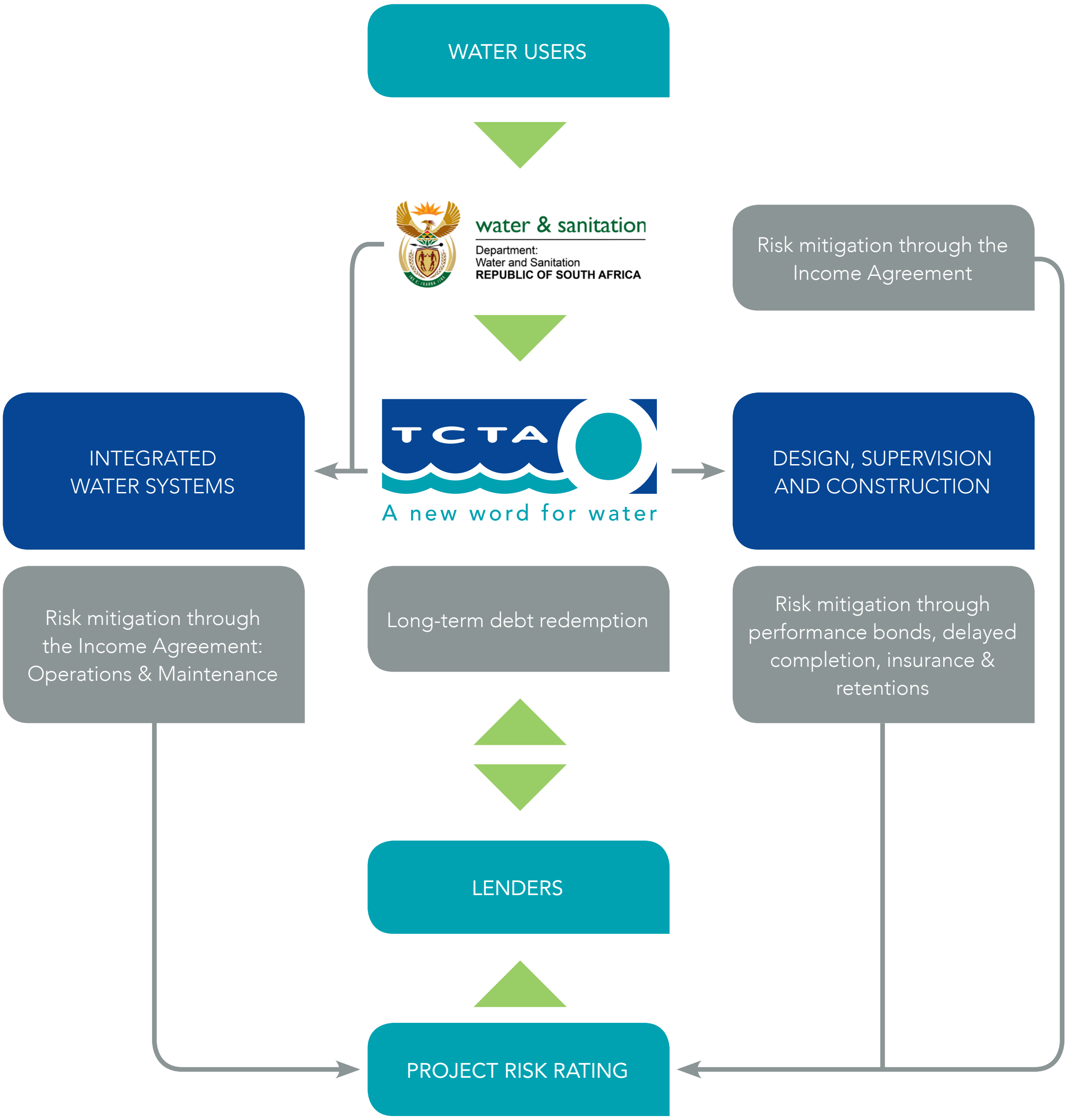
STRATEGIC ENABLERS

The medium-term strategy of TCTA is designed to leverage its unique set of core enablers, outlined as follows:

- extensive scope of services: end-to-end implementation capacity, from bankability and finance arrangement, through implementation management, to long-term debt redemption, operations and maintenance;
- unique borrowing capacity in the sector: sole institution with a borrowing capacity focusing on national water resource infrastructure;
- institutional integrity: robust governance track record, with 31 years of unqualified audits;
- innovation: providing thought leadership in critical areas of innovation, related to alternative water resources, infrastructure and finance.

OUR BUSINESS MODEL

Figure 1: The TCTA Business Model



The business model by which TCTA renders services, receives revenue and allocates business risk, is schematically displayed in Figure 1 and has remained largely unchanged since its inception more than thirty years ago. In essence, TCTA responds to Ministerial directives to implement mainly off-budget national water infrastructure, by progressing projects to a state of bankability and securing finance, followed by the procurement of design and construction services. Lenders draw comfort from risks being mitigated through the Income and Implementation Agreements. Loans are typically repaid over twenty years.

As the portfolio of projects grows, and TCTA's role in the sector gains complexity, the limitations of the Special Purpose Vehicle model are becoming more evident. Hence, the TCTA business model has come under greater scrutiny, in the preceding financial year, with options being explored to mitigate risks associated with revenue disruption, the business pipeline and to enhance the value proposition. The strategic initiative on the potential reconfiguration of our business model is expected to gain momentum in the new year, with due cognisance of the need for alignment of the broader Ministerial move to establish a National Water Resource Agency, incorporating TCTA.

TCTA is aware that any migration to an alternative business model would require extensive stakeholder consultation, ministerial approval and a revision of the Notice of Establishment. Accordingly, the reconfiguring of the TCTA business model is viewed by the Board as an ongoing initiative, starting with an independent assessment of financial sustainability mechanisms.

OUR CONTRIBUTIONS TO THE DEVELOPMENT OUTCOMES

In delivering on our mandate and the directives issued to us by the Minister of Water and Sanitation, the organisation continuously ensures that it strongly contributes to the developmental priorities of government, as reflected in the following table.

Table 1: Government outcomes and TCTA's contribution

OUTCOME		TCTA CONTRIBUTION
4	Decent employment through inclusive economic growth.	Providing cost-effective water infrastructure as an enabler of economic growth and jobs.
5	Skilled and capable workforce.	• Developing a strong skills-set in scarce fields, thereby enabling SA to compete in world markets. • Promoting entrepreneurship in small businesses.
6	Efficient, competitive and responsive economic infrastructure network.	Ensuring a comprehensive financial and implementation package that delivers the most cost-effective solution.
7	Vibrant, equitable and sustainable rural communities with food security for all.	Supporting other water sector institutions to enable them to deliver on their mandate.
8	Sustainable human settlements and improved quality of household life.	Providing affordable infrastructure and improved access to basic services.
9	A responsive, accountable, effective and efficient local government system.	Supporting other water sector institutions to enable them to deliver on their mandate
10	Environmental assets and natural resources that are well protected and continually enhanced.	Developing infrastructure in an environmentally responsible and socially inclusive manner, in accordance with global best practice.
12	An efficient, effective and development-orientated public service.	Contributing to the development of critical knowledge in the sector and beyond (e.g. project financing and implementation, desalination, water reuse).

In addition to the specific contributions outlined in the table, TCTA's stature and positioning enable its continuing strategic support to the Shareholder in the following manner:

- alleviation of fiscal pressure through the off-budget funding of national water infrastructure, where lenders draw comfort from TCTA's robust implementation track record, good governance, and reliable debt redemption;
- hub of relative strength in the sector, thereby providing a suitable vehicle for the planned water infrastructure agency;
- coordination of two strategic integrated projects, with significant impact on the broader water sector, and the development of the manganese export corridor from the Northern Cape and the Eastern Cape.

ENGAGING OUR STAKEHOLDERS

Constructive stakeholder engagement creates an environment for improved policy formulation, project planning, programmes and services; it is of benefit to both TCTA and its stakeholders. The latter benefit from the opportunity to contribute to policy and programme development, having an influence on processes that lead to better outcomes. TCTA benefits from improved information flow and insight, being given the opportunity to test policy initiatives or proposals with stakeholders, and having an effective platform to overcome obstacles. TCTA's mission is to support national water security through cost-effective financing and development of water infrastructure; effective and constructive stakeholder relations are critical to the execution of the mandate.

TCTA maintains relations with a wide range of stakeholder groups, with diverse interests in the organisation and its activities. This requires an approach to stakeholder relation management that is equally diverse, and sensitive to the requirements of each interest group. Failings in this area result in a loss of business focus, and diminished stakeholder support. Table 2 below outlines the stakeholder groups associated with TCTA, and the nature of our engagement with them.

Table 2: Stakeholder relationships

Stakeholder	Nature of interest/stake	Engagement strategy	
Parliament	Regulation and compliance with legislation.	• Empower with project information. • Present Integrated Annual Report..	• Account for performance and governance of the organisation. • Manage the relationship
Shareholder (Ministry)	Directive and mandate to operate. Financial guarantees and compliance.	• Account for performance and governance of the organisation. • Consult stakeholder on all major decisions.	• Provide project monthly reports. • Hold regular meetings. • Collaborate and empower with relevant information. • Manage the relationship.
Shareholder Department (DWS)	Compliance with Ministerial directives and mandate.	• Advise on funding requirements. • Provide advice and support on consultations with bulk water users. • Communicate results and performance. • Obtain feedback on requirements or any changes.	• Provide frequent status reports and updates. • Have stream-focused collaborative meetings/ engagements at senior management level. • Collaborate and empower with relevant information. • Manage the relationship.
Treasury	Operation within borrowing limits. Compliance with applicable legislation.	• Account for performance and governance of the organisation. • Consult on all major financial decisions and PFMA-related matters.	• Provide regular status reports and updates. • Collaborate and empower with relevant information. • Manage the relationship.

Stakeholder	Nature of interest/stake	Engagement strategy	
Major Water Boards	Current and future raw water off-takers and tariff payments.	• Involve and keep stakeholders informed on all developments regarding the implementation of projects. • Provide support on consultations with bulk potable water users.	
Water Boards and water entities	Key water sector role-players.	• Empower and consult on sector-wide issues. • Provide support on consultations with bulk potable water users. • Lobby for support as required.	• Ensure regular reporting on project progress. • Provide transparent information. • Explore future opportunities. • Manage the relationship.
Off-takers	Mutually beneficial relationships on bulk raw water infrastructure projects. Raw water off-takers and tariff payments	• Involve and keep stakeholders informed on all developments regarding the implementation of projects.	• Ensure regular reporting on project progress. • Provide transparent information. • Manage the relationship.
Local government	Availability of water infrastructure in the area of jurisdiction.	• Identify relevant municipalities and collaborate with them. • Lobby for support as required.	
Financiers	Ability to service loans.	• Keep satisfied. • Keep informed on financial standing of the organisation. • Meet regularly.	• Comply with contractual agreements. • Report on good governance.
Communities	Favourable decisions.	• Empower and consult on relevant issues.	• Establish representative community forums in active project areas.
Government Regulators	Compliance and good governance.	• Keep satisfied. • Keep informed.	• Engage regularly. • Provide compliance reports.
Binational partnerships	Servicing the terms of the Treaty.	• Manage closely. • Collaborate and consult.	• Regular meetings with binational partners.
Ratings agencies	Compliance and good governance.	• Keep satisfied.	• Keep informed.
Contractors	Successful implementation of projects.	• Manage closely. • Schedule monthly performance evaluation meetings.	• Monitor performance. • Satisfy contractual obligations.
Suppliers and consultants	Provision of quality services and products and timeous payment of services rendered. Successful management of contractors.	• Manage closely. • Schedule monthly performance evaluation meetings.	• Monitor performance. • Inform timeously on changes. • Satisfy contractual obligations.
Media	Accessibility of information and brand visibility.	• Keep informed. • Engage and empower. • Provide factual information.	• Ensure deadlines are met on all enquiries. • Manage the relationship.
Civil society	Social and environmental responsibility.	• Keep satisfied. • Consider needs and concerns.	• Respond decisively and responsibly. • Manage the relationship.
Affiliations and associations	Contribution to excellence in the sector.	• Share information. • Attend to all membership requirements within guidelines and expectations.	
Internal stakeholders	Organisational performance and a conducive working environment.	• Manage the relationship closely. • Collaborate and empower with information. • Account for performance and governance of the organisation.	• Consult stakeholder on all major decisions. • Have regular meetings. • Promote organisational values. • Promote accessibility. • Motivate. • Provide effective communication.

LEGISLATIVE AND OTHER MANDATES

The Trans-Caledon Tunnel Authority (TCTA) was established in 1986, by Notice 2631 in Government Gazette No. 10545, dated 12 December 1986, to finance and build the Delivery Tunnel North of the Lesotho Highlands Water Project (LHWP). In 1994, a directive was received to fulfil the financial obligations of the Government of South Africa, in terms of the Treaty on the Lesotho Highlands Water Project, on the water transfer component in Lesotho.

On 24 March 2000, the Notice of Establishment was amended by Notice 277 in Government Gazette No. 21017, to include the 1994 directive and to allow for the Minister, in terms of Section 24(d) of the notice, to issue directives to TCTA in terms of Section 103(2) of the National Water Act (Act No. 36 of 1998).

In accordance with Section 3 of the Notice of Establishment, TCTA is set up to:

- implement, operate and maintain that part of Phase 1 of the LHWP, situated in the Republic of South Africa, in accordance with the provisions of the Treaty; and
- perform the functions set out in Clauses 24(a) and (b) and any other additional functions which the Authority may be required to perform in terms of a directive by the Minister under Section 103(2) of the National Water Act.

In doing so, the Minister must be satisfied that such directives will not prejudice the capacity of TCTA to perform the functions for which it was established. The National Water Act allows the Minister to direct a body, established under Section 102 of the Act, to perform additional functions which may include, but are not limited to, providing water management institutions, both within the borders and external to the Republic, with:

- management services (project implementation);
- financial services (structuring and raising project finance, debt management and tariff setting);
- training; and
- other support services.

The above provision makes it clear that TCTA cannot undertake any function outside of its Notice of Establishment without a directive from the Minister, unlike the Water Boards, which are given such opportunity in terms of Section 30 of the Water Services Act (Act No. 108 of 1997).

The National Water Act requires that TCTA manages its different functions separately. This is further emphasised in the Notice of Establishment for TCTA, which states, in Section 20(1), that TCTA must manage its Treaty functions separately from its non-Treaty functions and account for them separately, as required by Section 105(1) of the National Water Act. The Treaty functions, in terms of Section 8A of Protocol 6 of the Treaty, are limited to the operations and maintenance of the Delivery Tunnel North within South Africa.

Section 20(2) furthermore states that the Authority's Treaty responsibilities are not applicable to its non-Treaty functions.

The bulk of TCTA's work now comprises non-Treaty functions. How TCTA accounts for this depends on the nature of the function assigned to the organisation in terms of Section 103(2) of the National Water Act. The impact of these provisions on TCTA is that, regarding the LHWP mandate and each directive, there is a separate:

- borrowing authority from the Department of Water and Sanitation (DWS)/National Treasury, government guarantees and funding arrangements;
- general ledger; and
- where money is borrowed to finance a project, separate income/implementation agreements with DWS, which are back-to-back with the water supply agreements between DWS and the off-takers.

The income/implementation agreements with DWS determine how costs may be charged on each project. To date, the following three principles have been applied:

- a structure per project is applied to ensure break-even of revenue with regard to costs over the debt repayment period. Key principles applied in determining an appropriate tariff structure for a project include: end-user affordability, predictability and sustainability;
- the revenue is only used to recover costs related to each project, namely capital costs, funding costs and administration costs; and
- management of liquidity and funding risks.

Since its original mandate (the Notice of Establishment), TCTA has received a further 19 directives. The mandate and directives are shown in Table 3.

Table 3: Mandate and Directives

Notice of Establishment/Directive	Acronyms	Date of Latest Directive	Type of Work					
			Planning	Funding	Implementation	Operation and maintenance	Advisory	Payment agency
Lesotho Highlands Water Project: Delivery Tunnel North (Treaty obligations)	LHWP	12 December 1986		√	√	√		
Vaal River System: To fulfil all the Republic's financial obligations in terms of or resulting from the Treaty (non-Treaty functions) on the Lesotho Highlands Water Project and any other obligations on the Vaal River System (Acid Mine Drainage Project).	VRS	3 August 1994 (and incorporated into amended Notice of Establishment, 24 March 2000)		√				√
Umgeni Water		4 July 2001					√	
Advisory Services to Water Management Institutions, Water Boards and DWS		17 May 2004					√	
Berg Water Project	BWP	6 May 2002		√	√		√*	
Vaal River Eastern Subsystem Augmentation Project	VRESAP	6 October 2004		√	√		√*	
Mooi–Mgeni Transfer Scheme – Phase 2	MMTS-2	29 November 2007		√	√		√*	
Olifants River Water Resources Development Project – Phase 2C	ORWRDP-2C	17 June 2008 (directive revised 12 March 2012)			√		√*	
Komati Water Scheme Augmentation Project	KWSAP	29 September 2008		√	√		√*	
Mokolo–Crocodile Water Augmentation Project – Phase 1 and 2A	MCWAP-1 and MCWAP-2A	19 May 2010		√	√		√*	
Metsi Bophelo Borehole Project		2 March 2011			√			
Acid Mine Drainage Project – Short-term Intervention	AMD (STI)	6 April 2011	√	√	√	√	√	
Refurbishment of Mooi–Mgeni Transfer Scheme – Phase 1	MMTS-1	29 November 2011			√			
Strategic Integrated Project No. 3	SIP-3	10 November 2012					√	
uMzimvubu Water Project	MWP	10 February 2014 (revised 7 February 2017)		√	√			
Strategic Integrated Project No. 18	SIP-18	26 February 2014					√	
Amendment to MMTS-2 directive to include the construction of a potable water pipeline for Umgeni Water	UMGENI	20 March 2014			√			
Olifants River Water Resources Development Project – Phase 2B	ORWRDP-2B	22 October 2015	√	√	√			
Water Off-take for Kriel Town	KRIEL	20 June 2015					√	
Acid Mine Drainage Project – Long-term Solution	AMD (LTS)	19 May 2016		√	√		√	
Berg River–Voëlvlei Augmentation Scheme	??	18 May 2017		√	√		√	

*Institutional arrangements

MAJOR PRODUCTS AND SERVICES

In order to fulfil the responsibilities set out in the Notice of Establishment and the directives that are given to it from time to time by the Minister, TCTA has established the following capabilities:

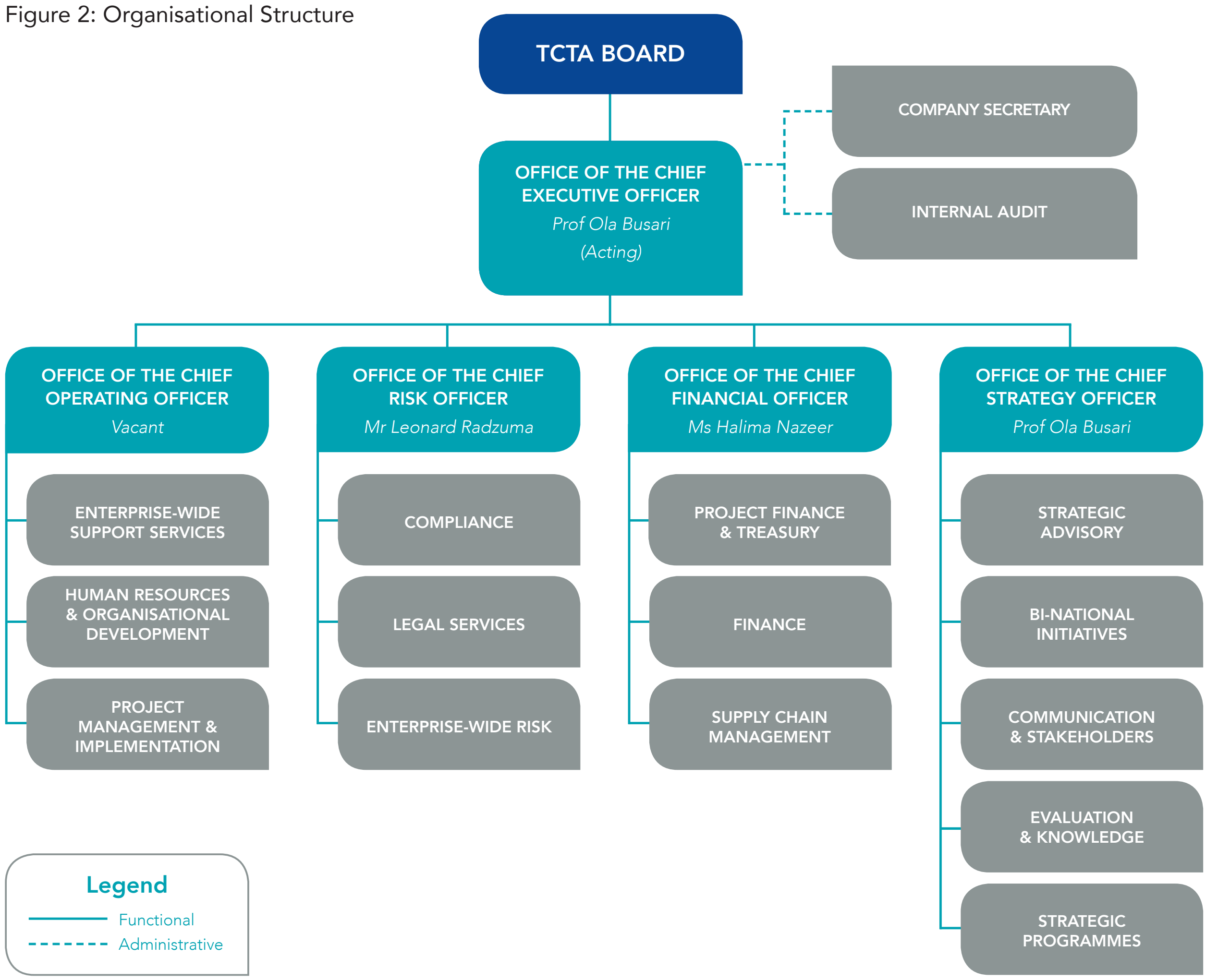
a) project management and implementation of water infrastructure:
- Project design
- Project construction
- Environmental compliance
- Land acquisition

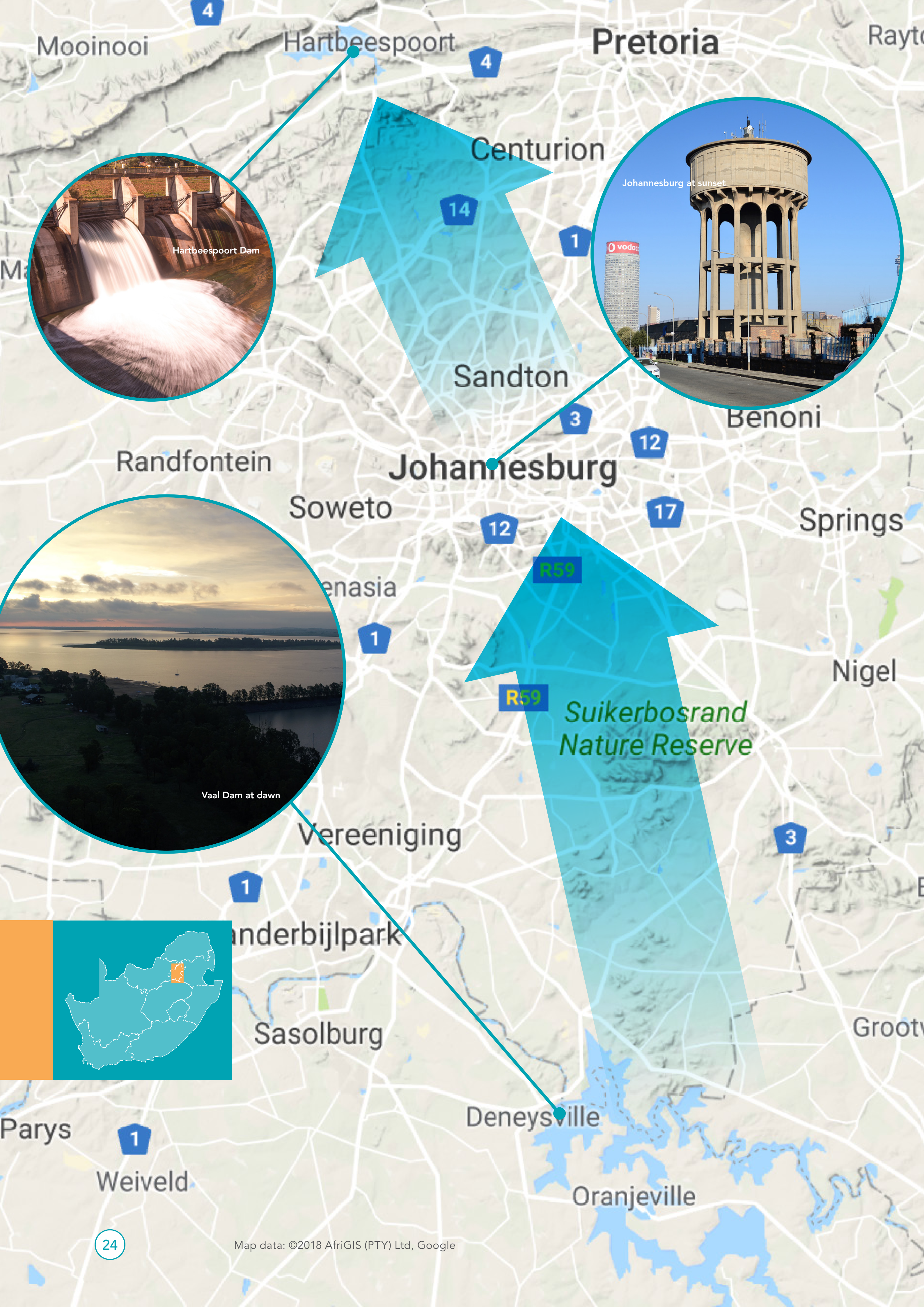
b) operation and maintenance;
c) debt management;
d) structuring and raising project finance;
e) knowledge management;
f) risk management;
g) socio-economic transformation; and
h) tariff setting.

ORGANISATIONAL STRUCTURE

(as at 31 March 2018)

Figure 2: Organisational Structure





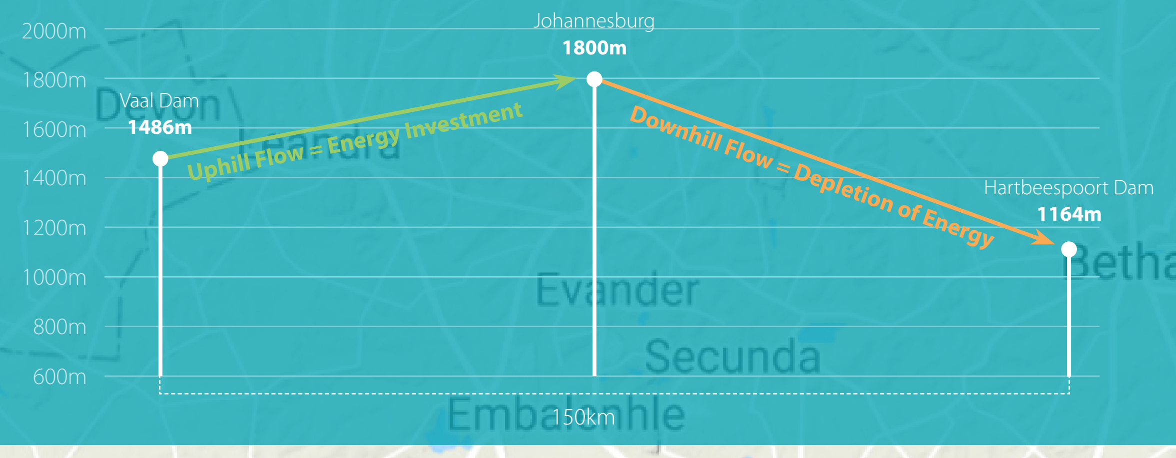
Map data: ©2018 AfriGIS (PTY) Ltd, Google

Island in the Sky (Gauteng)

The origins of our primary economic hub, Gauteng, comes from the 1886 discovery of gold on a ridge, some 50km south of Pretoria. In a break with what is the norm for most major cities, Johannesburg did not evolve next to a water course; instead, it is situated on a watershed, some 1,800 metres above sea level. The supply of water to the elevated city will always pose some challenges. Today, drawing on catchments as far as Lesotho and the Thukela basin, water from the upper Vaal is pumped some 300m higher, to the north, to supply Gauteng. Most of the return flows run into the Crocodile basin, further north, and some 600m lower than the ridge. The use of the water is entirely linear, although with the benefit of downstream use.

Looking to a more distant future where both water and energy are more diligently managed, it would not be unusual if a more circular approach to water use is adopted in Gauteng: Infrastructure choices would be geared towards harvesting energy from waste, recovering potable water from return flows, and retaining the water at the higher altitude. The adoption of a circular approach, would change the type of infrastructure required: A lesser emphasis on storage and supply, and a greater emphasis on capture and rehabilitation.

Elevation



PART B: PERFORMANCE INFORMATION

PERFORMANCE AGAINST THE PREDETERMINED OBJECTIVES

TCTA's performance during the reporting period was anchored in the following predetermined objectives, as agreed with the Minister of Water and Sanitation:

1) Manage the implementation of projects to meet the objectives
2) Operation and maintenance of AMD plants in accordance with requirements
3) Structure project funding and secure institutional arrangements
4) Raise funding for implementation of projects
5) Ensure financial sustainability of the organisation.

The organisational performance against the predetermined objectives in the year ending 31 March 2018 is given in Table 4.

Target achieved   Not achieved

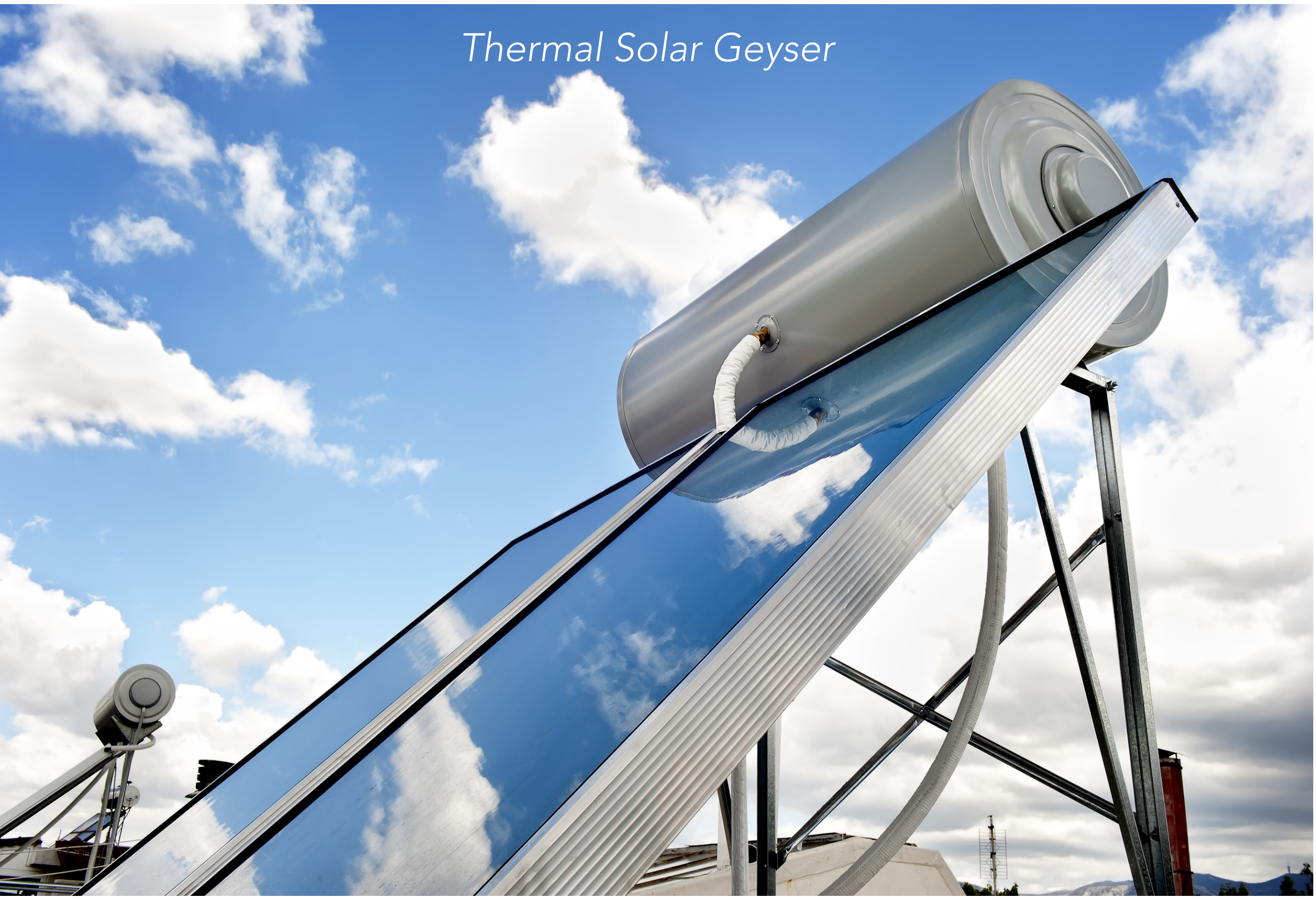

Thermal Solar Geyser

Table 4: Performance against the predetermined objectives

Predetermined Objective	Measure	Progress as of 31 March 2017	Actual Progress as of 31 March 2018	Targeted Progress for 31 March 2018	Reason for Missing of Target and Impact
1. Ensure financial sustainability of the organisation.	Operational costs managed within Board-approved budget framework.	YTD Budget R 406.45 million – Admin. costs. YTD actual R 228.84 million. Variance (R 176.89 million).	An amount of R201 million was spent on operational costs between 1 April and 31 March 2018, representing 54% of the target for the year	Actual spend on operational costs is between 90–100% of budgeted operational costs (R371.13 million).	Operational costs are significantly lower than budgeted for, as the anticipated workload has not materialised.
	Sufficient revenue is collected to meet obligations.		An amount of R6.17 billion was collected between 1 April and 31 March 2018, representing 104% of the target for the year.	An amount of between R5.31–5.59 billion is collected by 31 March 2018.	
	Capital expenditure (excluding LHWP2)		An amount of R122 million was expended between 1 April 2017 and 31 March 2018, representing 5% of the target for the year.	Between 90% and 100% of planned expenditure: R2.36 billion by 31 March 2018.	The reasons for below-budget expenditure are as follows: • Not proceeding with Phase 2B remains the biggest contributor to the low expenditure. • Ongoing delays in the award of the MCWAP2A and AMD-LTS PSP contracts deferred start of expenditure into the 2018/19 financial year. • Phase 2C expenditure is below budget due to delays in finalising contractor claims. There is an expectation that by end March one significant claim may materialise, which will impact on actual spend. • AMD STS is below budget owing to savings on projected contractor claims.
2. Manage the implementation of projects to meet the objectives.	Achievement of critical project milestone dates.	ORWRDP-2C: Projected Ready for Trial Operations period is June 2017. Progress towards achieving Ready for Trial Operations: • 40 km out of 40-km pipeline laid and backfilled. Testing of internal pipeline coating under way. • Pump station 96% complete – commissioning outstanding.	ORWRDP-2C: Ready for Operation was not achieved by 31 March 2018. Ready for Trial Operation is forecast to be achieved by end May 2018 and Ready for Operation by September 2018. Pre-commissioning is 50% complete.	ORWRDP-2C: Ready for Operation is achieved in the period November to December 2017.	The Ready for Trial Operation date was not achieved for the following reasons: • The extent of pipe repair works far exceeded the anticipated repair work, resulting in completion only by September 2017. • Finalisation of works required for trial operations to begin was planned to be completed by 13 December 2017. However, delays in the finalisation of the operating manuals and commissioning documentation have shifted this date to end May 2018. The physical construction of the project is completed and remaining work is limited to the commissioning and rehabilitation of the servitude. Furthermore, due to the delay in the construction of Phase 2D by DWS, the pump station can only be dry commissioned, therefore no adverse operational impact will be incurred. Consideration will be given to the requirement for a full four-month trial operation period, given the limited application of the full scheme and to minimise cost. The claims resolution process is ongoing.

Predetermined Objective	Measure	Progress as of 31 March 2017	Actual Progress as of 31 March 2018	Targeted Progress for 31 March 2018	Reason for Missing of Target and Impact
2. Manage the implementation of projects to meet the objectives. (continued)	Achievement of critical project milestone dates.	MCWAP-2A: As of 31 March the tender document for the procurement of the engineering professional service provider (PSP), who will undertake the design and construction supervision, was in good progress and the procurement strategy was approved.	MCWAP-2A: Final Inception Report was not submitted in March 2018. The contract to the Professional Service Provider to undertake this work is not yet concluded.	MCWAP-2A: Final Inception Report submitted in March 2018.	Material delay in the award of the PSP contract for the design and supervision of the scheme impacts the deliverables on the project. The contract was planned to be awarded in October 2017, but due to delays in the tender evaluation process and the requirement to conduct a probity audit, the final management recommendation was only presented for approval at the Finance and Procurement Committee meeting of 22 January 2018. The Finance and Procurement Committee so approved and recommended approval by the Board at the meeting of 31 January 2018. The Board did not approve, and requested further probity work for reconsideration at the meeting of 22 February 2018. Recommendations were not approved and further probity work was requested. The matter was scheduled to be considered at the 26 April 2018 meeting of the Board.
		AMD-LTS: Request for proposals for PSP out on tender.	The final conceptual design and optimisation of the scheme was not submitted in March 2018. The contract to the Professional Service Provider to undertake this work is not yet concluded.	Final conceptual design and optimisation of the scheme submitted in March 2018.	Material delay in the award of the PSP contract for the configuration and tender design of the scheme affects the deliverables on the project. The contract was planned to be awarded in June 2017, but due to delays in the tender evaluation process and the requirement to conduct a probity audit, the final management recommendation was only presented for approval at the Finance and Procurement Committee meeting of 22 January 2018. The Finance and Procurement Committee approved and recommended approval by the Board at the meeting of 31 January 2018. The Board did not approve, and requested further probity work for reconsideration at the meeting of 22 February 2018. Recommendations were not approved and further probity work was requested. The matter was scheduled to be considered on the 26 April 2018 meeting of the Board.
			The specialist studies and draft EIA scoping report were not completed by March 2018. A draft scoping report was submitted on 26 March 2018 and is under review by TCTA. The specialist studies will now begin in April 2018 to ensure that data collection critical, for the rainy season, is not missed.	The specialist studies and draft EIA scoping report complete by March 2018.	The EIA process for the project commenced in August 2017; the intention was that the PSP would have been appointed in June 2017 and the EIA would be based on the new configuration of the project. Due to the delay in the appointment of the PSP, the EIA and specialist studies were delayed. As a way forward and to minimise costs, the project team resolved to proceed with the EIA on the DWS Feasibility Study layout. The specialist studies will begin in April 2018, so as not to miss a rainy season, critical for data collection. Changes to the Feasibility Study layout, which might impact on the EIA, will be dealt with as a deviation if they occur.
3. Operation and maintenance of designated projects in accordance with DWS requirements/ specifications.	On the Acid Mine Drainage project, maintaining or reducing water levels within the mine voids.	An average of 32 Ml/d was pumped in the 2016/17 financial year.	In the financial year, the average volume of water treated in the Western Basin was 34 Ml/d.	In the financial year, treating an average volume of water in the Western Basin of between 30–33 Ml/d.	The plant operated very well without interruption during the period, which resulted in higher volumes being treated than planned. The basin was drawn down by 3.66 m on 31 March 2018.

Predetermined Objective	Measure	Progress as of 31 March 2017	Actual Progress as of 31 March 2018	Targeted Progress for 31 March 2018	Reason for Missing of Target and Impact
3. Operation and maintenance of designated projects in accordance with DWS requirements/ specifications. (continued)		The water level in the Central Basin was at 113.1m below shaft collar on 31 March 2017.	The water level in the Central Basin was lowered to 119.9 m below shaft collar by 31 March 2018.	The water level in the Central Basin is lowered to 135–140 m below shaft collar by 31 March 2018.	The target was not met due to interruptions in the operation and maintenance of the plant since December 2017. Failure of one of the pumps occurred in December 2017, which was recommissioned only in February 2018. Damage to one thickener also occurred in December 2017 when the TSS exceeded the design parameters. Sporadic cable theft resulted in full outages throughout the year. These factors resulted in the plant operating at 50% capacity since December 2017. The water level prior to the equipment failures was 123 m below ground level. The water level is still 6.1 m above the ECL.
		The water level in the Eastern Basin was at 10.96m below ECL on 31 March 2017.	The water level in the Eastern Basin was lowered to 11.39 m below the Environmental Critical Level by 31 March 2018.	The water level in the Eastern Basin is lowered to between 10–15 m below ECL by 31 March 2018.	
4. Structure project funding and secure institutional arrangements and request necessary authorisations to allow funding to be raised.	ORWRDP-2B: Obtain a borrowing limit.	In the pre-implementation phase of the project (a directive has been received but all the conditions have not been met to enable construction to commence, particularly with regard to funding and alternative funding mechanisms are being explored), TCTA acts as an advisor to DWS. Delay in the conclusion of the off-take agreements between DWS and the mines was mainly due to the mines' deferred operational requirements for water as communicated by the Joint Water Forum and their stated requirement for further technical studies.	The borrowing limit was not obtained by 31 March 2018.	The borrowing limit is obtained in the period from December 2017 to January 2018.	The appointment of Development Bank of Southern Africa and the delivery of its study has taken longer than anticipated. The study recommends the project proceed, and therefore a borrowing limit request will be submitted to National Treasury in the first quarter of 2018/19 subject to DBSA final approval. The consequence of missing the target is delayed implementation of the project and this would affect water delivery to the mines, mainly, as well as water for social needs. The impact on the mines should be seen in the context that they are reluctant to sign off=take agreements, and the alternative funding model was introduced only as a result.
	Mzimvubu Water Project: Submit final funding strategy to DWS.	Designed and submitted the funding model and supported the Department with regard to the financing of the project, engagements with stakeholders leading to a way forward to implementing the project. A new directive was received on 7 February 2017 and a borrowing limit to cover the short-term funding requirements is in preparation.	A final funding strategy was not submitted to DWS by May 2017.	The final funding strategy is submitted to DWS for approval in May 2017.	The funding strategy (which was incorporated into the borrowing limit) was loaded for consideration by the Risk and Finance Committee on 12 May 2017, but was deferred to July. In July the RFC approved the strategy for recommendation to the Board, but the Board did not approve it for submission to DWS. TCTA continued to support DWS in resolving the funding challenge by, for example: Supporting DWS with the application to the Budget Facility for Infrastructure (BFI), after meetings with the DG of National Treasury, DWS, and subsequently with the forum of DGs in the Presidency, Department of International Relations and Cooperation and DWS where support for the funding model concept through the BFI was discussed. The Minister of Finance did not support DWS's request for a borrowing limit; at the end of the reporting period the application for BFI funding had not been decided.

Predetermined Objective	Measure	Progress as of 31 March 2017	Actual Progress as of 31 March 2018	Targeted Progress for 31 March 2018	Reason for Missing of Target and Impact
4. Structure project funding and secure institutional arrangements and request necessary authorisations to allow funding to be raised. (continued)	AMD-LTS: Negotiate agreements for use of AMD water.	Identified and had preliminary engagements with the following potential users: • Sasol • Rand Water. With regard to Sasol, a presentation was made to their management in Secunda on the mutual benefit of entering into partnership with TCTA for the beneficial use of AMD as an alternative source of water to Sasol. A strong interest was expressed in entering into an MOU. A project steering committee was established between DWS and TCTA.	Agreements were not submitted to the principals (off-takers and DWS) for signing in March 2018. During the quarter ending March 2018, discussions continued between DWS and TCTA on the pricing framework for treated AMD and these culminated in a workshop on 16 March when a pricing term sheet was concluded. The next step is for TCTA to go back to the potential off-takers with the pricing proposal and, once this has been accepted by the off-takers, only then can the agreements be finalised.	Agreements submitted to the principals for signing in March 2018.	The delay in the conclusion of off-take discussions was caused mainly by the deferment in the finalisation of the framework for the pricing of AMD water, which was only finalised and agreed to between DWS and TCTA on 16 March 2018. This delay is not expected to have an influence on the raising of funding for AMD LTS, as this is done under the Vaal River System funding programme. However, the off-take agreements are required for the configuration of the project, and this could affect the project timelines.
5. Raise funding for implementation of infrastructure (funding is available for project implementation).	ORWRDP-2B: • Obtain fiscal funding commitment.		No funding was committed by DWS by June 2017. It was impossible to obtain fiscal funding as DWS did not commit any funding to this project in its Annual Performance Plan for 2017/18–2019/20.	R90 million–R117 million committed by DWS in June 2017.	TCTA made written requests and undertook follow-ups to DWS to request budget allocation at budget preparation stages and during budget reprioritisation, to no avail. Reasons for not meeting the target: There was a misalignment in that DWS did not include the project in its Annual Performance Plan, whereas TCTA has a directive to implement the project, which binds DWS to provide funding the organisation before commercial finance has been raised, compounded by the financial and budgetary challenges in the Department.
	• Availability of short-term funding (dependent on approval of borrowing limit).		Agreements were not effective by February–31 March 2018.	Agreements effective by February–March 2018.	Reasons for Agreements not being effective by February–March 2018 : Funding was dependent on the granting of a borrowing limit. The borrowing limit could be applied for only after DBSA had completed its study into the viability of mining platinum group metals in the project area and agreed to fund the project. The DBSA study and investment decision were delayed and so the borrowing limit could not be applied for, which affected the ability to raise funding.
	MCWAP: Availability of bridging facility (dependent on approval of borrowing limit).	Concurrence with the new borrowing limit was given by the Minister of Finance on 30 March 2017.	The bridging facility was available from March 2018 as cash from the revenues received.	Bridging facility available February–March 2018.	Existing MCWAP-1 facilities were available, since there is a combined borrowing limit for MCWAP-1 and 2.

SUMMARY OF PROJECT IMPLEMENTATION

In the 2017/18 financial year, the TCTA portfolio of projects consisted of those which were in preparation, construction, close-out and those on hold whilst issues around funding were resolved.

The key activities undertaken during the year under review are summarised as follows:

PROJECTS IN PREPARATORY PHASE

Mokolo and Crocodile River Water Augmentation Project – Phase 2A

The project comprises an abstraction weir, pump stations and a 160-km pipeline to transfer water from the Crocodile River near Thabazimbi to the Lephalale area.

The project is a prerequisite to enable further development of the Waterberg coal fields, as envisaged in Strategic Infrastructure Project 1 of the Presidential Infrastructure Co-ordinating Commission. It will enable Eskom to operate an additional three flue gas desulphurisation units at the Medupi Power Station, which could not be supplied with water from Mokolo Dam. The units minimise the environmental emissions from the power station and it is a requirement of the World Bank loan, to Eskom, that all units should be functional by 2024. The project will help to unlock the coal resources in the Waterberg region for additional power generation of 4 800 MW, coal supply to some of the Eskom Mpumalanga power stations and coal for export. The project will further provide additional water to Matimba Power Station for future retrofitting of flue gas desulphurisation units, and the Lephalale Municipality.

In the year under review, DWS requested TCTA to provide technical assistance in conducting the Environmental Impact Assessment (EIA) of the project. The EIA process started with a scoping phase in which a draft scoping report for the water transfer infrastructure was published for public comments in March 2018, followed by a public participation process with focus group discussions being held at Hartbeespoort Dam, Thabazimbi, Steenbokpan and Lephalale. The Environmental Impact Report is planned to be submitted to the Department of Environment Affairs (DEA) in the 2018/19 financial year, and will be followed by environmental authorisation and an appeal process.

In parallel, TCTA commenced with the procurement of an engineering Professional Service Provider (PSP) to undertake the design and construction supervision of the project. The tender was advertised on 23 June 2017. The tender evaluation and adjudication are complete and awaiting approval.

In July 2017, TCTA obtained approval of the borrowing limit from the Minister of Water and Sanitation together with concurrence from the Minister of Finance. This authorised TCTA to raise funding for the commercial component of the project. The social component of the project will be funded by the fiscus. The Implementation Agreement between DWS and TCTA and the Water Supply Agreements between DWS and the off-takers were drawn up and will be concluded in the 2018/19 financial year.

The required Guarantee Framework Agreement between DWS and the Department of Energy will be initiated in the coming financial year.

Acid Mine Drainage Project – Long-term Solution

The Acid Mine Drainage Project is being implemented in two phases.

The first phase, the Short-term Intervention, reduces the concentration of metals and neutralises the acid mine drainage. This phase is now complete and being operated by TCTA on behalf of DWS. The second phase, the Long-term Solution, treats the water from the first phase to a potable or industrial water standard for sale to consumers. Implementation of the Long-term Solution will reduce the need for dilution releases from the Vaal Dam and will augment water supplies to the Vaal River System, delaying the need for further augmentation.

During the 2017/18 financial year, progress was limited to the procurement of the engineering PSP for the treatment plants and the EIA process.

The tender for the procurement of the PSP, to undertake the configuration of the desalination plant/s including water off-takes and sludge disposal options, began on 2 March 2017. The tender evaluation and adjudication are complete and the appointment of the PSP is awaiting approval.

The EIA process started in August 2017. Baseline studies have begun with the recording of seasonal field data to ensure it is collected before the end of the rainy season. The draft scoping report based on the DWS feasibility study report has been prepared. The completion of the scoping process and the continuation of the EIA is subject to the outcome of the engineering optimisation report.

TCTA has started engagements, on behalf of DWS with potential off-takers for the treated water. The proceeds from the sale of this water will be used to offset the cost of treatment.

Berg River–Voëlvlei Augmentation Scheme

The proposed scheme involves the abstraction of winter water from the Berg River, once the ecological water requirements of the river and the estuary have been met.

The scheme comprises a weir and abstraction works with a pump station on the Berg River, with a 6.3-km long pipeline to the Voëlvlei Dam

On 18 May 2017, TCTA was directed by the Minister of Water and Sanitation to fund and implement the project as part of the Western Cape Water Supply System. The urgent need for augmenting the system became evident with the system's inability to cope with the current drought situation. Although the project will not provide relief from the current drought, it will increase the supply from Voëlvlei Dam by 23 million m^3 per annum in the medium to long term.

Due to the urgency of the project, a design and build contracting approach was adopted, which should reduce the implementation period by a year, within an acceptable risk framework. This entails:

- appointing a PSP to undertake technical evaluation, construction monitoring and administration/contract management;
- appointing the contractor to undertake the design and construction.

This contracting approach should result in achieving water delivery in June 2021.

An interim Project Charter based on the design and build approach was approved by the Board on 28 October 2017. The tender for the procurement of the PSP was advertised on 1 February 2018 and closed on 6 April 2018. It is planned to award the contract in the 2018/19 financial year.

PROJECTS IN CONSTRUCTION PHASE

Olifants River Water Resources Development Project – Phase 2C

The project comprises a 40-km distribution pipeline from De Hoop Dam, which feeds the De Hoop Water Treatment Works at Steel Bridge, and a pump station near Steelpoort, where it can interconnect with the Lebalelo Water Users Association infrastructure. Water from the De Hoop Dam is for the mining industry along the eastern limb of the Bushveld Complex as well as for municipal consumers in the Sekhukhune District Municipality.

In the year under review, the construction of the entire 40-km pipeline and pump station was completed with pre-commissioning activities at 50% completion. Wet commissioning of the scheme will remain pending, until the institutional arrangements between Lebalelo Water Users Association and DWS are concluded.

Overall, the project experienced approximately four years of delays mainly due to poor contractor performance, community disruptions and challenges that were encountered at the Steelpoort River crossing

Off-take Pipeline to the town of Kriel

The project will provide a backup water supply to Kriel when the water supply pipeline from Jericho Dam is out of service. The project comprises construction of a 3-km offtake pipeline from a pipeline to Duvha Power Station and an upgrade of the existing water treatment works. TCTA is undertaking the planning, design, environmental work and providing project management in support of DWS, which is building the works itself.

The project has slowed down due to the budgetary constraints faced by DWS.

To enable the construction of the pipeline to begin, TCTA has proposed a strategy in which it procures the long-lead items on behalf of DWS. An addendum to the Memorandum of Agreement to implement this strategy has been signed. DWS will transfer the remaining project funds to TCTA to manage the completion of the project during the 2018/19 financial year.

PROJECTS IN ADVISORY PHASE

This section covers projects where a directive has been received but preparatory work is required to make the project bankable, so that funding can be raised, or where insufficient funds are available from the fiscus. During this phase, TCTA acts in an advisory capacity to DWS to resolve these issues. The eventual quantum of funding will impact on the scope of works. There are two projects currently in this phase.

Olifants River Water Resources Development Project – Phase 2B

The project involves the development of bulk raw water distribution infrastructure in the middle Olifants River catchment area, comprising a 70-km pipeline from Flag Boshielo Dam to Pruisen near Mokopane with pump stations and reservoirs. When completed, the project will provide water for use by both the mines and the Mogalakwena Local Municipality.

Progress on this project has been halted due to it not having a bankable funding structure, as the mines would not sign off-take agreements. During the financial year, TCTA explored an alternative funding mechanism through the Development Bank of Southern Africa (DBSA) to fund the project, including under-writing of the debt, without signed off-take agreements with commercial users.

A bankability study was completed and the DBSA Board has approved the funding mechanism. However, the borrowing limit and funding proposal will require DWS and National Treasury approval.

uMzimvubu Water Project

The overall objective of the project is to provide water for social needs and to contribute to economic development of the poor and rural north-eastern region of the Eastern Cape Province by leveraging the water resources of the uMzimvubu River catchment to support agriculture, water supply, hydropower, transport and tourism.

In the reporting period, TCTA started with take-over activities from DWS and conducted a due diligence on the work performed to date.

The Project Charter was approved by the Board in November 2017, but the project could not proceed as funding was not available from the fiscus.

SUMMARY OF OPERATION AND MAINTENANCE ACTIVITIES

TCTA operates and maintains the following two infrastructure projects on behalf of DWS:

1) Delivery Tunnel North of the Lesotho Highlands Water Project; and
2) the Short-term Intervention of the Acid Mine Drainage Project.

A summary of these activities is as follows.

Delivery Tunnel North of the Lesotho Highlands Water Project

In terms of the Treaty, as amended by Protocol IV between the Republic of South Africa and the Kingdom of Lesotho, TCTA is responsible for the operation and maintenance of that part of the project situated in the Republic of South Africa, Delivery Tunnel North, and is accountable to the Lesotho Highlands Water Commission in this regard.

TCTA also manages the Ash River Management Plan, a river erosion monitoring and mitigating plan that was implemented following the start of water deliveries from LHWP.

During the financial year under review, TCTA complied with all its operations and maintenance obligations to ensure that the infrastructure could deliver the scheduled 780 million m^3 of water at the designated outlet point in the Ash River. TCTA also began with the planning for the 20-year inspection, scheduled at the end of 2018.

The Short-term Intervention of the Acid Mine Drainage Project

Upon completion of the implementation of the Short-term Intervention in the Western, Central and Eastern Basins, TCTA was contracted by DWS for the operation and maintenance of the high density sludge treatment plants. TCTA is responsible for ensuring that the plants are efficiently operated to meet the quantity and quality requirements of treated water and to draw the water down, in the mine void, to the environmental critical level. This is an interim arrangement until the Long-term Solution is commissioned.

In March 2018, TCTA concluded the award of new operations and maintenance contracts for the Central and Eastern Basin high density sludge treatment plants for the next 30 months. On the Western Basis, Sibanye Gold continues to operate and maintain the Treatment Plant.

Western Basin

During the reporting period occasional decanting to Tweelopiesspruit was experienced during the peak rain season.

The effluent discharge after treatment consistently complied with the specified standards. Minor deviations that occurred were immediately corrected when detected.

Central Basin

The water level in the Central Basin was targeted to be between 135–140 m below the shaft collar by the end of the financial year. However, this target was not achieved; the water level was lowered to 119.9 m below the shaft collar. This was due to interruptions in the operation of the plant which were experienced from December 2017. The interruptions consisted of one pump failure in December 2017, which was subsequently recommissioned in February 2018.

Further, one of the thickeners was damaged in December 2017, resulting in it being taken out of service and remedial action was then taken. Sporadic cable theft was experienced during the course of the year, which led to plant outages. These factors resulted in the plant operating at reduced capacity from December 2017 and hence the target for drawing down the basin was not met.

The environmental specifications for release of the treated water into the river system were consistently met throughout the year.

Eastern Basin

In the period under review, the water level in the Eastern Basin was lowered to 11.39 m below the Environmental Critical Level (ECL) and the target of 10–15 m below ECL was achieved.

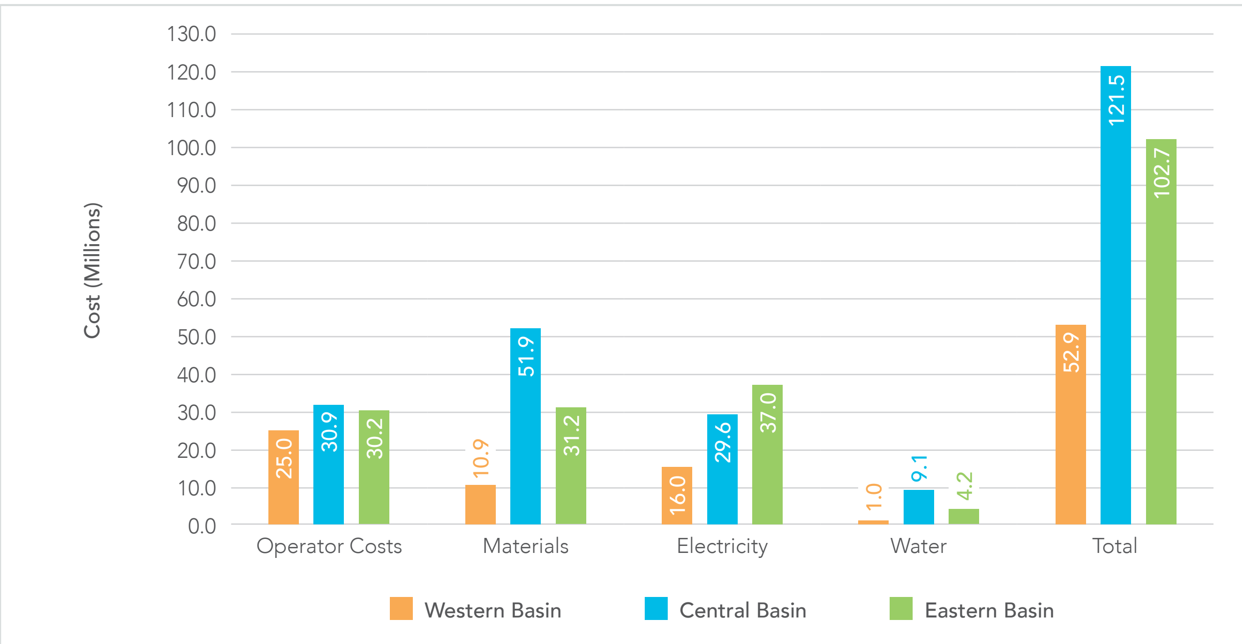
The environmental specifications for release of the treated water into the river system were consistently met throughout the year.

Table 5: Performance of the plants in 2017/18

			Western Basin		Central Basin		Eastern Basin	
Volumes	Design Capacity		40 Ml/day		84 Ml/day		110 Ml/day	
Volumes	Average Volume Treated		34.06 Ml/day		58.15 Ml/day		70.85 Ml/day	
Level of water below ground level	Environmental Critical Level		Has not been determined		126 m below ground level		106.67 m below ground level *	
Level of water below ground level	Level as at 31 March 2018		3.7 m		119.9 m		117.8 m	
	Parameter	Units	Limits (as per DWS directive)	Average measurement for the year	Limits (as per DWS directive)	Average measurement for the year	Limits (as per DWS directive)	Average measurement for the year
Quality of treated mine water	pH		6.5–9.5	9.49	6.5–9.5	8.87	6.5–9.5	8.73
Quality of treated mine water	Iron	mg/l	<1	0.08	<1	0.02	<1	0.23
Quality of treated mine water	Manganese	mg/l	<10	1.75	<10	0.81	<10	0.19
Quality of treated mine water	Aluminium	mg/l	<1	0.21	<1	0.00	<1	0.005
Quality of treated mine water	Sulphates	mg/l	≤3000	2179.13	≤3000	2740.02	≤3000	1411.87
Quality of treated mine water	Electrical conductivity	mS/m	≤450	307.23	≤450	393.68	≤450	258.67
Quality of treated mine water	Turbidity	NTU	<30	14.99	<30	8.87	<30	5.37
Quality of treated mine water	Uranium	mg/l	<50	27.55				

* The measuring point, at ground level, is now 2.27 m higher than in the previous reporting.

Figure 3: Annual expenditure on the plants in 2017/18



FINANCIAL SUMMARY

For the year ended 31 March 2018, TCTA was successful in achieving its strategic financial goals, as outlined below:-

Raised finance for infrastructure projects, on behalf of DWS, that would be recovered through user tariffs (either partially or fully);

Ensured that sufficient funds were available at all times to meet the requirements during construction. Where long-term funds are utilised TCTA entered into short-term investments to offset costs of these long-term funding;

Collaborated with DWS to ensure that the tariff, set in terms of the Pricing Strategy, is sufficient to cover their obligations and the obligations that TCTA has incurred on their behalf. These obligations comprise of interest payable on funding obligations and capital repayments on all projects funded outside the fiscus, operation and maintenance costs on certain projects, and other obligations of the South African Government in respect of the Lesotho Highlands Water Project.

Achievement of TCTA's strategic financial goals can best be interpreted via a deeper insight into the following five elements in its financial statements

a) The Tariff Receivable
b) Cash inflows
c) Utilisation Of Cash Received
d) Sources of funding
e) Distribution of debt across projects

THE TARIFF RECEIVABLE

The Tariff Receivable represents TCTA's entitlement to recover the project costs incurred for the funding, construction and implementation of national water infrastructure as well as the subsequent management of the debt incurred for the implementation of these projects. The Tariff Receivable relates to the present value of all cash flows that are payable by DWS to TCTA in order to settle construction costs and other expenses incurred for each project.

The amounts received on a monthly basis from DWS decreases the outstanding Tariff Receivable balance (refer to note 9.4 for details on the calculation of the Tariff Receivable).

The increase in the Tariff Receivable, from R27 181 million as reflected at 31 March 2017, to R28 950 million as reflected at 31 March 2018 is primarily due to the AG8 adjustment as future cash flows for capital expenditures have increased from prior year projections. This adjustment was predominantly in the VRS and MCWAP projects.

CASH INFLOWS

Cash and cash equivalents are held for the purposes of meeting TCTA's short-term cash commitments. Some short-term investments are included as cash and cash equivalents when it is readily convertible to a known amount of cash and the risk of a change in the value is insignificant. The maturity period of these short-term investments, classified as cash and cash equivalents, are normally less than three months from the date of acquisition.

TCTA prioritises liquidity across all its projects, as such, most investments are allocated to Call and Money Market Funds.

Cash inflows from operating activities for the year ended 31 March 2018, as reflected in figure 4, are higher than for the year ended 31 March 2017, predominantly due to higher receipts of revenues and netted of by lower recoveries on fiscally funded projects. The higher receipts were partly due to the repayment of the outstanding balance for the 2016/17 financial year. The total receipts for the 2017/18 financial year amounted to R6 218m of which R2.5bn related to the 2016/17 outstanding

Figure 4: Cash Inflows from Operations

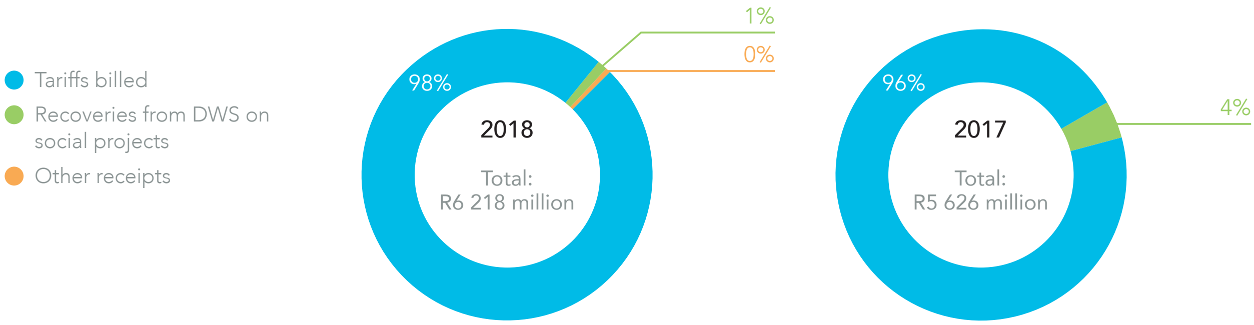


Figure 5: Cash inflows from financing and investing activities

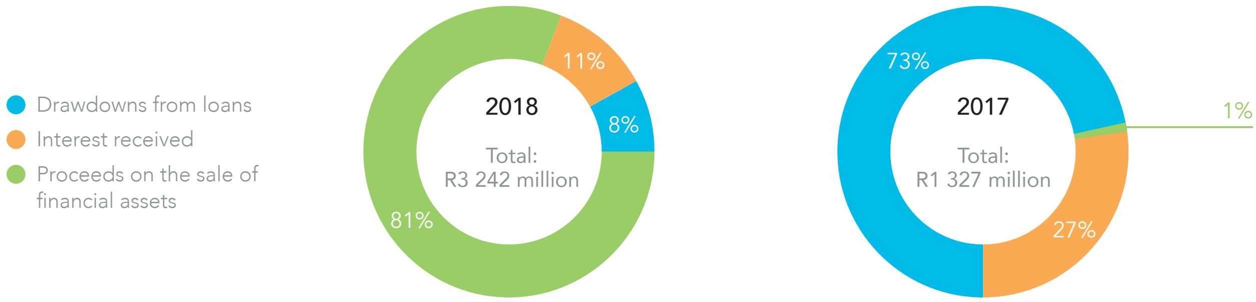
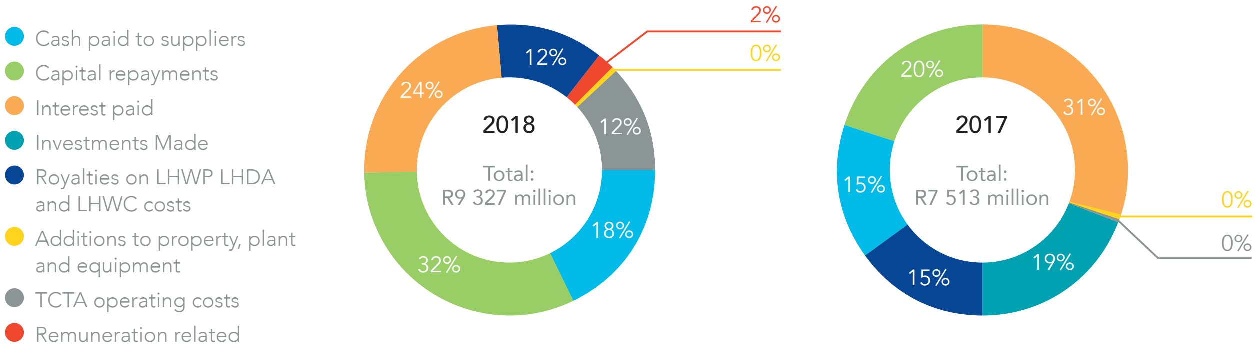


Figure 6: Cash outflows



balance. The tariff billing for the current financial year was higher than the previous financial year due to increased volumes, however the cash receipts for the year were not adequate to reduce the DWS outstanding balance. The DWS debtors balance increased from R2.5bn in 2016/17 to R3.2bn in the current year as TCTA continued to experience delays in receiving payments from DWS. Recoveries on social projects were lower as these projects are nearing completion. The receipts for the year included the fiscal contribution towards the Acid Mine Drainage amounting to R200m which has been accounted for as part of the Vaal River System.

Cash inflows from investing activities for the year ended 31 March 2018, figure 5, is higher than for the year ended 31 March 2017, mainly due to proceeds received on sale of financial assets in VRS. These financial assets were earmarked for the WSP02 redemption which took place in May 2017. Drawdowns from loans decreased as projects are nearing completion.

UTILISATION OF CASH RECEIVED

Total cash outflows increased for the year ended 31 March 2018, figure 6, as compared to outflows for the year ended 31 March 2017, due to increased capital repayments, this was due to the WSP02 which matured in May 2017. Cash paid to suppliers increased predominantly due to the increase in the AMD operations and maintenance as all three basins were being operated in the current financial year. The increase in other TCTA operating costs is due to a provision for doubtful debts that was raised in the current year. The construction costs have decreased overall with the main contributor to this year's spend being the work in progress for LHWP-2.

Interest paid decreased due to the repayment of WSP02.

The Treaty related costs increased by 24% due to increases in Royalties paid and operating costs for works in Lesotho. Remuneration related costs have remained within 5% of total outflows as only 2% of total payments made were towards remuneration.

SOURCES OF FUNDING

The total value of Bonds, as reflected in figure 7, decreased from R19 139 million in 2017 to R18 019 million in 2018 due to the redemption of WSP02. The composition of the sources of funding has not changed as reflected in the graphs below.

Funding from commercial banks has remained constant in the current year. Capital repayments have taken place in all projects.

The total debt decreased by R1 592 million from 31 March

2017 to 31 March 2018 due to the redemption of WSP02. The most significant movement in debt was the increase in short-term liabilities of R6 259 million, from 2017 to 2018, mainly arising from the reclassification of the WSP05 bonds from long term to short term liabilities due to their intended redemption on 1 August 2018.

Figure 7: Funding instruments

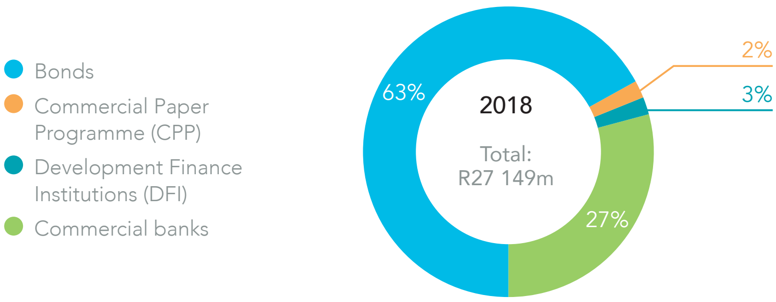
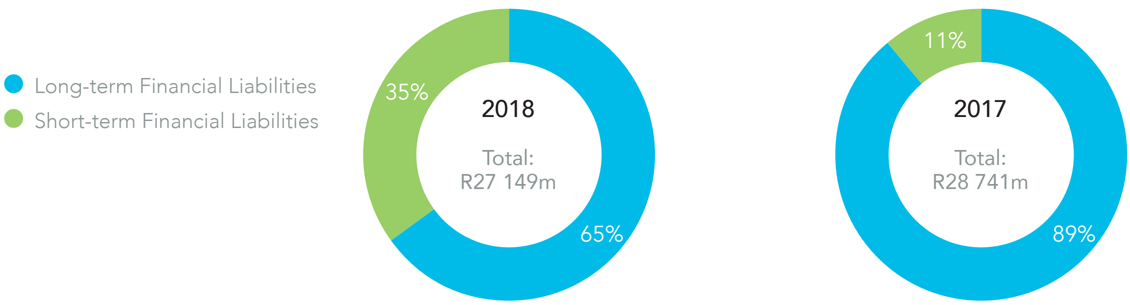


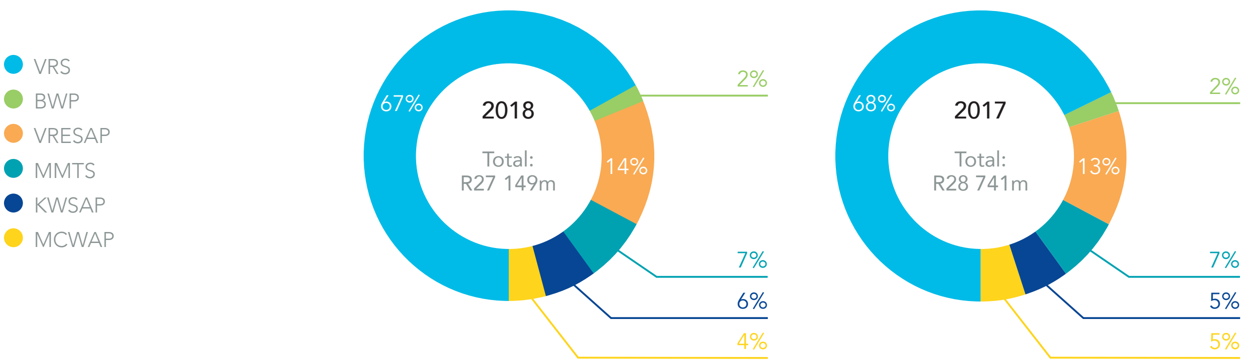
Figure 8: Total financial liabilities



DISTRIBUTION OF DEBT ACROSS PROJECTS

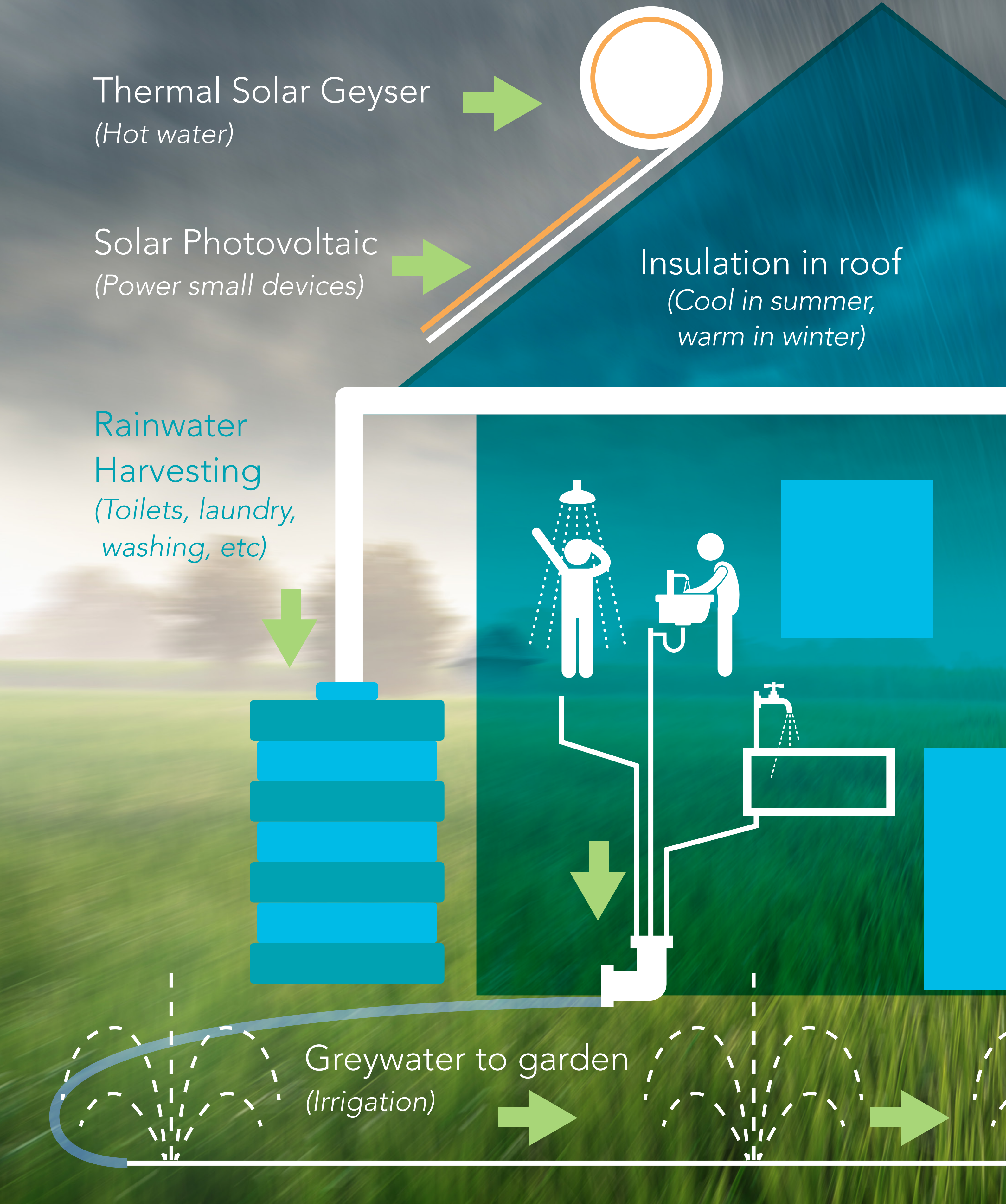
As at 31 March 2018, the overall debt outstanding decreased by R1 591 million and is reflected at an overall balance of R27 billion compared to the balance at 31 March 2017 of R29 billion. The decrease is as a result of the redemption of WSP02 as well as capital repayments in all projects.

Figure 9: Total debt by project



Rainwater Harvesting Plumbed to Supply Water into the House

Low energy water use house



Domestic Circular Water Use, and Unintended Consequences

Recent droughts in various parts of South Africa have revealed structural weaknesses in domestic water tariffs. Under normal supply conditions, and linear water use by the household, the rising block tariff works well: Low and middle tier users pay low to moderate rates, but high users, mostly affluent households, pay a much higher rate, to discourage wastefulness.

During a prolonged drought, however, this tariff structure can become problematic, as some South African cities have found. After a few years of drought, many households have gone from lavish water use to very sparing use, largely coaxed by stringent water restrictions, and a sense of responsible citizenship. This reduced consumption was aided by the adoption of circular water use practices, on a household level: Rainwater being harvested, and greywater collected, to be used for toilet flushing and irrigation. Within a short period of time, the water bills of vast numbers of households reduced dramatically, causing a sharp decline in the city's revenue streams, precisely at a time when the city would be needing robust revenue to fund emergency water infrastructure. A secondary impact on municipal revenue stems from reduced electricity use, since less water needs to be heated. The introduction of a universal levy on all users would address the revenue problem, but also increase the burden on historically minimal users, which are mostly low-income households.

Lessons are still being learned from this dynamic, but it seems clear that households tend to readily adapt to water restrictions, by investing in the necessary infrastructure (like JoJo tanks), to facilitate circular water use. The investment suggests that water use will not return to pre-drought levels, once the restrictions are lifted. This warrants careful consideration by planners and lenders, before relying on the projections of future water revenue. Another lesson is that rising block tariffs should only be used where a city or town has been adequately "drought-proofed", with only a minimal probability remaining that severe water restrictions may be imposed. Under these conditions, water sale volumes would be predictable, resulting in the uninterrupted working of the intended aspects of the tariff structure (cross-subsidisation and use containment).

PART C: SUSTAINABILITY AND TRANSFORMATION

INTRODUCTION

During the year under review, steps were taken to strengthen the TCTA environmental and social policy framework. To this end:

- the approved Land Acquisition policy is now being implemented;
- a draft Compensation Policy and a Resettlement and Livelihood Restoration Policy have been prepared for review by subject matter experts; and
- the Environmental Policy has been revised in light of King IV developments.

MITIGATION OF ENVIRONMENTAL IMPACTS

CORPORATE ENVIRONMENTAL MANAGEMENT SYSTEM (EMS)

The Corporate EMS scoping process has begun and will be expanded in the 2018/19 financial year. A resource-use baseline, spanning two financial years, has been compiled for significant resources used in the operation of the TCTA office in Centurion. A summary of the baseline data is presented in figure 10 below. The baseline will be expanded and is intended to serve as a reference for establishing the organisation's future targets for improved resources utility.

Figure 10: Average monthly use of resources

PROJECT-BASED ENVIRONMENTAL MANAGEMENT

In the spirit of capitalising on experience of project implementation to improve awareness, practice and to promote inter-project learning, several practice reviews have been conducted on topical matters. These include a review of rehabilitation practice, an update review of relocation practice as implemented on ORWRDP-2C, and an environmental incident management review that informed the development of an environmental incident classification system.

The Environmental Management System expansion and improvement efforts include the development of discipline-specific reporting templates and supporting workbooks in the interest of generating more meaningful and transparent records of compliance, practice, progress, performance and decision-making. The findings and recommendations from an internal audit on the management and control of environmental degradation risks have been incorporated into the relevant EMS elements.

Projects under construction, or in the rehabilitation phase, during the 2017/18 period resulted in no environmental incidents or non-compliance events that were reportable to the Department of Environmental Affairs (DEA). Independent Environmental Control Officers (ECOs) have been monitoring site performance against Environmental Authorisation conditions and Environmental Management Programme requirements. Consistently high levels of performance have been reported as presented in figure 11 below .

The AMD Central Basin operations and maintenance project recorded a single sludge spillage incident. DEA acknowledged the incident and on-site mitigation and remediation actions were implemented in accordance with the TCTA's emergency preparedness and response procedure.

New projects are in the early phases of planning with a strong focus on ensuring effective environmental risk and impact assessment and integration of environmental protection measures and compliance requirements into the various service providers' contracts and project control mechanisms.

The advanced state of projects under construction has seen the focus of environmental efforts concentrated on the management of rehabilitation towards achieving self-sustainable plant growth. The challenges posed by drought conditions are beyond project control, but efforts to limit the risks of erosion damage, access control and weed establishment have been actively managed. Rehabilitation monitoring and evaluation efforts have been ongoing to facilitate the acceptance and handover of the land to its owners. The surveying and registration of servitudes and land parcels are in progress.

A high-level project-specific summary of the most relevant elements of environmental impact management follows.

Mooi-Mgeni Transfer Scheme - Phase 2

Spring Grove Dam

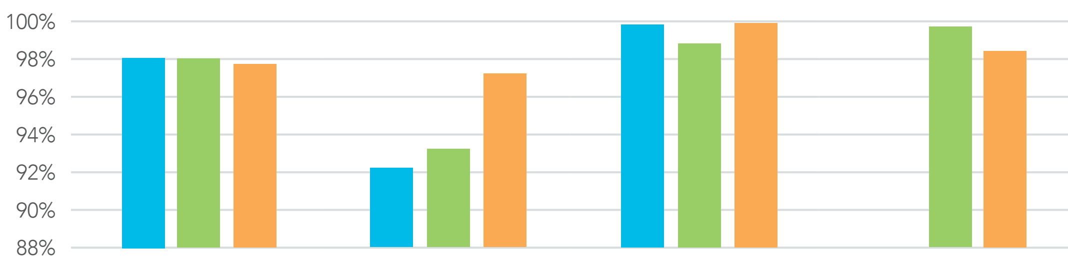
The biodiversity offset plan, required by the project's Record of Decision conditions, was submitted to DEA. In light of the Department's subsequent request for further information, the specialist service provider has been tasked with securing offset agreements with the owners of land on which the offsets are to be implemented on a stewardship basis.

Water Transfer Scheme

Whereas some areas have been accepted by landowners, the achievement of the specified 80% cover in other areas remains to be achieved before handover. The contractor appointed a local service provider to complete the remaining rehabilitation works and to maintain areas of the servitude that have not been handed back to the respective owners. The Environmental Monitoring Committee, established in February 2014, continues to meet every two months and will remain active until all environmental aspects of the project are closed-out.

The Surveyor-General's comments have been acted on and the approval of the pipeline servitude survey diagrams is awaited. This approval will enable the initiation of the registration of servitude against the title deeds of the affected properties.

Figure 11: Environmental Management Performance based on ECO inspection scores.



	MMTS 2 WTS	ORWRDP 2C	MCWAP	KRIEL PIPELINE
2015 - 2016	98,15%	92,24%	99,55%	
2016 - 2017	98,03%	93,26%	98,71%	99,17%
2017 - 2018	97,7%	95,45%	99,44%	98,14%

Olifants River Water Resources Development Project - Phase 2C

The rehabilitation strategy for the reporting period saw the establishment of drought-resistant maize, in community areas, using methods aligned with local agricultural practice. The performance of the cultivar was variable but quantitative evaluation was not possible as the produce was harvested by community members before the evaluations could begin. Rehabilitation of areas where final works have been completed continued with an estimated 80% of the servitude having been rehabilitated. A small team of workers remained on site and actively managed the servitude area, including the upkeep of erosion protection measures and control of weeds. The ECO and EMC continue to monitor project implementation; it has been recommended that the ECO inspection frequency should be amended relative to the levels of site activity as remaining environmental risks are not significant.

The land access agreements have been extended to allow for completion of the works and effective establishment and maintenance of rehabilitation. All compensation payable for the extension of access was paid to the holders of land rights.

Off-take pipeline to the town of Kriel

In the reporting period, the Kriel site began works and demonstrated a high level of environmental performance until the project was put on hold due to funding constraints. DEA was notified accordingly and has acknowledged the discontinuation of ECO monitoring activities until such time as project implementation activities resume.

Mokolo and Crocodile Water Augmentation Project - Phase 1

In the reporting period, the main focus was on the rehabilitation of the pipeline servitude. Areas of poor vegetation establishment were re-seeded by the contractor and are being monitored. Land portions with successful re-vegetation are in the process of being signed-off for return to landowners. Extensive work on the improvement of drainage and erosion control structures was undertaken to mitigate damage to the servitude that was caused by a high intensity, short duration rainfall event experienced in December 2016. The mitigation of the visual impact of a short section of gabion baskets through Rietspruitnek was undertaken to address landowners' objections to the infrastructure design. Areas of concern are being monitored on an ongoing basis by the PSP, contractor and independent ECO during the rehabilitation maintenance phase. Owing to the extended rehabilitation period, property valuation was undertaken to inform the compensation amount to affected landowners.

Acid Mine Drainage - Long-term Solution

The AMD-LTS EIA process started with the appointment of the PSP in August 2017. Pre-consultation discussions have been held with DEA and the Department of Mineral Resources. Baseline studies that depend on seasonal data collection have been initiated. A draft scoping report, based on information from the DWS Feasibility Study, has been provided to TCTA for comment. The outcome of the engineering optimisation report is a critical input for the completion of the scoping process and the meaningful continuation of the EIA.

Berg River-Voëlvlei Augmentation Scheme

The EIA process was concluded by DWS. Two formal appeals against the project were not upheld by DEA. The project has noted the stakeholder concerns that will be accommodated, where reasonably possible, to limit impacts on their land.

Olifants River Water Resources Development Project - Phase 2B

TCTA continued with assisting DWS with the management of the EIA process and technical assistance to conclude outstanding planning work on this project. TCTA participated in the review of the draft scoping report, attended public participation events and continued to provide technical information required for the assessment of environmental impacts. TCTA's participation in this process provides valuable insight that is applied in project implementation planning for the limitation and mitigation of social and environmental challenges and risk.

Acid Mine Drainage – Short-term Intervention, Operations and Maintenance

Central Basin

Despite post-construction rehabilitation efforts, the route from the works to the Elsburgspruit remains compromised by the illegal dumping of waste from the surrounding industries. During the reporting period, only one reportable incident of a leakage from the sludge pipeline occurred. DEA acknowledged the incident, which was immediately addressed on site.

Eastern Basin

Over the reporting period, the focus on the Eastern Basin was on the disposal of sludge generated by the high density sludge treatment plant. The sludge generated is being deposited into the mine void. This entailed a pilot project, which comprised two phases. Phase 1 of the pilot project involved pumping of the sludge down the shaft, where it was released 760 m below surface. Phase 2 involved the drilling of boreholes for the deposition of the sludge into other areas of the mine void. The continuing EIA for the Long-term Solution, includes a pipeline to transfer the waste to the DRD Ergo tailings facility for permanent co-disposal of sludge to supplement the current sludge disposal plan.

Western Basin

The treatment facility is managed through the general Operational Environmental Management Programme for the Sibanye Mine. A consultant has been engaged to develop a programme that is specific to TCTA operations

MITIGATION OF SOCIAL IMPACTS

The social mitigation measures during the reporting period included resettlement close-out activities, implementation of social projects and continued project stakeholder engagements.

RESETTLEMENT

Mooi-Mgeni Transfer Scheme - Phase 2

The recipients of the 36 resettlement houses have had their new homes registered in their names.

Olifants River Water Resources Development Project - Phase 2C

The final Resettlement Action Plan close-out report has been compiled to capture the resettlement practice and formalise the valuable lessons learned during the implementation of this sensitive project activity. The report is to inform the development of TCTA practice standards that will facilitate the application of lessons learned in the roll-out of future resettlement programmes for new projects.

SOCIO-ECONOMIC DEVELOPMENT

Social projects in the project areas are undertaken in collaboration with the local authorities, the PSP, the contractor and local communities.

BOREHOLE PROJECT

Most of the inhabitants of the villages adjacent to Phase 2C of the Olifants River Water Resource development Project rely on river water to meet their needs, due to the lack of water services infrastructure. The implementation of the boreholes project, in collaboration with the Sekhukhune District Municipality, is nearing completion at which time it will be handed over to the municipality. Two communities within the project area are currently benefiting from this social project. The Mampuru community borehole has been tested and handover is imminent. The Garagopola community borehole has been handed over to the Sekhukhune District Municipality and the community has started enjoying this positive contribution by the ORWRDP-2C project. Both of the borehole projects have been completed by Napemhego, a local, woman-owned company that was established by a local member of the Project Liaison Committee who, with support from the project, has enabled the company to be registered with the Construction Industry Development Board.

The Magolego community water supply was initially included in the borehole project. However, unfit borehole water quality necessitated the identification of an alternative water supply. The availability of water from a treatment plant has been established but depends on the construction of a 12-km supply pipeline to transfer the water to the community. TCTA has undertaken to provide the water storage tank subject to the completion of the pipeline by the district municipality.

SOIL EROSION PROJECTS

Local communities continue to benefit from the ORWRDP-2C project through job opportunities. The benefit was extended to people who were relocated and resettled by the DWS during the construction of De Hoop Dam; three people from this resettled community were employed.

PROJECT STAKEHOLDER ENGAGEMENTS

Olifants River Water Resources Development Project - Phase 2C

Engagements with various stakeholders during the close-out phase of the project have been maintained. These include regular progress discussions with the relevant Kgoshis and quarterly engagements with the Executive Mayor of Sekhukhune District Municipality. An awareness campaign was instrumental in ensuring a smooth process for the demobilisation of local employees.

The project is engaging inhabitants surrounding the pipeline route, to ensure that they are informed about the need to maintain the permanent servitude free of structures or deep-rooted crops during the operational phase of the project as required by the DWS.

Mokolo and Crocodile Water Augmentation Project - Phase 1

The project keeps the stakeholders – especially the landowners directly affected – abreast of developments through regular site visits by the Social Monitor. Consultations occur with landowners on an individual basis to address specific matters. Discussions relate to the completion of rehabilitation, the extension of temporary servitude rights, compensation matters and the registration of servitudes against the title deeds of the property. Communication with the authorities is maintained as required.

Olifants River Water Resources Development Project - Phase 2B

The public participation and social impact elements of the Phase 2B EIA process are being monitored to gain insight into the potential social impact risks and opportunities associated with this project. The communities affected have significant concerns relating to the effect that the project will have on their access to water resources and the consequences for water resource quality.

Acid Mine Drainage

No social challenges or risks have been noted for the operation and maintenance of the project, and liaison and relationship-building efforts with interest groups are ongoing. Engagement with the local leadership in the three basins continues. TCTA maintains its participation in stakeholder engagement fora in the areas, namely the Blesbokspruit Forum in the Eastern Basin and the Magaliesberg Water Forum in the Western Basin.

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Characterisation of the receiving community and of the scope of the project's social monitoring programme was in hand, but this activity was stopped due to the need to secure project funding from the fiscus

HEALTH AND SAFETY

TCTA strives to ensure that it maintains a safe working environment on its sites.

HEALTH AND SAFETY ON CONSTRUCTION SITES

In its implementation of projects, TCTA has to comply with the Occupational Health and Safety Act and the Construction Regulations of 2014. The organisation is therefore required to develop project-specific health and safety specifications, which are used for construction and audit purposes. Thereafter, TCTA appoints an agent to perform the health and safety oversight as well as monthly audits from which the project's compliance score is derived. In the case of ORWRDP-2C, the engineer performed the function of the agent.

In the 2017/18 financial year, ORWRDP-2C was the only project that was under construction. The project is substantially complete. At the end of the period under review, the contractor had demobilised a large number of staff on site and so the audit compliance score was no longer required.

The TCTA Health and Safety measure is referred to as Recordable Case Rate (RCR). A recordable case refers to any incident in which the employee is unable to work for a period exceeding 14 consecutive days. A period of 200 000 hours is the industry standard base rate, which equates to 100 employees working 40 hours a week and working for 50 weeks a year injury free. The maximum acceptable RCR is 0.5 and anything above this is not acceptable. The formula to calculate RCR is as follows:

$$\text{Recordable Case Rate} = \frac{[\text{Recordable cases}] \times 200\,000}{[\text{Total hours}]}$$

In the case of ORWRDP-2C, there were no recordable cases that involved fatalities and time lost to injuries during the 2017/18 reporting period. The RCR for ORWRDP-2C remained at 0.32. Table 6 shows the trend of the ORWRDP-2C health and safety compliance.

HEALTH AND SAFETY IN OPERATIONAL SITES

TCTA oversees the operation and maintenance of acid mine drainage plants in the Western, Central and Eastern Basins. The appointed operators have the appropriate authority to implement and monitor health and safety as per the Occupational Health and Safety Act (Act No. 85 of 1993).

There were no fatalities recorded during the reporting period in the three plants but only injuries leading to lost time, first-aid cases and near misses. First-aid cases are injuries that were treated with a first-aid kit, whereas near misses are incidents that nearly led to an injury. There were no recordable cases reported, resulting in a recordable case rate of 0.

The health and safety statistics for the three plants in the 2017/2018 financial year are tabulated in Table 7:

Table 6: Summary of Health and Safety Compliance

Project	Year	Lost time injuries	Fatalities	Recordable cases	Recordable case rate	H & S compliance score
ORWRDP-2C	2016	1	3	4	0.33	90%
	2017	0	0	0	0.32	94%
	2018	0	0	0	0.32	N/A

Table 7: Summary of AMD Plants Health and Safety statistics

Plant	Year	Lost time injuries	Fatalities	First Aid	Near miss	Recordable cases	Recordable case rate	Health & Safety non-compliance
Eastern Basin	2017	TBC						Data requested
	2018	1	0	0	12	0	0	None Identified
Central Basin	2017	TBC						Data requested
	2018	2	0	1	81	0	0	None identified
Western Basin	2017	TBC	0	0	0	0	0	Data requested
	2018	0	0	0	0	0	0	None identified

EMPLOYMENT AND EMPLOYMENT EQUITY ON PROJECTS

The creation of employment on TCTA projects is an integral part of the organisation's contribution to the government's transformation agenda and presents an opportunity to temporarily employ members of the communities affected by the infrastructure developments.

PROJECTS UNDER CONSTRUCTION

ORWRDP-2C is the only project that is under construction. The project is substantially complete and most of the personnel have been demobilised from site.

The employment figures presented in Table 8 represent the number of persons who were in the employ of the construction contractor at the end of the financial year.

Table 8: Active construction employees

Employment Group	Origin		Gender		Ethnic group		Annual totals	
	Local	Other	Female	Male	HDI	Non-HDI	March 2018	March 2017
Unskilled local	43	0	14	29	42	1	43	87
Semi-skilled	12	37	8	41	48	1	49	148
Skilled & other staff	2	20	4	18	13	9	22	50
Total	57	57	26	88	103	11	114	285

HDI, historically disadvantaged individual

OPERATIONS AND MAINTENANCE EMPLOYEES

Employees in the service of the operators of the AMD treatment facilities and those employed on LHWP are shown in Table 9.

Table 9: Active Operation and maintenance employees

Employees	Gender		Ethnic group		Total
	Female	Male	HDI	Non-HDI	March 2018
AMD O&M Eastern Basin	17	28	37	8	45
AMD O&M Central Basin	4	34	29	9	38
AMD O&M Western Basin	6	24	25	5	30
LHWP	0	4	3	1	4
Total O&M	27	90	94	23	117

STAFF COMPLEMENT AND EMPLOYMENT EQUITY

Table 10 reflects TCTA's employment numbers for the year under review. Although 175 permanent positions were approved, as of 31 March 2018 only 141 were filled. This is due to the organisation adopting a resourcing strategy that allows flexibility when filling positions only as and when projects are confirmed. This reflects a cautious approach when appointing people, with the objective to manage administrative costs while ensuring that the right employees are placed in the right position at the right time.

Table 10: Employment and vacancies

Level	Employment at beginning of period	Appointments*	Terminations	Employment at end of period
Top management	–	–	–	–
Senior management	7	2	–	9
Professionally qualified	71	2	3	74**
Skilled	53	2	2	50
Semi-skilled	10***	–	1	8
Unskilled	–	–	–	–
Total	141	6	6	141

* The appointment of contractors is excluded from the "Appointments" column.

** Four female employees in the "Skilled" category were promoted upwards into the "Professionally qualified" category.

*** One employee moved to the "Skilled" category.

The breakdown of employment by category and by personnel cost is given in Tables 11 and 12.

Table 11: Employment by category

Level	2016/17 Number of employees*	2017/18 Approved posts	2017/18 Number of employees	2017/18 Vacancies	Vacancies as percentages (%)
Top management	–	1	–	1	100
Senior management	7	9	9	–	–
Professionally qualified	71	99	74	25	25.3
Skilled	53	58	50	8	13.8
Semi-skilled	10	8	8	–	–
Unskilled	–	–	–	–	–
Total	141	175	141	34	19.4

Table 12: Personnel cost by employment category for the period under review*

Level	Personnel expenditure (guaranteed package) (R'000)	Percentage of personnel expenditure to total personnel cost (%)	Number employed during period	Average personnel cost per employee (R'000)
Top management	–*	–	–	–
Senior management	24 459	16.63	9	2 718
Professionally qualified	93 268	63.42	74	1 260
Skilled	27 287	18.55	50	546
Semi-skilled	2 049	1.39	8	256
Unskilled	–	–	–	–
Total	147 063**	100	141	1 043

*The CEO position is vacant.
**The table does not reflect the ex gratia payments made to employees during the 2017/18 financial year.

TCTA's Employment Equity status and achievement against set targets for the year under review, in line with the approved Employment Equity Plan, is shown in Tables 13, 14 and 15. Significant achievement was made with respect to the employment of women in the various employment categories and levels. In this respect equal remuneration for women and men has been achieved in TCTA. The challenge for the organisation, however, remains to ensure fair representation of people with disabilities, especially at senior management level. Targeted recruitment has been prioritised in this regard.

Table 13: Overall employment equity (%)

Actual / Target	Black	Female	Disabled
Actual	85	48	1.4
Target (31 March 2018)	88.1	49.7	2.5

Table 14: Breakdown of employment equity by employment category as at 31 March 2018

Classification	African				Coloured				Indian				White				Foreign nationals			
Level	Current		Target		Current		Target		Current		Target		Current		Target		Current		Target	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Top management	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Senior management	4	1	4	1	–	–	–	1	–	2	–	1	1	1	1	1	–	–	–	–
Professionally qualified	30	18	27	21	3	1	4	4	5	2	5	4	6	3	7	4	4	1	5	1
Skilled	11	27	19	30	1	5	2	3	–	2	1	2	–	4	2	5	–	–	–	–
Semi-skilled	2	7	4	5	–	–	–	–	–	–	–	–	–	–	1	1	–	–	–	–
Unskilled	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Total	47	53	55	57	4	6	6	8	5	6	6	7	7	8	11	11	4	1	5	1

Table 15: People living with disabilities

Level	Current: 2017/18	Target: 2017/18
Top management	–	–
Senior management	–	–
Professionally qualified	1	1
Skilled	1	1
Semi-skilled	–	–
Unskilled	–	–
Total	2	2

HUMAN CAPITAL PRACTICES

TCTA values its employees and continues to employ human resources and to adopt organisational development strategies, which position it as an employer of choice. For this reason, TCTA aims to have the right people in the right job at the right time.

TCTA is therefore committed to its people, as follows:

- to act in the best interests of the employees within the context of business;
- to provide a workplace where passion and expertise meet;
- to offer an opportunity to work in the water sector, which is at the core of the country's developmental and economic agenda;
- to remunerate its employees fairly;
- to offer opportunities for learning and growth; and
- to engage employees with respect and integrity, in accordance with TCTA's values.

During the 2017/18 financial year, the pillars of the people strategy were as follows:

- **Leadership stability:** a search and selection process for a new CEO was followed, which is envisaged to come to fruition in 2018.

- **Internal relationships:** improve employee engagement through restoring the relationship between organised labour and management. This work will continue into 2018/19.

- **Talent as priority:** it is through our people that TCTA achieves its goals. Thus, during 2017/18, TCTA focused on identifying suitable internal successors especially for positions in which critical and scarce skills are hosted. At the same time this allowed TCTA to map our talent with the definite intent to be ready for a fast changing future.

- **Fair rewards:** the TCTA remuneration portfolio was reviewed in its totality during 2017/18 with the intent to implement improvements during 2018/19, in order to ensure a fit-for-purpose remuneration portfolio as well as adherence to King IV guidance.

- **Culture:** Position the human capital function as a strategic contributor to the business, for example, through accentuated work with regard to shifting the organisational culture to be more professional, performance driven and learning orientated so that our employee engagement levels improve.

In view of the context given above, key human capital strategies, policies and procedures were reviewed during the period. Furthermore, TCTA values the importance of developing its talent. Table 16 provides information regarding the cost associated with the implementation of its learning and development strategy.

Table 16: Training costs

Personnel expenditure	Training expenditure	Training expenditure as a percentage of personnel expenditure	Number of employees trained	Average training cost per employee
R170 million	R1,5 million	0.91	114	R13 564

TCTA is making progress towards achieving the desired levels of employee engagement through the ongoing implementation of the various elements of its people strategy. The organisation has a good track record with regard to its employee retention rate, which for the year under review is 95.7%.

Table 17 categorises the reasons why TCTA employees left the organisation, the primary reason being for better career prospects.

Table 17: Reasons for staff leaving

Reason	Number	%
Death	–	-
Resignation	5	62.5
Dismissal	1	12.5
Retirement	–	–
Ill health	–	–
Expiry of contract*	2	25.0
Total	8	100.0

*Expiry of contract refers to fixed-term contracts ending, not to consultants as per Table x above.

Cases of misconduct and disciplinary action recorded during the period under review are set out in Table 18.

Table 18: Labour relations: Cases of misconduct and disciplinary action

Reason	Number
Verbal warning	–
Written warning	–
Final written warning	3
Dismissal	1

KNOWLEDGE AND LEARNING

ENTRENCHING THE KNOWLEDGE AGENDA

TCTA continuously strives to stimulate organisational learning through the application of its knowledge assets to research and develop innovative solutions in water governance, capture best practices in project-based environmental and social mitigation measures, and finding solutions to water infrastructure challenges. Furthermore, TCTA supports the fostering of inter-institutional partnerships as a conduit for promoting best practice in water management, and a corporate environment that values learning.

THOUGHT LEADERSHIP IN THE WATER SECTOR

During 2017/18, TCTA continued its pursuit of thought leadership in the water sector through the convening of sector-wide forums that engaged with a range of sector challenges, among others water resources limitations, the effects of climate change and recurring droughts, biases in strategic decision-making, and the broadening and strengthening of specialised advisory inputs to the effective coordination of integrated strategic infrastructure projects. In particular, the severe drought in the three Cape provinces emphasised the importance of continued and improved stewardship of the resource, as well as the urgent consideration of alternative, climate-resilient water sources, such as seawater desalination and water reclamation.

TCTA continues to invest in the development of a knowledge hub in large-scale desalination, which now anchors a multi-institutional Desalination Community of Practice. This provides a unique platform for targeted research and knowledge exchange, and has established a collaborative research initiative with the Water Research Commission into the role of desalination in the water–energy–climate nexus. During the year, the organisation made advisory contributions, in respect of desalination, to DWS, in regard to a Cabinet Memorandum and to the Western Cape Government in terms of drought response. The work resonates with the Acid Mine Drainage Project, which aims to rehabilitate mine water on a large scale, insofar as technology and procurement approaches are concerned. Within the context of the limits of surface-water resources being approached in a number of key basins, and the volatility being introduced by climate change, TCTA maintains a willingness to engage the challenge of mastering alternative water infrastructure development.

TCTA provided support to the National Water and Sanitation Master Planning Initiative, through contributions on desalination and writing the chapter on ensuring financial sustainability in the water sector. It also participated in the development of the Water Security Framework for South Africa through the Department of Planning, Monitoring and Evaluation.

During 2017/18, TCTA also continued to provide coordination, advisory support and thought leadership in two pivotal national infrastructure programmes: SIP-18, which focuses on the country-wide Water and Sanitation Infrastructure, and SIP-3, which deals with the South-Eastern Node and Corridor Development. Successful coordination of these two pivotal initiatives has significant catalytic effects on both economic and social development, on a national scale.

RESEARCH AND PUBLICATIONS

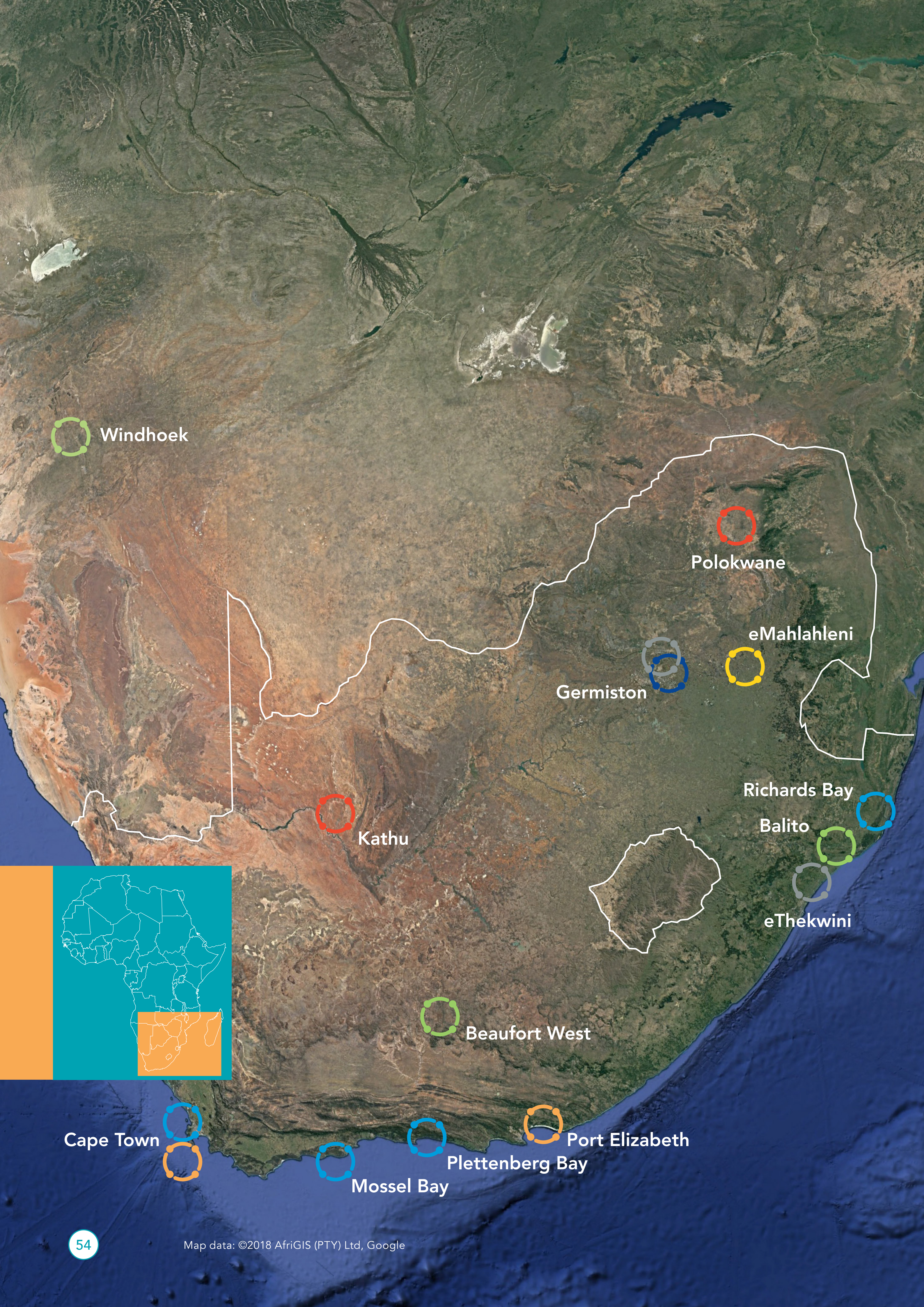
During the reporting period, TCTA's outputs in water and development-related research continued to profile the organisation as a respected knowledge institution, both locally and internationally. In this regard, TCTA conducted research in six areas of importance to its principal partners, leading to the publication of as many papers and articles.

The themes of the publications were diverse, ranging from biodiversity offsets to boundary spanning to an associative knowledge management approach, posing the question: Is South Africa optimally pursuing its options in water security? Further topics included "The impact of site selection choices on the capital cost of large-scale seawater desalination projects", "The Cape water crisis", and "A review of national drought management and mitigation in South Africa".

GENERATING LESSONS FOR A LEARNING ORGANISATION

The importance of evaluative work in the development of a learning organisation is vast. During the course of the year, TCTA continued to give prominence to evaluative studies, in the pursuit of effective management of results, and to promote accountability. In doing so, the organisation gleaned key lessons from three intervention areas, and drew management attention to entry points in programming and implementation. The following internal programmes were selected for evaluation: SIP Coordination, the ERP system implementation, and Project Governance.

Looking ahead, it is anticipated that evaluative work will become more mainstream, and include the systematic review of significant programmes and operations. This will enhance TCTA's ability to reinforce learning and knowledge flows amongst employees and stakeholders, leading to more effective management of results, and the embedding of overall accountability.



Map data: ©2018 AfriGIS (PTY) Ltd, Google

Examples of Circular Water Use

Various instances of circular water use already exist in Southern Africa. The circumstances are unique in each instance, and the solution typically prescribed by the available feed-water, the subsequent water use requirement, as well as the economics of the undertaking. The feed water types include industrial effluent, domestic sewerage, acidic mine water and seawater. These waters are treated to different levels of purity, depending on their subsequent use, be it potable use, cooling or industrial use. In all instances, the use is circular; once used, the effluent is recycled, and used again.

A notable deficiency remains to be the limited scale on which circular water use is practiced, and the sporadic manner in which it occurs. More integrated planning for circular use opportunities, on a national and regional scale, should be explored.

- **Seawater desalination, for potable use**
- **Municipal effluent, direct reused as potable**
- **Acid mine drainage, reused**
- **Acid mine drainage, reused in tailings**
- **Municipal effluent, recycled for irrigation and industrial use**
- **Municipal effluent, recycled for cooling**
- **Municipal effluent, reused in tailings**

PART D: GOVERNANCE

INTRODUCTION

GOVERNANCE

The TCTA Board is committed to sound governance, and provides oversight to ensure that the organisation's business conduct complies with the highest standards of corporate governance. Risk management and control systems are in place, and were designed in accordance with best practice. TCTA complies with the principles of the King Code of Good Governance, the King Report on Governance (King IV) and the adopted governance requirements of the Companies Act (No. 71 of 2008, as amended).

GOVERNANCE STRUCTURES

The governance structures are as follows:

- the Board has delegated certain responsibilities to appropriate Board committees to support it in its oversight responsibility;
- statutory and relevant subcommittees are in place;
- the Board has delegated management accountability to the Chief Executive Officer through the delegation of authority, to direct the business strategically, and to ensure the operational execution of that strategy;
- the Chief Executive Officer is assisted by the Executive Committee and senior management in the fulfilment of specific mandates, based on the delegation of authority; and
- the broad mandate of the organisation is implemented through its operating divisions.

GOVERNANCE CONTEXT

The main duties of the Chairperson of the Board, the Board members and the Chief Executive Officer are clearly documented, along with the governance principles by which they act. The Board engages according to an annual programme, and clear guidance is provided on the matters reserved for the Board, as well as the various Board committees, through terms of reference. TCTA has adopted a governance framework that meets the strategic objectives and compliance requirements of the organisation, engenders responsible corporate behaviour, minimises conflict of interest, and serves the interests of the Shareholder (National Government). The practice of sound corporate governance is embedded in our values, our culture and our processes.

Accordingly, TCTA is managed in an efficient, accountable, transparent and ethical manner. This behaviour is embedded in a governance culture that strives for much more than mere compliance with legislation.

PORTFOLIO COMMITTEE ON WATER AND SANITATION

The Portfolio Committee on Water and Sanitation oversees the service delivery performance of TCTA, within the broader context of its contribution to the sector and the State.

During this reporting period, TCTA attended two Portfolio Committee meetings, on 3 May and 5 October 2017. Common issues applicable to all boards were raised, namely, the payment of monthly retainers, and the attendance of Board members at Portfolio Committee meetings. Further issues more specific to TCTA was the appointment of a permanent Chief Executive Officer, the potential impact of risk re-rating on TCTA's ability to raise finance, how the uMzimvubu Water Project might be funded, and the nature of the relationship between DWS and TCTA.

EXECUTIVE AUTHORITY

The Public Finance Management Act (PFMA) gives authority to the relevant Executive Authority for oversight over a public entity. In the case of TCTA, the Minister of Water and Sanitation is the Executive Authority. The Executive Authority has a duty to ensure that the appropriate mix of executive and non-executive directors is appointed and that directors have the necessary skills to guide the public entity.

THE BOARD OF DIRECTORS

The Board provides leadership and strategic oversight, and oversees the internal control environment, sustaining value to the organisation's Shareholder and stakeholders. The Board ensures adherence to principles of good governance and accountability as espoused in the King IV Report and its Board Charter. All the members of the Board are individually and collectively aware of their responsibilities to the organisation's stakeholders and each brings experience, independence and judgment.

The Executive Authority appointed the Board of Directors on 1 December 2015 to serve as TCTA's Accounting Authority for the period from 1 December 2015 to 30 November 2018. The appointment was made in terms of Section 49(2)(a) of the PFMA.

THE ROLE OF THE BOARD OF DIRECTORS

TCTA has a unitary Board, by which directors arrive at decisions through consensus. The Board has the authority to exercise all the powers and perform any of the functions of the organisation, except to the extent that the Notice of Establishment, the PFMA or the Shareholder Compact direct otherwise.

In performing its duties, the Board approves a business and funding model that is sustainable and viable for the organisation, and is in the best interests of the Shareholder and the public.

To achieve these goals, the Board considers a framework of corporate strategy and corporate governance wherein the corporate strategy addresses the strategic decisions of choice of business model, funding structure and having a strategic plan that ensures the long-term sustainability of the organisation. Corporate governance, on the other hand, addresses the implementation and execution of the corporate strategy as managed by the Board in terms of conformance and performance standards in the best interests of the Shareholder (National Government), key stakeholders and the organisation.

DIRECTORS' LIABILITY INSURANCE

Directors' and Officers' Liability Insurance is in place to protect directors against the risk of personal liability. Directors' liability insurance covers the directors and officers of the TCTA in the event that they are sued for breach in the performance of their duties, as it relates to the business of the organisation.

BOARD CHARTER

As recommended by the King IV Report, the TCTA Board has a Board Charter setting out its responsibilities, which are disclosed in the Integrated Annual Report. The Board Charter sets out the parameters within which the Board operates by defining its powers, roles and responsibilities, structure and Board processes. Furthermore, it assists the Board in ensuring that the principles of good corporate governance are applied in all the dealings of the Board. The Board Charter is reviewed periodically to ensure relevance and adaptation to new requirements and legislation.

CONFLICT OF INTEREST

The Board subscribes to the principle that conflicts of interest should be avoided. At each Board and subcommittee meeting, directors declare their interests regarding any agenda item, to prevent personal interests from subverting the interests of the organisation. In addition, individual directors declare their interests in a register that is presented to the Shareholder annually for consideration. Should any member have a personal interest in a matter under discussion, they are obliged to disclose their interests, and recuse themselves from the discussion. During the year, Mr S Roopa declared two conflicts of interest in relation to a potential service providers on the MCWAP-2A and ICT Infrastructure Project. In both instances he recused himself from the meeting during the discussions. Ms Z Manase notified the Board of her appointment to the interim Board of Umgeni Water Board. TCTA was a service provider to Umgeni Water for the construction of a pipeline and has a 3rd party relationship with them in relation to the MMTS-2 project.. The same protocol exists for Executive Committee meetings, bid committee meetings and general management meetings within TCTA.

COMPOSITION OF THE BOARD

As at 31 March 2018, the Board of TCTA comprised seven independent, non-executive directors, one non-executive director from National Treasury and one executive director, being the Chief Executive Officer. During the financial year one independent non-executive director resigned and has not been replaced. The Chairperson of the Board is an independent non-executive director and is supported by a Deputy Chairperson, who is also an independent non-executive director.

BOARD REMUNERATION

TCTA remunerates its Board members in line with the Non-Executive Directors' Remuneration Policy and Procedure, as approved by the then Minister of Water and Environmental Affairs in 2008. This policy ensures that directors' remuneration is appropriate to the level, skills and expertise required by the position, and in accordance with current market practice and the guidelines of state-owned entities. Non-executive directors are remunerated through a monthly retainer, a quarterly fee, meeting attendance fees and ad hoc fees, as determined by extra work undertaken at the Board's request. The notes to the annual financial statements provide more information about directors' remuneration.

BOARD COMMITTEES

The Board has established six standing committees with specific focal areas, and has accordingly delegated roles and responsibilities to them. As of 31 March 2018, these were the Audit & Risk Committee, the Finance & Procurement Committee, the Governance & Sustainability Committee, the Human Capital, Social & Ethics Committee, the Investment & Technical Committee, and the Nominations Committee.

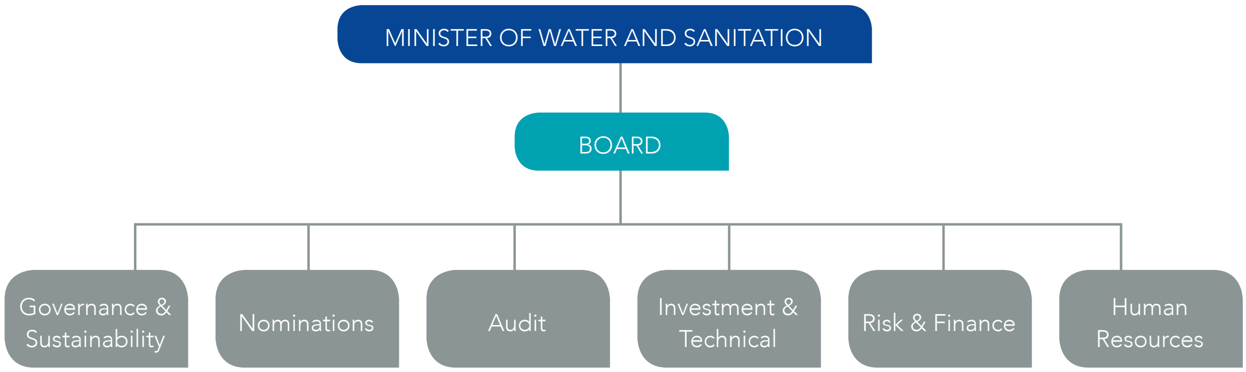
The Audit & Risk Committee is statutory, as prescribed by Sections 76(4)(d) and 77 of the PFMA; the other committees support the Board in the fulfilment of its governance, oversight and reporting duties in reporting to the Shareholder and key stakeholders. All the standing committees are chaired by independent, non-executive directors.

Each committee's role, responsibilities and membership are in accordance with its terms of reference, as approved by the Board. The terms of reference are reviewed periodically to ensure they remain in line with relevant regulations, organisational requirements and best practices in corporate governance.

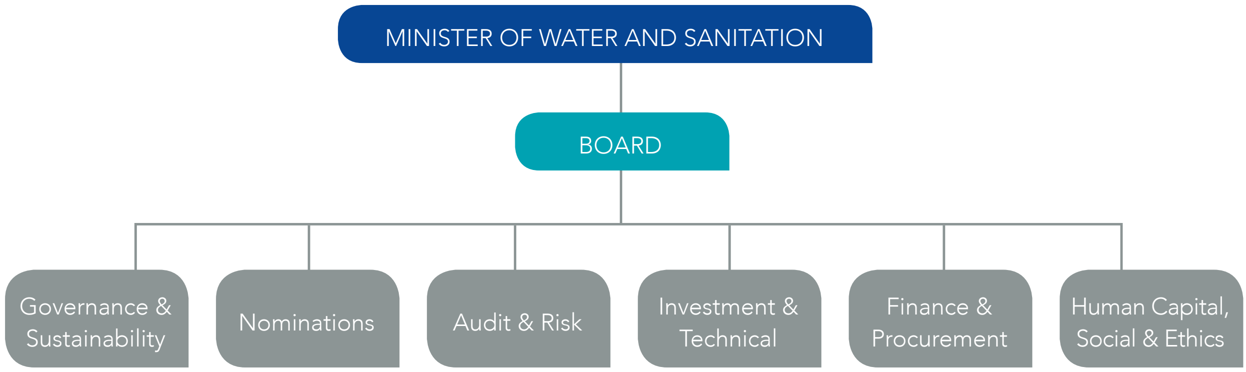
Board and Committee Structure

The Board committee structure was revised once during the course of the reporting period, to improve efficiency and focus.

1 April 2017 – 24 November 2017



25 November 2017 – 31 March 2018



MEETINGS

The following Board and committee meetings were held during the period under review (1 April 2017 to 31 March 2018). The following tables reflect the attendance of Board members:

Legend (for all tables)

✓ = Present; A = Apology; NM = No longer a member; Ɔ = Teleconference: NI = Not Invited; NA = Not Appointed,

Table 19: Board Meeting Attendance

Committee Members	26 April 2017	23 May 2017 (Special)	29 May 2017	29 June 2017 (Special)	30 July 2017	30 August 2017 (Special)	28 September 2017 (Special)	28 October 17	31 October 2017 (Special)	04 November 2017 (Special)	24 November 2017 (Special)	27 November 2017 (Strategy)	28 November 2017 (Strategy)	14 December 2017 (Special)	31 January 2018	23 February 2018 (Special)	20 March 2018 (Special)	26 March 2018 (Special)	29 March 2018 (Special)
M Hlahla (Chairperson)	✓	P	✓	Ɔ	✓	Ɔ	✓	A	A	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Z Manase (Chairperson)	✓	A	✓	Ɔ	✓	✓	A	✓	Ɔ	✓	✓	✓	✓	✓	✓	✓	✓	✓	Ɔ
JRD Modise (Dep. Chairperson)	✓	✓	✓	Ɔ	✓	✓	✓	✓	Ɔ	✓	A	✓	✓	Ɔ	Ɔ	Ɔ	✓	✓	A
S Roopa	✓	✓	A	✓	A	✓	✓	✓	Ɔ	✓	✓	✓	A	✓	✓	✓	✓	✓	Ɔ
S Makhathini	✓	A	✓	Ɔ	Ɔ	✓	Ɔ	✓	Ɔ	✓	A	✓	Ɔ	✓	✓	A	Ɔ	A	A
MJ Ellman	✓	A	A	Ɔ	✓	✓	A	✓	Ɔ	✓	✓	✓	✓	✓	✓	✓	✓	✓	Ɔ
S Khondlo	Ɔ	✓	✓	Ɔ	Ɔ	✓	✓	Ɔ	A	Ɔ	Ɔ	A	A	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ
M Chonco	✓	✓	✓	Ɔ	Ɔ	✓	Ɔ	Ɔ	A	✓	✓	✓	✓	A	✓	✓	✓	✓	Ɔ
T Moahloli (NT delegate)	A	✓	✓	A	✓	✓	A	A	A	A	✓	✓	✓	A	A	A	✓	✓	Ɔ
L Radzuma (Acting CEO)	✓	✓	✓	Ɔ	✓	✓	✓	✓	Ɔ	✓	✓	✓	✓	✓	✓	✓	NM	NM	NM

Table 20: Human Resources / Human Capital, Social & Ethics

Committee Members	25 May 2017	15 June 2017 (Special)	18 July 2017	19 September 2017 (Special)	28 September 2017	17 October 2017	07 November 2017	26 January 2018
S Roopa (Chairperson)	✓	✓	✓	✓	✓	✓	✓	✓
M Hlahla	✓	✓	✓	✓	✓	✓	NM	NM
S Makhathini	✓	✓	✓	✓	A	✓	✓	✓
S Khondlo	A	✓	✓	ɔ	✓	✓	ɔ	ɔ
M Chonco	✓	A	✓	✓	ɔ	✓	✓	A
L Radzuma	✓	✓	✓	✓	✓	✓	A	

Table 21: Risk and Finance

Committee Members	16 May 2017 (Workshop)	22 May 2017	11 July 2017	13 October 2017	02 November 2017 (Special)	22 November 2017 (Special)
Z Manase	✓	✓	✓	✓	✓	✓
S Roopa	✓	✓	✓	✓	A	✓
MJ Ellman (Acting Chairperson)	✓	✓	✓	A	✓	✓
S Makhathini	✓	✓	✓	NM	NM	NM
M Chonco	✓	✓	✓	A	✓	✓
T Moahloli (NT delegate)	A	✓	✓		A	A
L Radzuma (Acting CEO)	✓	✓	✓	A	✓	

Table 22: Finance & Procurement

Committee Members	24 January 2018
S Roopa	✓
MJ Ellman (Acting Chairperson)	✓
M Chonco	✓
T Moahloli (NT delegate)	A
L Radzuma (Acting CEO)	✓

Table 23: Nominations

Committee Members	07 November 2017	20 November 2017	15 March 2018 (Special)	16 March 2018 (Special)
S Roopa (Chairperson)	✓	✓	ɔ	ɔ
JRD Modise (new Chairperson)	✓	ɔ	✓	ɔ
MJ Ellman	NI	✓	NM	NM
Z Manase	A	✓	NM	NM
S Khondlo	ɔ	ɔ	ɔ	ɔ
S Makhathini	✓	ɔ	ɔ	ɔ
M Chonco	✓	✓	NI	NI
T Moahloli (NT delegate)	✓	A	NM	NM

Table 24: Audit

Committee Members	19 April 2017	23 May 2017	28 July 2017	25 August 2017 (Special)	30 August 2017 (Special)	20 October 2017	24 October 2017 (Special)
JRD Modise (Chairperson)	✓	✓	✓	✓	✓	✓	✓
MJ Ellman	✓	A	✓	✓	✓	ɔ	✓
Z Manase	A	✓	✓	A	✓	A	ɔ
S Khondlo	✓	✓	NM	NM	NM	NM	NM
S Makhathini	NA	NA	✓	ɔ	✓	✓	ɔ
T Moahloli (NT delegate)	✓	✓	NM	NM	NM	NM	NM
L Radzuma (Acting CEO)	✓	✓	✓	✓	✓	✓	✓

Table 25: Audit & Risk

Committee Members	24 January 2018	19 March 2018 (Special)
JRD Modise (Chairperson)	✓	ɔ
MJ Ellman	✓	ɔ
S Makhathini	✓	ɔ
S Roopa	✓	ɔ
L Radzuma (Acting CEO)	✓	NM

Table 26: Investment & Technical

Committee Members	22 June 2017	19 July 2017	12 September 2017	24 January 2018
S Khondlo (Chairperson)	✓	✓	ɔ	ɔ
MJ Ellman	✓	✓	✓	✓
S Makhathini	✓	✓	✓	✓
M Chonco	✓	✓	✓	✓
T Moahloli (NT delegate)	A	✓	✓	A
L Radzuma (Acting CEO)	✓	✓	✓	✓

Table 27: Joint Audit & Risk and Finance & Procurement

Committee Members	04 December 2017
JDR Modise (Chairperson)	✓
T Moahloli	A
MJ Ellman	A
S Makhathi	A
S Roopa	✓
M Chonco	ɔ
L Radzuma	A

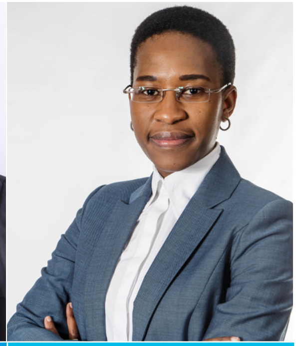
Table 28: Governance and Sustainability

Committee Members	15 June 2017	18 July 2017	12 December 2017	30 January 2017
M Hlahla (Chairperson)	✓	✓	NM	NM
JRD Modise (Deputy Chairperson)	A	ɔ	ɔ	ɔ
Z Manase (Chairperson)	A	✓	✓	✓
S Roopa	✓	✓	✓	✓
S Khondlo	✓	✓	ɔ	ɔ
T Moahloli (NT delegate)	NA	NA	A	A
L Radzuma (Acting CEO)	✓	✓		✓

BOARD MEMBER PROFILES




Surname & Initials	**Manase, ZD** (Chairperson from 6 November 2017)	**Modise, JRD** (Deputy Chairperson)	**Roopa, S**	**Makhathini, SFS**
Gender	Female	Male	Male	Female
Race	African	African	Indian	African
Age	56	51	60	31
Qualifications	• BCom • BCompt(Hons) • HDip(Tax) • CA(SA)	• BCom • BAcc • CA(SA), SAICA • MBA • Advanced Management Programme	• BJuris • LLB • MPhil • Certificate: Transformation of Institutes of Higher Education • Certificate: Executive Programme for Leaders in Government • Certificate: Negotiating International Contracts & Development Finance • Certificate: Global Housing Trends	• BCom (Accounting) • BCom(Hons)(Accounting Sciences) • Postgrad. Diploma: Accounting Sciences • Certificate: Theory in Accounting • CA(SA), SAICA
Date of first appt.	2015/12/01	2015/12/01	2015/12/01	2015/12/01
Status as at 31 March 2018	Current	Current	Current	Current
Responsibilities	**Current position** • Chief Executive Officer (Manase and Associates) **TCTA Board Committee Memberships (as at 31 March 2018)** • Governance & Sustainability **Other Directorships/ Trusteeships/Committee Memberships** • Trustee - Nelson Mandela Children's Fund • PRASA • State Diamond • Department of International Relations and Cooperation	**Current position** • Executive Chairman (Batsomi Investments) **TCTA Board Committee Memberships (as at 31 March 2018)** • Governance & Sustainability • Nominations • Audit & Risk **Other Directorships/ Trusteeships/Committee Memberships** • NERSA • ArcelorMittal • Altron • Batsomi subsidiaries and associated companies • Trustee (Nelson Mandela Children's Fund)	**Current position** • Owner (S Roopa Consultants) **TCTA Board Committee Memberships (as at 31 March 2018)** • Governance & Sustainability • Human Capital, Social & Ethics • Finance & Procurement • Nominations • Audit & Risk **Other Directorships/ Trusteeships/Committee Memberships** • iSimangaliso Wetland Park Authority	**Current position** • Founding Director (Ubambo Consulting) **TCTA Board Committee Memberships (as at 31 March 2018)** • Human Capital, Social & Ethics • Nominations • Audit & Risk • Investment & Technical **Other Directorships/ Trusteeships/Committee Memberships** • HPCSA – Professional Board • National Library of South Africa • Provincial Department of Health • DRKKDM & DRKKDM Economic Development Agency

				
	Khondlo, SN	**Chonco, MM**	Ellman, MJ	Moahloli, DT
	Male	Male	Male	Female
	African	African	Coloured	African
	50	37	70	35
	• Dip: Civil Engineering • BSc(Agric) • MSc (Eng Management) • Dip: Project Management • Certificate: Property Practitioner Practice	• BSc • BSc(Hons)(Hydro-geology) • PDBA • MBA	• BSc (Chem Eng) • MSc (Chem Eng) • PhD (Chem Eng) • MBA	• BSc • BA(Hons) (Economics) • MA (Economic Science)
	2006/07/01 (break between 2014/08/31 and 2015/12/01)	2016/08/02	2015/12/01	2015/12/01
	Current	Current	Current	Current
	Current position • Chief Executive Officer (East London Industrial Development Zone) **TCTA Board Committee Memberships (as at 31 March 2018)** • Governance & Sustainability • Human Capital, Social & Ethics • Nominations • Investment & Technical **Other Directorships/ Trusteeships/Committee Memberships** • Buffalo City Development Agency • Johannesburg Water	**Current position** • Acting Chief Executive Officer (from 5–20 March 2018) **TCTA Board Committee Memberships (as at 31 March 2018)** • Human Capital, Social & Ethics • Finance & Procurement • Nominations • Investment & Technical **Other Directorships/ Trusteeships/Committee Memberships** • Trustee – SAB Provident Fund • National Business Initiative • South African Business Coalition on Health and AIDS (SABCOHA)	**Current position** • Managing Director (Siyadingana Consulting (Pty) Ltd) • Managing Director (Siyadingana Properties (Pty) Ltd) **TCTA Board Committee Memberships (as at 31 March 2018)** • Finance & Procurement • Audit & Risk • Investment & Technical **Other Directorships/ Trusteeships/Committee Memberships** • Bloemwater • South African Bureau of Standards • Advisory Board,Department of Chemical Engineering, University of Pretoria	**Current position** • Chief Director: Liability Management (National Treasury) **TCTA Board Committee Memberships (as at 31 March 2018)** • Governance & Sustainability • Finance & Procurement • Investment & Technical **Other Directorships/ Trusteeships/Committee Memberships** None

BOARD MEMBER PROFILES

Surname & Initials	Busari, O	Radzuma, NL	Hlahla, MW (Chairperson until 24 October 2017)
Gender	Male	Male	Female
Race	African	African	African
Age	56	43	54
Qualifications	• BSc(Hons) (Civil Eng) • MSc (Eng)(Hydro-geology) • PhD (Water Resource Management) • Advanced (Enviro-nmental) Isotopes • MBA • Senior Executive Programme	• BCom (Accounting) • MBL	• BA (Economics) • MSc (Urban Planning) • Advanced Management Programme • Certificate (Accounting and Finance)
Date of first appt.	2018/03/21	2016/11/01	2015/12/01
Status as at 31 March 2018	Current	Stepped down 4 March 2018	Resigned 2017/10/24
Responsibilities	**Current position** • Acting Chief Executive Officer **Other Directorships/ Trusteeships/Committee Memberships** None	**Current position:** • Chief Risk Officer and Acting CEO (until 4 March 2018) **Other Directorships/ Trusteeships/Committee Memberships** None	**Other board committee memberships:** • Royal Bafokeng Holdings • Liberty Holdings and Stanlib Ltd

THE COMPANY SECRETARY

The Board appoints the Company Secretary to complement and support the Board in exercising its oversight function. The Company Secretary guides the Board on its roles and responsibilities and to ensure that the Board is well informed and equipped to discharge its oversight function. The Company Secretary updates the Board on relevant changes in legislation as well as changes in corporate governance practices. The Company Secretary is also secretary of the Board committees.

All directors have access to the Company Secretary's services. The position has been vacant since 5 March 2018.

RISK MANAGEMENT

The management of risk is fundamental to the delivery of TCTA's mandate, and the achievement of its corporate objectives. The Board of Directors is ultimately responsible for risk management of. TCTA has adopted an enterprise-wide risk management methodology and framework, which allows a holistic view of all strategic, operational, project and financial risks.

RISK MANAGEMENT GOVERNANCE STATEMENT

A sound risk governance structure provides a solid foundation for embedding an effective risk management culture within the organisation. TCTA recognises that risk management requires a team-based approach for effective application across the organisation. In terms of Section 51(1) (a)(i) of the PFMA, the Board has the ultimate responsibility for the management of risk within TCTA. In line with King IV, principles 4 and 11, the TCTA Board exercises oversight of risk management and in particular it governs risks in a way that supports the organisation in setting and achieving strategic objectives.

In ensuring that risk management is embedded within all levels of the organisation, the Board delegates the responsibility of managing risks to management. Management ensures that all risks affecting its areas of responsibility are identified and mitigated to acceptable tolerance levels. The Board, as the Accounting Authority in terms of PFMA Section 49(2)(a), exercised oversight during the reporting period.

RISK APPETITE

TCTA has a conservative risk appetite stemming from the nature of its business operations and its strategic objectives. Any risks that are rated above "low", as determined by the Enterprise-wide Risk Management framework, requires management to develop and implement mitigation measures to reduce such to an acceptable level. In order to achieve effective monitoring of the organisational risk profile, the risk appetite incorporates impacts on both qualitative and quantitative measures as follows:

Quantitative Measures

These refer to the impact on TCTA's financial performance such as cost-effectiveness, revenue volatility, liability management, fund raising ability and projects' credit rating.

Qualitative Measures

These are informed by factors such as:

- Key stakeholder relations
- Reputation
- Service delivery
- Environmental, health and safety issues
- Regulatory compliance.

APPROACH TO RISK MANAGEMENT

At TCTA, potential hazards are identified proactively in a continuous and systematic manner, which is embedded in the Enterprise Risk Management processes. This approach enables TCTA to manage risks within acceptable tolerance levels. Risks are identified, evaluated and managed at the appropriate levels, and their collective impact on the organisation is also taken into account.

Risk management at TCTA comprises the following interrelated functions:

- Risk governance, which creates an enabling environment for structured management, oversight and reporting of risks.
- Risk management processes, which include planning, identifying and assessing risks inherent in TCTA's business operations.
- Risk assurance, which includes the combined effort of various elements within the organisation in assessing and monitoring the adequacy, effectiveness, control and oversight of risks.

RISK RESPONSIBILITIES WITHIN TCTA

Board of Directors	The Board is responsible for risk governance, which includes strategic decision making and risk oversight. Through its subcommittees, the Board recognises all material risks which TCTA is exposed to and ensures that the requisite risk management culture, practices, policies, resources and systems are in place and functioning effectively.
Audit and Risk Committee	The Audit and Risk Committee is responsible for assisting the Board in its oversight role. It assists the Board with an oversight of an effective policy and plan for risk management. The Committee reviews TCTA's portfolio of risks against the organisation's risk appetite and tolerance. The Committee is aware of TCTA's significant risks and determines whether management is responding appropriately to identified risks.
Executive Committee	The Executive Committee sets the tone of risk management from the top that affects the integrity and ethics and other factors of the control environment within TCTA. It also ensures that TCTA has sound risk management and corporate governance practices and processes.
Business Units	The business units are responsible for implementing and monitoring the process of risk management and integrating these into the day-to-day operational activities of TCTA. They are also responsible for ensuring that risks affecting the achievement of the business objectives are identified, assessed/measured, managed, monitored, and reported effectively within defined risk appetites and risk strategies.
Risk Management Division	The Risk Management Division develops and implements the risk management policy, framework, plan and processes that ensures risks are identified and effectively managed; implements, reviews and updates the enterprise-wide risk management architecture; and monitors the TCTA's risk profile to ensure that major risks are identified and reduced to acceptable levels.
Internal and External Audit	Assists the Board and management in independently monitoring the control environment of TCTA; and monitors the progress made by business units and the organisation in managing risks. It also provides assurance that risks are properly managed within the organisation.

MANAGEMENT OF RISKS DURING THE FINANCIAL YEAR

TCTA continued to integrate risk management into its business activities. The organisation has a risk management policy and framework which was approved by the Board. A risk management implementation plan highlighting all the risk management activities for the year was approved by the Board.

The risk management plan has been successfully implemented during the year under review. The strategic, operational and project risk registers were developed and reviewed in order to ensure that all identified organisational risks were mitigated in line with the plan.

Categorised as follows:

Strategic risks

These are risks have the potential of preventing TCTA from achieving its business objectives. These risks may emanate from inter-alia policy decisions, changes in the economic environment, or from legal and regulatory changes. Such risks are managed through strong governance structures.

During the year strategic risks were identified, and measures were taken to manage such risks. Key strategic risks, which were rated "extreme" or "high" in terms of the TCTA Risk Management Framework, after implementation of mitigation measures were presented to the Audit and Risk Committee and the Board for noting.

Operational risks

These risks emanate from the quality and efficiencies of TCTA's internal operations and systems. Such risks may be due to fraud, error or system failure or to breakdown in internal controls. Such risks are managed through a comprehensive set of policies and procedures and an inclusive system of internal controls.

Project risks

These risks emanate from an engineering, environmental, health and safety, and project management environment. Contractual remedies are in place with contractors to provide remedies for delays and incentives for the early completion of projects. Project risks are further managed by ensuring compliance with legislative requirements for construction projects.

Financial risks

The financial risks to which TCTA is exposed are generally associated with funding and liability management. These are all Treasury-related risks, involving liquidity, interest rate, credit and project finance.

Such risks were managed through the following:

- Maintaining sufficient government guaranteed facilities with domestic banks as a liquidity buffer.
- Complying with a predetermined Board-approved optimal capital structure of fixed to floating rate debt and effective debt management strategies.
- Use of appropriate hedging strategies and careful selection of counterparties and allocation of concentration limits to ensure adequate diversification of investments.
- Appropriate and sound project-related institutional arrangements, which contribute to securing good credit ratings and building strong relationships with local and international lenders.

Continuity risk

This is the risk that TCTA may not be able to continue its services, due to an interruption of business.

The business continuity risks are managed through an approved business continuity policy, framework and plan, an a disaster recovery plan. However, TCTA was not able to test the disaster recovery plan during the financial year under review owing to challenges in securing an off-site disaster recovery facility.

Risk financing

All potential financial losses that TCTA cannot manage internally are transferred to third parties through placement of the relevant insurance covers.

KEY RISKS IDENTIFIED DURING THE FINANCIAL YEAR 2017/18

Table 29 below shows the top five strategic risks identified during the financial year and the proposed mitigation measures.

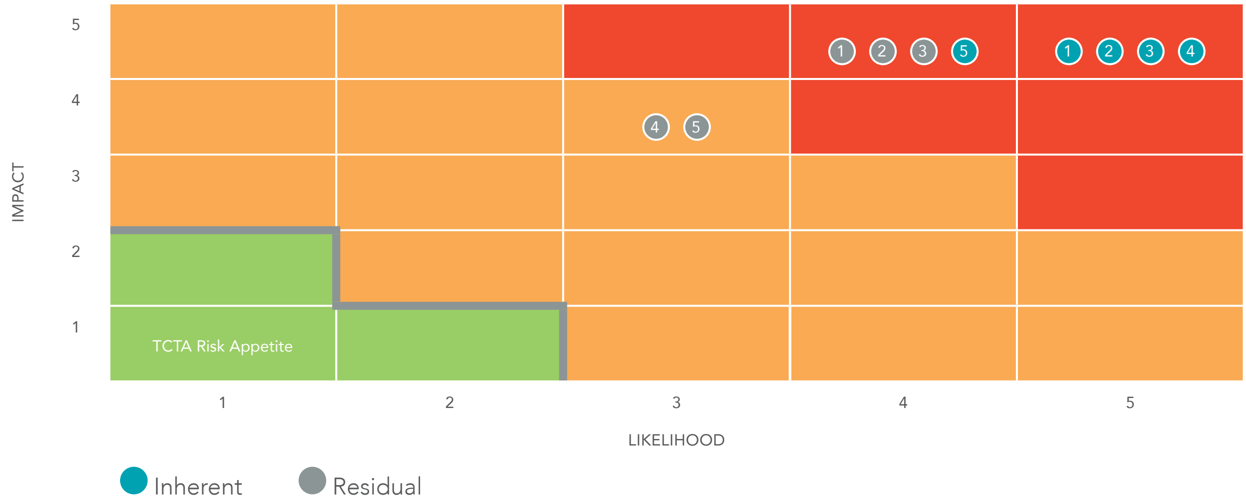
Table 29: Top Five Strategic Risks

No.	Risk	Inherent Risk	Mitigation measures	Residual risk
1.	Liquidity risk, caused by delays in receiving water revenue from the Department of Water and Sanitation (DWS).	25	• Engage National Treasury and the Department of Water and Sanitation • Ring-fence capital tariffs. • Cession of tariffs. • Secure adequate cash and liquidity facilities.	20
2.	Default risk, of potential failure to raise adequate funding for the redemption of the WS05 bond, following an abandoned auction, and compounded by the disruption of revenue from DWS.	25	• Continuous engagement with DWS to ensure payment is made on time. • Accelerate the process of procuring loans. • Active engagement with the market.	20
3	Project risk, of failing to meet implementation deadlines.	25	• Proactive engagement with DWS and the Minister to ensure DWS allocates resources to projects that TCTA is directed to implement • Finalise procurement of required services on time.	20
4.	Risk, due to potential failure to derive value from IT systems within approved timeframes	25	• Executive level sponsorship. • Engagement of external IT specialists. • Data verification by Internal and External Audit. • Rolling out of change management programme across the organisation.	12
5.	Funding risk, owing to DWS fiscal transfers being withheld for social component of projects	20	• Engaging with DWS during all phases of the budget planning process.	12

KEY: Extreme (15–25) High (8–12)

The following figure illustrates the inherent and residual risks, superimposed on TCTA's risk rating matrix:

Figure 12: Inherent and Residual Risks



INTERNAL AUDIT

TCTA's Internal Audit is an independent provider of assurance and consulting activity that adds value and enhances the organisation's operations. It assists the business to accomplish its objectives by providing a systematic and disciplined approach to evaluate and improve the effectiveness of the control environment.

The Internal Audit follows a risk-based approach with a value proposition based on three core elements:

- **Assurance:** on the governance, risk management, and control processes to help TCTA achieve its strategic, operational, financial, and compliance objectives.
- **Insight:** by providing insight and recommendations based on analyses and assessments of data and business processes.
- **Objectivity:** through commitment to integrity and accountability, provides the Board and Executive Management with objective and independent advice.

ACCOUNTABILITY

The Internal Audit reports functionally to the Audit and Risk Committee of the Board and administratively to the Chief Executive Officer. The head of Internal Audit is responsible for the following key performance areas:

- the annual assessment of the adequacy and effectiveness of business processes in managing risks;
- developing a three-year annual audit plan for approval by the Audit and Risk Committee;
- maintaining the fraud hotline and following up on investigations of reported incidents;
- maintaining a quality assurance and improvement programme that covers all aspects of the internal audit activity; and
- effectively manages the Internal Audit activity to ensure it adds value to the organisation.

COMBINED ASSURANCE

Principle 15 of the King IV Code (2016) introduced the combined assurance as recommended governance practice. The recommendation was based on the general understanding that more can be done to improve assurance coverage and quality through better coordination of assurance providers. The combined assurance model has been applied by TCTA between internal (compliance, internal audit, legal units) and external assurance providers. This is done to ensure that significant risk areas are adequately addressed and suitable controls exist to mitigate and reduce risks.

COMPLIANCE WITH LAWS, CODES, RULES AND STANDARDS

The Board of Directors governs and directs compliance with applicable laws and adopted non-binding rules, codes and standards. To this end, TCTA has established a compliance function. As is the case with all its organisational policies, the Compliance Framework and Policy is reviewed every three years in accordance with the recommendations of the Compliance Institute of South Africa, or updated as and when required. During the year under review, compliance procedures and controls, emanating from the Compliance Framework and Policy approved in the previous year, were institutionalised. The framework addresses the material regulatory risks associated with non-compliance of regulatory requirements. Implementation of the procedures and controls has been a steady process of embedding compliance risk management in TCTA.

The Board of Directors considers non-compliance with legislative requirements a key risk, as it not only exposes TCTA to fines and civil claims, but can also result in loss of operational authorisations and reputational harm. The Public Finance Management Act requires the Board of Directors to ensure that TCTA and its employees comply with the provisions applicable to Schedule 2 Public Entities, as well as any other legislation applicable to the organisation. The regulatory universe was reviewed in the previous year, following an intensive legislative monitoring process in which all the new applicable laws were identified and added. This assisted the compliance function to identify and assess critical controls associated with regulatory requirements, codes and standards applicable to the organisation. A clear line of sight on regulations was established, which ensured the creation of early awareness of compliance requirements that enabled TCTA to address them more proactively and efficiently.

The Board of Directors oversees compliance management and has delegated the review and approval of TCTA's Compliance Programme to the Audit and Risk Committee. The Compliance Programme details the activities to be undertaken to ensure compliance, and the management of regulatory risks including monitoring compliance with applicable regulatory requirements. The Compliance Plan, which is aligned with the balance scorecard to mitigate compliance risk exposures emerging from the execution of the strategy, was also approved and executed during the year under review.

Public Finance Management Act

The PFMA outlines the fiduciary duties and responsibilities of the Board of Directors, and requires that the Board serve as the organisation's Accounting Authority. TCTA is identified as a major public entity and is listed under Schedule 2 of the PFMA. The Board of Directors ensures that the organisation adheres to the requirements outlined in the PFMA for the assessment of risks, annual budget submissions, and the annual conclusion and submission of the Shareholder's Compact.

The Board of Directors continues to monitor implementation of the PFMA and ensures that the organisation adheres to all procedures for reporting to the Executive Authority through submission of quarterly performance reports.

TCTA's Board of Directors, as the Accounting Authority, has the responsibility of ensuring that the organisation has and maintains effective, efficient and transparent systems of financial and risk management and internal control. The design and implementation of effective controls has been delegated to the TCTA Executive Management. The 2017/18 financial year saw a significant increase in PFMA non-compliance compared to 2016/17. This was mainly attributable to leadership decision-making with regard to the procurement of goods and services.

King IV

The Board of Directors is committed to the application of King IV governance principles, which were launched on 1 November 2016, in conjunction with regulatory provisions to achieve the overarching principles of sound governance, namely, responsibility, accountability, fairness and transparency. The Board of Directors undertook to ensure the successful implementation of King IV in the 2017/18 financial year.

The Board is satisfied that every effort has been made during the financial year to apply material aspects of King IV. Application of the King IV principles is monitored through the Governance Assessment Instrument (GAI). In this regard detailed compliance with King IV is reflected in the dashboard, which provides an overview of the application by TCTA of the principles contained in King IV.

The application register is reflected in the bar chart and graph below:

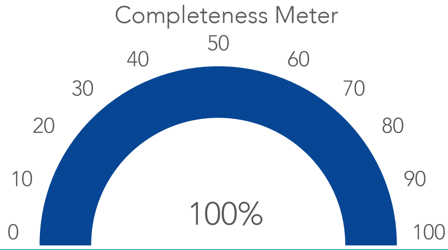
Figure 13: King IV dashboard

King IV™ Dashboard - Current Review

Trans Caledon Tunnel Authority
Registration Number: 4360104923

King IV™ Dashboard - Current Review

Last Updated: 18 Apr 2018
Last Archived: 31 Mar 2014



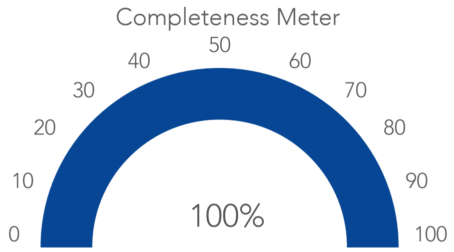
Practice Count

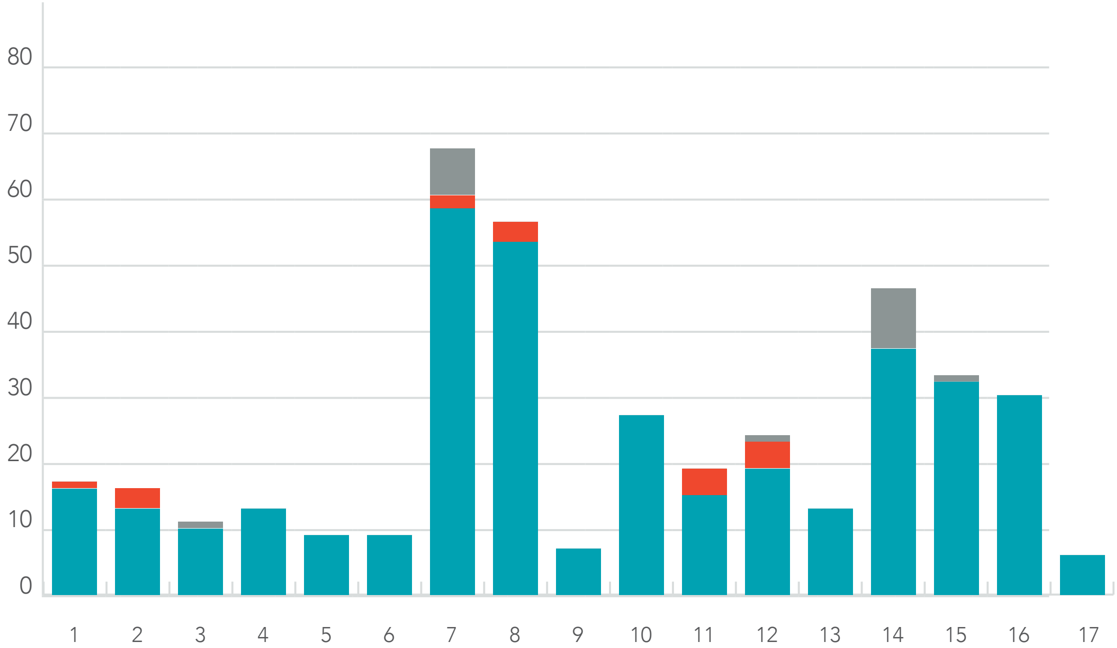
367	■	Satisfactorily Applied
17	■	Not applied
19	■	Not Applicable
403		**TOTAL**

Figure 13: King IV dashboard (continued)

King IV™ Management Review

Last Updated: 18 Apr 2018
Last Archived: 31 Mar 2014





Principle	Satisfactorily Applied	Not Applied	Not Applicable
1. Leadership	16	1	0
2. Organisational Ethics	13	3	0
3. Responsible corporate citizenship	10	0	1
4. Strategy and performance	13	0	0
5. Reporting	9	0	0
6. Primary role and responsibilities	9	0	0
7. Composition	58	2	7
8. Committees	53	3	0
9. Evaluations of the performance	7	0	0
10. Appointment and delegation to management	27	0	0
11. Risk governance	15	4	0
12. Technology and information governance	19	4	1
13. Compliance governance	13	0	0
14. Remuneration governance	37	0	9
15. Assurance	32	0	1
16. Stakeholders	30	0	0
17. Institutional investors	6	0	0
	367	**17**	**19**


Acid Mine Drainage Treatment Plant at Germinston


'TORAY'
MEMBRANE INSTALLED

Desalination

Desalination, that is, the ability to harvest fresh water from seawater, has been a human aspiration since biblical times. Today, the technology is mature, and with proper planning, it can be implemented with confidence and at a predictable cost.

The importance of desalination cannot be overstated. Of all the technologies employed in circular water use, seawater desalination is the only one that actually introduces additional fresh water to the cycle.

The impact potential of seawater desalination can be framed in global terms. Of all water on the planet, only one percent is accessible fresh water, to be found in dams, lakes, rivers and underground - And yet, 99% of the global population currently rely on it. Seawater makes up 97% of the planetary water, but only one percent of the population consume desalinated water. With the United Nations predicting that 14% of the global population will be facing water scarcity in another six years, it stands to reason that seawater will become a mainstream water source.

A lot changes when one's water supply becomes self-reliant, independent of climate or supply constraints. Water ceases to be a scarce natural resource, with its consumption needing to be regulated by a rising block tariff structure. Instead, water becomes an economic input commodity, the supply of which can be scaled as required, at a predictable price. In this way, seawater desalination is a deeply disruptive technology, for the better.
Since 2011, TCTA has been active in desalination thought leadership.

PART E: INFORMATION AND COMMUNICATION TECHNOLOGY

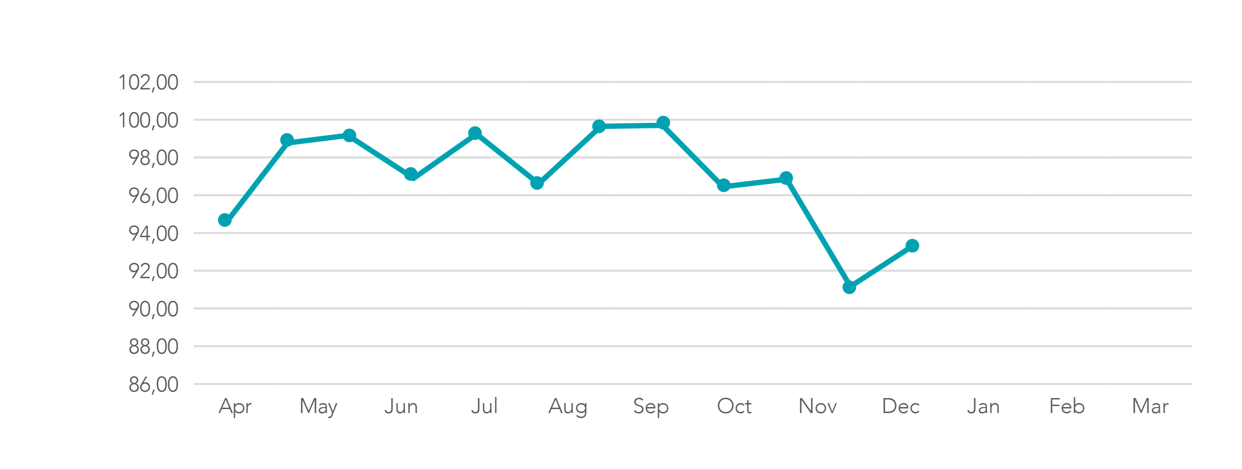
BUSINESS CONTINUITY

The Information and Communication Technology (ICT) environment is a key enabler and vehicle to deliver business processes and services, and provides a secure platform on which critical business information systems operate. During the year ended March 2018, the average performance of the ICT Data Centre was above the 95% target, with 96% availability of critical systems (Figure 11).

One major incident was reported in the fourth quarter, resulting in a two-day downtime, due to disk failure in the Storage Area Network. Although physical ICT infrastructure remained a challenge during this period, due to its age, TCTA continued to maintain an above-average security posture against cyber threats. The organisation was not affected by cyber-attacks and no incidents of unauthorised access or malicious software attacks were reported.

Although TCTA did not operate a dedicated or syndicated disaster recovery facility, contingency measures were in place to ensure that corporate data was backed-up to an off-site storage facility on a daily basis. Steps were also taken to move some of the critical systems from the internal ageing infrastructure to an external hosting facility.

Figure 14: Critical Server Availibility



TECHNOLOGY AND INFORMATION GOVERNANCE

In terms of King IV, the Board has the responsibility to govern technology and information in a way that supports the organisation's setting and achieving its strategic objectives. In line with this, an ICT governance charter was developed, which sets the governance structures and defines the roles of Board and management with respect to the governance of technology and information. Further, the governance framework was also reviewed in order to align with King IV and new legislation such as the Protection of Personal Information Act.

Table 30 shows TCTA's level of compliance with King IV practices in the governance of technology and information.

Table 30 - King IV Technology and Information Governance Practices

Principle	Applied
1. The Board should assume responsibility for the governance of technology and information by setting the direction for how technology and information should be approached and addressed in the organisation.	
2. The Board should approve policy that articulates and gives effect to its set direction on the employment of technology and information.	
3. The Board should delegate to management the responsibility to implement and execute effective technology and information management.	
4. The Board should exercise ongoing oversight of technology and information management and, in particular, oversee that it results in the following:	
a. Integration of people, technologies, information and processes across the organisation.	
b. Integration of technology and information risks into organisation-wide risk management.	
c. Arrangements to provide for business resilience.	
d. Proactive monitoring of intelligence to identify and respond to incidents, including cyber-attacks and adverse social media events.	
e. Management of the performance of, and the risks pertaining to, third-party and outsourced service providers.	
f. The assessment of value delivered to the organisation through significant investments in technology and information, including the evaluation of projects throughout their life cycles and of significant operational expenditure.	
g. The responsible disposal of obsolete technology and information in a way that has regard to environmental impact and information security.	
h. Ethical and responsible use of technology and information.	
i. Compliance with relevant laws.	
5. The Board should exercise ongoing oversight of the management of information and, in particular, oversee that it results in the following:	
a. The leveraging of information to sustain and enhance the organisation's intellectual capital.	
b. An information architecture that supports confidentiality, integrity and availability of information.	
c. The protection of personal information.	
d. The continual monitoring of security of information.	
6. The Board should exercise ongoing oversight of the management of technology and, in particular, oversee that it results in the following:	
a. A technology architecture that enables the achievement of strategic and operational objectives.	
b. The management of risks pertaining to the sourcing of technology.	
c. Monitoring and appropriate responses to developments in technology, including the capturing of potential opportunities and the management of disruptive effects on the organisation and its business model.	

7. The Board should consider the need to receive periodic independent assurance on the effectiveness of the organisation's technology and information arrangements, including outsourced services.	
8. The following should be disclosed in relation to technology and information:	
a. An overview of the arrangements for governing and managing technology and information.	
b. Key areas of focus during the reporting period, including objectives, significant changes in policy, significant acquisitions and remedial actions taken as a result of major incidents.	
c. Actions taken to monitor the effectiveness of technology and information management and how the outcomes were addressed.	
d. Planned areas of future focus.	

	Satisfactorily Applied		Partly Applied		Not Applied

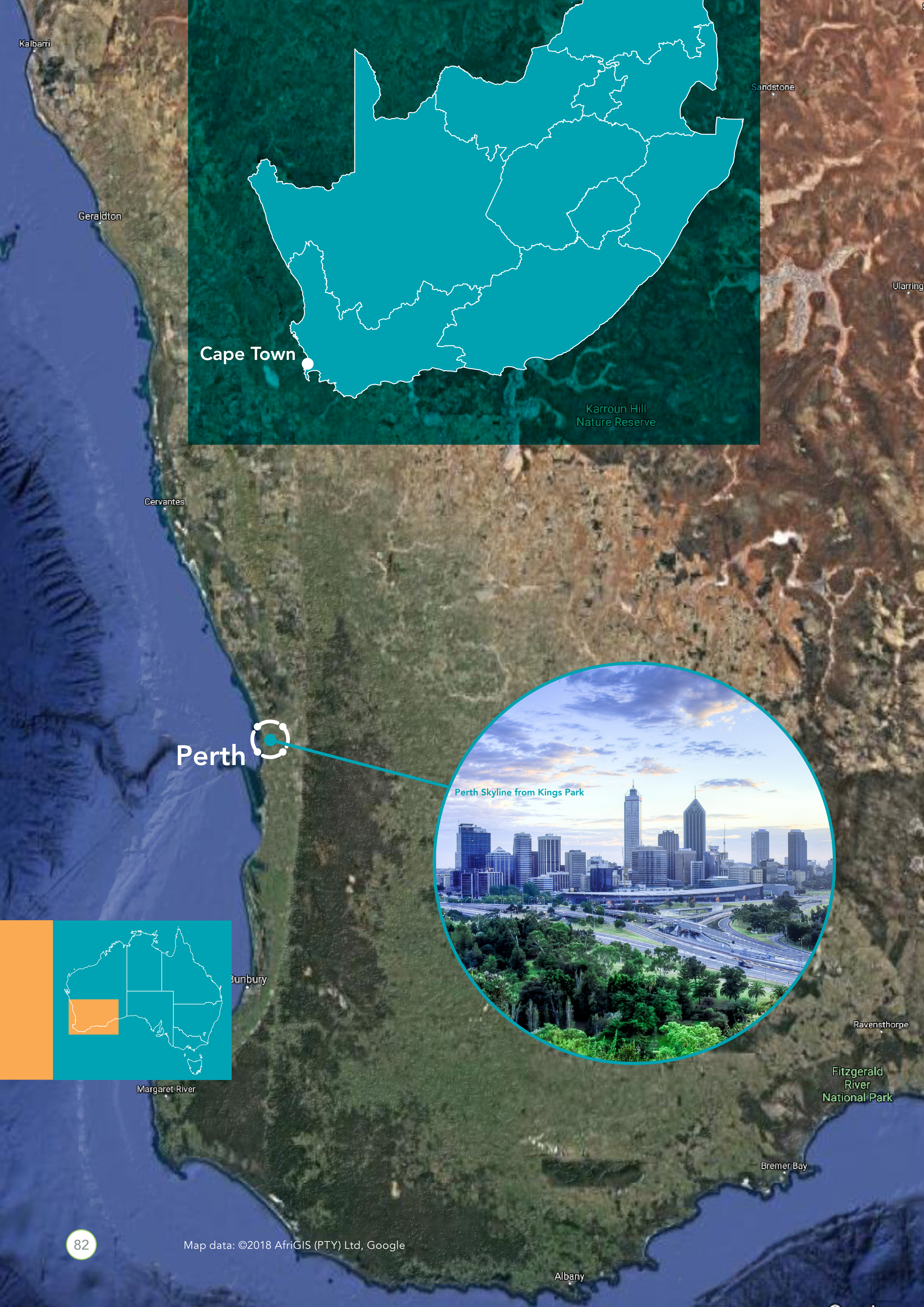
STRATEGIC OBJECTIVES AND PROJECTS

In the period under review, the organisation embarked on two critical ICT projects, in support of the strategy.

Implementation of an Enterprise Resource Planning System – Significant progress was made towards implementation of the Oracle E-Business Suite, with critical components of the Finance and Supply Chain Management modules going live in September 2017, and the Payroll component of the Human Capital Management module going live in March 2018. The system, once fully implemented and stabilised, will seamlessly automate and integrate people, technologies, information and processes across the organisation. Benefits are already being realised in the enforcement of the delegation of authority and processes in supply chain management. This should help towards reduction of non-compliance with policies and irregular expenditure.

Implementation of a Treasury Management System has been substantially completed, with the system currently operating in the pre-production environment. This has given TCTA the opportunity to identify and reduce the number of exceptions and move all key activities from spreadsheets into the system with appropriate controls and audit trails.

Wastewater to Potable Water in Singapore


Kalbarri
Geraldton
Cervantes
Sandstone
Ualring
Cape Town
Karroun Hill
Nature Reserve
Perth
Perth Skyline from Kings Park
Bunbury
Margaret River
Ravensthorpe
Fitzgerald
River
National Park
Bremer Bay
Albany
Map data: ©2018 AfriGIS (PTY) Ltd, Google

Comparing Cape Town with Perth

In many ways, the climate and water resource dispensation of Cape Town could be compared with that of Perth, Western Australia. Both are located between the 32nd and 34th parallels, on the south-western edge of a large continent. Both have a winter rainfall climate, with a progressive decline in average rainfall evident over the past few decades. Both cities have growing populations in the two million to four million tranche, and have adopted very successful water conservation and demand management programs. Both share a similar geology of substantial aquifers, but with only limited water storage available in dams.

	Cape Town	Perth, WA
Population (million)	3.8	2.0
Dam storage (million m^3)	899	630
Dam storage per capita (m^3)	236	315
Potable water consumption (excl. agriculture) (million m3 per annum)	303	300

A series of significant step-downs in rainfall (and hence dam inflows) have occurred in Perth since 1974; today, average annual inflow is a mere 46 million m3, compared to 338 million m3 prior to 1974. In response to this climate adjustment, water managers in Western Australia have followed a multi-pronged approach, changing both the water resource mix and the way water was being used. Having had more time to adjust to the changes, Perth is probably a valid model of how the Cape could respond to a similar challenge.

	Cape Town	Perth, WA
Water recycled for non-potable use (million m3 per annum)	18	30-35
Seawater desalination (million m3 per annum)	6	145
Groundwater extraction (million m3 per annum)	3	140
Reliance on dam inflows (% of supply)	98%	5%
Reliance on dam inflows (million m3 per annum)	294	15

Perth has adopted circular water use practices, and diversified its water resources away from climate dependence. Whereas both cities distribute a similar amount of potable fresh water, Perth recycles nearly double the volume of the Cape, at five large treatment plants, and to an advanced secondary stage. This allows a wider range of usage, including aquifer recharge. Dams are increasingly used as storage for all sources of water, not just river flows. Two large seawater desalination plants provide nearly half of the potable supply, completely climate independent. Two extensive well-fields provide a similar quantity of groundwater, largely climate independent. The reliance of Perth on dam inflows is down to 5%, whilst the Cape is still 98% reliant on surface water. In describing their strategy, the Water Corporation in Perth has adopted the very fitting slogan "Water forever, whatever the weather".

PART F: FINANCIAL INFORMATION

INDEPENDENT AUDITOR'S REPORT TO PARLIAMENT ON TRANS-CALEDON TUNNEL AUTHORITY

Opinion

We have audited the financial statements of the Trans-Caledon Tunnel Authority ("TCTA" or "the Entity") set out on pages 96 to 255 which comprise the aggregated statement of financial position as at 31 March 2018, the aggregated statement of profit or loss and other comprehensive income, aggregated statement of changes in equity and aggregated statement of cash flows for the year then ended, as well as the notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the financial statements present fairly, in all material respects, the financial position of the TCTA as at 31 March 2018, and its financial performance and cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS) and the requirements of the Public Finance Management (Act No.1 of 1999) (PFMA).

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing ("ISAs"). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the audit of the financial statements section of this auditor's report.

We are independent of the entity in accordance with Independent Regulatory Board for Auditors Code of Professional Conduct for Registered Auditors ("IRBA Code"), the International Ethics Standards Board for Accountants Code of Ethics for Professional Accountants ("IESBA code"), and other independence requirements applicable to performing the audit of TCTA. We have fulfilled our other ethical responsibilities in accordance with the IRBA Code, IESBA Code, and in accordance with other ethical requirements applicable to performing the audit of TCTA.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole and in forming our opinion, and we do not provide a separate opinion or conclusion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

KEY AUDIT MATTER	HOW THE MATTER WAS ADDRESSED IN THE AUDIT
Procurement and Contract Management The delegation of authority and supply chain management (SCM) policies of the entity are designed to ensure compliance with the principles of the PFMA, and are approved by the Accounting Authority. National Treasury regulates procurement deviations and must, in terms of SCM Instruction Note 3 of 2016/17, approve deviations from competitive bidding under certain conditions, prior to the entity committing to the expenditure. Particulars of irregular and fruitless and wasteful expenditure as defined by the PFMA must be disclosed in the financial statements. Non-compliance with policy and National Treasury instructions gives rise to irregular expenditure, while a lack of good governance over procurement and contract management can in certain instances also lead to fruitless and wasteful expenditure being incurred.	**Our procedures to address the risk of undetected irregular or fruitless and wasteful expenditure in relation to this key audit matter included:** • We used subject matter specialists, including an engineering specialist, to assess the governance over and reasonability of water infrastructure procurement for selected contracts. • We conducted focused audit sampling across all expenditure to further identify any additional irregular or fruitless and wasteful expenditure not identified by management, with particular emphasis on testing compliance around procurement deviations. • We tested the compliance of procurement processes against the requirements of TCTA policies, applicable National Treasury regulations and instructions, and applicable legislation.

<table>
<tr><th>KEY AUDIT MATTER</th><th>HOW THE MATTER WAS ADDRESSED IN THE AUDIT</th></tr>
<tr><td>Procurement and contract management compliance in respect of water infrastructure contracts, and in particular the increased usage of deviations from competitive bidding processes, significant variation orders on contracts, as well as concerns identified in media reports and in Parliament in respect of SOE governance over infrastructure contracts, were identified as an area of increased audit focus in the current period.

We considered this to be a matter of audit significance because of the extent of audit effort required in assessing the completeness of irregular and fruitless and wasteful expenditure in responding to these risks.

Irregular expenditure and fruitless and wasteful expenditure are disclosed in Note 24.</td><td>• We inspected minutes of meetings, contracts, correspondence with relevant authorities such as National Treasury, reports issued by internal audit and other external consultants, and other relevant documentary evidence to assess the completeness of irregular and fruitless and wasteful expenditure.
• We assessed the governance in respect of the delegation of authority issued at strategic and operational level, and for a sample of variation orders across multiple contracts, inspected whether these variations orders were in compliance with the delegation of authority.
• We made use of computer assisted audit techniques and analytical review procedures to identify risk areas with respect to possible procurement irregularities.</td></tr>
<tr><td>Tariff receivables

Tariff receivables amount to R28 950 000 000 and comprises 86% of the total assets (2017: 82%) of TCTA as at reporting date, and has been disclosed in Note 9.4.

The tariff receivable is a non-derivative financial asset with determinable receipts based either on costs to be reimbursed or a tariff determined to enable TCTA to repay the project debt and operating costs over long term periods.

TCTA determines the carrying amount by computing the present value of estimated future cash flows at the financial instrument’s original effective interest rate. The estimated future cash flows are subject to significant judgement, assumptions, and estimates about future events.

These included an assessment of:
• The estimation of current and future construction costs which is dependent on the level of water demand. Matters arising in the current year including variation orders, actual progress verses expected and changes in supply and demand alter this assessment each year.
• The projection of water volume consumption required for each project.
• The internal rate of return used to discount all cash flows for projects.
• Consumer Price Index used to estimate future net cash flows.

Based on the points noted above and the significance of the tariff receivable balance, this area remained an area of focus for the period under review.</td><td>Our procedures included, among others, the following:

• We made use of specialists to assess reasonability of the percentage completion on various projects as well as managements estimations of CPI.
• We reviewed the tariff receivable models for mathematical accuracy, and consistency of formulae used across all tariff models as at reporting date.
• We inspected the consistency of the effective interest rate in the current year to prior years and to the date of project inception.
• We traced inputs and invoices to the DWS (e.g. approved tariff rates, approved water volumes and approved long term cost plans) to supporting audit evidence.
• We assessed the reasonability of forecasts of water volumes, Consumer Price Index (CPI), forecast tariff rates and total construction costs across tariff models.
• We reviewed the reasonability of the disclosure and presentation relating to the tariff receivable as well as the presentation of current and non-current tariff receivables.</td></tr>
</table>

INDEPENDENT AUDITOR'S REPORT TO PARLIAMENT ON TRANS-CALEDON TUNNEL AUTHORITY (CONTINUED)

KEY AUDIT MATTER	HOW THE MATTER WAS ADDRESSED IN THE AUDIT
Tariff Receivable – Timing of cash-flows to be received and the impact on other audit considerations. TCTA recovers it's expenditure on mandated projects through tariffs from water users through the Department of Water and Sanitation (DWS). The relationship between the entity and the DWS is captured in the National Water Act (NWA) where the entity is an implementation agent of the DWS in terms of the directives issued by the Minister as the political head of the department. During the period under review there has been an increase in the value of tariff receivable invoices that are past due (refer to Note 10.4). TCTA has experienced delays in the receipt of invoiced tariff receivables. The timing of cash receipts from DWS is a significant assumption in the computation and measurement of the tariff receivable balance and overall valuation and existence of the account balance. The assessment of the timing of cash inflows also impacts TCTA's ability to meet its financial obligations and hence this assessment was considered to be a significant aspect of our liquidity assessment and further highlighted in note 6.2.1.	**Our procedures included, among others, the following audit procedures:** • We assessed the DWS invoice collection pattern for the past three years including the 2018 financial year, including collections made post the 2018 financial year. This analysis was used to assess TCTA's ability to recover the invoiced amounts timeously and according to budget and hence to be able to settle their obligations as they become due. • Assessed the liquidity stress test scenarios (note 6.2.1) for reasonability and consistency and assessed the sufficiency of TCTA's undrawn facilities to sustain its operations in the event that no cash is received from DWS. • Performed a headroom assessment between the consolidated capital market guarantee by DWS and TCTA's debt balance (note 9). • We assessed TCTA's activity ratios; accounts receivable turnover rate and the accounts receivable collection days, to assess the entity's ability to collect amounts due from DWS.

Responsibilities of the accounting authority for the financial statements

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

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

Auditor's responsibilities for the audit of the financial statements

Our 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 our 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.

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

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

Reportable Irregularity

In accordance with our responsibilities in terms of sections 44(2) and 44(3) of the Auditing Profession Act, we report that we have identified a reportable irregularity in terms of the Auditing Profession Act. We have reported such matter to the Independent Regulatory Board for Auditors. The matter pertaining to the reportable irregularity has been described in Note 24.1.2 to the financial statements.

REPORT ON THE AUDIT OF THE ANNUAL PERFORMANCE REPORT

Introduction and scope

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

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

We evaluated the usefulness and reliability of the reported performance information in accordance with the criteria developed from the performance management and reporting framework, as defined in the general notice, for the following selected objectives presented in the annual performance report of the public entity for the year ended 31 March 2018:

OBJECTIVES	PAGES IN THE ANNUAL PERFORMANCE REPORT
Objective 1 – Ensure financial sustainability of the organisation	27
Objective 2 – Manage the implementation of projects to meet the objectives	27 - 28
Objective 3 – Operation and maintenance of designated projects in accordance with DWS requirements/ specifications	28 - 29
Objective 4 – Structure project funding and secure institutional arrangements and request necessary authorisations to allow funding to be raised	29 - 30
Objective 5 - Raise funding for implementation of infrastructure (funding is available for project implementation)	30

We performed procedures to determine whether the reported performance information was properly presented and whether performance was consistent with the approved performance planning documents. We 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.

We did not raise any material findings on the usefulness and reliability of the reported performance information for the following objectives:

- Objective 1 – Ensure financial sustainability of the organisation
- Objective 2 – Manage the implementation of projects to meet the objectives
- Objective 3 – Operation and maintenance of designated projects in accordance with DWS requirements/ specifications

INDEPENDENT AUDITOR'S REPORT TO PARLIAMENT ON TRANS-CALEDON TUNNEL AUTHORITY (CONTINUED)

- Objective 4 - Structure project funding and secure institutional arrangements and request necessary authorisations to allow funding to be raised
- Objective 5 - Raise funding for implementation of infrastructure (funding is available for project implementation)

Other matter

We draw attention to the matter below. Our opinions are not modified in respect of this matter.

Achievement of planned targets

Refer to the annual performance report on pages 27 to 30 for information on the achievement of planned targets for the year.

REPORT ON THE AUDIT OF COMPLIANCE WITH LEGISLATION

Introduction and scope

In accordance with the PAA and the general notice issued in terms thereof, we have a responsibility to report material findings on the compliance of the public entity with specific matters in key legislation. We performed procedures to identify findings but not to gather evidence to express assurance. Accordingly, we do not express an opinion or conclusion on these matters

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

Expenditure management

Effective and appropriate steps were not taken to prevent irregular expenditure amounting to R618 million as disclosed in note 24 to the annual financial statements, as required by section 51(1)(b)(ii) of the PFMA. A portion of this amounting to R357 million related to prior years. The majority of the irregular expenditure was due to non-compliance with the entity's Operational Delegation of Authority (DoA), relating to the approval of variation orders on construction contracts.

Procurement and contract management

Some of the goods, works or services, procured by the public entity, were not procured through a procurement process which is fair, equitable, transparent, cost-effective and competitive, as required by section 51(1)(a)(iii) of the PFMA. This matter was also reported in the prior year. In certain instances, variation orders were not approved by the National Treasury, accounting authority or other delegated official as required by the approved delegation of authority, read with section 56 of the PFMA and National Treasury SCM Instruction Note 3 of 2016/17.

Consequence management

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

Internal control deficiencies

We considered internal control relevant to our audit of the financial statements, reported performance information and compliance with applicable legislation. However, our objective was not to express any form of assurance on it.

The matters reported below are limited to the significant internal control deficiencies that resulted in the findings on compliance with legislation included in this report.

Leadership

Management did not establish and communicate policies and procedures to enable and support the effective understanding and execution of internal control objectives, processes and responsibilities. The delegation of authority is not effectively implemented at an operational level on construction contracts, leading to the incurrence of irregular expenditure.

Management did not develop and monitor the implementation of action plans to address internal control deficiencies. In particular, effective consequence management in response to previously identified irregular or fruitless and wasteful expenditure was not consistently executed in a timely manner.

Management did not provide effective leadership based on good governance and protecting and enhancing the best interests of the entity. Investigations instituted by the Board identified undue influence by two former employees in the selection of a particular service provider which resulted in irregular expenditure as disclosed in Note 24.1.2.

Financial and performance management

Management did not review and monitor compliance with applicable legislation. This resulted in the entity incurring additional irregular expenditure in the current year.

Other reports

We draw attention to the following engagements conducted by various parties that are either in progress or have been completed. These reports did not form part of our opinion on the financial statements or our findings on the reported performance information or compliance with legislation.

Investigations

An independent consultant conducted two forensic investigations into the procurement processes in respect of the Central and Eastern Acid Mine Drainage projects, at the request of the board of directors. The investigations were concluded in the current period and resulted in criminal proceedings against two ex-employees and the relevant service providers, in respect of the Central Basin. The criminal investigations were still in progress at the date of this auditor's report.

Ernst & Young Inc.
Partner – Ernest van Rooyen
Registered Auditor
Chartered Accountant (SA)
31 August 2018
Johannesburg

ANNEXURE – AUDITOR'S RESPONSIBILITY FOR THE AUDIT

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

FINANCIAL STATEMENTS

In addition to our responsibility for the audit of the financial statements as described in this auditor's report, we 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 our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the board of directors, which constitutes the accounting authority
- conclude on the appropriateness of the board of directors, which constitutes the accounting authority's use of the going concern basis of accounting in the preparation of the financial statements. We also conclude, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the TCTA's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements about the material uncertainty or, if such disclosures are inadequate, to modify the opinion on the financial statements. Our conclusions are based on the information available to me at the date of this auditor's report. However, future events or conditions may cause an entity to cease continuing as a going concern
- evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation

COMMUNICATION WITH THOSE CHARGED WITH GOVERNANCE

We 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 we identify during our audit.

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

From the matters communicated to those charged with governance, we determine those matters that were of the most significance in the audit of the financial statements of the current period and are therefore key audit matters. We describe these matters in this auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in this auditor's report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest of such communication.

AUDIT AND RISK COMMITTEE'S REPORT

FOR THE YEAR ENDED 31 MARCH 2018

1. AUDIT AND RISK COMMITTEE RESPONSIBILITY

The Audit and Risk Committee is pleased to present the report in terms of the requirements arising from Sections 51(1)(a)(ii) and 76(4)(d), of the Public Finance Management Act (Act 1 of 1999, as amended by Act 29 of 1999) as well as the Treasury Regulations 27.1.7(a)(b) and (c) and in accordance with the King Code of Governance Principles for South Africa for the financial year ended 31 March 2018.

The role of the committee is defined in the Audit and Risk Committee formal terms of reference, approved by the Board of Directors. The terms of reference covers, among others, its statutory duties and assistance to the Board with oversight of financial and non-financial reporting and disclosure, the internal control system, risk management, internal and external audit function and combined assurance, including information technology governance.

The Committee reports that it has fulfilled all its statutory duties as required by the PFMA and that it has conducted its affairs in compliance with its terms of reference adopted by the Board and has discharged all of its responsibilities contained therein.

2. EXECUTION OF STATUTORY DUTIES

In the conduct of its duties the committee has, inter alia, reviewed the following functions:

2.1 Going-concern assumption

The committee has assessed TCTA's ability to continue as a going concern and have no reason to believe that the organisation will not be a going concern in the year ahead. The long-term solvency of TCTA is determined by its right to claim revenue from DWS that is collected by it from water users through the inclusion of TCTA tariffs payable by water users.

The revenue is determined by using a methodology which is recorded in income agreements, that is designed to recover TCTA's costs incurred in connection with the projects, over a predetermined period of time or until they are paid in full. TCTA is entitled to receive revenue from DWS whether or not DWS has in turn collected its billings from water users. These entitlements are backed by Government guarantees (explicit and implicit) in favour of the lender. However, TCTA has experienced delays in receipts of revenue from DWS which is a concern as this impacts liquidity resulting in TCTA being placed under pressure in fulfilling its payment obligations to its creditors. The matter is enjoying attention at Ministerial level.

2.2 Outstanding Debt by the Department of Water and Sanitation

Notwithstanding our conclusion on the going concern above, delays have been experienced in the receipts of revenues from the department of water and sanitation. These delays have a potential to put TCTA under pressure to service debt. The business model of TCTA is currently not designed to create profits, surplus or reserves that will cushion TCTA from the impact of non payment. Ongoing discussions are continuing with National Treasury on the appropriate business model.

2.3 Effectiveness of Internal Control

Sections 38(1) (a) (i) and 51(1) (a) (i) of the PFMA state that the accounting authority must ensure that the entity has maintained an effective, efficient and transparent system of financial management, risk management and internal control.

Based on the reports provided by Internal Audit, the Risk Division (comprising of Governance, Risk and Compliance) and management reports, TCTA's control environment was satisfactory for the period under review.

AUDIT AND RISK COMMITTEE'S REPORT (CONTINUED)

The combined assurance model has been applied at TCTA between internal (compliance, legal and internal audit) and external assurance providers. This approach ensures that significant risk areas are adequately addressed and suitable controls exist to mitigate and reduce risks. However, there are control weaknesses that were identified by assurance providers that will require improvement. The progress on the implementation of proposed recommendations have been reported to the committee quarterly.

The overall control environment and compliance with legislation requires enhancement.

2.4 Irregular, Fruitless and Irregular Expenditure

Notwithstanding, the satisfactorily control environment , the significant increase in irregular expenditure was as a result of an outdated operational delegation of authority. There was also non compliance with compliance with the procurement process in the award of the AMD operation and maintenance tender.

In respect of irregular variation orders, this arose from non-compliance with the Operational Delegation of Authority. Such Operational Delegation of Authority will be reviewed to ensure consistency with the operational requirements as a matter of urgency.

The introduction of the practice note 3 and practicality in its implementation in TCTA's operation contributed to the increase of irregular expenditure.

Consequence Management

Disciplinary steps were not taken against officials who had incurred or permitted irregular expenditure and fruitless and wasteful expenditure as required by Section 51(1)(e)(iii) of the PFMA. Investigations are underway to determine the cause of the irregular expenditure.

2.5 Annual and Monthly Management Reports Submitted in Terms of Legislation

Management reporting disciplines are in place, which include the preparation of the annual corporate plan and the budget approved by the Board of Directors.

Quarterly performance results and the financial status of TCTA are reported against approved targets, to both DWS and Treasury. Cash flow forecasts are updated monthly, whereas working capital and borrowing limits are monitored on a regular basis. Executive management has scheduled meetings to consider day-to-day issues pertaining to TCTA business and ad hoc meetings as and when required.

2.6 Evaluation of financial statements

In respect of the annual financial statements, the committee

- confirmed the going concern as the basis of preparation of the annual financial statements;
- reviewed compliance with the financial conditions of loan covenants;
- examined and reviewed the annual financial statements, as well as all financial information disclosed to the public prior to submission and approval by TCTA's Board of Directors;
- ensured that the annual financial statements fairly present the financial position of TCTA as at the end of the financial year as well as the results of operations and cash flows for the financial year;
- considered accounting treatments, significant unusual transactions and accounting judgments, especially those relating to the Tariff Receivable, which is the present value of the entitlement to future revenues from DWS to repay all expenditure incurred on the projects.

2.7 Summary of main activities undertaken by the Audit and Risk Committee during the financial year under review

The committee's responsibilities arise from the Public Finance Management Act of 1999 Section76 (4) (d) and Treasury Regulations 27.1. In performing its responsibilities, the committee has reviewed the following:

- the effectiveness of the internal control systems;
- the effectiveness of the internal audit function;
- the risk areas of operations covered in the scope of the internal and external audits;
- the adequacy, reliability and accuracy of financial information provided to management and other users of such information;
- the accounting and auditing concerns identified as a result of the internal or external audits;
- compliance with applicable legal and regulatory provisions.
- and objectivity of the external auditors.

2.8 Internal Audit

The Audit and Risk Committee approved the annual audit plan for the internal audit function. The internal audit function is responsible for reviewing and providing assurance on the adequacy of the internal control environment across operations.

The Head of Internal Audit has been vacant since November 2017. The gap that resulted from this vacancy has marginally impacted the performance of the function. A person has been appointed for the position.

2.9 Investigations and Reportable Irregularity

The Audit and Risk Committee wishes to highlight that a number of investigations were concluded into alleged irregularities at TCTA. An external consulting firm was engaged to perform forensic investigations into the allegations and their recommendations were considered and acted upon.

These investigations related to the irregularities in respect of the tender award for AMD Central Basin and Eastern Basin and associated treatment plant operations, maintenance and management services. There were no adverse findings made on the eastern basin, however, adverse findings were made on the central basin. The investigations have been concluded and appropriate disciplinary actions have been instituted and a criminal case opened with the South African Police Service.

Subsequently, notwithstanding this, the auditors had to refer the irregularity to IRBA in terms of the Audit Profession Act.

3. ANY ISSUES/MATTERS THAT PERTAIN SPECIFICALLY TO THE PUBLIC ENTITY

The Board assigned the oversight of the control environment function to the Audit and Risk Committee. TCTA implemented a risk management strategy which includes the fraud prevention plan and combined assurance plan. The committee monitored the significant risks every quarter and is satisfied that they are managed to an acceptable level.

4. AUDIT AND RISK COMMITTEE MEETING ATTENDANCE

The Audit and Risk Committee consists of the members listed hereunder. During the financial year under review, the Committee met nine (9) times and appropriate feedback was provided to the Board on matters that are within the mandate of the committee. The table below reflect the members attendance.

AUDIT AND RISK COMMITTEE'S REPORT (CONTINUED)

Committee Members	19 April 2017	23 May 2017	28 July 2017	25 August 2017 (Special)	30 August 2017 (Special)	20 October 2017	24 October 2017 (Special)	24 January 2018	19 March 2018 (Special)
JRD Modise (Chairperson)	✓	✓	✓	✓	✓	✓	✓	✓	☎
MJ Ellman	✓	A	✓	✓	✓	☎	✓	✓	☎
Z Manase	A	✓	✓	A	✓	A	☎	NM	NM
S Khondlo	✓	✓	NM	NM	NM	NM	NM	NM	NM
S Makhathini	NA	NA	✓	☎	✓	✓	☎	✓	☎
T Moahloli (NT delegate)	✓	✓	NM	NM	NM	NM	NM	NM	NM
S Roopa	NM	NM	NM	NM	NM	NM	NM	✓	☎

✓ = Present; A = Apology; NM = No longer a member; ☎ = Teleconference; NA = Not Appointed

5. RECOMMENDATION OF THE ANNUAL FINANCIAL STATEMENTS

The Committee has evaluated the financial statements of TCTA for the year ended 31 March 2018 and based on the information presented is satisfied that the statements in all material aspects comply with the requirements of the PFMA and IFRS. The Committee is satisfied with the going concern status of the organization as premised in the preparation of the financial statements and recommended the financial statements for approval by the Board.

JRD Modise
Chairperson of the Audit and Risk Committee


Berg River Dam Supplying the City of Cape Town

AGGREGATED STATEMENT OF FINANCIAL POSITION

AS AT 31 MARCH 2018

	Note(s)	2018 R million	2017 R million
ASSETS			
Non-Current Assets			
Property, plant and equipment	7	6	10
Intangible assets	8	14	16
Tariff receivable*	9.4	25 898	26 241
Total Non-Current Assets		**25 918**	**26 267**
Current Assets			
Tariff receivable*	9.4	3 052	941
Short-term financial market investments	9.5	371	3 052
Loans and other receivables	10	211	80
Prepayments	11	88	127
Non-contractual amounts	13.1	-	2
Cash and cash equivalents	15	3 849	2 559
Total Current Assets		**7 571**	**6 761**
TOTAL ASSETS		**33 489**	**33 028**
EQUITY AND LIABILITIES			
RESERVES			
Retained income		4 753	2 666
TOTAL EQUITY		**4 753**	**2 666**
LIABILITIES			
Non-Current Liabilities			
Long-term financial market liabilities	9.6.3	17 653	25 504
Provisions	14	282	290
Total Non-Current Liabilities		**17 935**	**25 794**
Current Liabilities			
Trade and other payables	12	1 188	1 165
Non-contractual amounts	13.1	78	116
Provisions	14	39	50
Short-term financial market liabilities	9.6.2	9 496	3 237
Total Current Liabilities		**10 801**	**4 568**
TOTAL LIABILITIES		**28 736**	**30 362**
TOTAL EQUITY AND LIABILITIES		**33 489**	**33 028**

** Department of Water and Sanitation (DWS) invoiced debtor 2018: R3.2bn (2017: R2.5bn); additional disclosure in note 10.4.*

The accounting policies on pages 9 to 20 and the notes on pages 21 to 128 form an integral part of the annual financial statements.

AGGREGATED STATEMENT OF COMPREHENSIVE INCOME

AS AT 31 MARCH 2018

	Note(s)	2018 R million	2017 R million
CONSTRUCTION REVENUE	16	538	693
CONSTRUCTION COSTS	16	(538)	(693)
OTHER OPERATING INCOME	17	1 725	1 378
EXPENSES		(1 725)	(1 378)
Legal fees and litigation costs		(12)	(4)
Depreciation	7	(4)	(6)
Amortisation	8	(6)	-
Operating costs for the work in Lesotho	18	(200)	(175)
Lesotho Highlands Water Commission (LHWC) costs	22.2.1	(16)	(14)
Staff costs	21.3	(92)	(116)
Directors' emoluments and related costs	22.3	(10)	(10)
Royalties paid	20	(914)	(855)
AMD operations and maintenance	21	(273)	(165)
Other operating expenses	21	(198)	(33)
OPERATING SURPLUS		-	-
NET FINANCE INCOME/(COSTS)		2 087	2 304
Finance income	19.1	5 718	5 589
Finance costs	19.2	(3 631)	(3 285)
SURPLUS (DEFICIT) FOR THE YEAR		**2 087**	**2 304**
TOTAL COMPREHENSIVE INCOME (DEFICIT) FOR THE YEAR		**2 087**	**2 304**

AGGREGATED STATEMENT OF CHANGES IN EQUITY

FOR THE YEAR ENDED 31 MARCH 2018

	Retained income R million	Total equity R million
BALANCE AT 31 MARCH 2016	362	362
Surplus for the year	2 304	2 304
Total comprehensive income for the year	**2 304**	**2 304**
BALANCE AT 31 MARCH 2017	**2 666**	**2 666**
Surplus for the year	2 087	2 087
Total comprehensive income for the year	**2 087**	**2 087**
BALANCE AT 31 MARCH 2018	**4 753**	**4 753**

AGGREGATED STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 MARCH 2018

	Note(s)	2018 R million	2017 R million
CASH FLOWS FROM OPERATING ACTIVITIES			
Cash receipts on tarriff receivable		6 218	5 626
Cash paid to suppliers and employees		(2 955)	(2 228)
Cash generated from project activities	A	3 263	3 398
Interest paid	C	(2 203)	(2 347)
Net cash from operating activities		**1 060**	**1 051**
CASH FLOWS FROM INVESTING ACTIVITIES			
Purchase of property, plant and equipment	7	(1)	(5)
Sale of property, plant and equipment	7	1	10
Purchase of other intangible assets	8	(4)	(16)
Payments to acquire financial assets		-	(1 430)
Proceeds on the sale of financial assets		2 634	-
Interest received	B	364	354
Net cash from investing activities		**2 994**	**(1 087)**
CASH FLOWS FROM FINANCING ACTIVITIES			
Proceeds from long-term borrowings		-	550
Repayments on long-term borrowings		(2 826)	(1 226)
Proceeds from short-term borrowings		244	413
Repayments on short-term borrowings		(183)	(260)
Net cash from financing activities		**(2 765)**	**(523)**
Total cash movement for the year		1 290	(559)
Cash at the beginning of the year		2 559	3 118
TOTAL CASH AT END OF THE YEAR	15	**3 849**	**2 559**

NOTES TO THE AGGREGATED STATEMENT OF CASH FLOWS

FOR THE PERIOD ENDED 31 MARCH 2018

	Note(s)	2018 R million	2017 R million
A. CASH (USED IN)/GENERATED FROM PROJECT ACTIVITIES			
Surplus for the year		2 087	2 304
Adjustments for non cash flow items:			
Depreciation on non-current assets		10	6
Net interest income		3 013	2 771
Foreign exchange gains		-	(6)
Foreign exchange losses		-	8
Interest income and imputed interest on tariff receivable		(5 099)	(5 080)
Construction revenue		(538)	(692)
Other income		(1 725)	(1 378)
Non cash flow in operating expenses		(73)	127
Changes in working capital:			
Loans and other receivables		(112)	33
Prepayments		39	48
Payables and provisions (excluding interest payable)		29	(242)
Capitalised to/(removed from) tariff receivable		5 187	5 483
Non cash flow item in accounts receivable		443	37
Non cash flow item in accounts payable		3	(21)
Cash (used in)/generated from project activities		**3 264**	**3 398**
B. INTEREST RECEIVED			
Amount due at beginning of the year		65	30
Income during the year adjusted for non-cash items		317	389
Interest accrued[1]		371	446
Bond premium amortised		(52)	(53)
Interest on RSA account		(2)	(4)
Amount due at the end of the year		(18)	(65)
Interest received		**364**	**354**

[1] *Interest accued excludes imputed interest on the tarriff receivable*

NOTES TO THE AGGREGATED STATEMENT OF CASH FLOWS

FOR THE PERIOD ENDED 31 MARCH 2018

	Note(s)	2018 R million	2017 R million
C. INTEREST PAID			
Amount not paid at beginning of the year		(514)	(542)
Expensed during the year adjusted for non-cash items		(2 131)	(2 319)
Amount expensed (excluding imputed interest)		(3 384)	(3 217)
Less: bond discount amortised		6	1
Capital adjustment to inflation-linked liability		1 104	760
Interest on compensation		28	28
Interest capitalised to the principal amount		115	107
Accrued interest on switched bonds		-	2
Amount not paid at the end of the year		443	514
Interest paid		**(2 202)**	**(2 347)**
D. RECONCILIATION OF FINANCIAL MARKET LIABILITIES TO FINANCING ACTIVITIES AS AT 31 MARCH			
Liabilities at beginning of year		28 741	28 440
Long term borrowings		25 504	26 908
Short term borrowings		3 237	1 532
Cash flow from financing activities		(2 764)	(523)
Non cash flow items		1 173	827
- Capitalised interest		115	107
- Capital adjustment to inflation-linked liability		1 104	760
- Bond discount / premium		(46)	(40)
Liabilities as at end of year		27 149	28 741
Long term borrowings		17 654	25 504
Short term borrowings		9 495	3 237

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

1. GENERAL INFORMATION

The Trans-Caledon Tunnel Authority (TCTA) is a specialised liability management body, established in terms of Government Notice No 2631 in Government Gazette No 10545, dated 12 December 1986. The Notice was replaced by Government Notice No 277 in Government Gazette No 21017, dated 24 March 2000. The entity is domiciled in South Africa. The address of the registered office is 265 West Avenue, Tuinhof Building, 1st Floor Centurion.

2. SIGNIFICANT ACCOUNTING POLICIES

The principal accounting policies applied in the preparation of these annual financial statements are set out below. These accounting policies have been consistently applied to all years presented.

2.1 Statement of compliance

The financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

The Accounting Standards Board (ASB), as the mandated by the PFMA to set the reporting standards for the preparation of annual financial statements of government institutions, has issued Directive 12 which requires that qualifying entities prepare their annual financial statement in accordance with the Generally Recognised Accounting Practices (GRAP). The Directive has set out the criteria that institutions are to meet in order to qualify for the application of GRAP as the reporting framework.TCTA has conducted the self assessment in accordance with the criteria in the Directive which indicates, on initial assessment, that TCTA qualifies to apply the standards of GRAP in the preparation of the annual financial statements. TCTA management is in the process of engaging with National Treasury on the results of the initial assessment as other factors, such as lender requirements, need to be considered prior to the conclusion being reached on this matter. The Directive is applicable for financial periods commencing 01 April 2018.

2.1.1 Property, plant and equipment

Recognition and measurement

On initial recognition property, plant and equipment is measured at cost. An item can only be recognised as property, plant and equipment if it is probable that:

- future economic benefits associated with the item will flow to TCTA;
- the cost of the item can be reliably measured; and
- the item is expected be used during more than one accounting period.

Subsequent costs

The costs of day-to-day servicing of assets are not recognised as property, plant and equipment, but are expensed as repairs and maintenance in the year incurred.

Costs of replacing or upgrading components of an asset can be capitalised, provided that the recognition criteria have been met. The costs of replacement/upgrading are capitalised to the carrying amount of the component of property, plant and equipment when that cost is incurred, while the carrying amounts of components replaced, are derecognised. Cost of improvements are also capitalised when it meets the recognition criteria.
TCTA applies the cost model for all classes of assets by recognising it at cost, adjusted for accumulated depreciation and accumulated impairment losses.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

Furniture, vehicles, computer and office equipment

Depreciation is recognised so as to write off the cost of assets less their residual values over their useful lives, using the straight-line method.

Office furniture	4 years
Motor vehicles	4 years
Computer hardware and office equipment	2 years
Networking equipment	2 years
Video conferencing equipment	2 years

The estimated useful lives, residual values and depreciation method are reviewed at the end of the reporting period in terms of the property, plant and equipment policy, with the effect of any changes in estimate accounted for on a prospective basis.

Assets held under finance lease

Assets held under finance leases are depreciated over the shorter of their expected useful lives or the lease term. There are currently no assets held under finance leases.

Leasehold improvements

These are stated at cost less accumulated depreciation and accumulated impairment. Depreciation is calculated on the straight-line basis over the shorter of the remaining period of the lease and the useful life of the asset. The useful life of the asset will be assessed at least on an annual basis and will depend on an extension of the current lease agreement.

Disposals of property, plant and equipment and derecognition of property, plant and equipment

Gains and losses on disposals are determined by comparing proceeds with the carrying amount at the date of sale. These are included in surplus/deficit when the asset is derecognised. An item of property, plant and equipment initially recognised is derecognised upon disposal or when no future economic benefits are expected from its use or disposal.

Impairment

IAS 36: Impairment of assets, is applied to all property, plant and equipment. At each reporting date, TCTA reviews the carrying amounts of its assets to determine whether there is any indication that those assets may be impaired. An asset's recoverable amount is the higher of an asset's or cash-generating unit's (CGU) fair value less costs of disposal and its value in use. The impairment losses are recognised in surplus or deficit. A reversal of an impairment deficit for an asset is recognised immediately in surplus or deficit. This occurs if there has been a change in the estimates used to determine the asset's recoverable amount since the last impairment deficit was recognised.

Recoverable amount

Recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount. The recoverable amount is determined as being the higher of fair value less cost of disposal and value in use.

Fair value less costs of disposal

This is the price that would be received to sell an asset less any incremental costs directly attributable to the disposal of an asset or cash-generating unit, excluding finance costs. In determining fair value less costs of disposal, recent market transactions are taken into account. Where it is not possible to determine the fair value less costs of disposal because there is no basis for making a reliable estimate of the amount obtainable from the sale of the asset in an arm's length transaction between knowledgeable and willing parties, the value in use is deemed to be its recoverable amount.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Value in use

Value in use is the present value of the future cash flows expected to be derived from an asset/cash-generating unit. The discount rate utilised is the weighted average cost of capital applicable to the cash-generating unit/asset. In instances where the recoverable amount is determined based on present value techniques, the discount rates used to determine the fair value less the cost of disposal and key assumptions and valuation techniques are disclosed.

2.1.2 Intangible assets

Recognition and measurement

Acquired separately

Intangible assets acquired separately are measured on initial recognition at cost.

Subsequent costs

Following initial recognition, intangible assets are carried at cost less any accumulated amortisation and accumulated impairment losses.

2.1.2 Intangible assets (continued)

Useful lives

The useful lives of intangible assets are assessed as either finite or indefinite. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are considered to modify the amortisation period or method, as appropriate, and are treated as changes in accounting estimates

Amortisation

The amortisation period and the amortisation method for an intangible asset with a finite useful life is reviewed at least at the end of each reporting period. The amortisation expense on intangible assets with finite lives is recognised in the statement of comprehensive income as the expense category that is consistent with the function of the intangible assets.

Amortisation of the asset begins when the asset is available for use. It is amortised over the period of expected future benefit. Amortisation is recorded in surplus/deficit.

Computer software	2 years

Impairment

Intangible assets with finite lives are amortised over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired.

2.1.3 Foreign currency translation

Functional and presentation currency

The functional currency of TCTA is the currency of the primary economic environment in which it operates. The financial statements are presented in South African Rand, which is TCTA's functional and presentation currency.

Transactions and balances

Transactions in foreign currencies are accounted for at the rates of exchange ruling on the date of the transactions. Foreign exchange gains and losses arising from the settlement of such transactions and from translation at

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year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in surplus or deficit, except when deferred in OCI as qualifying cash flow hedges. Unrealised differences on monetary assets and liabilities are recognised in surplus or deficit in the year in which they occur.

Foreign currency monetary items, such as the foreign denominated loans entered into, are translated using the closing rates at year end.

2.1.4 Financial assets

Classification

TCTA recognises a financial asset in its statement of financial position when, and only when, it becomes party to the contractual provisions of the instrument. Financial assets are classified based on TCTA's business model. (IFRS 9 (2009, 2010)). TCTA considers if it holds the financial assets to collect contractual cash flows or to sell it prior to maturity to realise fair value changes. TCTA holds its financial assets to maturity and thus elected to collect the cash flows from holding the asset. TCTA considers the characteristics of the contractual cash flows of the financial assets to determine whether the conditions for amortised cost have been met as detailed below. Assets are initially measured at fair value plus, in the case of a financial assets not at fair value through surplus or deficit, particular transaction costs. Assets are subsequently measured at amortised cost or fair value.

TCTA measures financial assets at amortised cost when the following conditions for measurement at amortised cost have been met:

- the assets are held within TCTA's business model where the objective is to hold assets in order to collect contractual cash flows; and
- the contractual terms of the financial assets result in cash flows on specific dates that are solely payments of principal and interest on the principal amount outstanding.

TCTA's financial assets mainly consist of the redemption assets, the tariff receivable and derivative instruments.

Redemption assets

Redemption assets consist of an investment portfolio, aggregated for the redemption of the bonds as and when they mature. TCTA currently makes investments in order to smooth the refinancing of its mega bond issues. There have been fundamental changes in the approach to investing following the credit crisis. Credit evaluation is first categorised relative to two other considerations i.e. liquidity and price. For any counterparty to be considered for investments, TCTA will have to evaluate them from three perspectives:

- The first is externally, where the counterparty's credit rating is considered, country of origin, their expertise in investments and the track record of the organisation is taken into account.
- The second aspect is the internally generated assessment, which deals with liquidity and credit of the organisation. This is to allow TCTA to set clearly defined limits that ensures spreading of risk and limits exposure to particular assets or industry.
- The last aspect is the product, similar to the first aspect, the product should be rated by a reputable credit rating agency in line with money market products and hence would normally hold assets that are short to medium term duration. They also must subscribe to industry organisations for similar type instruments with clearly defined benchmarks.

Redemption assets are carried at amortised cost, using the effective interest method. The redemption assets are not reflected separately, but part of financial investments. All fixed investments are held-to-maturity.

2.1.4 Financial assets (continued)

Tariff receivable

The tariff receivable is a non-derivative financial asset with determinable receipts based either on costs to be reimbursed or a tariff determined to enable TCTA to repay the project debt over approximately a twenty year period. This category is made up of the right to receive cash from the Department of Water and Sanitation (DWS) with respect to construction work completed on DWS projects or services rendered by TCTA in managing debt on each project. The tariff receivable arises as a result of TCTA incurring costs in terms of the directive from the Minister of Water and Sanitation in each project.

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2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

The tariff receivable arises as the contra to the construction revenue earned in each project, and is measured at amortised cost using the effective interest method.

TCTA revises its estimates of costs and water tariff annually and adjusts the carrying amount of the tariff receivable to reflect actual and revised estimated cash flows. TCTA recalculates the carrying amount by computing the present value of estimated future cash flows at the financial instrument's original effective interest rate determined in accordance with paragraph AG 8 of IAS 39. The adjustment is recognised in surplus or deficit. The critical accounting estimates and judgements from management is included in note 3.

Derivative instruments

Derivative assets and liabilities are initially classified at fair value through surplus or deficit on the date a derivative contract is entered into and are subsequently remeasured at fair value. Derivatives are classified as current and non-current on the basis of their settlement dates.

Loans and receivables

Loans and receivables are measured at amortised cost.

Impairment of financial assets

Financial assets, other than those at fair value through surplus or deficit (FVTPL), are individually assessed for indicators of impairment at each reporting date. Financial assets are impaired where there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the financial assets have been impacted.

Objective evidence of impairment could include:
- significant financial difficulty of the issuer or counterparty; or
- default or delinquency in interest or principal payments; or
- it is becoming probable that the borrower will enter bankruptcy or financial reorganisation.

For certain categories of financial assets, such as trade receivables, assets that are assessed not to be impaired individually, are subsequently assessed for impairment on a collective basis. Objective evidence of impairment for a portfolio of receivables could include TCTA's past experience of collecting payments, an increase in the number of delayed payments in the portfolio past the average credit period, as well as observable changes in national or local economic conditions that correlate with default on receivables.

The amount of the impairment deficit recognised is the difference between the asset's carrying amount and the present value of estimated future cash flows, reflecting the impact of collateral and guarantees, discounted at the financial asset's original effective interest rate.

Loans and receivables comprise amounts due by DWS on projects funded from the fiscus. TCTA recovers the costs incurred on mandated projects from DWS on a monthly basis and the payment terms are as set in the Memorandum of Agreement between TCTA and DWS.

Derecognition of financial assets

TCTA derecognises financial assets when, and only when, the contractual rights to the cash flows from the asset expire; or it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If TCTA neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, TCTA recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If TCTA retains substantially all the risks and rewards of ownership of a transferred financial asset, TCTA continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received. A transfer occurs when the entity transfers the contractual rights to receive the cash flows of the financial asset or assumes a contractual obligation to pay cash flows to one or more recipients in terms of an arrangement that meets the requirements of IFRS 9.3.2.5.

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Effective interest method

The effective interest method is the method used to calculate the amortised cost of a financial instrument and of allocating interest income or expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts through the expected life of the financial instrument, or, where appropriate, a shorter period, to the net carrying amount on initial recognition.

Cash and cash equivalents

Cash and short-term deposits in the statement of financial position comprise call deposits, cash at banks and on hand. For the purpose of the aggregated statement of cash flows, cash and cash equivalents consist of bank balances, call deposits and cash on hand and is measured at amortised cost.

2.1.5 Financial liabilities

Financial liabilities are classified as either financial liabilities 'at fair value through surplus or deficit (FVTPL)' or 'other financial liabilities' at amortised cost.

Financial liabilities at FVTPL

A financial liability may be designated as at FVTPL upon initial recognition if:

- such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or
- the financial liability forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with TCTA's documented risk management or investment strategy, and information about the financial liability is provided internally on that basis; or
- it forms part of a contract containing one or more embedded derivatives which permits the entire combined contract (asset or liability) to be designated as at FVTPL.

Financial liabilities at FVTPL are stated at fair value, with any resultant gain or deficit recognised in surplus or deficit.

Short-term financial market liabilities

Funding portfolio

The short-term funding portfolio comprises short-term commercial paper classified as "other liabilities" and are held at amortised cost, using the effective interest method.

Strategic portfolio

The strategic portfolio is a trading portfolio established for interest rate risk management purposes.

Locally registered bonds held-for-trading purposes are carried at fair value, which is determined with reference to exchange rate quoted prices at the close of business on the reporting date. Resultant gains or losses on the subsequent measurement are included in surplus or deficit for the year in which they arise. At present, no such instruments are held by TCTA. Refer to note 5.2.3.2 for information relating to the management of interest rate risk.

TCTA engages in repurchase agreements in locally registered bonds, within limits, with the panel of marketmakers to enhance the marketability of the bonds in issue. The repurchase agreements are recognised at transaction value and are classified as "other liabilities" at amortised cost.

Other financial liabilities

Other financial liabilities, including borrowings, are initially measured at fair value.

Other financial liabilities are subsequently measured at amortised cost using the effective interest method, with interest expense recognised on an effective interest basis.

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FOR THE PERIOD ENDED 31 MARCH 2018

2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Long-term financial market liabilities

Funding portfolio

The funding portfolio comprises the long-term funding for the specific projects as detailed below:

- Locally registered bonds in issue are classified as "other liabilities" and are hence carried at amortised cost, applying the effective interest rate method.
- Local loans are stated at amortised cost and classified as "other liabilities". At reporting date, foreign loans are stated at amortised cost and restated at the rates of exchange ruling at that date. Gains or losses are recognised in surplus or deficit.
- Long-term commercial paper (more than twelve months to maturity), classified as "other liabilities", are held at amortised cost, using the effective interest method.

Trade and other payables

Payables are classified as "other liabilities" and are stated at amortised cost, using the effective interest method.

Derecognition of financial liabilities

TCTA derecognises financial liabilities when, and only when, TCTA's obligations are discharged, cancelled or they expire.

Gains and losses on subsequent measurement of financial instruments

Gains and losses arising from a change in the fair value of financial instruments are included in surplus or deficit for the year in which they arise.

2.1.6 Fair value estimation

IFRS 13 defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (i.e. an exit price). This transaction is assumed to take place either in the principal market for the asset or liability; or in the absence of a principal market, in the most advantageous market for the asset or liability. The market in which the entity would normally enter into a transaction to sell the asset or to transfer the liability is presumed to be the principal market or, in the absence of a principal market, the most advantageous market.

The fair values of the listed bonds are the closing rate of the JSE Limited's bond market at the reporting date.
The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined by using valuation techniques. TCTA uses a variety of methods and makes assumptions that are based on market conditions existing at each reporting date.

Quoted market prices or dealer quotes for similar instruments are used for long-term debt. Other techniques, such as estimated discounted cash flows, are used to determine fair value for the remaining financial instruments. The fair value of forward foreign exchange contracts is determined using forward exchange market rates at the reporting date.

In certain instances the carrying value of a financial instrument approximates its fair value.
The fair value of financial assets and liabilities are reflected in note 9.3.

2.1.7 Offsetting

Financial assets and financial liabilities are offset, and the net amount reported in the statement of financial position where there is a current legally enforceable right to set off the recognised amounts and there is an intention to settle on a net basis, or to realise the asset and settle the liability simultaneously.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

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2.1.8 Finance costs

Finance costs are expensed in the period in which they occur. Finance costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

2.1.9 Employee benefits

Short-term employee benefits

The cost of all short-term employee benefits is recognised during the period in which the employee renders the related services.

Leave benefits

Annual leave is granted pro rata in accordance with the number of full calendar months worked and is subject to a cap.

Termination benefits

Termination benefits are employee benefits provided in exchange for the termination of an employee's employment as a result of either:

- an entity's decision to terminate an employee's employment before the normal retirement date or;
- an employee's decision to accept an offer of benefits in exchange for the termination of employment

2.1.10 Provisions

Provisions are recognised when TCTA has a legal or constructive present obligation as a result of a past event and it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

Provisions are reviewed at each reporting date and adjusted to reflect the current best estimate. If it is no longer probable that an outflow of resources will be required to settle the obligation, the provision is reversed.

Provisions are only used for those expenditures for which the provision was initially recognised.

Compensation

The provision relates to compensation payments being paid on the Lesotho Highlands Water Project (LHWP) over a fifty year period. These arose due to the relocation of the recipients during the construction of the LHWP which RSA is sharing the benefits of. The recipients have the option to receive compensation as a lump sum, annual payments made in cash or a set amount of maize grain. The LHDA is directly responsible for the management and payment of the underlying contracts. TCTA annually receives estimates of the future cash flows payable on these contracts.

The annual cash flows are increased by the forecast Lesotho CPI rate. These cash flows are considered managements' best estimate of the obligation payable to the LHDA and are discounted at a market-related discount rate reflective of the appropriate time value of money. The compensation provision raised by TCTA relates to the RSA government's obligation.

2.1.11 Liabilities of the water delivery component of the project in Lesotho

The Lesotho Highlands Water Project was designed to augment the water supply to South Africa and to generate hydro-electrical power for Lesotho. In terms of the provisions of the Treaty between the Government of the Republic of South Africa (RSA) and the Government of the Kingdom of Lesotho (GOL), the RSA is responsible for all costs relating to the water transfer component of the project and the GOL is responsible for the total cost of the components relating to the generation of hydro-electrical power.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

The initial arrangements included that the Lesotho Highlands Development Authority (LHDA) will raise the funding for the construction of that part of the project situated in Lesotho. In terms of Article 10(1) of the Treaty, TCTA (on behalf of RSA) is responsible for all costs incurred relating to the water delivery component of the project. This includes borrowings and the related finance costs incurred by the LHDA with respect to the water delivery component of the project (refer to note 9.6.3). As a result, TCTA is responsible for making payments to the LHDA and its lenders on behalf of the RSA in respect of such obligations.

2.1.12 Construction contracts

TCTA construction contracts relate to infrastructure projects which TCTA is directed to implement by the Minister of Water and Sanitation from time to time. These infrastructure projects are accounted for in terms of IAS 11: Construction Contracts and deal with the construction of a single asset such as a dam or pipeline, and in some instances a number of assets which are closely interrelated or interdependent in terms of their design, technology and function or ultimate purpose or use. TCTA applies IAS 11: Construction Contracts separately for each construction contract as required in the directive from the Minister of Water and Sanitation.

When the outcome of a construction contract can be estimated reliably, TCTA recognises contract revenue and contract costs associated with the construction contract as revenue and expenses respectively by reference to the stage of completion of the contract activity at the end of the reporting period.

Contract costs

Contract costs comprise:
a.) costs that relate directly to the specific contract;
b.) costs that are attributable to contract activity in general and can be allocated to the contract; and
c.) such other costs as are specifically chargeable to the customer under the terms of the contract.

Costs that are included as part of contract activity in general can be allocated to specific projects and include:
a.) insurance;
b.) costs of design and technical assistance that are not directly related to a specific project; and
c.) construction overheads.

Such costs are allocated using appropriate methods that best reflect project utilisation and are applied consistently to all costs having similar characteristics. This allocation is based on all costs being absorbed by the projects, in a ratio that reflects a normal level of construction activity in each project.

Costs that are specifically chargeable to DWS under the terms of each project contract are included in the construction costs. These costs may include general administrative costs during construction and development costs for which reimbursement is specified in terms of the Implementation Agreement or any other relevant contract relating to a project.

Contract revenue

Contract revenue comprises:
a.) the initial amount of revenue agreed in the contract; and
b.) variations in contract work, and claims:
    i.) to the extent that is probable that they will result in revenue; and
    ii.) they are capable of being reliably measured.

Contract revenue is measured at the fair value of the consideration received or receivable. Contract revenue for all project implementation performed on behalf of DWS as directed by the Minister of Water and Sanitation will always reflect the extent to which DWS underwrites expenditure and commitments in terms of the directive. The stage of completion is determined by the proportion that contract costs incurred for work performed to date bear to the estimated total contract cost.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

2.1.13 Royalties

Royalties, as defined in the Treaty, are paid to the Government of Lesotho for the benefit of receiving South Africa's share of the yield from the Orange River through the Lesotho Highlands Water Project, a gravity scheme, rather than through the least cost Orange-Vaal Transfer Scheme (OVTS), a pumping scheme wholly located within South Africa.

In terms of Article 12, Paragraph (10) of The Treaty between Governments of the Republic of South Africa and the Kingdom of Lesotho, royalties comprise of a fixed and a variable component.

The fixed component relating to the investment element of the net benefit of LHWP compared to the OVTS and adjusted on a monthly basis in accordance with the Producer Price Index (PPI) published in the Republic of South Africa. The compensation will be for fifty years and commenced from January 1995.

The variable component is based on the volume of water delivered to South Africa and is made up of the net benefit on being able to gravitate from LHWP rather than pumping from OVTS.

It comprises of:
- The difference in electricity costs. This component is adjusted on a monthly basis in accordance with the Producer Price Index (PPI) and corrected on a yearly basis when the Eskom selling price of electricity becomes available (usually in October of every year).
- The difference in operation and maintenance costs, which is also adjusted on a monthly basis in accordance with the PPI.

Royalties are recognised in surplus or deficit in the period it is incurred.

2.1.14 Interest income

Interest income comprises interest receivable on loans, advances, trade receivables and income from financial market investments. Interest is only recognised when it is probable that the economic benefits associated with the transaction will flow to TCTA. The total interest income (calculated using the effective interest method) for financial assets that are measured at amortised cost are recognised in surplus or deficit.

2.1.15 Leasing

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.
Finance leases – lessee

Assets held under finance leases are recognised at inception of the lease at the lower of the fair value of the leased assets at commencement of the lease or the present value of the minimum lease payments. A corresponding finance lease obligation is included in the statement of financial position. Lease payments consists of finance costs and the repayment of the lease obligation in such a manner as to achieve a constant rate of interest on the remaining balance of the liability. Finance costs are directly recognised in surplus/deficit.

Operating leases – lessee

Leases of assets to TCTA under which all the risks and benefits of ownership are effectively retained by the lessor, are classified as operating leases. Payments made under operating leases are charged against surplus/ deficit on a straight-line basis over the period of the lease.

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FOR THE PERIOD ENDED 31 MARCH 2018

2. SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

2.1.16 Related party transactions

TCTA has applied the government-related entities exemption in terms of IAS 24: Related Party Disclosures, and has only disclosed significant transactions with entities controlled by the Government of South Africa in note 22. Management considered the closeness of the related party relationship in determining the information to be disclosed.

Other factors relevant in determining the significance of transactions which should be disclosed includes:

- significant in amount
- carried out on a non-market terms;
- outside normal day-to-day business operations;
- disclosed to regulatory or supervisory authorities; or
- reported to Exco and the Board of Directors.

2.1.17 Fruitless and wasteful and irregular expenditure

A contingent liability is recorded in the accounting records if the contingency is probable and the amount of the liability can be reasonably estimated. If both conditions are not met, the liability may be disclosed in a footnote on the financial statements or not reported at all.

2.1.18 Contingent liabilities

Contingent liabilities are disclosed unless the possibility of an outflow of resources embodying economic benefits is remote. A provision is recognised in the accounting records if the contingency is probable and the amount of the liability can be reasonably estimated.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

3 CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

In the process of applying TCTA's accounting policies, management makes various estimates and judgements based on past experience, expectations of the future and other information. The key sources of estimation uncertainty and the critical judgements that can significantly affect the amounts recognised in the financial statements are disclosed below:

Estimates and assumptions

The following key assumptions and other key sources of estimation uncertainty have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities, as presented in these financial statements, within the next financial year. TCTA based its assumptions and estimates on parameters available when the financial statements were prepared. Any changes to existing conditions, such as market changes or circumstances beyond TCTA's control, are reflected in the assumptions when they occur.

3.1 Provision for compensation

This provision relates to compensation payments being paid on the LHWP over a fifty-year period.

TCTA is reliant on the LHDA for information relating to the compensation provision at year end, as well as payments made to the respective recipients. The provision has been based on the expected payments for the water transfer contracts, derived from the information obtained from the LHDA, adjusted for expected future increases in CPI in Lesotho as obtained from BER (Bureau for Economic Research). The future cash flows are present valued at a year-end rate representative of appropriate time value of money for the underlying cash flows. Refer to note 14 for the reconciliation of the compensation provision.

3.2 Estimates of cash flows imputed in the tariff receivable financial asset

At the inception of each project, TCTA estimates the construction costs to be incurred and tariffs to be received over the debt repayment period.

The projected costs are based on the estimates of timing and cost as approved by the TCTA Board and the respective project off-takers in the project charters. At each reporting date, these estimates are revised to take into account changes in the timing of the contract, costs due to escalation and variation orders.

3.2 Estimates of cash flows imputed in the tariff receivable financial asset (continued)

TCTA estimates the future receipt of tariffs from DWS using projected demand consumption as forecast by DWS, to arrive at a tariff that will repay all debt and operating costs when the long-term facilities expire. The estimated tariff will also include the forecasting of inflation where the project water supply agreement with DWS allows for inflationary increases in the tariff over the life of the project. Water demand consumption and inflation are revised on an annual basis using the best estimates available from DWS and reputable economic research agencies respectively. Refer to note 9.

3.3 Operating segments

IFRS 8 requires that the results and information with regards to identified segments are regularly reviewed by the entity's Chief Operating Decision Maker (CODM) to make decisions about resources to be allocated to the segment and assess its performance. TCTA considers the monthly reporting to and review by the CODM as "regular". Refer to note 5 for further disclosures.

3.4 Provision for incentives

The incentive provision is estimated at the end of each financial year. The total incentive pool is based on the total actual salaries incurred for the year, multiplied by a factor based on the performance rating of the entity. The performance rating is determined with reference to the expected organisational score and the resulting amount of the final pool is approved at the discretion of the Board of Directors. The provision for incentives can be found in note 14.

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FOR THE PERIOD ENDED 31 MARCH 2018

4. NEW STANDARDS AND INTERPRETATIONS

4.1 Standards and interpretations effective and adopted in the current year

In the current year, the company has adopted the following standards and interpretations that are effective for the current financial year and that are relevant to its operations.

4.2 Standards and interpretations not yet effective

The company has chosen not to early adopt the following standards and interpretations, which have been published and are mandatory for the company's accounting periods beginning on or after 01 April 2018 or later periods:

IFRS 16 Leases
IFRS 16 Leases is a new standard which replaces IAS 17 Leases, and introduces a single lessee accounting model. The main changes arising from the issue of IFRS 16 which are likely to impact the company are as follows:

Company as lessee:
Lessees are required to recognise a right-of-use asset and a lease liability for all leases, except short term leases or leases where the underlying asset has a low value, which are expensed on a straight line or other systematic basis.

- The cost of the right-of-use asset includes, where appropriate, the initial amount of the lease liability; lease payments made prior to commencement of the lease less incentives received; initial direct costs of the lessee; and an estimate for any provision for dismantling, restoration and removal related to the underlying asset.
- The lease liability takes into consideration, where appropriate, fixed and variable lease payments; residual value guarantees to be made by the lessee; exercise price of purchase options; and payments of penalties for terminating the lease.
- The right-of-use asset is subsequently measured on the cost model at cost less accumulated depreciation and impairment and adjusted for any re-measurement of the lease liability. However, right-of-use assets are measured at fair value when they meet the definition of investment property and all other investment property is accounted for on the fair value model. If a right-of-use asset relates to a class of property, plant and equipment which is measured on the revaluation model, then that right-of-use asset may be measured on the revaluation model.
- The lease liability is subsequently increased by interest, reduced by lease payments and re-measured for reassessments or modifications.
- Re-measurements of lease liabilities are affected against right-of-use assets, unless the assets have been reduced to nil, in which case further adjustments are recognised in surplus or deficit.
- The lease liability is re-measured by discounting revised payments at a revised rate when there is a change in the lease term or a change in the assessment of an option to purchase the underlying asset.
- The lease liability is re-measured by discounting revised lease payments at the original discount rate when there is a change in the amounts expected to be paid in a residual value guarantee or when there is a change in future payments because of a change in index or rate used to determine those payments.
- Certain lease modifications are accounted for as separate leases. When lease modifications which decrease the scope of the lease are not required to be accounted for as separate leases, then the lessee re-measures the lease liability by decreasing the carrying amount of the right of lease asset to reflect the full or partial termination of the lease. Any gain or deficit relating to the full or partial termination of the lease is recognised in surplus or deficit. For all other lease modifications which are not required to be accounted for as separate leases, the lessee re-measures the lease liability by making a corresponding adjustment to the right-of-use asset.
- Right-of-use assets and lease liabilities should be presented separately from other assets and liabilities. If not, then the line item in which they are included must be disclosed. This does not apply to right-of-use assets meeting the definition of investment property which must be presented within investment property. IFRS 16 contains different disclosure requirements compared to IAS 17 leases.

Company as lessor:

- Accounting for leases by lessors remains similar to the provisions of IAS 17 in that leases are classified as either finance leases or operating leases. Lease classification is reassessed only if there has been a modification.
- A modification is required to be accounted for as a separate lease if it both increases the scope of the lease by adding the right to use one or more underlying assets; and the increase in consideration is commensurate to the stand alone price of the increase in scope.

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- If a finance lease is modified, and the modification would not qualify as a separate lease, but the lease would have been an operating lease if the modification was in effect from inception, then the modification is accounted for as a separate lease. In addition, the carrying amount of the underlying asset shall be measured as the net investment in the lease immediately before the effective date of the modification. IFRS 9 is applied to all other modifications not required to be treated as a separate lease.
- Modifications to operating leases are required to be accounted for as new leases from the effective date of the modification. Changes have also been made to the disclosure requirements of leases in the lessor's financial statements.

Sale and leaseback transactions:

- In the event of a sale and leaseback transaction, the requirements of IFRS 15 are applied to consider whether a performance obligation is satisfied to determine whether the transfer of the asset is accounted for as the sale of an asset.
- If the transfer meets the requirements to be recognised as a sale, the seller-lessee must measure the new right-of-use asset at the proportion of the previous carrying amount of the asset that relates to the right-of-use retained. The buyer-lessor accounts for the purchase by applying applicable standards and for the lease by applying IFRS 16
- If the fair value of consideration for the sale is not equal to the fair value of the asset, then IFRS 16 requires adjustments to be made to the sale proceeds. When the transfer of the asset is not a sale, then the seller-lessee continues to recognise the transferred asset and recognises a financial liability equal to the transfer proceeds. The buyer-lessor recognises a financial asset equal to the transfer proceeds.

The effective date of the standard is for years beginning on or after 01 January 2019.

The company expects to adopt the standard for the first time in the 2020 annual financial statements.

It is unlikely that the standard will have a material impact on the company's annual financial statements.

Amendments to IFRS 15: Clarifications to IFRS 15 Revenue from Contracts with Customers

The amendment provides clarification and further guidance regarding certain issues in IFRS 15. These items include guidance in assessing whether promises to transfer goods or services are separately identifiable; guidance regarding agent versus principal considerations; and guidance regarding licenses and royalties.

The effective date of the amendment is for years beginning on or after 01 January 2018.

The company expects to adopt the amendment for the first time in the 2019 annual financial statements.

It is unlikely that the amendment will have a material impact on the company's annual financial statements.

IFRS 15 Revenue from Contracts with Customers

IFRS 15 supersedes IAS 11 Construction contracts; IAS 18 Revenue; IFRIC 13 Customer Loyalty Programmes; IFRIC 15 Agreements for the construction of Real Estate; IFRIC 18 Transfers of Assets from Customers and SIC 31 Revenue - Barter Transactions Involving Advertising Services.

The core principle of IFRS 15 is that an entity recognises revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. An entity recognises revenue in accordance with that core principle by applying the following steps:

- Identify the contract(s) with a customer
- Identify the performance obligations in the contract
- Determine the transaction price
- Allocate the transaction price to the performance obligations in the contract
- Recognise revenue when (or as) the entity satisfies a performance obligation.

The new standard may be applied with full retrospective effect or under a modified retrospective approach with an adjustment made to the opening balance of retained income. Early adoption is permitted. The impact on TCTA will be the combination of the construction revenue and other revenues to be revenue from contracts plus the combination of construction costs and other operating costs to be contract costs. IFRS 15 also includes extensive new disclosure requirements.

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FOR THE PERIOD ENDED 31 MARCH 2018

4. NEW STANDARDS AND INTERPRETATIONS (CONTINUED)

The effective date of the standard is for years beginning on or after 01 January 2018.

The company expects to adopt the standard for the first time in the 2019 annual financial statements.

It is unlikely that the standard will have a material impact on the company's annual financial statements.

IFRS 9 Financial Instruments

IFRS 9 issued in November 2009 introduced new requirements for the classification and measurements of financial assets. IFRS 9 was subsequently amended in October 2010 to include requirements for the classification and measurement of financial liabilities and for derecognition, and in November 2013 to include the new requirements for general hedge accounting. Another revised version of IFRS 9 was issued in July 2014 mainly to include a)impairment requirements for financial assets and b) limited amendments to the classification and measurement requirements by introducing a "fair value through other comprehensive income" (FVTOCI) measurement category for certain simple debt instruments.

Key requirements of IFRS 9:

- All recognised financial assets that are within the scope of IAS 39 Financial Instruments: Recognition and Measurement are required to be subsequently measured at amortised cost or fair value. Specifically, debt investments that are held within a business model whose objective is to collect the contractual cash flows, and that have contractual cash flows that are solely payments of principal and interest on the outstanding principal are generally measured at amortised cost at the end of subsequent reporting periods. Debt instruments that are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets, and that have contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on outstanding principal, are measured at FVTOCI. All other debt and equity investments are measured at fair value at the end of subsequent reporting periods. In addition, under IFRS 9, entities may make an irrevocable election to present subsequent changes in the fair value of an equity investment (that is not held for trading) in other comprehensive income with only dividend income generally recognised in surplus or deficit.
- With regard to the measurement of financial liabilities designated as at fair value through surplus or deficit, IFRS 9 requires that the amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of the liability is presented in other comprehensive income, unless the recognition of the effect of the changes of the liability's credit risk in other comprehensive income would create or enlarge an accounting mismatch in surplus or deficit. Under IAS 39, the entire amount of the change in fair value of a financial liability designated as at fair value through surplus or deficit is presented in surplus or deficit.
- In relation to the impairment of financial assets, IFRS 9 requires an expected credit deficit model, as opposed to an incurred credit deficit model under IAS 39. The expected credit deficit model requires an entity to account for expected credit losses and changes in those expected credit losses at each reporting date to reflect changes in credit risk since initial recognition. It is therefore no longer necessary for a credit event to have occurred before credit losses are recognised.
- The new general hedge accounting requirements retain the three types of hedge accounting mechanisms currently available in IAS 39. Under IFRS 9, greater flexibility has been introduced to the types of transactions eligible for hedge accounting, specifically broadening the types of instruments that qualify for hedging instruments and the types of risk components of non-financial items that are eligible for hedge accounting. In addition, the effectiveness test has been replaced with the principal of an "economic relationship". Retrospective assessment of hedge effectiveness is also no longer required. Enhanced disclosure requirements about an entity's risk management activities have also been introduced.

The effective date of the standard is for years beginning on or after 01 January 2018.

The company expects to adopt the standard for the first time in the 2019 annual financial statements.

It is unlikely that the standard will have a material impact on the company's annual financial statements.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

5. SEGMENTAL INFORMATION

TCTA is required to disclose segmental information as required by IFRS 8: Operating Segments as TCTA's debt instruments are traded in a public market. This information aims to assist in evaluating the nature and financial effects of TCTA's business activities and the economic environments in which TCTA operates. The standard has specific disclosure requirements about TCTA's services, the geographical areas in which it operates, and major customers.

5.1. Operating segments

Each segment is identified in terms of separate directives received from the Minister of Water and Sanitation. Each of these segments (projects) meets the criteria as an identifiable component of TCTA's business as it (a) may earn revenues and incur expenses; (b) each segment's operating results are regularly reviewed by the entity's Chief Operating Decision Maker (CODM) to determine the allocation of resources and assess its performance, and (c) discrete financial information for it is available. The function of CODM is fulfilled by the Chief Executive Officer and EXCO members who review the financial results of TCTA on a monthly basis.

Presently the operating segments of TCTA are aligned to the project orientated model of the organisation.

5.2. Identification of operating segments

An important criterion for identifying operating segments is that the operating results are regularly reviewed by the entity's CODM to make decisions about resources to be allocated to the segment and assess its performance. TCTA considers monthly reporting to be 'regularly'.

TCTA provides various services to its customers such as liability management, treasury management services as well as project implementation. TCTA is required to report and account separately for each project and reports to the CODM (on a monthly basis), government (as determined by legislation) as well as external stakeholders (as determined in individual agreements) on the performance and financial position of each project as directed by the Minister of Water and Sanitation.

The mandate and directives are funded by government or TCTA arranges commercial funding and manages the debt repayment. In the second instance, TCTA earns revenue for the service it provides in respect of its liability management, project implementation and treasury management services. This revenue ensures that TCTA is able to repay the liabilities incurred.

In terms of IFRS two or more operating segments may be aggregated into a single operating segment if aggregation is consistent with the core principle of the standard, have similar economic characteristics, and if the segments are similar in certain aspects. The aggregated financial statements are merely a sum total of TCTA's assets, liabilities, income and expenses. TCTA therefore includes a full statement of financial position and statement of comprehensive income in note 5.4 below as well as the segmental cash flows as an annexure (Annexure A) to these financial statements to fulfil its obligation of separate reporting.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

5. SEGMENTAL INFORMATION (CONTINUED)

5.3. Entity-wide disclosures

DESCRIPTION OF THE SEGMENT	CURRENT WORK	ACRONYM
Vaal River System Treaty Functions as per Section 21 of the Notice of Establishment Delivery Tunnel North of the Lesotho Highlands Water Project Sections 24 (a), (b) and (c) - To fulfil the RSA financial obligations in terms of or resulting from the Treaty - To receive the water from LHDA and discharge into the Ash River - Additional functions pertaining to the release of the water	Royalty payments to the Government of Lesotho. Payments for: the operation and maintenance of the water transfer component in Lesotho undertaken by Lesotho Highlands Development Authority. the construction of Phase II and Lesotho Highlands Water Commission costs.	VRS
Advisory Services Advice to institutions on various matters pertaining to the construction of infrastructure and the viability of the water sector. The Income Agreement, signed in 2001 between DWS and TCTA, established the principle of using water use charges on the Vaal River System to enable TCTA to meet its financial obligations incurred when carrying out a directive of the Minister, where no alternative source of income was provided (transfers or separate income streams). Sections 24 (d)Other functions that may be assigned to the Authority in terms of Section 103 (2) of the National Water Act Combined borrowing programme for LHWP and AMD funded from the cash flow from the Vaal River system Acid Mine Drainage Project	Strategic Integrated Project-3 & 18. Mzimvubu Water project.	VRS
The project comprises **Short-term intervention** The installation of pumps to extract water from the Western, Central and Eastern Basins in the Witwatersrand gold fields, neutralisation and reduction in the concentration of metals before discharge into the river system. **Long-term solution** The incorporation of the short-term intervention and further treatment to reduce the total dissolved solids so as to enable DWS to meet its water resource quality objective at the Vaal Barrage.	Management of debt. Operation and Maintenance Pre-implementation phase.	AMD
Berg Water Project The project comprises the Berg River Dam and supplementary scheme located in the reaches of the Berg River near Franschhoek, Western Cape.	Management of debt, Project close-out.	BWP

NOTES TO THE ANNUAL FINANCIAL STATEMENTS
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DESCRIPTION OF THE SEGMENT	CURRENT WORK	ACRONYM
Vaal River Eastern Sub-system Augmentation Project The project comprises of a scheme to convey water 121 km from the Vaal Dam to the Secunda area.	Management of debt, Project close-out.	**VRESAP**
Mooi Mgeni Transfer Scheme (Phase 2) The project comprises of the Spring Grove Dam on the Mooi River, a fish barrier upstream of the dam and augmentation of the Water Transfer System from the Mooi to the Mpofana River.	Management of debt, Project close-out.	**MMTS-2**
Komati Water Scheme Augmentation Project This project forms part of the Vaal River Eastern Subsystem. The project comprises the installation of a system to convey water to Eskom's power stations in Mpumalanga.	Management of debt.	**KWSAP**
Olifants River Water Resource Development Project Phase 2C: The project comprises a 40 km pipeline from De Hoop Dam to Steelpoort Phase 2B: A new funding model is being developed. Once developed and approved it will enable the scope of work to be determined.	 Implementation. Advisory.	**ORWRDP**
Mokolo - Crocodile Water Augmentation Project Phase 1: The project comprises of a scheme to convey water 43 km from the Mokolo Dam to the Lephalale area Phase 2A: The project comprises of a scheme to transfer water 160 km from the Crocodile River, near Thabazimbi, to the Lephalale area	Management of debt. Project close-out. Pre-implementation.	**MCWAP**
Mooi Mgeni Transfer Scheme (Phase I) This project comprises the refurbishment of the existing transfer scheme from Mearns Weir into the Mgeni system.	Project close-out.	**MMTS-1**
Umgeni The MMTS-2 directive was amended on 20 March 2014 to include the construction of a potable water pipeline for Umgeni Water as part of the water transfer project.	Project close-out.	**UMGENI**
Offtake to the town of Kriel The project comprises of a 3 km pipeline from the KWSAP to Kriel Water treatment works and the upgrading of the works	Project management services	**KRIEL**
uMzimvubu River Water Project This project is in the Mzimvubu area inthe Eastern Cape. The scope of work and sourcesof funding are still to be determined.	Advisory stage.	**MRWP**
Trans Caledon Tunnel Authority - Corporate		**TCTA-C**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

5. SEGMENTAL INFORMATION (CONTINUED)

5.4. Operating segments: financial results

TCTA will report detailed statements of financial position as well as statements of comprehensive income, for each project.

5.4.1. Segmental Statement of Financial Position as at 31 March 2018

	Note(s)	VRS R million	BWP R million	VRESAP R million
ASSETS				
Non-Current Assets				
Property, plant and equipment	7	6	-	-
Intangible assets	8	14	-	-
Tariff receivable*	9.4	18 647	458	3 717
Total Non-Current Assets		**18 667**	**458**	**3 717**
Current Assets				
Tariff receivable*	9.4	2 652	47	196
Short-term financial market investments	9.5	321	-	-
Loans and other receivables	10	53	-	-
Prepayments	11	76	-	-
Cash and cash equivalents	15	2 910	72	82
Total Current Assets		**6 012**	**119**	**278**
TOTAL ASSETS		**24 679**	**577**	**3 995**
EQUITY AND LIABILITIES				
RESERVES				
Retained income		**5 308**	**(23)**	**134**
LIABILITIES				
Non-Current Liabilities				
Long-term financial market liabilities	9.6.3	9 671	515	3 286
Provisions	14	282	-	-
Total Non-Current Liabilities		**9 953**	**515**	**3 286**
Current Liabilities				
Trade and other payables	12	858	5	51
Non-contractual amounts	13.1	59	3	5
Provisions	14	39	-	-
Short-term financial market liabilities	9.6.2	8 462	77	519
Total Current Liabilities		**9 418**	**85**	**575**
TOTAL LIABILITIES		**19 371**	**600**	**3 861**
TOTAL EQUITY AND LIABILITIES		**24 679**	**577**	**3 995**

** Department of Water and Sanitation (DWS) debtor 2018: R3.2bn (2017: R2.5bn); additional disclosure in note 10.4*
Financial statements are rounded to the nearest million. Where balances are zero, the amount is less than R500 000.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

MCWAP R million	MMTS-2 R million	ORWRDP R million	KWSAP R million	MMTS-1 R million	UMGENI R million	KRIEL R million	TCTA-C R million	MRWP R million	TOTAL R million
-	-	-	-	-	-	-	-	-	6
-	-	-	-	-	-	-	-	-	14
565	1 412	-	1 099	-	-	-	-	-	25 898
565	**1 412**	**-**	**1 099**	**-**	**-**	**-**	**-**	**-**	**25 918**
-	111	-	46	-	-	-	-	-	3 052
-	50	-	-	-	-	-	-	-	371
-	22	95	-	1	17	6	-	17	211
-	1	11	-	-	-	-	-	-	88
474	209	1	70	-	-	-	31	-	3 849
474	**393**	**107**	**116**	**1**	**17**	**6**	**31**	**17**	**7 571**
1 039	**1 805**	**107**	**1 215**	**1**	**17**	**6**	**31**	**17**	**33 489**
(530)	**(81)**	**-**	**(59)**	**-**	**4**	**-**	**-**	**-**	**4 753**
1 497	1 450	-	1 234	-	-	-	-	-	17 653
-	-	-	-	-	-	-	-	-	282
1 497	**1 450**	**-**	**1 234**	**-**	**-**	**-**	**-**	**-**	**17 935**
25	68	106	12	1	13	6	31	12	1 188
4	1	1	-	-	-	-	-	5	78
-	-	-	-	-	-	-	-	-	39
43	367	-	28	-	-	-	-	-	9 496
72	**436**	**107**	**40**	**1**	**13**	**6**	**31**	**17**	**10 801**
1 569	**1 886**	**107**	**1 274**	**1**	**13**	**6**	**31**	**17**	**28 736**
1 039	**1 805**	**107**	**1 215**	**1**	**17**	**6**	**31**	**17**	**33 489**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

5. SEGMENTAL INFORMATION (CONTINUED)

5.4. Operating segments: financial results (continued)

5.4.2. Segmental Statement of Financial Position as at 31 March 2017

	Note(s)	VRS R million	BWP R million	VRESAP R million
ASSETS				
Non-Current Assets				
Property, plant and equipment	7	10	-	-
Intangible assets	8	16	-	-
Tariff receivable*	9.4	18 360	499	3 853
Total Non-Current Assets		**18 386**	**499**	**3 853**
Current Assets				
Tariff receivable*	9.4	737	135	69
Short-term financial market investments	9.5	2 951	-	-
Loans and other receivables	10	25	-	-
Prepayments	11	41	-	-
Non-contractual amounts	13.1	-	2	-
Cash and cash equivalents	15	1 525	80	60
Total Current Assets		**5 279**	**217**	**129**
TOTAL ASSETS		**23 665**	**716**	**3 982**
EQUITY AND LIABILITIES				
RESERVES				
Retained income		**2 958**	**(12)**	**142**
LIABILITIES				
Non-Current Liabilities				
Long-term financial market liabilities	9.6.3	17 074	653	3 409
Provisions	14	290	-	-
Total Non-Current Liabilities		**17 364**	**653**	**3 409**
Current Liabilities				
Trade and other payables	12	855	8	57
Non-contractual amounts	13.1	85	-	9
Provisions	14	50	-	-
Short-term financial market liabilities	9.6.2	2 353	67	365
Total Current Liabilities		**3 343**	**75**	**431**
TOTAL LIABILITIES		**20 707**	**728**	**3 840**
TOTAL EQUITY AND LIABILITIES		**23 665**	**716**	**3 982**

Financial statements are rounded to the nearest million. Where balances are zero, the amount is less than R500 000.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

MCWAP R million	MMTS-2 R million	ORWRDP R million	KWSAP R million	MMTS-1 R million	UMGENI R million	KRIEL R million	TOTAL R million
-	-	-	-	-	-	-	10
-	-	-	-	-	-	-	16
826	1 550	-	1 153	-	-	-	26 241
826	**1 550**	**-**	**1 153**	**-**	**-**	**-**	**26 267**
-	-	-	-	-	-	-	941
-	101	-	-	-	-	-	3 052
-	26	-	-	-	16	13	80
-	1	85	-	-	-	-	127
-	-	-	-	-	-	-	2
447	263	30	154	-	-	-	2 559
447	**391**	**115**	**154**	**-**	**16**	**13**	**6 761**
1 273	**1 941**	**115**	**1 307**	**-**	**16**	**13**	**33 028**
(342)	**(55)**	**-**	**(29)**	**-**	**4**	**-**	**2 666**
1 540	1 538	-	1 290	-	-	-	25 504
-	-	-	-	-	-	-	290
1 540	**1 538**	**-**	**1 290**	**-**	**-**	**-**	**25 794**
42	61	97	20	-	12	13	1 165
-	4	18	3	-	-	-	116
-	-	-	-	-	-	-	50
33	396	-	23	-	-	-	3 237
75	**458**	**115**	**46**	**-**	**12**	**13**	**4 568**
1 615	**1 996**	**115**	**1 336**	**-**	**12**	**13**	**30 362**
1 273	**1 941**	**115**	**1 307**	**-**	**16**	**13**	**33 028**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

5. SEGMENTAL INFORMATION (CONTINUED)

5.4. Operating segments: financial results (continued)

5.4.3. Segmental Statement of Comprehensive Income for the year ended 31 March 2018

	Note(s)	VRS R million	BWP R million	VRESAP R million
CONSTRUCTION REVENUE	16	249	-	-
CONSTRUCTION COSTS	16	(249)	-	-
OTHER OPERATING INCOME	17	1 688	6	9
EXPENSES		(1 688)	(6)	(9)
Legal fees and litigation costs		(10)	-	-
Depreciation	7	(4)	-	-
Amortisation	8	(6)	-	-
Operating costs for the work in Lesotho	18	(200)	-	-
Lesotho Highlands Water Commission (LHWC) costs	22.2.1	(16)	-	-
Staff costs	21.3	(68)	(4)	(6)
Directors' emoluments and related costs	22.3	(10)	-	-
Royalties paid	20	(914)	-	-
AMD operations and maintenance	21	(273)	-	-
Other operating expenses	21	(187)	(2)	(3)
OPERATING SURPLUS/(DEFICIT)		-	-	-
NET FINANCE INCOME/(COSTS)		2 350	(11)	(8)
Finance income	19.1	4 842	69	395
Finance costs	19.2	(2 492)	(80)	(403)
SURPLUS/(DEFICIT) FOR THE YEAR		2 350	(11)	(8)
SURPLUS/(DEFICIT) FOR THE YEAR		**2 350**	**(11)**	**(8)**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

MCWAP R million	MMTS-2 R million	ORWRDP R million	KWSAP R million	MMTS-1 R million	UMGENI R million	KRIEL R million	TOTAL R million
73	3	203	-	1	1	8	538
(73)	(3)	(203)	-	(1)	(1)	(8)	(538)
8	8	-	6	-	-	-	1 725
(8)	(8)	-	(6)	-	-	-	(1 725)
-	(2)	-	-	-	-	-	(12)
-	-	-	-	-	-	-	(4)
-	-	-	-	-	-	-	(6)
-	-	-	-	-	-	-	(200)
-	-	-	-	-	-	-	(16)
(6)	(4)	-	(4)	-	-	-	(92)
-	-	-	-	-	-	-	(10)
-	-	-	-	-	-	-	(914)
-	-	-	-	-	-	-	(273)
(2)	(2)	-	(2)	-	-	-	(198)
-	-	-	-	-	-	-	-
(188)	(26)	-	(30)	-	-	-	2 087
113	165	-	134	-	-	-	5 718
(301)	(191)	-	(164)	-	-	-	(3 631)
(188)	(26)	-	(30)	-	-	-	2 087
(188)	**(26)**	**-**	**(30)**	**-**	**-**	**-**	**2 087**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS
FOR THE PERIOD ENDED 31 MARCH 2018

5. SEGMENTAL INFORMATION (CONTINUED)

5.4. Operating segments: financial results (continued)

5.4.4. Segmental Statement of Comprehensive Income for the year ended 31 March 2017

	Note(s)	VRS R million	BWP R million	VRESAP R million
CONSTRUCTION REVENUE	16	372	-	-
CONSTRUCTION COSTS	16	(372)	-	-
OTHER OPERATING INCOME	17	1 322	6	10
EXPENSES		(1 322)	(6)	(10)
Legal fees and litigation costs		(2)	-	(1)
Depreciation	7	(6)	-	-
Operating costs for the work in Lesotho	18	(175)	-	-
Lesotho Highlands Water Commission (LHWC) costs	22.2.1	(14)	-	-
Staff costs	21.3	(76)	(4)	(6)
Directors' emoluments and related costs	22.3	(10)	-	-
Royalties paid	20	(855)	-	-
AMD operations and maintenance	21	(165)	-	-
Other operating expenses	21	(19)	(2)	(3)
OPERATING SURPLUS/(DEFICIT)		-	-	-
NET FINANCE INCOME/(COSTS)		2 344	2	17
Finance income	19.1	4 672	86	392
Finance costs	19.2	(2 328)	(84)	(375)
SURPLUS/(DEFICIT) FOR THE YEAR		2 344	2	17
SURPLUS/(DEFICIT) FOR THE YEAR		**2 344**	**2**	**17**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

MCWAP R million	MMTS-2 R million	ORWRDP R million	KWSAP R million	MMTS-1 R million	UMGENI R million	KRIEL R million	TOTAL R million
94	64	140	-	-	19	3	692
(94)	(64)	(140)	-	-	(19)	(3)	(692)
14	20	-	6	-	-	-	1 378
(14)	(20)	-	(6)	-	-	-	(1 378)
(1)	(1)	-	-	-	-	-	(5)
-	-	-	-	-	-	-	(6)
-	-	-	-	-	-	-	(175)
-	-	-	-	-	-	-	(14)
(12)	(13)	-	(4)	-	-	-	(115)
-	-	-	-	-	-	-	(10)
-	-	-	-	-	-	-	(855)
-	-	-	-	-	-	-	(165)
(1)	(6)	-	(2)	-	-	-	(33)
-	-	-	-	-	-	-	-
(9)	(61)	-	11	-	-	-	2 304
135	169	-	134	-	-	-	5 588
(144)	(230)	-	(123)	-	-	-	(3 284)
(9)	(61)	-	11	-	-	-	2 304
(9)	**(61)**	**-**	**11**	**-**	**-**	**-**	**2 304**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

6. FINANCIAL INSTRUMENT RISK MANAGEMENT

6.1. Capital management

TCTA manages its capital to ensure that projects will be able to continue as a going concern while optimising the debt for each project.

The capital structure of TCTA consists of short-, medium and long-term debt (borrowings as detailed in note 9.6) and equity (comprising accumulated surpluses or deficits).

TCTA is not subject to any externally imposed capital requirements except for adherence to the debt ceiling as approved by DWS with concurrence from the Minister of Finance. TCTA's Risk and Finance Committee reviews each project's capital structure on a quarterly basis. As part of this review, the Committee considers the cost of capital and the risks associated with each class of debt.

TCTA's borrowing limits per project is reviewed on an annual basis by the Minister of Water and Sanitation, with the concurrence of the Minister of Finance. The borrowing limits are based on TCTA's borrowing requirements in order to fulfil the Republic of South Africa's financial obligations in terms of, or resulting from, the Treaty and other directives received from the Minister (Refer to note 6.2.1.1 - to 6.2.1.8).

Optimal capital structure:
In principle, TCTA prefers to maintain a capital structure of a minimum 70% fixed rate debt to 30% floating rate debt ratio after construction of the infrastructure. This ensures that there is less volatility on the debt curve and furthermore there is a high predictability of cash flows, thus minimising the associated interest rate risk to each project.

6.2. Financial risk management objectives

The Board has overall responsibility for the establishment and oversight of risk management within the organisation and approves all risk management policies. Risk management in TCTA is carried out through a central risk management function. The Risk Department identifies, assesses and mitigates financial risks in close co-operation with other Operational Units. The Risk and Finance Committee, comprising of at least three non-executive directors and the CEO, assists management and the Board in this regard. It oversees how management monitors compliance to funding and risk management policies and reviews the adequacy of the risk management framework in relation to the risks that TCTA is exposed to.

TCTA's treasury activities comprise of raising financing and managing investments (e.g. liquidity and treasury investment portfolios). TCTA's treasury operates within the South African financial markets, as such, is subject to associated risks, which could have financial implications to the organisation. In line with the approved Risk Management Framework and Treasury Risk Management policy, the Risk Management Department monitors treasury risks on a daily, weekly and monthly basis, in order to ensure that controls in place are working effectively, to identify and mitigate any possible financial losses to the organisation.

TCTA's market activities expose it to market risk (including currency risk, interest rate risk, etc.) credit risk and liquidity risk (Refer notes 6.2.1-6.2.3).

TCTA seeks to minimise the effects of these risks by using derivative financial instruments to hedge risk exposures where possible and appropriate within Board approved policies.

The various types of financial, treasury and operational risks pertaining to each of the projects are identified, assessed, managed and monitored in a prudent manner, within a Board approved risk tolerance framework.
The liability is managed in a very prudent and conservative manner, which is further underscored by the adoption of the following portfolio approach and objectives:

- asset and liability matching: TCTA strives to minimise both refinancing and repricing risks associated with maturing debt by matching the maturity dates of debt issued with free cash generated by the project.
- refinancing and repricing risks are further managed by the creation of redemption portfolios. TCTA runs redemption portfolios at minimum of three years prior to maturity of a bond or bullet payment.

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TCTA has taken a more proactive approach to short-term cash management than in prior years. All future financing requirements are tabled for the next three months and funds are raised to match those maturities. Furthermore, in order to promote interest in the commercial paper program, funds are raised ahead of any financing requirement and invested until the specific need for funding arises. Consequently, TCTA has maintained a strong presence in the commercial paper market and has been able to secure funding at competitive prices.

The set guiding principles and objectives have been applied consistently over the years.

6.2.1. Liquidity stress test scenarios as at 23 Aug 2018

TCTA has performed a liquidity stress test in order to assess its ability to meet its debt obligations in the next 12 months. The assessment was performed at 23 August 2018 and considers three scenarios.

Scenario 1:

- This scenario assumes the estimated time from the 23 August 2018 until the date that the cash resources are fully depleted assuming no cash is recovered through the tariffs received from DWS and no additional funding is obtained.
- The table below represents the stress test that was performed by TCTA management to determine the number of days each project's cash resources would last, assuming TCTA does not receive any payments from DWS. The calculation takes the opening cash balance, assuming no additional cash receipts in the foreseeable future, and deducts all the forecasted cash outflows over the period.

Estimated number of days as at 23 August 2018 until exhaustion of cash resources assuming no tariffs are received in the foreseeable future – worst case scenario

Project	Cash balances excluding receivables (1) R million	Days until cash is depleted	Anticipated depletion date	Undrawn liquidity facilities(3) R million	Notes
VRESAP	117	7	31 Aug 18	128	Note 1
MMTS-2 Project Bank account	102	13	6 Sep 18	336	Note 2
ORWRDP	13	67	30 Oct 18	-	Note 3
VRS	1 783	97	29 Nov 18	3 823	Note 4
BWP	105	158	29 Jan 19	700	Note 5
MMTS Savings – Debt service account	170	202	14 Mar 19	-	Note 6
KWSAP	99	>219 days	After March 2019	750	
MCWAP	453	>219 days	After March 2019	200	

(1) This cash balance represents the cash balance as at 23 August 2018. It does not include any forecast inflows from the tariffs.

(2) Expected date at which the cash resources will be depleted.

(3) TCTA has available facilities that enables each project to drawdown if required. This is further supplemented by the Global Facility of R250 million. Except ORWRDP which is funded from the fiscus.

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6. FINANCIAL INSTRUMENT RISK MANAGEMENT (CONTINUED)

Notes:

1. The liquidity risk for VRESAP in the table above is impacted by the maturity of commercial paper on the 30th August 2018 which management is intending to roll forward, this risk would further be mitigated by the use of undrawn facilities of R128m which would be sufficient to meet the projects cash flow requirements until the 31st December 2018. Should this scenario prevail management would then drawdown on the Global facility to meet the expected cash outflows till 31st March 2019. The majority of the Global facility is anticipated to be utilised towards VRESAP.
2. The liquidity risk for MMTS-2 in the table above is impacted by the maturity of commercial paper on the 24th August 2018, this risk is further mitigated by the potential use of undrawn facilities of R336m which would be sufficient to ensure that the estimated cash depletion date (in the event no tariffs are received and no additional funding is obtained) would occur beyond 31 March 2019.
3. ORWRDP is a social project which is fully funded by fiscus contributions and the entity, therefore does not have any borrowing authority for this project.
4. R6.5 billion worth of bank term loans and revolving credit facilities, amounting to R4bn and R2.5bn respectively, were arranged to raise funds for the redemption of the WS05 for the LHWP on 31 July 2018 which took place successfully. R9.2bn was required to redeem the WS05, R6.5bn of which was funded via the new bank facilities, with the balance financed from TCTA savings. LHWP will still have facilities of R3.8bn to use should cash shortfall prevail which would be sufficient to ensure that the estimated cash depletion date (in the event no tariffs are received and no additional funding is obtained) would occur beyond 31 March 2019.
5. The liquidity risk for BWP in the table above is mitigated by the potential use of undrawn facility of R700m. The available facility will be sufficient to ensure that the estimated cash depletion date (in the event no tariffs are received and no additional funding is obtained) would occur beyond 31 March 2019.
6. All tariffs received are ring-fenced in the Project Bank Account as per a loan covenant. When servicing of the debt is due, funds are transferred from the Project Bank Account to the Savings/Debt Service account. Project funding relating to MMTS-2 Project Bank Account combined resources will be sufficient to meet the expected cash outflows of MMTS Savings – Debt service account.

Scenario 2:

- This scenario considers the estimated time from the 23 August 2018 until the date that the cash resources are fully depleted assuming that cash is received through the tariff receivable (including a once off payment of past due amounts) but no additional funding is obtained.
- The table below represents the number of days each project's cash resources would last assuming TCTA receives timely payments (in respect of the tariff receivable) from DWS. The calculation takes the opening cash balance, adds the projected cash flows which assumes a balloon cash injection of outstanding debtors with monthly receipts maintained within the normal payment terms going forward, and deducts all the forecasted cash outflows over the period.

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Estimated number of days as at 23 August 2018 until exhaustion of cash resources assuming the forecast tariff receivable is received within payment terms and DWS catches up on overdue payments – Best case scenario

Project	Cash balances excluding receivables[1] R million	Days until cash is depleted	Anticipated depletion date[2]	Undrawn liquidity facilities[3] R million	Notes
ORWRDP	13	62	30 Oct 18	-	Note 1
VRESAP	1 120	183	28 Feb 19	128	Note 2
MMTS-2 Project Bank account	102	>219 days	After March 2019	336	
BWP	344	>219 days	After March 2019	700	
LHWP	11 371	>219 days	After March 2019	3 823	
MMTS Savings – Debt service account	605	>219 days	After March 2019	-	
KWSAP	378	>219 days	After March 2019	750	
MCWAP	971	>219 days	After March 2019	200	

[1] This represents the available cash resources per project as at 23 August 2018, and then adds to that balance the forecast receipt of tariff receivables and DWS catching up on prior outstanding invoices.

[2] Date at which the cash resources will be depleted.

[3] TCTA has available facilities that enables each project to drawdown if required. This is further supplemented by the Global Facility of R250 million. Except ORWRDP which is funded from the fiscus.

Notes

1. ORWRDP is a social project which is fully funded by fiscus contributions and the entity, therefore does not have any borrowing authority for this project.
2. The liquidity risk for VRESAP in the table above is impacted by the maturity of commercial paper on the 30th August 2018 which management is intending to roll forward, this risk would further be mitigated by the use of undrawn facilities of R128m which would be sufficient to meet the projects cash flow requirements until the 31st March 2019.

Scenario 3:

- This scenario considers the estimated time from the 23 August 2018 until the date that the cash resources are fully depleted assuming that cash is received through the tariff but no additional funding is obtained.
- The table below represents the number of days each project's cash resources would last assuming TCTA receives delayed payments (in respect of the tariff receivable) from DWS. The calculation takes the opening cash balance, adds the projected cash flows taking into consideration the historic trends, and deducts all the forecasted cash outflows over the period. The historic trends are based on the receipt patterns experienced over the past 12 months. DWS has in the past 12 months not paid all invoices on time, resulting in an increase in the debtor amounts past due. This scenario uses the past 12 month's financial year receipt patterns as the basis for determining the timing of the future cash inflows.

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6. FINANCIAL INSTRUMENT RISK MANAGEMENT (CONTINUED)

Estimated number of days as at 23 August 2018 until exhaustion of cash resources assuming the forecast tariff receivable is received using historic trends – base case scenario

Project	Cash balances excluding receivables[(1)] R million	Days until cash is depleted	Anticipated depletion date[(2)]	Undrawn liquidity facilities[(3)] R million	Notes
ORWRDP	13	67	30 Oct 18	-	Note 1
VRESAP	966	115	17 Dec 18	128	Note 2
MMTS-2 Project Bank account	102	>219 days	After March 2019	336	
BWP	344	>219 days	After March 2019	700	
LHWP	9 786	>219 days	After March 2019	3 823	
MMTS Savings – Debt service account	496	>219 days	After March 2019	-	
KWSAP	330	>219 days	After March 2019	750	
MCWAP	900	>219 days	After March 2019	200	

[(1)] This represents the available cash resources per project as at 23 August 2018, and then adds to that balance the forecast receipt of tariff receivables.

[(2)] Date at which the cash resources will be depleted.

[(3)] TCTA has available facilities that enables each project to drawdown if required. This is further supplemented by the Global Facility of R250 million. Except ORWRDP which is funded from the fiscus.

Notes

1. ORWRDP is a social project which is fully funded by fiscus contributions and the entity, therefore does not have any borrowing authority for this project.
2. The liquidity risk for VRESAP in the table above is impacted by the maturity of commercial paper on the 30th August 2018 which management is intending to roll forward, this risk would further be mitigated by the use of undrawn facilities of R128m which would be sufficient to meet the projects cash flow requirements until the 31st March 2019.

TCTA and DWS are presently investigating mechanisms for ring-fencing of the receipt of tariff revenue by DWS from consumers to only be used to repay the tariff that is due to TCTA. This will ensure timely payment of tariffs by DWS to TCTA.

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FOR THE PERIOD ENDED 31 MARCH 2018

6.2.1.1 VRS

A) Financing facilities

Funding sources and utilisation at 31 March :

Total borrowing authority	2018 R million	2017 R million
Global limit [(1)]	36 800	36 900
Utilisation	(18 585)	(20 542)
Available	**18 215**	**16 358**

The table above includes the total utilisation of all facilities, including both local and foreign loans, against the borrowing limit.

[(1)] The Global limit is as set by National Treasury and governs the total limit of gross liabilities of the project. The individual limit is set internally from time to time when markets are suitable to move from one instrument to the other.

Total utilisation of capital market and commercial paper facilities

The following tables reflect the bonds and commercial paper and excludes local and foreign loans as the latter do not have authorised limits.

Each year the Risk and Finance Committee reviews and approves facility utilisation for the financial year.

2018 Approved facilities	Individual limit R million	Issued R million	Available R million	CPI adjusted value [(2)] R million	Outstanding debt [(3)] R million
Total issued to date					
Commercial Paper Programme (including Term Paper)	4 000	77	3 923	-	77
Capital Market – WS04 [(1)]	-	-	-	-	-
Capital Market – WS05	7 000	3 525	3 475	8 804	8 375
Capital Market – WSP1	-	-	-	-	-
Capital Market – WSP2 [(1)]	2 176	-	2 176	-	-
Capital Market – WSP3	1 000	32	968	-	32
Capital Market – WSP4	1 000	97	903	-	95
Capital Market – WSP5 [(1)]	13 824	9 538	4 286	-	9 518
	29 000	**13 269**	**15 731**	**8 804**	**18 097**
Repurchases					
Repurchases for the year	1 000	-	1 000	-	-

[(1)] The borrowing limits for bonds is as approved from time to time by the Risk and Finance Committee and then the Board. The borrowing limits for the bonds is governed by the total acceptable issuance limit of R21 billion.

[(2)] This includes the nominal at the CPI rate.

[(3)] This includes unrealised discount/premium and excludes loan commitments shown in the next table.

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FOR THE PERIOD ENDED 31 MARCH 2018

6. FINANCIAL INSTRUMENT RISK MANAGEMENT (CONTINUED)

2017 Approved facilities	Individual limit R million	Issued R million	Available R million	CPI adjusted value [2] R million	Outstanding debt [3] R million
Total issued to date					
Commercial Paper Programme (including Term Paper)	4 000	182	3 818	-	181
Capital Market – WS04 [1]	-	-	-	-	-
Capital Market – WS05	7 000	3 525	3 475	8 409	7 322
Capital Market – WSP1	-	-	-	-	-
Capital Market – WSP2 [1]	2 176	2 176	-	-	2 177
Capital Market – WSP3	1 000	32	968	-	32
Capital Market – WSP4	1 000	97	903	-	95
Capital Market – WSP5 [1]	13 824	9 538	4 286	-	9 514
	29 000	**15 550**	**13 450**	**8 409**	**19 321**
Repurchases					
Repurchases for the year	1 000	-	1 000	-	-

[1] The borrowing limits for bonds is as approved from time to time by the Risk and Finance Committee and then the Board. The borrowing limits for the bonds is governed by the total acceptable issuance limit of R21 billion.

[2] This includes the nominal at the CPI rate.

[3] This includes unrealised discount/premium and excludes loan commitments shown in the next table.

The limits for commercial paper and the individual bonds are the authorised limits for utilisation of the individual bonds and commercial paper. The aggregate utilisation of the commercial paper and bonds is capped by the total borrowing authority limit.

Loan commitments

Total utilisation of local and foreign loans	2018 Utilisation R million	2017 Utilisation R million	2018 Outstanding debt R million	2017 Outstanding debt R million
Local loans	34	53	34	53
Foreign loans	3	55	3	55
	37	**108**	**37**	**108**

B) Government-guaranteed facilities

TCTA has in place government-guaranteed liquidity facilities of R550 million (2017: R550 million), with commercial banks. These facilities can be drawn upon should the need arise and are, therefore, useful as a liquidity buffer. As at 31 March 2018, these facilities were not utilised (2017: unused).

C) Liquidity and interest risk tables

The liquidity and interest risk tables are included for each project and includes the contractual maturity analysis reports for non-derivative financial assets and liabilities as well as the liquidity analysis for derivatives.

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Contractual maturity analysis report for non-derivative financial assets / (liabilities)

The following tables detail TCTA's remaining contractual maturity for its non-derivative financial assets and liabilities with agreed repayment periods. The tables are based on the undiscounted cash flows of financial assets and liabilities .The tables include the principal cash flows. The contractual maturity is based on the earliest date on which TCTA may be required to pay. The inclusion of information on non-derivative financial assets is necessary in order to understand TCTA's liquidity risk management as the liquidity is managed on a net asset and liability basis. The carrying amounts for financial assets and liabilities are presented in Note 9.5 and 9.6.

As at 31 March, VRS had contractual maturities as summarised below:

2018	Weighted average effective interest rate	Total undiscounted current financial assets / (liabilities)	Non-current financial assets / (liabilities)		Total undiscounted non-current financial assets / (liabilities)	Total undiscounted financial assets / (liabilities)
			1-5 years	>5 years		
Non-derivative financial assets / (liabilities)	%	R million	R million	R million	R million	R million
Financial assets						
Tariff receivable	9,95%	5 370	-	56 795	56 795	62 165
Loans and receivables	Not applicable	53	-	-	-	53
Fixed term investments	8,19%	321	-	-	-	321
Cash and cash equivalents [(1)]	7,01%	2 910	-	-	-	2 910
Financial asset maturities		8 655	-	56 795	56 795	65 450
Financial liabilities						
Bonds	9,09%	(870)	(11 537)	-	(11 537)	(12 407)
CPI-linked bonds	11,54%	(9 250)	(8 637)	-	(8 637)	(17 886)
Commercial paper	6,87%	(2)	-	-	-	(2)
Term paper	8,37%	(75)	(75)		(75)	(150)
Fixed rate loans: Local	10,16%	(9)	(33)	-	(33)	(43)
Variable rate loans: local [(1)]	7,74%	(3)	-	-	-	(3)
Trade and other payables (excluding interest payable) [(2)]	Not applicable	(492)	-	-	-	(492)
Financial liabilities maturities		(10 701)	(20 281)	-	(20 281)	(30 982)
Net financial asset/ (liabilities)		**(2 046)**	**(20 281)**	**56 795**	**36 514**	**34 468**

[(1)] The amounts included above for variable interest rate instruments for both non-derivative assets and liabilities is subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period. The variable interest rate investments are on demand.

[(2)] Accrued interest has been included with the applicable instruments in the table.

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6. FINANCIAL INSTRUMENT RISK MANAGEMENT (CONTINUED)

2017 Non-derivative financial assets / (liabilities)	Weighted average effective interest rate	Total undiscounted current financial assets / (liabilities)	Non-current financial assets / (liabilities) 1-5 years	Non-current financial assets / (liabilities) >5 years	Total undiscounted non-current financial assets / (liabilities)	Total undiscounted financial assets / (liabilities)
	%	R million	R million	R million	R million	R million
Financial assets						
Tariff receivable	9,95%	2 638	-	55 606	55 606	58 244
Loans and receivables	Not applicable	25	-	-	-	25
Fixed term investments	7,68%	2 951	-	-	-	2 951
Cash and cash equivalents [(1)]	7,96%	1 525	-	-	-	1 525
Financial asset maturities		7 139	-	55 606	55 606	62 745
Financial liabilities						
Bonds	9,04%	(3 079)	(12 404)	-	(12 404)	(15 483)
CPI-linked bonds	11,54%	(445)	(8 637)	-	(8 637)	(9 082)
Commercial paper	6,87%	(67)	-	-	-	(67)
Term paper	8,41%	(40)	(75)	-	(75)	(115)
Fixed rate loans: Local	10,16%	(6)	(43)	(1)	(44)	(50)
Fixed rate loans: Foreign	3,00%	(13)	-	-	-	(13)
Variable rate loans: local [(1)]	7,53%	(57)	(3)	-	(3)	(60)
Trade and other payables (excluding interest payable) [(2)]	Not applicable	(426)	-	-	-	(426)
Financial liabilities maturities		(4 133)	(21 162)	(1)	(21 163)	(25 296)
Net financial asset/ (liabilities)		**3 006**	**(21 162)**	**55 605**	**34 443**	**37 449**

[(1)] The amounts included above for variable interest rate instruments for both non-derivative assets and liabilities is subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period. The variable interest rate investments are on demand.

[(2)] Accrued interest has been included with the applicable instruments in the table.

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Liquidity analysis for derivative financial instruments

The following table details TCTA's liquidity analysis for its derivative financial instruments for VRS. The table has been drawn up based on the undiscounted contractual cash inflows and outflows on derivative instruments that settled, and the undiscounted gross inflows and outflows on those derivatives that require gross settlement. The table is drawn up based on actual FEC rates and will, therefore, not tie to the balances at the reporting date. There were no FEC's as at 31 March 2018.

Foreign exchange contracts	2018 R million	2017 R million	2018 EUR million	2017 EUR million
Cash (outflows)/ inflow				
1-3 months	-	-	-	-
3-12 months	-	(14)	-	1
	-	**(14)**	**-**	**1**

The above contractual maturities reflect the net cash outflows and inflows and are therefore different from the carrying values of the liabilities at reporting date.

6.2.1.2 BWP

A) Financing facilities

Funding sources and utilisation at 31 March:

Total borrowing authority	2018 R million	2017 R million
Borrowing limit	770	880
Utilisation	(593)	(720)
Available	**177**	**160**

2018 Utilisation of approved facilities	Individual limit R million	Disbursed [3] R million	Available [3] R million	Outstanding debt R million
Commercial Paper Programme	450	-	450	-
Loan [1]	500	400	-	220
Loan [1] [2] [3]	EUR 100	EUR 100	-	373
Loan	300	-	300	-
			750	**593**

[1] The facilities are not available for further drawdowns.

[2] This is a Euro denominated facility drawn in Rands, and repaid in Rands.

[3] All amounts are in ZAR unless otherwise stated.

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6. FINANCIAL INSTRUMENT RISK MANAGEMENT (CONTINUED)

2017 Utilisation of approved facilities	Individual limit R million	Disbursed [3] R million	Available [3] R million	Outstanding debt R million
Commercial Paper Programme	450	-	450	-
Loan [1]	500	400	-	240
Loan [1] [2] [3]	EUR 100	EUR 100	-	430
Loan	300	50	250	50
			700	**720**

[1] The facilities are not available for further drawdowns.

[2] This is a Euro denominated facility drawn in Rands, and repaid in Rands.

[3] All amounts are in ZAR unless otherwise stated.

B) Liquidity and interest risk tables

The liquidity and interest risk tables are included for each project and includes the contractual maturity analysis reports for non-derivative financial assets and liabilities. There is no liquidity analysis for derivatives as there were no derivative instruments in BWP.

Contractual maturity analysis report for non-derivative financial assets / (liabilities)

The following tables detail TCTA's remaining contractual maturity for its non-derivative financial assets and liabilities with agreed repayment periods. The tables are based on the undiscounted cash flows of financial assets and liabilities .The tables include the principal cash flows. The contractual maturity is based on the earliest date on which TCTA may be required to pay. The inclusion of information on non-derivative financial assets is necessary in order to understand TCTA's liquidity risk management as the liquidity is managed on a net asset and liability basis. The carrying amounts for financial assets and liabilities are presented in Note 9.5 and 9.6.

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FOR THE PERIOD ENDED 31 MARCH 2018

As at 31 March, BWP had contractual maturities as summarised below:

2018 Non-derivative financial assets / (liabilities)	Weighted average effective interest rate %	Total undiscounted current financial assets / (liabilities) R million	Non-current financial assets / (liabilities) 1-5 years R million	 >5 years R million	Total undiscounted non-current financial assets / (liabilities) R million	Total undiscounted financial assets / (liabilities) R million
Financial assets						
Tariff receivable	9,93%	98	320	374	694	792
Cash and cash equivalents [1]	6,30%	72	-	-	-	72
Financial asset maturities		170	320	374	694	864
Financial liabilities						
Fixed rate loans [2]	8,33%	(125)	(437)	(247)	(684)	(809)
Variable rate loans [1][2]	9,33%	-	-	-	-	-
Trade and other payables (excluding interest payable) [3]	Not applicable	(4)	-	-	-	(4)
Financial liabilities maturities		(129)	(437)	(247)	(684)	(813)
Net financial asset/ (liabilities)		**41**	**(117)**	**127**	**10**	**51**

(1) The amounts included above for variable interest rate instruments for both non-derivative assets and liabilities is subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period. The variable interest rate investments are on demand.

(2) Loan repayments are made periodically as per the respective agreements.

(3) Accrued interest has been included with the applicable instruments in the table.

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6. FINANCIAL INSTRUMENT RISK MANAGEMENT (CONTINUED)

2017 Non-derivative financial assets / (liabilities)	Weighted average effective interest rate %	Total undiscounted current financial assets / (liabilities) R million	Non-current financial assets / (liabilities) 1-5 years R million	 >5 years R million	Total undiscounted non-current financial assets / (liabilities) R million	Total undiscounted financial assets / (liabilities) R million
Financial assets						
Tariff receivable	9,93%	198	362	396	758	956
Cash and cash equivalents [(1)]	7,17%	80	-	-	-	80
Financial asset maturities		278	362	396	758	1 036
Financial liabilities						
Fixed rate loans [(2)]	8,32%	(111)	(482)	(347)	(829)	(940)
Variable rate loans [(1)(2)]	9,33%	(4)	(21)	(87)	(108)	(112)
Trade and other payables (excluding interest payable) [(3)]	Not applicable	(3)	-	-	-	(3)
Financial liabilities maturities		(118)	(503)	(434)	(937)	(1 055)
Net financial asset/ (liabilities)		**160**	**(141)**	**(38)**	**(179)**	**(19)**

[(1)] The amounts included above for variable interest rate instruments for both non-derivative assets and liabilities is subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period. The variable interest rate investments are on demand.

[(2)] Loan repayments are made periodically as per the respective agreements.

[(3)] Accrued interest has been included with the applicable instruments in the table.

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6.2.1.3 VRESAP

A) Financing facilities

Funding sources and utilisation at 31 March :

Total borrowing authority	2018 R million	2017 R million
Borrowing limit	4 111	4 156
Utilisation	(3 805)	(3 775)
Available	**306**	**381**

2018 Utilisation of approved facilities	Individual limit R million	Disbursed [2] R million	Available [2] R million	Outstanding debt R million
Commercial Paper Programme	400	393	7	382
Loan [1] [2]	EUR 85	EUR 85	-	645
Loan	1 350	1 350	-	1 353
Loan	1 000	991	9	908
Loan	155	155	-	128
Loan	350	350	-	389
			16	**3 805**

2017 Utilisation of approved facilities	Individual limit R million	Disbursed [2] R million	Available [2] R million	Outstanding debt R million
Commercial Paper Programme	300	192	108	189
Loan [1] [2]	EUR 85	EUR 85	-	697
Loan	1 350	1 350	-	1 425
Loan	1 000	826	174	900
Loan	155	155	-	136
Loan	350	350	-	428
			282	**3 775**

[1] *This is a Euro denominated facility drawn in Rands and repaid in Rands.*

[2] *All amounts are in ZAR unless otherwise stated.*

B) Liquidity and interest risk tables

The liquidity and interest risk tables are included for each project and includes the contractual maturity analysis reports for non-derivative financial assets and liabilities. There is no liquidity analysis for derivatives as there were no derivative instruments in VRESAP.

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6. FINANCIAL INSTRUMENT RISK MANAGEMENT (CONTINUED)

Contractual maturity analysis report for non-derivative financial assets / (liabilities)

The following tables detail TCTA's remaining contractual maturity for its non-derivative financial assets and liabilities with agreed repayment periods. The tables are based on the undiscounted cash flows of financial assets and liabilities .The tables include the principal cash flows. The contractual maturity is based on the earliest date on which TCTA may be required to pay. The inclusion of information on non-derivative financial assets is necessary in order to understand TCTA's liquidity risk management as the liquidity is managed on a net asset and liability basis. The carrying amounts for financial assets and liabilities are presented in Note 9.5 and 9.6.

As at 31 March, VRESAP had contractual maturities as summarised below:

2018 **Non-derivative financial assets / (liabilities)**	**Weighted average effective interest rate**	**Total undiscounted current financial assets / (liabilities)**	**Non-current financial assets / (liabilities)**		**Total undiscounted non-current financial assets / (liabilities)**	**Total undiscounted financial assets / (liabilities)**
			1-5 years	**>5 years**		
	%	**R million**	**R million**	**R million**	**R million**	**R million**
Financial assets						
Tariff receivable	9,83%	580	2 291	3 679	5 970	6 550
Loans and receivables	Not applicable	-	-	-	-	-
Cash and cash equivalents [(1)]	6,84%	82	-	-	-	82
Financial asset maturities		662	2 291	3 679	5 970	6 632
Financial liabilities						
Commercial paper	6,90%	-	-	-	-	-
Term paper	7,58%	(338)	(55)	-	(55)	(393)
Fixed rate loans [(2)]	10,02%	(415)	(1 600)	(2 030)	(3 630)	(4 045)
Variable rate loans [(1)(2)]	9,64%	(97)	(419)	(1 572)	(1 991)	(2 088)
Trade and other payables (excluding interest payable) [(3)]	Not applicable	(14)	-	-	-	(14)
Financial liabilities maturities		(864)	(2 074)	(3 602)	(5 676)	(6 540)
Net financial (liabilities)/ assets		**(202)**	**217**	**77**	**294**	**92**

[(1)] The amounts included above for variable interest rate instruments for both non-derivative assets and liabilities is subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period. The variable interest rate investments are on demand.

[(2)] Loan repayments are made periodically as per the respective agreements.

[(3)] Accrued interest has been included with the applicable instruments in the table.

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2017 Non-derivative financial assets / (liabilities)	Weighted average effective interest rate	Total undiscounted current financial assets / (liabilities)	Non-current financial assets / (liabilities)		Total undiscounted non-current financial assets / (liabilities)	Total undiscounted financial assets / (liabilities)
			1-5 years	>5 years		
	%	R million	R million	R million	R million	R million
Financial assets						
Tariff receivable	9,83%	455	2 106	4 451	6 557	7 012
Loans and receivables	Not applicable	-	-	-	-	-
Cash and cash equivalents (1)	7,00%	60	-	-	-	60
Financial asset maturities		515	2 106	4 451	6 557	7 072
Financial liabilities						
Commercial paper	6,90%	(10)	-	-	-	(10)
Term paper	8,45%	(182)	-	-	-	(182)
Fixed rate loans (2)	9,97%	(420)	(1 621)	(2 420)	(4 041)	(4 461)
Variable rate loans (1)(2)	9,95%	(100)	(425)	(1 734)	(2 159)	(2 259)
Trade and other payables (excluding interest payable) (3)	Not applicable	(12)	-	-	-	(12)
Financial liabilities maturities		(724)	(2 046)	(4 154)	(6 200)	(6 924)
Net financial (liabilities)/ assets		**(209)**	**60**	**297**	**357**	**148**

(1) The amounts included above for variable interest rate instruments for both non-derivative assets and liabilities is subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period. The variable interest rate investments are on demand.

(2) Loan repayments are made periodically as per the respective agreements.

(3) Accrued interest has been included with the applicable instruments in the table.

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6. FINANCIAL INSTRUMENT RISK MANAGEMENT (CONTINUED)

6.2.1.4 LHWP, BWP, VRESAP, KWSAP, MMTS-2 AND MCWAP: GLOBAL BRIDGING FACILITY

A) Financing facilities

In November 2015, National Treasury approved the extension of the borrowing limit of R250 million for the global bridging facility to 31 October 2018. TCTA can only utilise the facility to provide short-term advance funding for expenditure on mandated off-budget water projects and associated advisory services to water sector institutions (i.e. projects that are not reliant on funding from the fiscus). This bridging facility is a short-term financing of the projects pending the finalisation of obtaining long-term funding for these projects. The facility of R250m had not been utilised at the end of the current or prior period.

6.2.1.5 MCWAP

A) Financing facilities

Funding sources and utilisation at 31 March :

Total borrowing authority	2018 R million	2017 R million
Borrowing limit	2 229	2 000
Utilisation	(1 540)	(1 573)
Available	**689**	**427**

2018 Utilisation of approved facilities	Individual limit R million	Disbursed R million	Available R million	Outstanding debt R million
Loan	700	498	-	498
Loan	200	-	200	-
Loan	600	225	-	225
Loan	700	700	-	817
	2 200	**1 423**	**200**	**1 540**

2017 Utilisation of approved facilities	Individual limit R million	Disbursed R million	Available R million	Outstanding debt R million
Loan	700	516	184	516
Loan	200	-	200	-
Loan	600	239	-	239
Loan	700	700	-	818
	2 200	**1 455**	**384**	**1 573**

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B) Liquidity and interest risk tables

The liquidity and interest risk tables are included for each project and includes the contractual maturity analysis reports for non-derivative financial assets and liabilities. There is no liquidity analysis for derivatives as there was no derivative instruments in MCWAP.

Contractual maturity analysis report for non-derivative financial assets / (liabilities)

The following tables detail TCTA's remaining contractual maturity for its non-derivative financial assets and liabilities with agreed repayment periods. The tables are based on the undiscounted cash flows of financial assets and liabilities .The tables include the principal cash flows. The contractual maturity is based on the earliest date on which TCTA may be required to pay. The inclusion of information on non-derivative financial assets is necessary in order to understand TCTA's liquidity risk management as the liquidity is managed on a net asset and liability basis. The carrying amounts for financial assets and liabilities are presented in Note 9.5 and 9.6.

As at 31 March, MCWAP had contractual maturities as summarised below:

2018	Weighted average effective interest rate	Total undiscounted current financial assets / (liabilities)	Non-current financial assets / (liabilities)		Total undiscounted non-current financial assets / (liabilities)	Total undiscounted financial assets / (liabilities)
			1-5 years	>5 years		
Non-derivative financial assets / (liabilities)	**%**	**R million**	**R million**	**R million**	**R million**	**R million**
Financial assets						
Tariff receivable	13,58%	11	-	21 619	21 619	21 630
Cash and cash equivalents [1]	7,11%	474	-	-	-	474
Financial asset maturities		486	-	21 619	21 619	22 104
Financial liabilities						
Fixed rate loans [2]	9,45%	(115)	(485)	(1 499)	(1 984)	(2 099)
Variable rate loans [1][2]	9,29%	(70)	(278)	(671)	(949)	(1 019)
Trade and other payables (excluding interest payable) [3]	Not applicable	(12)	-	-	-	(12)
Financial liabilities maturities		(197)	(763)	(2 170)	(2 933)	(3 130)
Net financial asset/ (liabilities)		**289**	**(763)**	**19 449**	**18 686**	**18 975**

[1] The amounts included above for variable interest rate instruments for both non-derivative assets and liabilities is subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period. The variable interest rate investments are on demand.

[2] Loan repayments are made periodically as per the respective agreements.

[3] Accrued interest has been included with the applicable instruments in the table.

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6. FINANCIAL INSTRUMENT RISK MANAGEMENT (CONTINUED)

2017 Non-derivative financial assets / (liabilities)	Weighted average effective interest rate %	Total undiscounted current financial assets / (liabilities) R million	Non-current financial assets / (liabilities) 1-5 years R million	 >5 years R million	Total undiscounted non-current financial assets / (liabilities) R million	Total undiscounted financial assets / (liabilities) R million
Financial assets						
Tariff receivable	13,58%	771		17 529	17 529	18 300
Cash and cash equivalents [1]	7,18%	447	-	-	-	447
Financial asset maturities		1 218	-	17 529	17 529	18 747
Financial liabilities						
Fixed rate loans [2]	9,45%	(108)	(477)	(1 614)	(2 091)	(2 199)
Variable rate loans [1][2]	9,58%	(73)	(293)	(753)	(1 046)	(1 119)
Trade and other payables (excluding interest payable) [3]	Not applicable	(42)	-	-	-	(42)
Financial liabilities maturities		(223)	(770)	(2 367)	(3 137)	(3 360)
Net financial asset/ (liabilities)		**995**	**(770)**	**15 162**	**14 392**	**15 387**

[1] The amounts included above for variable interest rate instruments for both non-derivative assets and liabilities is subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period. The variable interest rate investments are on demand.

[2] Loan repayments are made periodically as per the respective agreements.

[3] Accrued interest has been included with the applicable instruments in the table.

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6.2.1.6 MMTS-2

A) Financing facilities

Funding sources and utilisation at 31 March :

Total borrowing authority	2018 R million	2017 R million
Borrowing limit	1 966	2 055
Utilisation	(1 817)	(1 935)
Available [3]	**149**	**120**

2018 Utilisation of approved facilities	Individual limit R million	Disbursed [2] R million	Available [2] R million	Outstanding debt R million
Commercial Paper Programme	400	290	110	279
Loan	250	-	250	-
Loan [1][2]	EUR 80	EUR 54	EUR 0	660
Loan [1][2]	EUR 70	EUR 45	EUR 0	539
Loan [1][2]	EUR 45	EUR 29	EUR 0	339
				1 817

2017 Utilisation of approved facilities	Individual limit R million	Disbursed [2] R million	Available [2] R million	Outstanding debt R million
Commercial Paper Programme	400	320	80	308
Loan	250	-	250	-
Loan [1][2]	EUR 80	EUR 54	EUR 0	711
Loan [1][2]	EUR 70	EUR 45	EUR 0	562
Loan [1][2]	EUR 45	EUR 29	EUR 0	354
				1 935

[1] *These are Euro denominated facilities drawn in Rands and repaid in Rands.*

[2] *All amounts are in ZAR unless otherwise stated.*

[3] *Before the funding strategy is implemented, the borrowing limit is monitored to ensure it is not exceeded.*

B) Liquidity and interest risk tables

The liquidity and interest risk tables are included for each project and includes the contractual maturity analysis reports for non-derivative financial assets and liabilities. There is no liquidity analysis for derivatives as there were no derivative instruments in MMTS-2.

Contractual maturity analysis report for non-derivative financial assets / (liabilities)

The following tables detail TCTA's remaining contractual maturity for its non-derivative financial assets and liabilities with agreed repayment periods. The tables are based on the undiscounted cash flows of financial

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6. FINANCIAL INSTRUMENT RISK MANAGEMENT (CONTINUED)

assets and liabilities .The tables include the principal cash flows. The contractual maturity is based on the earliest date on which TCTA may be required to pay. The inclusion of information on non-derivative financial assets is necessary in order to understand TCTA's liquidity risk management as the liquidity is managed on a net asset and liability basis. The carrying amounts for financial assets and liabilities are presented in Note 9.5 and 9.6.

As at 31 March , MMTS-2 had contractual maturities as summarised below:

Contractual maturity analysis report for non-derivative financial liabilities

2018	Weighted average effective interest rate	Total undiscounted current financial assets / (liabilities)	Non-current financial assets / (liabilities)		Total undiscounted non-current financial assets / (liabilities)	Total undiscounted financial assets / (liabilities)
			1-5 years	>5 years		
Non-derivative financial assets / (liabilities)	%	R million	R million	R million	R million	R million
Financial assets						
Tariff receivable	9,31%	252	708	1 867	2 575	2 827
Loans and receivables	Not applicable	22	-	-	-	22
Fixed term investments	7,02%	50	-	-	-	50
Cash and cash equivalents [(1)]	6,44%	209	-	-	-	209
Financial asset maturities		533	708	1 867	2 575	3 108
Financial liabilities						
Term paper	7,88%	(290)	-	-	-	(290)
Fixed rate loans	8,93%	(109)	(389)	(560)	(949)	(1 058)
Variable rate loans [(1)(2)]	9,71%	(124)	(484)	(1 050)	(1 534)	(1 658)
Trade and other payables (excluding interest payable) [(3)]	Not applicable	(43)	-	-	-	(43)
Financial liabilities maturities		(566)	(873)	(1 610)	(2 483)	(3 049)
Net financial asset/ (liabilities)		**(33)**	**(164)**	**257**	**92**	**59**

[(1)] The amounts included above for variable interest rate instruments for both non-derivative assets and liabilities is subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period. The variable interest rate investments are on demand.

[(2)] Loan repayments are made periodically as per the respective agreements.

[(3)] Accrued interest has been included with the applicable instruments in the table.

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2017 Non-derivative financial assets / (liabilities)	Weighted average effective interest rate %	Total undiscounted current financial assets / (liabilities) R million	Non-current financial assets / (liabilities) 1-5 years R million	 >5 years R million	Total undiscounted non-current financial assets / (liabilities) R million	Total undiscounted financial assets / (liabilities) R million
Financial assets						
Tariff receivable	9,31%	124	737	2 278	3 014	3 138
Loans and receivables	Not applicable	26	-	-	-	26
Fixed term investments	7,76%	101	-	-	-	101
Cash and cash equivalents [(1)]	6,91%	263	-	-	-	263
Financial asset maturities		514	737	2 278	3 014	3 528
Financial liabilities						
Term paper	7,92%	(320)	-	-	-	(320)
Fixed rate loans	8,93%	(113)	(407)	(651)	(1 058)	(1 171)
Variable rate loans [(1) (2)]	10,45%	(135)	(513)	(1 167)	(1 680)	(1 815)
Trade and other payables (excluding interest payable) [(3)]	Not applicable	(44)	-	-	-	(44)
Financial liabilities maturities		(612)	(920)	(1 818)	(2 738)	(3 350)
Net financial asset/ (liabilities)		**(98)**	**(183)**	**459**	**276**	**178**

[(1)] The amounts included above for variable interest rate instruments for both non-derivative assets and liabilities is subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period. The variable interest rate investments are on demand.

[(2)] Loan repayments are made periodically as per the respective agreements.

[(3)] Accrued interest has been included with the applicable instruments in the table.

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6. FINANCIAL INSTRUMENT RISK MANAGEMENT (CONTINUED)

6.2.1.7 ORWRDP

ORWRDP is funded through the fiscus, hence there are no financing facilities for this project.

A) Liquidity and interest risk tables

The liquidity and interest risk tables are included for each project and includes the contractual maturity analysis reports for non-derivative financial assets and liabilities. There is no liquidity analysis for derivatives as there were no derivative instruments in ORWRDP.

Contractual maturity analysis report for non-derivative financial assets / (liabilities)

The following tables detail TCTA's remaining contractual maturity for its non-derivative financial assets and liabilities with agreed repayment periods. The tables are based on the undiscounted cash flows of financial assets and liabilities .The tables include the principal cash flows. The contractual maturity is based on the earliest date on which TCTA may be required to pay. The inclusion of information on non-derivative financial assets is necessary in order to understand TCTA's liquidity risk management as the liquidity is managed on a net asset and liability basis. The carrying amounts for financial assets and liabilities are presented in Note 9.5 and 9.6.

As at 31 March , ORWRDP had contractual maturities as summarised below:

2018	Weighted average effective interest rate	Total undiscounted current financial assets / (liabilities)	Non-current financial assets / (liabilities)		Total undiscounted non-current financial assets / (liabilities)	Total undiscounted financial assets / (liabilities)
			1-5 years	>5 years		
Non-derivative financial assets / (liabilities)	%	R million	R million	R million	R million	R million
Financial assets						
Loans and receivables	Not applicable	78	-	-	-	78
Cash and cash equivalents [(1)]	6,26%	1	-	-	-	1
Financial asset maturities		79	-	-	-	79
Financial liabilities						
Trade and other payables	Not applicable	(106)	-	-	-	(106)
Financial liabilities maturities		(106)	-	-	-	(106)
Net financial asset/ (liabilities)		**(27)**	**-**	**-**	**-**	**(27)**

[(1)] The amounts included above for variable interest rate instruments for both non-derivative assets and liabilities is subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period. The variable interest rate investments are on demand.

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2017 Non-derivative financial assets / (liabilities)	Weighted average effective interest rate %	Total undiscounted current financial assets / (liabilities) R million	Non-current financial assets / (liabilities) 1-5 years R million	 >5 years R million	Total undiscounted non-current financial assets / (liabilities) R million	Total undiscounted financial assets / (liabilities) R million
Financial assets						
Loans and receivables	Not applicable	-	-	-	-	-
Cash and cash equivalents [1]	6,94%	30	-	-	-	30
Financial asset maturities		30	-	-	-	30
Financial liabilities						
Trade and other payables	Not applicable	(97)	-	-	-	(97)
Financial liabilities maturities		(97)	-	-	-	(97)
Net financial asset/ (liabilities)		**(67)**	**-**	**-**	**-**	**(67)**

[1] The amounts included above for variable interest rate instruments for both non-derivative assets and liabilities is subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period. The variable interest rate investments are on demand.

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6. FINANCIAL INSTRUMENT RISK MANAGEMENT (CONTINUED)

6.2.1.8 KWSAP

A) Financing facilities

Funding sources and utilisation at 31 March :

Total borrowing authority	2018 R million	2017 R million
Borrowing limit	1 419	1 419
Utilisation	(1 262)	(1 313)
Available	**157**	**106**

2018 Utilisation of approved facilities	Individual limit R million	Disbursed R million	Available R million	Outstanding debt R million
Commercial Paper Programme	500	-	500	-
Loan	400	369	31	346
Loan	600	600	-	916
Loan	250	-	250	-
	1 750	**969**	**781**	**1 262**

2017 Utilisation of approved facilities	Individual limit R million	Disbursed R million	Available R million	Outstanding debt R million
Commercial Paper Programme	500	-	500	-
Loan	400	369	-	369
Loan	600	600	-	944
Loan	250	-	250	-
	1 750	**969**	**750**	**1 313**

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B) Liquidity and interest risk tables

The liquidity and interest risk tables are included for each project and includes the contractual maturity analysis reports for non-derivative financial assets and liabilities. There is no liquidity analysis for derivatives as there were no derivative instruments in KWSAP.

Contractual maturity analysis report for non-derivative financial assets / (liabilities)

The following tables detail TCTA's remaining contractual maturity for its non-derivative financial assets and liabilities with agreed repayment periods. The tables are based on the undiscounted cash flows of financial assets and liabilities .The tables include the principal cash flows. The contractual maturity is based on the earliest date on which TCTA may be required to pay. The inclusion of information on non-derivative financial assets is necessary in order to understand TCTA's liquidity risk management as the liquidity is managed on a net asset and liability basis. The carrying amounts for financial assets and liabilities are presented in Note 9.5 and 9.6.

As at 31 March, KWSAP had contractual maturities as summarised below:

2018	Weighted average effective interest rate	Total undiscounted current financial assets / (liabilities)	Non-current financial assets / (liabilities)		Total undiscounted non-current financial assets / (liabilities)	Total undiscounted financial assets / (liabilities)
			1-5 years	>5 years		
Non-derivative financial assets / (liabilities)	%	R million	R million	R million	R million	R million
Financial assets						
Tariff receivable	10,51%	166	569	1 661	2 230	2 396
Cash and cash equivalents [1]	6,77%	70	-	-	-	70
Financial asset maturities		236	569	1 661	2 230	2 466
Financial liabilities						
Term paper					-	-
Fixed rate loans [2]	9,59%	(102)	(472)	(1 305)	(1 777)	(1 879)
Variable rate loans [1][2]	8,82%	(24)	(147)	(541)	(688)	(712)
Trade and other payables (excluding interest payable) [3]	Not applicable	(11)	-	-	-	(11)
Financial liabilities maturities		(137)	(619)	(1 846)	(2 465)	(2 602)
Net financial asset/ (liabilities)		**99**	**(50)**	**(185)**	**(235)**	**(134)**

[1] The amounts included above for variable interest rate instruments for both non-derivative assets and liabilities is subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period. The variable interest rate investments are on demand.

[2] Loan repayments are made periodically as per the respective agreements.

[3] Accrued interest has been included with the applicable instruments in the table.

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6. FINANCIAL INSTRUMENT RISK MANAGEMENT (CONTINUED)

2017 Non-derivative financial assets / (liabilities)	Weighted average effective interest rate	Total undiscounted current financial assets / (liabilities)	Non-current financial assets / (liabilities)		Total undiscounted non-current financial assets / (liabilities)	Total undiscounted financial assets / (liabilities)
			1-5 years	>5 years		
	%	R million	R million	R million	R million	R million
Financial assets						
Tariff receivable	10,51%	111	580	1 770	2 350	2 461
Cash and cash equivalents [(1)]	7,19%	154	-	-	-	154
Financial asset maturities		265	580	1 770	2 350	2 615
Financial liabilities						
Term paper					-	-
Fixed rate loans [(2)]	9,59%	(58)	(453)	(1 455)	(1 908)	(1 966)
Variable rate loans [(1)(2)]	9,31%	-	(191)	(812)	(1 003)	(1 003)
Trade and other payables (excluding interest payable) [(3)]	Not applicable	(16)	-	-	-	(16)
Financial liabilities maturities		(74)	(644)	(2 267)	(2 911)	(2 985)
Net financial asset/ (liabilities)		**191**	**(64)**	**(497)**	**(561)**	**(370)**

[(1)] The amounts included above for variable interest rate instruments for both non-derivative assets and liabilities is subject to change if changes in variable interest rates differ to those estimates of interest rates determined at the end of the reporting period. The variable interest rate investments are on demand.

[(2)] Loan repayments are made periodically as per the respective agreements.

[(3)] Accrued interest has been included with the applicable instruments in the table.

6.2.1.9 MMTS- 1

A) Liquidity and interest risk tables

This project comprises the refurbishment of the existing transfer scheme from Mearns Weir into the Mgeni system and the project is funded from the fiscus.

Contractual maturity analysis report for non-derivative financial assets / (liabilities)

The following tables detail TCTA's remaining contractual maturity for its non-derivative financial assets and liabilities with agreed repayment periods. The tables are based on the undiscounted cash flows of financial assets and liabilities .The tables include the principal cash flows. The contractual maturity is based on the earliest date on which TCTA may be required to pay. The inclusion of information on non-derivative financial assets is necessary in order to understand TCTA's liquidity risk management as the liquidity is managed on a net asset and liability basis. The carrying amounts for financial assets and liabilities are presented in Note 9.5 and 9.6.

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As at 31 March , MMTS-1 had contractual maturities as summarised below:

2018 Non-derivative financial assets / (liabilities)	Weighted average effective interest rate %	Total undiscounted current financial assets / (liabilities) R million	Non-current financial assets / (liabilities) 1-5 years R million	>5 years R million	Total undiscounted non-current financial assets / (liabilities) R million	Total undiscounted financial assets / (liabilities) R million
Financial assets						
Loans and receivables	Not applicable	1	-	-	-	1
Financial asset maturities		1	-	-	-	1
Financial liabilities						
Trade and other payables	Not applicable	(1)	-	-	-	(1)
Financial liabilities maturities		(1)	-	-	-	(1)
Net financial asset/ (liabilities)		-	-	-	-	-

2017 Non-derivative financial assets / (liabilities)	Weighted average effective interest rate %	Total undiscounted current financial assets / (liabilities) R million	Non-current financial assets / (liabilities) 1-5 years R million	>5 years R million	Total undiscounted non-current financial assets / (liabilities) R million	Total undiscounted financial assets / (liabilities) R million
Financial assets						
Loans and receivables	Not applicable	-	-	-	-	-
Financial asset maturities		-	-	-	-	-
Financial liabilities						
Trade and other payables	Not applicable	-	-	-	-	-
Financial liabilities maturities		-	-	-	-	-
Net financial asset/ (liabilities)		-	-	-	-	-

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6. FINANCIAL INSTRUMENT RISK MANAGEMENT (CONTINUED)

6.2.1.10 UMGENI

A) Liquidity and interest risk tables

This project comprises the construction of a potable water pipeline from the water treatment works at the Spring Grove Dam to a terminal reservoir at Nottingham Road and the project is funded by Umgeni Water.

Contractual maturity analysis report for non-derivative financial assets / (liabilities)

The following tables detail TCTA's remaining contractual maturity for its non-derivative financial assets and liabilities with agreed repayment periods. The tables are based on the undiscounted cash flows of financial assets and liabilities .The tables include the principal cash flows. The contractual maturity is based on the earliest date on which TCTA may be required to pay. The inclusion of information on non-derivative financial assets is necessary in order to understand TCTA's liquidity risk management as the liquidity is managed on a net asset and liability basis. The carrying amounts for financial assets and liabilities are presented in Note 9.5 and 9.6.

As at 31 March, UMGENI had contractual maturities as summarised below:

2018	Weighted average effective interest rate	Total undiscounted current financial assets / (liabilities)	Non-current financial assets / (liabilities)		Total undiscounted non-current financial assets / (liabilities)	Total undiscounted financial assets / (liabilities)
			1-5 years	>5 years		
Non-derivative financial assets / (liabilities)	%	R million	R million	R million	R million	R million
Financial assets						
Loans and receivables	Not applicable	17	-	-	-	17
Financial asset maturities		17	-	-	-	17
Financial liabilities						
Trade and other payables	Not applicable	(13)	-	-	-	(13)
Financial liabilities maturities		(13)	-	-	-	(13)
Net financial asset/ (liabilities)		**4**	**-**	**-**	**-**	**4**

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2017 Non-derivative financial assets / (liabilities)	Weighted average effective interest rate %	Total undiscounted current financial assets / (liabilities) R million	Non-current financial assets / (liabilities) 1-5 years R million	>5 years R million	Total undiscounted non-current financial assets / (liabilities) R million	Total undiscounted financial assets / (liabilities) R million
Financial assets						
Loans and receivables	Not applicable	16	-	-	-	16
Financial asset maturities		16	-	-	-	16
Financial liabilities						
Trade and other payables	Not applicable	(12)	-	-	-	(12)
Financial liabilities maturities		(12)	-	-	-	(12)
Net financial asset/ (liabilities)		**4**	**-**	**-**	**-**	**4**

6.2.1.11 KRIEL

A) Liquidity and interest risk tables

This project comprises the construction of a 3-km pipeline from the KWSAP to Kriel Water treatment works and the upgrading of the works.

Contractual maturity analysis report for non-derivative financial assets / (liabilities)
The following tables detail TCTA's remaining contractual maturity for its non-derivative financial assets and liabilities with agreed repayment periods. The tables are based on the undiscounted cash flows of financial assets and liabilities. The tables include the principal cash flows. The contractual maturity is based on the earliest date on which TCTA may be required to pay. The inclusion of information on non-derivative financial assets is necessary in order to understand TCTA's liquidity risk management as the liquidity is managed on a net asset and liability basis. The carrying amounts for financial assets and liabilities are presented in Note 9.5 and 9.6.

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6. FINANCIAL INSTRUMENT RISK MANAGEMENT (CONTINUED)

As at 31 March, KRIEL had contractual maturities as summarised below:

2018	Weighted average effective interest rate	Total undiscounted current financial assets / (liabilities)	Non-current financial assets / (liabilities)		Total undiscounted non-current financial assets / (liabilities)	Total undiscounted financial assets / (liabilities)
			1-5 years	>5 years		
Non-derivative financial assets / (liabilities)	%	R million	R million	R million	R million	R million
Financial assets						
Loans and receivables	Not applicable	6	-	-	-	6
Financial asset maturities		6	-	-	-	6
Financial liabilities						
Trade and other payables	Not applicable	(6)	-	-	-	(6)
Financial liabilities maturities		(6)	-	-	-	(6)
Net financial asset/ (liabilities)		-	-	-	-	-

2017	Weighted average effective interest rate	Total undiscounted current financial assets / (liabilities)	Non-current financial assets / (liabilities)		Total undiscounted non-current financial assets / (liabilities)	Total undiscounted financial assets / (liabilities)
			1-5 years	>5 years		
Non-derivative financial assets / (liabilities)	%	R million	R million	R million	R million	R million
Financial assets						
Loans and receivables	Not applicable	13	-	-	-	13
Financial asset maturities		13	-	-	-	13
Financial liabilities						
Trade and other payables	Not applicable	(13)	-	-	-	(13)
Financial liabilities maturities		(13)	-	-	-	(13)
Net financial asset/ (liabilities)		-	-	-	-	-

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6.2.1.12 MRWP

A) Liquidity and interest risk tables

Contractual maturity analysis report for non-derivative financial assets / (liabilities)

The following tables detail TCTA's remaining contractual maturity for its non-derivative financial assets and liabilities with agreed repayment periods. The tables are based on the undiscounted cash flows of financial assets and liabilities .The tables include the principal cash flows. The contractual maturity is based on the earliest date on which TCTA may be required to pay. The inclusion of information on non-derivative financial assets is necessary in order to understand TCTA's liquidity risk management as the liquidity is managed on a net asset and liability basis. The carrying amounts for financial assets and liabilities are presented in Note 9.5 and 9.6.

As at 31 March, MRWP had contractual maturities as summarised below:

2018	Weighted average effective interest rate	Total undiscounted current financial assets / (liabilities)	Non-current financial assets / (liabilities)		Total undiscounted non-current financial assets / (liabilities)	Total undiscounted financial assets / (liabilities)
			1-5 years	>5 years		
Non-derivative financial assets / (liabilities)	%	R million	R million	R million	R million	R million
Financial assets						
Loans and receivables	Not applicable	17	-	-	-	17
Financial asset maturities		17	-	-	-	17
Financial liabilities						
Trade and other payables	Not applicable	(12)	-	-	-	(12)
Financial liabilities maturities		(12)	-	-	-	(12)
Net financial asset/ (liabilities)		**5**	**-**	**-**	**-**	**5**

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FOR THE PERIOD ENDED 31 MARCH 2018

6. FINANCIAL INSTRUMENT RISK MANAGEMENT (CONTINUED)

6.2.1.13 TCTA-Corporate

A) Liquidity and interest risk tables

Contractual maturity analysis report for non-derivative financial assets / (liabilities)

The following tables detail TCTA's remaining contractual maturity for its non-derivative financial assets and liabilities with agreed repayment periods. The tables are based on the undiscounted cash flows of financial assets and liabilities .The tables include the principal cash flows. The contractual maturity is based on the earliest date on which TCTA may be required to pay. The inclusion of information on non-derivative financial assets is necessary in order to understand TCTA's liquidity risk management as the liquidity is managed on a net asset and liability basis. The carrying amounts for financial assets and liabilities are presented in Note 9.5 and 9.6.

As at 31 March, TCTA-Corporate had contractual maturities as summarised below:

2018	Weighted average effective interest rate	Total undiscounted current financial assets / (liabilities)	Non-current financial assets / (liabilities)		Total undiscounted non-current financial assets / (liabilities)	Total undiscounted financial assets / (liabilities)
			1-5 years	>5 years		
Non-derivative financial assets / (liabilities)	**%**	**R million**	**R million**	**R million**	**R million**	**R million**
Financial assets						
Loans and receivables	Not applicable	31	-	-	-	31
Financial asset maturities		31	-	-	-	31
Financial liabilities						
Trade and other payables	Not applicable	(31)	-	-	-	(31)
Financial liabilities maturities		(31)	-	-	-	(31)
Net financial asset/ (liabilities)		-	-	-	-	-

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6.2.2. Credit risk

TCTA invests excess funds with counterparties and this exposes the organisation to credit risk. Credit risk is defined as the risk that a counterparty defaults on its obligations on maturity or redemption or presentation of paper for settlement, resulting in financial deficit to TCTA.

The credit risk is in two forms i.e. (i) the risk of financial deficit resulting from the failure of a counterparty to honour its obligations in accordance with the terms and conditions of a contract or (ii) the risk of financial deficit resulting from the failure of a counterparty to a financial transaction to effect timely settlement, in the correct amount and currency, of its obligations according to the terms and conditions of the relevant transaction(s). This section relates to the credit risk on financial market investments and derivatives as disclosed in the statement of financial position. Refer to note 9.4 for the assessment of the credit quality of the tariff receivable and note 9.2 for loans and other receivables.

TCTA has adopted a policy of only dealing with creditworthy counterparties and obtaining sufficient collateral, where appropriate, as a means of mitigating the risk of financial deficit from defaults. TCTA only transacts with entities that are rated the equivalent of investment grade and above. In terms of policy, TCTA will only invest with counterparties with a long-term rating of A or better. This information is supplied by independent rating agencies where available and, if not available, TCTA uses other publicly available financial information and its own trading records to rate its major customers. TCTA's exposure and the credit ratings of its counterparties are continuously monitored and the aggregate value of transactions concluded is spread amongst approved counterparties. Credit exposure is controlled by setting counterparty limits that are reviewed and approved by the Risk and Finance Committee annually.

Hence, credit risk at TCTA is managed through the following:

- ensuring that TCTA deals with reputable counterparties;
- liaison with credit rating agencies;
- allocating counterparty investment limits;
- continuous monitoring of the financial status of counterparties;
- annual review of counterparty limits; and
- daily monitoring of utilisation of counterparty limits.
- Limits are allocated based on the following:
- limits are allocated to counterparties with a minimum short-term rating of P-1 and long-term rating of A from Moody's rating agency, or the equivalent from the other rating agencies;
- an internal credit rating score is calculated based on qualitative and quantitative factors;
- the allocated credit limit can be up to 10% of shareholders' funds, depending on the internal credit rating, with a cap of R 1 500 million per counterparty; and
- the credit limit consumption of forward exchange contracts (FECs) with commercial banks is determined according to the Risk Policy whereby the maximum of a calculated risk weighting value or the mark-to-market value of an instrument will be used as the consumption against the credit limit of a specific counterparty.

To further mitigate against the credit risk associated with derivative instruments, TCTA has negotiated International Swap and Derivatives Association Master Agreement (ISDA) agreements with the various market-makers.
The credit limit per counterparty refers to the overall limit for all TCTA projects. Refer to note 5.2.2.1 to 5.2.2.7 for further detail for each project.

Concentration risk

Concentration risk in TCTA is measured per counterparty and per project. According to TCTA policy, the utilisation of a counterparty limit is subject to a 30% concentration limit per counterparty. The concentration limit is further extended to projects whereby investment to a counterparty should not exceed 30% of a single project funds. This ensures that the portfolio is sufficiently diversified and is exposed to acceptable levels of risk. For each project, the amount of risk exposure to counterparties varies on a day-to-day basis depends on volumes of trades done. TCTA determines this exposure daily and prepares a report before any dealing is performed. Exception to the limits requires an approval through exception reporting by the Risk department.

Similar credit ratings in the notes below, refer to different counterparties and are therefore not combined.

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6. FINANCIAL INSTRUMENT RISK MANAGEMENT (CONTINUED)

VRS

Financial instruments and cash deposits

The table below reflects the utilisation per counterparty against the credit limit at 31 March:

Moody's Ratings:			2018		Moody's Ratings:			2017	
Short-term	Long-term	Credit limit R million	Total utilisation(1) R million	Available R million	Short-term	Long-term	Credit limit R million	Total utilisation(1) R million	Available R million
P-1	Aa1	1 500	122	1 378	P-1	Aa1	1 500	781	719
P-1	Aa1	1 500	249	1 251	P-1	Aa1	1 500	492	1 008
P-1	Aa1	1 500	180	1 320	P-1	Aa1	1 500	670	830
P-1	Aaa	1 500	84	1 416	P-1	Aaa	1 500	356	1 144
P-1	Aa1	1 500	395	1 105	P-1	Aa1	1 500	843	657
	***	*	138	-		***	*	278	-
	***	**	1 385	-		***	**	5	-
	***	*	482	-		***	*	715	-
	***	*	225	-		***	*	347	-
		-	-	-	P-1	A1	500	1	499
		7 500	**3 260**	**6 470**			**8 000**	**4 488**	**4 857**

(1) The total utilisation includes derivatives.

** These three counterparties in total are subject to a maximum of 30% of the project funds*

*** This investment or counterparty is subject to a maximum of 50% of the project funds*

**** Moodys does not rate these investments. This is a fund of a counterparty, and not a separate counterparty.*

BWP

Financial instruments and cash deposits

The table below reflects the utilisation per counterparty against the credit limit at 31 March:

Moody's Ratings:			2018		Moody's Ratings:			2017	
Short-term	Long-term	Credit limit R million	Total utilisation R million	Available R million	Short-term	Long-term	Credit limit R million	Total utilisation R million	Available R million
P-1	Aa1	1 500	7	1 493	P-1	Aa1	1 500	10	1 490
P-1	Aa1	1 500	15	1 486	P-1	Aa1	1 500	13	1 487
P-1	Aaa	1 500	14	1 486	P-1	Aaa	1 500	17	1 483
P-1	Aa1	1 500	15	1 485	P-1	Aa1	1 500	18	1 482
	***	*	-	-		***	*	4	-
	***	*	1	-		***	*	12	-
	***	*	-	-		***	*	7	-
		6 000	**52**	**5 950**			**6 000**	**81**	**5 942**

** These three counterparties in total are subject to a maximum of 30% of the project funds*

*** This investment or counterparty is subject to a maximum of 50% of the project funds*

**** Moodys does not rate these investments. This is a fund of a counterparty, and not a separate counterparty.*

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VRESAP

Financial instruments and cash deposits

The table below reflects the utilisation per counterparty against the credit limit at 31 March:

Moody's Ratings:		2018			Moody's Ratings:		2017		
Short-term	Long-term	Credit limit R million	Total utilisation R million	Available R million	Short-term	Long-term	Credit limit R million	Total utilisation R million	Available R million
P-1	Aa1	1 500	8	1 492	P-1	Aa1	1 500	8	1 492
P-1	Aa1	1 500	15	1 486	P-1	Aa1	1 500	14	1 486
P-1	Aaa	1 500	14	1 486	P-1	Aaa	1 500	15	1 485
P-1	Aa1	1 500	14	1 486	P-1	Aa1	1 500	14	1 486
	***	*	5	-		***	*	-	-
	***	**	7	-		***	**	-	-
	***	*	13	-		***	*	6	-
	***	*	6	-		***	*	4	-
		6 000	**82**	**5 950**			**6 000**	**61**	**5 949**

** These three counterparties in total are subject to a maximum of 30% of the project funds*
*** This investment or counterparty is subject to a maximum of 50% of the project funds*
**** Moodys does not rate these investments. This is a fund of a counterparty, and not a separate counterparty.*

MCWAP

Financial instruments and cash deposits

The table below reflects the utilisation per counterparty against the credit limit at 31 March:

Moody's Ratings:		2018			Moody's Ratings:		2017		
Short-term	Long-term	Credit limit R million	Total utilisation R million	Available R million	Short-term	Long-term	Credit limit R million	Total utilisation R million	Available R million
P-1	Aa1	1 500	47	1 454	P-1	Aa1	1 500	66	1 434
P-1	Aa1	1 500	1	1 499	P-1	Aa1	1 500	70	1 430
P-1	Aaa	1 500	-	1 500	P-1	Aaa	1 500	53	1 447
P-1	Aa1	1 500	51	1 449	P-1	Aa1	1 500	128	1 372
	***	*	24	-		***	*	24	-
	***	**	236	-		***	**	1	-
	***	*	78	-		***	*	67	-
	***	*	37	-		***	*	39	-
		6 000	**474**	**5 902**			**6 000**	**448**	**5 683**

** These three counterparties in total are subject to a maximum of 30% of the project funds*
*** This investment or counterparty is subject to a maximum of 50% of the project funds*
**** Moodys does not rate these investments. This is a fund of a counterparty, and not a separate counterparty.*

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6. FINANCIAL INSTRUMENT RISK MANAGEMENT (CONTINUED)

MMTS-2

Financial instruments and cash deposits

The table below reflects the utilisation per counterparty against the credit limit at 31 March:

Moody's Ratings:		2018			Moody's Ratings:		2017		
Short-term	Long-term	Credit limit R million	Total utilisation R million	Available R million	Short-term	Long-term	Credit limit R million	Total utilisation R million	Available R million
P-1	Aa1	1 500	162	1 338	P-1	Aa1	1 500	202	1 298
P-1	Aa1	1 500	14	1 486	P-1	Aa1	1 500	22	1 478
P-1	Aa1	1 500	6	1 494	P-1	Aa1	1 500	28	1 472
P-1	Aaa	1 500	7	1 493	P-1	Aaa	1 500	29	1 471
P-1	Aa1	1 500	24	1 476	P-1	Aa1	1 500	36	1 464
	***	*	5	-		***	*	11	-
	***	**	18	-		***	**	-	-
	***	*	14	-		***	*	30	-
	***	*	9	-		***	*	7	-
		7 500	**259**	**7 287**			**7 500**	**365**	**7 172**

** These three counterparties in total are subject to a maximum of 30% of the project funds*
*** This investment or counterparty is subject to a maximum of 50% of the project funds*
**** Moodys does not rate these investments. This is a fund of a counterparty, and not a separate counterparty.*

ORWRDP

Financial instruments and cash deposits

The table below reflects the utilisation per counterparty against the credit limit at 31 March:

Moody's Ratings:		2018			Moody's Ratings:		2017		
Short-term	Long-term	Credit limit R million	Total utilisation R million	Available R million	Short-term	Long-term	Credit limit R million	Total utilisation R million	Available R million
P-1	Aa1	1 500	-	1 500	P-1	Aa1	1 500	5	1 495
P-1	Aa1	1 500	-	1 500	P-1	Aa1	1 500	3	1 497
P-1	Aa1	1 500	-	1 500	P-1	Aa1	1 500	5	1 495
P-1	Aaa	1 500	-	1 500	P-1	Aaa	1 500	8	1 492
P-1	Aa1	1 500	1	1 499	P-1	Aa1	1 500	8	1 492
A1	A1	500	-	500	A1	A1	500	1	499
		8 000	**1**	**7 999**			**8 000**	**30**	**7 970**

** These three counterparties in total are subject to a maximum of 30% of the project funds*
*** This investment or counterparty is subject to a maximum of 50% of the project funds*
**** Moodys does not rate these investments. This is a fund of a counterparty, and not a separate counterparty.*

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KWSAP

Financial instruments and cash deposits

The table below reflects the utilisation per counterparty against the credit limit at 31 March:

Moody's Ratings:			2018		Moody's Ratings:			2017	
Short-term	Long-term	Credit limit R million	Total utilisation R million	Available R million	Short-term	Long-term	Credit limit R million	Total utilisation R million	Available R million
P-1	Aa1	1 500	10	1 491	P-1	Aa1	1 500	18	1 482
P-1	Aa1	1 500	13	1 487	P-1	Aa1	1 500	30	1 470
P-1	Aaa	1 500	11	1 490	P-1	Aaa	1 500	27	1 473
P-1	Aa1	1 500	18	1 482	P-1	Aa1	1 500	33	1 467
	***	*	2	-		***	*	6	-
	***	*	10	-		***	*	24	-
	***	*	6	-		***	*	15	-
		6 000	**70**	**5 950**			**6 000**	**153**	**5 892**

** These three counterparties in total are subject to a maximum of 30% of the project funds*

*** This investment or counterparty is subject to a maximum of 50% of the project funds*

**** Moodys does not rate these investments. This is a fund of a counterparty, and not a separate counterparty.*

MMTS-1

There are no investments for the current year (2017: none).

UMGENI

There are no investments for the current year (2017: none).

KRIEL

There are no investments for the current year (2017: none).

6.2.3. Market risk

Market risk is the risk that the fair value or cash flows of a financial instrument will fluctuate due to change in market prices. Market risk reflects currency risk, interest rate risk, and other price risks.

TCTA's activities expose it primarily to the financial risks of changes in interest rates. Foreign exchange is currently small as only 1% of borrowings are foreign currency denominated.

Foreign currency risk management

The few transactions denominated in foreign currencies result in exposures to exchange rate fluctuations. In order to manage foreign exchange risk, Forward Exchange Contracts (FEC's) are in place to hedge against risks associated with repayment of foreign loans.

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6. FINANCIAL INSTRUMENT RISK MANAGEMENT (CONTINUED)

VRS

Foreign currency risk arises from the impact of exchange rate fluctuations on the project's foreign currency loan liabilities.

As the foreign loan was repaid in 2018, TCTA is currently not exposed to Euro exchange rate fluctuations. TCTA has a policy to cover 100% of its foreign capital commitments and 75% of interest and fees.

TCTA makes use of FECs for economic hedging purposes. The table below shows the foreign exchange cover as at 31 March for VRS (2017: LHWP had foreign exchange contracts as shown below and AMD did not have any foreign exchange contracts). :

	2018 EUR mil	2017 EUR mil
Foreign exchange contracts maturity profile		
Liabilities		
< 1 year	-	1

Foreign currency sensitivity

There was no foreign currency exposure as of 31 March 2018. The table below illustrates the sensitivity of the net result for the 2017 financial year in regard to the financial liabilities and financial assets and the EUR/ZAR exchange rates.

It assumes a 15% change of the EUR/ZAR exchange rate for the year ended 31 March 2018 (2017: 15%). The sensitivity analysis is based on foreign currency financial instruments held at each reporting date and also takes into account FECs that offset effects from changes in currency exchange rates.

If the rand had weakened against the Euro 15% (2017: 15%) then this would have had the following impact:

Financial asset and financial liabilities: sensitivity analysis	2018 Change in Euro Rand	2017 Change in Euro Rand
Weakening of Rand		
Surplus / (deficit)	-	144 263
Strengthening of Rand		
Surplus / (deficit)	-	(144 263)
	-	-

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BWP, VRESAP, MMTS-2, KWSAP, ORWRDP, MCWAP, AMD, MMTS-1 and UMGENI

These projects do not have any foreign currency exposures.

Interest rate risk

Interest rate risk is the risk of financial loss arising from adverse fluctuations in market interest rates. This is the risk that adverse changes in interest rates will cause a reduction in net income caused by increased cost from financial liabilities including repricing of TCTA's floating debt obligations and the short-term rollover of maturing debt.

TCTA manages interest rate risk by fixing a portion of its debt depending on market conditions. The Risk and Finance Committee approved an optimal capital structure where a minimum of 70% debt is fixed for all projects post construction. Currently most of the projects are above the approved capital structure.

TCTA does not have any derivatives hedging interest rate risk, instead attainment of the optimal capital structure and the proactive interest rate risk management strategies are applied.

VRS

Fixed vs. variable rate loans

The following table details the interest rate exposure for VRS.

The optimal capital structure based on the sensitivity simulation is 70% fixed (2017:70%) and 30% floating (2017:30%). This ensures limited fluctuation of the cumulative debt curve.

The ratio of fixed to floating debt as at 31 March 2018 was 53% (2017: 61%) fixed and 47% (2017: 39%) floating. The proportional interest-rate exposures on total outstanding debt of the project can be summarised as follows:

2018	**Borrowings at fixed rates**	**Borrowings at variable rates**	**Fixed rate borrowings as % of total debt book**	**Variable rate borrowings as % of total debt book**
Interest -rate exposure on borrowings	**R million**	**R million**		
Borrowings	**9 680**	**8 455**	**53%**	**47%**

2017	**Borrowings at fixed rates**	**Borrowings at variable rates**	**Fixed rate borrowings as % of total debt book**	**Variable rate borrowings as % of total debt book**
Interest -rate exposure on borrowings	**R million**	**R million**		
Borrowings	11 867	7 560	61%	39%

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

6. FINANCIAL INSTRUMENT RISK MANAGEMENT (CONTINUED)

Interest rate sensitivity

The following table illustrates the sensitivity of the net result for the year to a reasonably possible change in interest rates of +100bps and -100bps (2017: +/- 100bps) and +200bps and -200bps (2017: +/- 200bps), with effect from the beginning of the year. These changes are considered to be reasonably possible based on observation of current market conditions. The calculations are based on LHWP's financial instruments held at the reporting date. All other variables are held constant.

Sensitivity analysis: Impact on surplus / (deficit)	2018 R million	2017 R million
Change in interest rates of -100bps	6	7
Change in interest rates of +100bps	(6)	(7)
Change in interest rates of -200bps	12	14
Change in interest rates of +200bps	(12)	(14)
Financial assets		
Change in interest rates of -100bps	(20)	(29)
Change in interest rates of +100bps	20	29
Change in interest rates of -200bps	(40)	(59)
Change in interest rates of +200bps	40	59

The table above excludes the Tariff receivable.

Currently TCTA does not have any derivatives hedging interest rate risk. Interest rate risk is managed through achievement of optimal capital structure, and continuous monitoring of short-, medium- and long-term interest rates' exposures.

A change in interest rates will not have an impact on equity (2017: no impact).

BWP

Fixed vs. variable rate loans

The ratio of fixed to floating debt as at 31 March 2018 was 100% (2017: 93%) fixed and 0% (2017: 7%) floating.

2018 Interest -rate exposure on borrowings	Borrowings at fixed rates R million	Borrowings at variable rates R million	Fixed rate borrowings as % of total debt book	Variable rate borrowings as % of total debt book
Borrowings	**593**	**-**	**100%**	**-%**

2017 Interest -rate exposure on borrowings	Borrowings at fixed rates R million	Borrowings at variable rates R million	Fixed rate borrowings as % of total debt book	Variable rate borrowings as % of total debt book
Borrowings	669	50	93%	7%

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

Interest rate sensitivity

The following table illustrates the sensitivity of the net result for the year to a reasonably possible change in interest rates of +100bps and -100bps (2017: +/- 100bps) and +200bps and -200bps (2017: +/- 200bps), with effect from the beginning of the year. These changes are considered to be reasonably possible based on observation of current market conditions. The calculations are based on BWP's financial instruments held at the reporting date. All other variables are held constant.

Sensitivity analysis: Impact on surplus / (deficit)	2018 R million	2017 R million
Financial liabilities		
Change in interest rates of -100bps	-	1
Change in interest rates of +100bps	-	(1)
Change in interest rates of -200bps	-	2
Change in interest rates of +200bps	-	(2)
Financial assets		
Change in interest rates of -100bps	(1)	(1)
Change in interest rates of +100bps	1	1
Change in interest rates of -200bps	(2)	(3)
Change in interest rates of +200bps	2	3

The table above excludes the Tariff receivable.

Where the numbers are reflected as zero, the movements are less than R500 000.

A change in interest rates will not have an impact on equity (2017: no impact).

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

6. FINANCIAL INSTRUMENT RISK MANAGEMENT (CONTINUED)

VRESAP

Fixed vs. variable rate loans

The ratio of fixed to floating debt as at 31 March 2018 was 65% (2017: 70%) fixed and 35% (2017: 30%) floating.

2018	Borrowings at fixed rates	Borrowings at variable rates	Fixed rate borrowings as % of total debt book	Variable rate borrowings as % of total debt book
Interest -rate exposure on borrowings	R million	R million		
Borrowings	**2 489**	**1 316**	**65%**	**35%**

2017	Borrowings at fixed rates	Borrowings at variable rates	Fixed rate borrowings as % of total debt book	Variable rate borrowings as % of total debt book
Interest -rate exposure on borrowings	R million	R million		
Borrowings	2 647	1 127	70%	30%

Interest rate sensitivity

The following table illustrates the sensitivity of the net result for the year to a reasonably possible change in interest rates of +100bps and -100bps (2017: +/- 100bps) and +200bps and -200bps (2017: +/- 200bps), with effect from the beginning of the year. These changes are considered to be reasonably possible based on observation of current market conditions. The calculations are based on VRESAP's financial instruments held at the reporting date. All other variables are held constant.

Sensitivity analysis: Impact on surplus / (deficit)	2018 R million	2017 R million
Financial liabilities		
Change in interest rates of -100bps	13	11
Change in interest rates of +100bps	(13)	(11)
Change in interest rates of -200bps	26	21
Change in interest rates of +200bps	(26)	(21)
Financial assets		
Change in interest rates of -100bps	(1)	(2)
Change in interest rates of +100bps	1	2
Change in interest rates of -200bps	(3)	(3)
Change in interest rates of +200bps	3	3

The table above excludes the Tariff receivable.

A change in interest rates will not have an impact on equity (2017: no impact).

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MCWAP

Fixed vs. variable rate loans

The ratio of fixed to floating debt as at 31 March 2018 was 66% (2017: 80%) fixed and 34% (2017: 20%) floating.

2018 Interest -rate exposure on borrowings	Borrowings at fixed rates R million	Borrowings at variable rates R million	Fixed rate borrowings as % of total debt book	Variable rate borrowings as % of total debt book
Borrowings	**1 011**	**529**	**66%**	**34%**

2017 Interest -rate exposure on borrowings	Borrowings at fixed rates R million	Borrowings at variable rates R million	Fixed rate borrowings as % of total debt book	Variable rate borrowings as % of total debt book
Borrowings	1 261	311	80%	20%

Interest rate sensitivity

The following table illustrates the sensitivity of the net result for the year to a reasonably possible change in interest rates of +100bps and -100bps (2017: +/- 100bps) and +200bps and -200bps (2017: +/- 200bps), with effect from the beginning of the year. These changes are considered to be reasonably possible based on observation of current market conditions. The calculations are based on MCWAP's financial instruments held at the reporting date. All other variables are held constant.

Sensitivity analysis: Impact on surplus / (deficit)	2018 R million	2017 R million
Financial liabilities		
Change in interest rates of -100bps	5	5
Change in interest rates of +100bps	(5)	(5)
Change in interest rates of -200bps	11	9
Change in interest rates of +200bps	(11)	(9)
Financial assets		
Change in interest rates of -100bps	(4)	(6)
Change in interest rates of +100bps	4	6
Change in interest rates of -200bps	(8)	(12)
Change in interest rates of +200bps	8	12

The table above excludes the Tariff receivable.

A change in interest rates will not have an impact on equity (2017: no impact).

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6. FINANCIAL INSTRUMENT RISK MANAGEMENT (CONTINUED)

MMTS-2

Fixed vs. variable rate loans

The ratio of fixed to floating debt as at 31 March 2018 was 36% (2017: 37%) fixed and 64% (2017: 63%) floating.

2018	**Borrowings at fixed rates**	**Borrowings at variable rates**	**Fixed rate borrowings as % of total debt book**	**Variable rate borrowings as % of total debt book**
Interest -rate exposure on borrowings	**R million**	**R million**		
Borrowings	**660**	**1 157**	**36%**	**64%**

2017	**Borrowings at fixed rates**	**Borrowings at variable rates**	**Fixed rate borrowings as % of total debt book**	**Variable rate borrowings as % of total debt book**
Interest -rate exposure on borrowings	**R million**	**R million**		
Borrowings	711	1 223	37%	63%

Interest rate sensitivity

The following table illustrates the sensitivity of the net result for the year to a reasonably possible change in interest rates of +100bps and -100bps (2017: +/- 100bps) and +200bps and -200bps (2017: +/- 200bps), with effect from the beginning of the year. These changes are considered to be reasonably possible based on observation of current market conditions. The calculations are based on MMTS's financial instruments held at the reporting date. All other variables are held constant.

	2018	**2017**
Sensitivity analysis: Impact on surplus / (deficit)	**R million**	**R million**
Financial liabilities		
Change in interest rates of -100bps	12	11
Change in interest rates of +100bps	(12)	(11)
Change in interest rates of -200bps	23	23
Change in interest rates of +200bps	(23)	(23)
Financial assets		
Change in interest rates of -100bps	(1)	(2)
Change in interest rates of +100bps	1	2
Change in interest rates of -200bps	(2)	(5)
Change in interest rates of +200bps	2	5

The table above excludes the Tariff receivable.

A change in interest rates will not have an impact on equity (2017: no impact).

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ORWRDP

Fixed vs. variable rate loans

There are no borrowings in this project for the current and 2017 financial year as this project is funded from the fiscus.

Interest rate sensitivity

The following table illustrates the sensitivity of the net result for the year to a reasonably possible change in interest rates of +100bps and -100bps (2017: +/- 100bps) and +200bps and -200bps (2017: +/- 200bps), with effect from the beginning of the year. These changes are considered to be reasonably possible based on observation of current market conditions. The calculations are based on ORWRDP's financial instruments held at the reporting date. All other variables are held constant.

Sensitivity analysis: Impact on surplus / (deficit)	2018 R million	2017 R million
Financial liabilities		
Financial assets		
Change in interest rates of -200bps	-	(1)
Change in interest rates of +200bps	-	1

The table above excludes the Tariff receivable.

Where the numbers are reflected as zero, the movements are less than R500 000.

A change in interest rates will not have an impact on equity (2017: no impact).

KWSAP

Fixed vs. variable rate loans

The ratio of fixed to floating debt as at 31 March 2018 was 75% (2017: 74%) fixed and 25% (2017: 26%) floating.

2018 Interest -rate exposure on borrowings	Borrowings at fixed rates R million	Borrowings at variable rates R million	Fixed rate borrowings as % of total debt book	Variable rate borrowings as % of total debt book
Borrowings	**946**	**316**	**75%**	**25%**

2017 Interest -rate exposure on borrowings	Borrowings at fixed rates R million	Borrowings at variable rates R million	Fixed rate borrowings as % of total debt book	Variable rate borrowings as % of total debt book
Borrowings	969	344	74%	26%

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6. FINANCIAL INSTRUMENT RISK MANAGEMENT (CONTINUED)

Interest rate sensitivity

The following table illustrates the sensitivity of the net result for the year to a reasonably possible change in interest rates of +100bps and -100bps (2017: +/- 100bps) and +200bps and -200bps (2017: +/- 200bps), with effect from the beginning of the year. These changes are considered to be reasonably possible based on observation of current market conditions. The calculations are based on KWSAP's financial instruments held at the reporting date. All other variables are held constant.

	2018	2017
Sensitivity analysis: Impact on surplus / (deficit)	**R million**	**R million**
Financial liabilities		
Change in interest rates of -100bps	4	3
Change in interest rates of +100bps	(4)	(3)
Change in interest rates of -200bps	8	6
Change in interest rates of +200bps	(8)	(6)
Financial assets		
Change in interest rates of -100bps	(2)	(2)
Change in interest rates of +100bps	2	2
Change in interest rates of -200bps	(4)	(4)
Change in interest rates of +200bps	4	4

The table above excludes the Tariff receivable.

A change in interest rates will not have an impact on equity (2017: no impact).

Refinancing risk

Refinancing risk is the possibility that TCTA cannot refinance by borrowing to repay its existing debt. The duration of liabilities can be viewed as the rate at which liabilities will reprice when refinanced. In terms of duration analysis, liabilities with short duration stand to gain by repricing at lower levels on refinancing date in a downward trending environment. But, since managing interest rate risk is more complex than increasing or decreasing the duration mismatch, duration matching is used as a guiding principle. In TCTA, duration is used in conjunction with other interest rate risk mitigation measures such as the sensitivity of the debt curve to changes in the capital structure, water demand, inflation and interest rates.

VRS

The table below shows the duration of bonds issued by TCTA as at 31 March:

2018	**Maturity**	**Amount issued**	**Duration**
Bonds	**Date**	**R million**	**Years**
WS05	2018/08/01	3 525	0,32
WSP3	2019/05/28	32	1,04
WSP4	2020/05/28	97	1,87
WSP5	2021/05/28	9 538	2,63
		13 192	**2**

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VRS The table below shows the duration of bonds issued by TCTA as at 31 March: (Continued)

2017	Maturity	Amount issued	Duration
Bonds	**Date**	**R million**	**Years**
WS05	2018/08/01	3 525	1,27
WSP2	2017/05/28	2 176	0,14
WSP3	2019/05/28	32	1,87
WSP4	2020/05/28	97	2,62
WSP5*	2021/05/28	9 538	3,31
		15 368	**2,38**

** The movement is due to the redemption of WSP2 in May 2017.*

BWP

As at 31 March 2018 BWP had no term paper and no call paper in issue (2017: no term paper and no call paper).

VRESAP

As at 31 March 2018 VRESAP had R393 million term paper and no call paper in issue (2017: R182 million term paper and no call paper).

MMTS-2

As at 31 March 2018 MMTS-2 had R290 million term paper and no call paper in issue (2017: R320 million term paper and no call paper).

KWSAP

As at 31 March 2018 KWSAP had no term paper and no call paper in issue (2017: no term paper and no call paper). There is no commercial paper programme for MCWAP, ORWRDP, AMD, MMTS-1, Umgeni and Kriel.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

7. PROPERTY, PLANT AND EQUIPMENT

	2018			2017		
	Cost or revaluation R million	Accumulated depreciation R million	Carrying value R million	Cost or revaluation R million	Accumulated depreciation R million	Carrying value R million
Office furniture	4	(4)	-	4	(4)	-
Computer equipment	4	(4)	-	4	(3)	1
Networking equipment	8	(8)	-	8	(8)	-
Office equipment	3	(3)	-	3	(3)	-
Motor vehicles	2	(1)	1	2	(1)	1
Video conferencing equipment	-	-	-	-	-	-
Leasehold improvements	22	(17)	5	22	(14)	8
Equipment under finance lease	2	(2)	-	2	(2)	-
Total	**45**	**(39)**	**6**	**45**	**(35)**	**10**

Reconciliation of property, plant and equipment - 2018

	Opening balance R million	Additions R million	Disposals R million	Depreciation R million	Total R million
Office furniture	-	-	-	-	-
Computer equipment	1	-	-	(1)	-
Networking equipment	-	-	-	-	-
Office equipment	-	-	-	-	-
Motor vehicles	1	1	(1)	-	1
Video conferencing equipment	-	-	-	-	-
Leasehold improvements	8	-	-	(3)	5
Total	**10**	**1**	**(1)**	**(4)**	**6**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

Reconciliation of property, plant and equipment - 2017

	Opening balance R million	Additions R million	Disposals R million	Accumulated depreciation and disposal of assets R million	Depreciation R million	Total R million
Office furniture	2	-	(1)	-	(1)	-
Computer equipment	-	-	(2)	3	-	1
Networking equipment	-	-	(2)	2	-	-
Office equipment	2	-	(3)	2	(1)	-
Motor vehicles	-	1	-	-	-	1
Video conferencing equipment	-	-	(2)	2	-	-
Leasehold improvements	8	4	-	-	(4)	8
Total	**12**	**5**	**(10)**	**9**	**(6)**	**10**

8. INTANGIBLE ASSETS

	2018			2017		
	Cost / Valuation R million	Accumulated amortisation R million	Carrying value R million	Cost / Valuation R million	Accumulated amortisation R million	Carrying value R million
Computer software	**37**	**(23)**	**14**	33	(17)	16

Reconciliation of intangible assets - 2018

	Opening balance R million	Additions R million	Amortisation R million	Total R million
Computer software	**16**	**4**	**(6)**	**14**

Reconciliation of intangible assets - 2017

Opening balance

	Opening balance R million	Additions R million	Total R million
Computer software	-	16	16

NOTES TO THE ANNUAL FINANCIAL STATEMENTS
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9. FINANCIAL INSTRUMENTS

9.1. Financial instruments by category

The accounting policies for financial instruments have been applied to the line items below:

The carrying values of financial assets and liabilities not carried at fair value, approximate their respective fair values.

9.1.1. Accounting classifications of financial assets

Financial assets as per statement of financial position at 31 March 2018:

Financial assets	Note	Carrying amount financial assets at amortised cost R million	Total carrying amount R million
Financial assets measured at amortised cost			
Non-current financial assets			
Tariff receivable	9.4	25 898	25 898
Current financial assets			
Tariff receivable	9.4	3 052	3 052
Loans and other receivables	10	211	211
Financial market investments	9.5	371	371
Fixed term investments and investments on call		371	371
Cash and cash equivalents	15	3 849	3 849
Total financial assets		**33 381**	**33 381**
Current/Non-current financial assets		**33 381**	**33 381**
Non-current		25 898	25 898
Current		7 483	7 483

Financial assets as per statement of financial position at 31 March 2017:

Financial assets	Note	Carrying amount financial assets at amortised cost R million	Total carrying amount R million
Non-current financial assets			
Tarriff receivable	9.4	26 241	26 241
Current financial assets			
Tariff receivable	9.4	941	941
Loans and other receivables	10	80	80
Financial market investments	9.5	3 052	3 052
Fixed term investments and investments on call		3 052	3 052
Cash and cash equivalents	15	2 559	2 559
Total financial assets		**32 873**	**32 873**
Current/Non-current financial assets		**32 873**	**32 873**
Non-current		26 241	26 241
Current		6 632	6 632

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

9.1.2. Accounting classifications of financial liabilities

Liabilities per statement of financial position at 31 March 2018:

Financial liabilities	Note	Carrying amount at amortised cost R million	Total carrying amount R million
Financial liabilities measured at amortised cost			
Non-current financial liabilities			
Local debt	9.6.3		
Bonds		9 644	9 644
Other bonds		9 644	9 644
Other borrowings	9.6.3		
Other borrowings by TCTA		7 982	7 982
Fixed rate loans		5 566	5 566
Variable rate loans		3 114	3 114
CPI rate loans		302	302
Other borrowings (LHDA)		27	27
Fixed rate loans		27	27
Current financial liabilities	9.6.2		
Local debt	9.6.3		
Bonds		8 374	8 374
CPI-linked bonds		8 374	8 374
Other borrowings	9.6.2		
Other borrowings by TCTA		1 112	1 112
Fixed rate loans		357	357
Variable rate loans		745	745
CPI rate loans		10	10
Other commitments (LHDA)		10	10
Fixed rate loans		7	7
Variable rate loans		3	3
Foreign loans	9.6.2	-	-
Total financial market liabilities not measured at amortised cost		**27 149**	**27 149**
Trade and other payables		1 188	1 188
Total financial liabilities		**28 338**	**28 338**
Current/Non-current financial liabilities		**28 338**	**28 338**
Non-current		17 653	17 653
Current		10 685	10 685

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

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9. FINANCIAL INSTRUMENTS (CONTINUED)

9.1.2. Accounting classifications of financial liabilities (continued)

Liabilities per statement of financial position at 31 March 2017:

Financial liabilities	Note	Carrying amount at amortised cost R million	Total carrying amount R million
Non-current financial assets			
Local debt	9.6.3		
Bonds		16 962	16 962
CPI-linked bonds		7 322	7 322
Other bonds		9 640	9 640
Other borrowings	9.6.3		
Other borrowings by TCTA		8 505	8 505
Fixed rate loans		5 933	5 933
Variable rate loans		2 271	2 271
CPI rate loans		301	301
Other borrowings (LHDA)		37	37
Fixed rate loans		34	34
Variable rate loans		3	3
Current financial liabilities	9.6.2		
Local debt	9.6.3		
Bonds		2 177	2 177
Other bonds		2 177	2 177
Other borrowings	9.6.2		
Other borrowings by TCTA		1 029	1 029
Fixed rate loans		326	326
Variable rate loans		694	694
CPI rate loans		9	9
Other commitments (LHDA)		19	19
Fixed rate loans		4	4
Variable rate loans		15	15
Foreign loans	9.6.2		
Other commitments (LHDA)		13	13
Total financial market liabilities not measured at fair value		28 742	28 742
Trade and other payables		1 165	1 165
Total financial liabilities		**29 907**	**29 907**
Current/Non-current financial liabilities		**29 907**	**29 907**
Non-current		25 504	25 504
Current		4 403	4 403

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

9.2. Significance of financial instruments

9.2.1. Financial assets

Details on the components of the tariff receivable are in note 9.4. The interest earned on the tariff receivable to compensate for the time value of money, is disclosed as "Finance income" on the statement of comprehensive income and details provided in note 19.1.

9.2.2. Financial liabilities

The most significant financial liability is the bonds issued by TCTA. Note 9.9 provides detail on the respective redemption dates, the interest rate, the value of the issued bonds. Interest is paid semi-annually to bond holders.

9.3. Fair value measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

As part of the disclosure requirements for fair value measurements, TCTA classifies fair value measurements using a 'fair value hierarchy' that reflects the significance of the inputs used in making the measurements.

Fair value measurements are categorised into a three-level hierarchy, based on the type of inputs to the valuation techniques used, as follows:

- level 1 inputs are quoted prices in active markets for items identical to the asset or liability being measured;
- level 2 inputs are other observable inputs other than quoted market prices included in level 1 that are observable either directly or indirectly; and
- level 3 inputs are unobservable inputs which management has developed to reflect the assumptions that market participants would use when determining an appropriate price for the asset or liability.

The categorisation of the fair value measurement into one of the three different levels is determined on the basis of the lowest level input that is significant to the fair value measurement in its entirety. The significance of an input is assessed against the fair value measurement in its entirety. Assessing the significance of a particular input to the fair value measurement in its entirety requires judgement, considering factors specific to the asset or liability.

The carrying value of financial assets and liabilities not carried at fair value approximate their respective fair values, except for the bonds issued by LHWP. Disclosed in note 9.3.1.

There have been no transfers between level 1 and level 2 during the year.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

9. FINANCIAL INSTRUMENTS (CONTINUED)

9.3.1. Financial liabilities

The fair value of financial liabilities for disclosure purposes is estimated by discounting the contractual future cash flows at the current market interest rate that is available to TCTA for similar financial instruments.

VRS

Instruments	2018 R million	2017 R million	Fair value hierarchy	Valuation technique(s) and key input(s)	Significant unobservable inputs	Relations of unobservable inputs to fair value
CPI-linked bonds	8 975	8 711	Level 1	Not applicable	Not applicable	Not applicable
Other bonds	10 293	12 340	Level 2	Not applicable	Not applicable	Not applicable
Total financial liabilities at fair value	**19 268**	**21 051**				

9.4. Tariff receivables

9.4.1. Totals

	2018			2017		
Project	Long-term R million	Short-term R million	Tariff receivable R million	Long-term R million	Short-term R million	Tariff receivable R million
VRS	18 647	2 652	21 299	18 360	737	19 097
BWP	458	47	505	499	135	634
VRESAP	3 717	196	3 913	3 853	69	3 922
MCWAP	565	-	565	826	-	826
MMTS-2	1 412	111	1 523	1 550	-	1 550
KWSAP	1 099	46	1 145	1 153	-	1 153
Total	**25 898**	**3 052**	**28 950**	**26 241**	**941**	**27 182**

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9.4.2. Reconciliation of movements in the tariff receivable

The tariff receivable arises as the contra to the construction revenue earned in each project, and is measured at amortised cost using the effective interest method.

2018	Opening Balance 1 April 2017	Construction revenue earned	Other income	Tariffs or transfers received from DWS	Interest income earned on the tariff receivable	Imputed interest on the tariff receivable	Closing Balance 31 March 2018
Project	R million	R million	R million	R million	R million	R million	R million
VRS	19 097	249	1 497	(4 093)	1 901	2 648	21 299
BWP	634	-	6	(174)	63	(23)	505
VRESAP	3 922	-	9	(377)	385	(26)	3 913
MCWAP	826	73	8	(271)	83	(153)	565
MMTS-2	1 550	3	8	(173)	144	(10)	1 521
KWSAP	1 153	-	6	(99)	121	(36)	1 145
	27 182	**325**	**1 534**	**(5 187)**	**2 697**	**2 400**	**28 950**

2017	Opening Balance 1 April 2016	Construction revenue earned	Other income	Tariffs or transfers received from DWS	Interest income earned on the tariff receivable	Imputed interest on the tariff receivable	Closing Balance 31 March 2017
Project	R million	R million	R million	R million	R million	R million	R million
VRS	17 442	372	1 322	(4 337)	1 736	2 562	19 097
BWP	800	-	6	(236)	79	(15)	634
VRESAP	3 915	-	10	(384)	385	(3)	3 922
MCWAP	836	94	14	(227)	109	-	826
MMTS-2	1 539	64	20	(175)	143	(41)	1 550
KWSAP	1 148	-	7	(127)	121	4	1 153
	25 680	**530**	**1 379**	**(5 486)**	**2 573**	**2 507**	**27 182**

TCTA revises its estimates of payments or receipts on an annual basis, then adjusts the carrying amount of the tariff receivable to reflect actual and revised estimated cash flows. TCTA recalculates the carrying amount by computing the present value of estimated future cash flows at the tariff receivables' original effective interest rate for each project. The adjustment is recognised in net finance cost.

MCWAP is partially funded from the fiscus, 25% of the project costs are recovered through transfers from the fiscus.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

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9. FINANCIAL INSTRUMENTS (CONTINUED)

9.5. Financial assets: current versus non-current

	2018		2017	
	Current	Non-current	Current	Non-current
Financial market investments	R million	R million	R million	R million
VRS	321	-	2 951	-
BWP	-	-	-	-
VRESAP	-	-	-	-
MCWAP	-	-	-	-
MMTS-2	50	-	101	-
ORWRDP	-	-	-	-
KWSAP	-	-	-	-
Balance on statement of financial position	**371**	**-**	**3 052**	**-**

9.5.1. Balances per project

The following are the total current and non-current financial assets disclosed on the statement of financial position:

	2018		2017	
	Current	Non-current	Current	Non-current
Project	R million	R million	R million	R million
VRS	5 936	18 647	5 237	18 360
BWP	120	458	215	499
VRESAP	278	3 717	129	3 853
MCWAP	474	565	447	825
MMTS-2	391	1 412	391	1 550
ORWRDP	96	-	30	-
KWSAP	116	1 099	154	1 153
MMTS-1	1	-	-	-
UMGENI	17	-	16	-
KRIEL	6	-	13	-
TCTA-C	31	-	-	-
MRWP	17	-	-	-
Balance on statement of financial position	**7 483**	**25 898**	**6 634**	**26 241**

There are no non-current financial assets for these projects during the financial periods presented.

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Reconciliation of current and non-current financial assets disclosed on the statement of financial position:

	2018	2017	2018	2017
	Current		Non-current	
Balances on statement of position	**R million**	**R million**	**R million**	**R million**
Tariff receivable	3 052	941	25 898	26 241
Loans and other receivables	211	80	-	-
Financial market investments	371	3 052	-	-
Cash and cash equivalents	3 849	2 559	-	-
Total financial assets	**7 483**	**6 634**	**25 898**	**26 241**

9.5.2. Current financial assets per project

	2018	2017
Current financial assets	**R million**	**R million**
VRS		
Tariff receivable	2 652	737
Loans and other receivables	53	25
Financial market investments	321	2 951
Cash and cash equivalents	2 910	1 525
	5 936	5 238
BWP		
Tariff receivable	47	135
Loans and other receivables	-	-
Financial market investments	-	-
Cash and cash equivalents	72	80
	119	215
VRESAP		
Tariff receivable	196	69
Loans and other receivables	-	-
Financial market investments	-	-
Cash and cash equivalents	82	60
	278	129

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

9. FINANCIAL INSTRUMENTS (CONTINUED)

9.5.2. Current financial assets per project (continued

	2018 R million	2017 R million
MCWAP		
Tariff receivable	-	-
Loans and other receivables	-	-
Financial market investments	-	-
Cash and cash equivalents	474	447
	474	447
MMTS-2		
Tariff receivable	111	-
Loans and other receivables	22	26
Financial market investments	50	101
Cash and cash equivalents	209	263
	392	390
ORWRDP		
Loans and other receivables	95	-
Financial market investments	-	-
Cash and cash equivalents	1	30
	96	30
KWSAP		
Tariff receivable	46	-
Loans and other receivables	-	-
Financial market investments	-	-
Cash and cash equivalents	70	154
	116	154
MMTS-1		
Loans and other receivables	1	-
Financial market investments	-	-
	1	-
UMGENI		
Loans and other receivables	17	16
KRIEL		
Loans and other receivables	6	13
TCTA-C		
Cash and cash equivalents	31	-
MRWP		
Loans and other receivables	17	-
Total current financial assets	**7 483**	**6 632**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

9.5.3. Non- current financial assets per project

	2018		Total noncurrent financial assets	2017		Total noncurrent financial assets
	1 to 5 year	>5 years		1 to 5 year	>5 years	
Non-current financial assets	R million	R million	R million	R million	R million	R million
VRS						
Tariff receivable	-	18 647	18 647	-	18 360	18 360
BWP						
Tariff receivable	167	291	458	206	293	499
VRESAP						
Tariff receivable	943	2 774	3 717	655	3 198	3 853
MCWAP						
Tariff receivable	-	565	565	-	826	826
MMTS-2						
Tariff receivable	219	1 193	1 412	162	1 388	1 550
KWSAP						
Tariff receivable	124	975	1 099	88	1 066	1 153
Total non-current financial assets	**1 453**	**24 443**	**25 898**	**1 111**	**25 130**	**26 241**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

9. FINANCIAL INSTRUMENTS (CONTINUED)

9.6. Financial liabilities: current versus non-current

9.6.1. Totals

	2018		2017	
	Current	Non-current	Current	Non-current
Project	R million	R million	R million	R million
VRS	9 321	9 671	3 208	17 074
BWP	82	515	75	653
VRESAP	569	3 286	422	3 409
MCWAP	68	1 497	75	1 540
MMTS-2	436	1 450	458	1 538
ORWRDP	106	-	97	-
KWSAP	40	1 234	43	1 290
MMTS-1	1	-	-	-
UMGENI	13	-	12	-
KRIEL	6	-	13	-
TCTA-C	31	-	-	-
MRWP	12	-	-	-
Balance on statement of financial position	**10 686**	**17 653**	**4 402**	**25 504**

There are no non-current financial liabilities for these projects during the financial periods presented.

Reconciliation of current and non-current financial liabilities disclosed on the statement of financial position:

	2018	2017	2018	2017
	Current	Current	Non-current	Non-current
Balances on statement of position	R million	R million	R million	R million
Borrowings	9 496	3 237	17 653	25 504
Trade and other payables	1 188	1 165	-	-
Total financial liabilities	**10 686**	**4 402**	**17 653**	**25 504**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

9.6.2. Current financial market liabilities

	2018 R million	2017 R million
VRS		
Other borrowings by TCTA	8 452	2 322
Other commitments (LHDA)	10	18
Foreign loans - Other commitments (LHDA)	-	13
Trade and other payables	858	855
Total per project	9 320	3 208
BWP		
Borrowings	77	67
Trade and other payables	5	8
Total per project	82	75
VRESAP		
Borrowings	519	365
Trade and other payables	51	57
Total per project	570	421
MCWAP		
Borrowings	43	33
Trade and other payables	25	41
Total per project	68	74
MMTS-2		
Borrowings	367	396
Trade and other payables	68	62
Total per project	435	458
ORWRDP		
Trade and other payables	106	97

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

9. FINANCIAL INSTRUMENTS (CONTINUED)

	2018 R million	2017 R million
KWSAP		
Borrowings	28	23
Trade and other payables	12	20
Total per project	40	43
MMTS-1		
Trade and other payables	1	-
UMGENI		
Trade and other payables	13	12
KRIEL		
Trade and other payables	6	13
TCTA-C		
Trade and other payables	31	-
MRWP		
Trade and other payables	12	-
Total current financial liabilities	**10 684**	**4 402**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

9.6.3. Non-current financial liabilities

	2018		Total non-current financial liabilities	2017		Total non-current financial liabilities
	1 to 5 year	>5 years		1 to 5 year	>5 years	
Project	R million	R million	R million	R million	R million	R million
VRS						
Local debt - Bonds	9 644	-	9 644	16 962	-	16 962
Other borrowings - VRS: Other borrowings by TCTA	-	-	-	75	-	75
Other borrowings - Other commitments (LHDA)	27	-	27	36	1	37
	9 671	-	9 671	17 073	1	17 074
BWP						
Borrowings	309	206	515	319	333	653
VRESAP						
Borrowings	925	2 361	3 286	819	2 590	3 409
MCWAP						
Borrowings	234	1 263	1 497	211	1 329	1 540
MMTS-2						
Borrowings	370	1 080	1 450	360	1 178	1 538
KWSAP						
Borrowings	166	1 068	1 234	143	1 147	1 290
Total	**11 675**	**5 978**	**17 653**	**18 925**	**6 578**	**25 504**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

9. FINANCIAL INSTRUMENTS (CONTINUED)

9.7. Interest rates

Project	2018 %	2017 %
VRS		
Loans bear effective interest at rates ranging from	*4.8 to 10.2	**5.2 to 20.2
Project weighted average rate including Bonds and Commercial Paper	9,62	9,23
Project weighted average rate including Capital Market and Commercial Paper	9,62	9,23

** The interest rate applicable to one of the development funding foreign loans is 4.8%. This is a Euro loan facility drawn as ZAR funding.*

*** The 20.2% relates to a EIB loan, valued at spot at R13 million . The interest rate applicable to this loan is 3.0%, however, due to forward exchange contract costs, the overall effective interest rate on this loan amounts to 20.2%.*

The project funded at a weighted average rate of:

Project	2018 %	2017 %
BWP	8,33	8,39
VRESAP	9,68	9,88
MMTS-2	9,14	9,48
KWSAP	9,40	9,52
MCWAP	9,42	9,48

ORWRDP and MMTS-1 are funded from the fiscus and the weighted average cost of capital is therefore not applicable.

9.8. Exchange rates (closing rates)

The following are exchange rates utilised by TCTA as at 31 March:

	2018		2017	
Foreign currency	Bid Rand	Offer Rand	Bid Rand	Offer Rand
Euros	**14,613**	**14,618**	14,271	14,335

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

9.9. Bonds

TCTA is the legal issuer of the following LHWP local registered bonds:

Loan No	Type	Redemption date	Interest rate	Authorised nominal/ principal value R million	Nominal/ capital indexed issued R million
WS05	Inflation	2018/08/01	5,00%	7 000	*8 804
WSP2	Nominal	2017/05/28	9,00%	2 176	-
WSP3	Nominal	2019/05/28	9,00%	1 000	32
WSP4	Nominal	2020/05/28	9,00%	1 000	97
WSP5	Nominal	2021/05/28	9,00%	13 824	9 538

Inflation indexed bond reflected at CPI value.

	2018		2017	
Value of bonds	Fair value R million	Nominal value R million	Fair value R million	Nominal value R million
Authorised	-	29 500***	-	29 500***
Issued	19 268*	18 021**	21 051*	19 139**
Unrealised premium to be amortised over the life of the loan	-	68	-	135
Unrealised discount to be amortised over the life of the loan	-	(71)	-	(92)
Unrealised amortisation of CPI uplift-ment for WS05	**-**	**(447)**	**-**	**(1 156)**

**The fair value of the locally registered bonds issued is measured at the market price at financial year-end.*

*** The amounts in issue may not exceed the consolidated capital market guarantee of R21 billion.*

**** This includes a limit of R4.5 billion on WS03 that matured on 15 September 2010.*

9.10. Offsetting financial assets and financial liabilities

TCTA enters into derivative transactions under International Swaps and Derivatives Association (ISDA) master netting agreements. These agreements generally allows the aggregation of all transactions in a single net amount for amounts in the same currency, owed by each counterparty on a single day, to be paid by the one party to the other. Derivative agreements are settled net in terms of these ISDA agreements. International Securities Market Association (ISMA) netting agreements govern net settlement between counterparties in relation to certain capital market transactions and balances owing, such as repurchase agreements and are therefore not netted off in the statement of financial position. The right to offset is enforceable on the occurrence of future events such as default on loan agreements or other credit events.

There were no such agreemens for 2018 and 2017.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

9. FINANCIAL INSTRUMENTS (CONTINUED)

9.11. Derivative exposures

VRS

As at 31 March 2018, there are no forward exchange contracts as the foreign loan has been repaid.

The table below details derivative values:

Forward exchange contracts(*)	2018 Foreign amount million	2018 Rand amount million	2017 Foreign amount million	2017 Rand amount million
Notonal amounts EUR contracts	-	-	1	14

Net foreign exchange contracts are stated at fair value. This derivative contract has been entered to economically hedge specific underlying commitments recorded on the statement of financial position on the reporting date. Deriviatives are used to hedge currency exposures.

(*) The notional amount of a financial instrument is nominal or face value that is used to calculate payments made on that instrument.

Fair value is the current mark-to-market value of all the derivatives at the reporting date (2018: R0 2017: R303 576).

9.12. Long-term liability maturity profile

The tables below indicate TCTA's exposure to fixed and floating interest rates:

9.12.1. Exposure to floating interest rates: Liabilities

	2018			Total exposure to floating interest rates	2017			Total exposure to floating interest rates
	<1 year	1-5 years	>5 years		<1 year	1-5 years	>5 years	
Project	R million	R million	R million	R million	R million	R million	R million	R million
VRS	8 455	-	-	8 455	7 482	78	-	7 560
BWP	-	-	-	-	-	-	50	50
VRESAP	351	134	831	1 316	207	79	841	1 127
MCWAP	23	103	403	529	7	41	263	311
MMTS-2	317	167	674	1 158	345	157	721	1 223
KWSAP	1	25	289	315	-	18	326	344
	9 147	**429**	**2 197**	**11 773**	**8 041**	**373**	**2 201**	**10 615**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

9.12.2. Exposure to fixed interest rates: Liabilities

	2018			Total exposure to fixed interest rates	2017			Total exposure to fixed interest rates
	<1 year	1-5 years	>5 years		<1 year	1-5 years	>5 years	
Project	R million	R million	R million	R million	R million	R million	R million	R million
VRS	7	9 672	-	9 679	2 193	9 673	1	11 867
BWP	77	309	206	592	67	319	283	669
VRESAP	168	791	1 530	2 489	158	741	1 748	2 647
MCWAP	20	131	860	1 011	26	169	1 066	1 261
MMTS-2	51	203	406	660	51	203	457	711
KWSAP	26	141	779	946	23	125	821	969
	349	**11 247**	**3 781**	**15 377**	**2 518**	**11 230**	**4 376**	**18 124**

9.12.3. Exposure to floating interest rates: Assets

	2018			Total exposure to floating interest rates	2017			Total exposure to floating interest rates
	<1 year	1-5 years	>5 years		<1 year	1-5 years	>5 years	
Project	R million	R million	R million	R million	R million	R million	R million	R million
VRS	2 910	-	-	2 910	1 524	-	-	1 524
BWP	52	-	-	52	80	-	-	80
VRESAP	82	-	-	82	60	-	-	60
MCWAP	474	-	-	474	447	-	-	447
MMTS-2	208	-	-	208	263	-	-	263
ORWRDP	1	-	-	1	30	-	-	30
KWSAP	70	-	-	70	154	-	-	154
TCTA-C	31	-	-	31	-	-	-	-
	3 827	**-**	**-**	**3 827**	**2 558**	**-**	**-**	**2 558**

The table above excludes the maturity periods for loans and other receivables.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

9. FINANCIAL INSTRUMENTS (CONTINUED)

9.12.4. Exposure to fixed interest rates: Assets

	2018			Total exposure to fixed interest rates	2017			Total exposure to fixed interest rates
	<1 year	1-5 years	>5 years		<1 year	1-5 years	>5 years	
Project	**R million**	**R million**	**R million**	**R million**	**R million**	**R million**	**R million**	**R million**
VRS	321	-	-	321	2 951	-	-	2 951
MMTS-2	50	-	-	50	101	-	-	101
	371	**-**	**-**	**371**	**3 052**	**-**	**-**	**3 052**

The table above excludes the maturity periods for loans and other receivables and cash and equivalents.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

10. LOANS AND OTHER RECEIVABLES

The total includes receivables for ORWRDP and MMTS-1, which have been disclosed as part of current loans and receivables. These projects are funded from the fiscus. UMGENI is funded by Umgeni Water. Loans and other receivables also includes inter-project loan accounts with LHWP

Current	Notes	2018 R million	2017 R million
VRS		53	25
MMTS-2		22	26
ORWRDP		95	-
MMTS-1		1	-
UMGENI		17	16
KRIEL		6	13
MRWP		17	-
Total		**211**	**80**

BWP, VRESAP, and KWSAP have zero balances for the current and prior period.

[(1)] *Amounts due from Umgeni Water Board for services delivered*

10.1. VRS Loans and other receivables reconciliation

The table below is a reconciliation of the inter-project loan accounts with VRS/LHWP. The balances mainly consist of recoveries of overhead costs based on an approved recovery model to allocate overhead administration costs to all projects. These balances are settled on a monthly basis and amounts outstanding are due to timing differences. These balances are settled on a monthly basis and balances are subject to interest charged at the WACC rate of VRS/LHWP at the end of each month.

Project	2018 R million	2017 R million
BWP	-	3
VRESAP	(1)	4
MCWAP	(1)	(2)
MMTS-2	(4)	9
ORWRDP	24	5
KWSAP	(1)	3
KRIEL	2	-
MRWP	-	2
TCTA-C	31	-
	53	24
Other	-	1
Total VRS loans and other receivables	**53**	**25**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

10. LOANS AND OTHER RECEIVABLES (CONTINUED)

10.2. Credit quality of financial assets that are neither past due nor impaired

When a counterparty fails to make a payment when it is contractually due, that financial asset is past due, even though this does not mean that the counterparty will never pay. This does however mean that it can trigger various actions such as renegotiation, enforcement of covenants or legal proceedings. ORWRDP and MMTS-1 are funded from the fiscus. The customer is the DWS and the credit risk is deemed limited even though DWS is the sole customer.

10.3. Ageing of loans and receivables

As at 31 March, the ageing analysis of loans and other receivables are as follows:

2018	Total	Neither past due nor impaired	Past due but not impaired		
			30-60 days	61-90 days	>90 days
Project	R million	R million	R million	R million	R million
VRS	53	53	-	-	-
MMTS-2	22	22	-	-	-
UMGENI	17	17	-	-	-
KRIEL	6	6	-	-	-
ORWRDP	95	95	-	-	-
MMTS-1	1	1	-	-	-
MRWP	17	17	-	-	-
Balance at end of year	**211**	**211**	**-**	**-**	**-**

[1] Balances outstanding is deemed past due when a counterparty has failed to make a payment when contractually due.

[2] The balance for BWP is included in trade and other payables due to a credit note issued to City of Cape Town. TCTA invoice on budgeted volumes received from the DWS on a monthly basis and on an annual basis CCT provides TCTA with the actual volumes utilised and an adjustment is then processed to reconcile any over/under payments.

2017	Total	Neither past due nor impaired	Past due but not impaired		
			30-60 days	61-90 days	>90 days
Project	R million	R million	R million	R million	R million
VRS	25	25	-	-	-
MMTS-2	26	26	-	-	-
UMGENI	16	16	-	-	-
KRIEL	13	13	-	-	-
Balance at end of year	**80**	**80**	**-**	**-**	**-**

[1] Balances outstanding is deemed past due when a counterparty has failed to make a payment when contractually due.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

10. LOANS AND OTHER RECEIVABLES (CONTINUED)

10.4. DWS Debtor

The DWS invoiced debtor relates to amounts outstanding from the DWS for commercially funded projects. Included in the tariff receivable are invoiced amounts outstanding from the DWS amounting to R3.2 bn (2017:R2.5 bn). The ageing of those amounts are reflected below:

2018	Neither past due nor impaired	Past due but not impaired				Total
		<30 days	30-60 days	61-90 days	>90 days	
Project	R million	R million	R million	R million	R million	R million
VRS	774	939	-	478	657	2 848
MMTS-2	20	40	-	11	24	95
MCWAP	-	25	25	-	-	50
KWSAP	11	10	10	11	11	53
VRESAP	38	41	41	-	42	162
Total	**843**	**1 055**	**76**	**500**	**734**	**3 208**

2017	Neither past due nor impaired	Past due but not impaired				Total
		<30 days	30-60 days	61-90 days	>90 days	
Project	R million	R million	R million	R million	R million	R million
VRS	1 176	387	-	411	219	2 192
VRESAP	74	40	-	-	-	114
MCWAP	24	24	-	-	15	63
MMTS-2	32	1	18	-	-	51
KWSAP	23	13	-	-	-	36
Total	**1 329**	**465**	**18**	**411**	**234**	**2 457**

TCTA invoices to DWS are due 30 days after the date on invoice, with the exception of VRESAP invoices which are due 30 days after DWS has billed users. KWSAP invoices are due 35 days after DWS has billed the user.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

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11. PREPAID EXPENDITURE

Prepaid expenditure includes advance payments made to contractors, annual insurance and treasury related licence fees. The advance payments are recouped from future payment certificates. Other prepaid expenditure are amortised to the income statement in the periods that the expenses are incurred.

Project	2018 R million	2017 R million
VRS	76	41
BWP	-	-
VRESAP	-	-
MCWAP	-	-
MMTS-2	1	1
ORWRDP*	11	85
KWSAP	-	-
MMTS-1	-	-
UMGENI	-	-
KRIEL	-	-
Balance at end of year	**88**	**127**

** Of the amount above for ORWRDP, R11 million relates to an advance payment to a contractor. An on demand performance guarantee has been provided as security for the Prepaid expenditure.*

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

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12. TRADE AND OTHER PAYABLES

2018	Interest payable: Other borrowings by TCTA	Interest payable: Other commitments (LHDA)	Loan account: LHWP	Loan account: MMTS-1	Loan account: UMGENI	Other creditors	Operations and maintenance: Advance from DWS	Working capital Advance	Balance per project
	R million	R million	R million	R million	R million	R million	R million	R million	R million
VRS	365	1	(10)	-	-	502	-	-	858
BWP	1	-	-	-	-	4	-	-	5
VRESAP	37	-	(1)	-	-	15	-	-	51
MCWAP	13	-	(1)	-	-	13	-	-	25
MMTS-2	25	-	(4)	-	(57)	22	-	82	68
ORWRDP	-	-	24	-	-	82	-	-	106
KWSAP	1	-	(1)	-	-	12	-	-	12
MMTS-1	-	-	-	1	-	-	-	-	1
KRIEL	-	-	2	-	-	2	-	2	6
UMGENI[(1)]	-	-	-	-	1	12	-	-	13
MRWP	-	-	12	-	-	-	-	-	12
TCTA-C	-	-	31	-	-	-	-	-	31
Balance at end of year	**442**	**1**	**52**	**1**	**(56)**	**664**	**-**	**84**	**1 188**

2017	Interest payable: Other borrowings by TCTA	Interest payable: Other commitments (LHDA)	Loan account: LHWP	Loan account: MMTS-1	Loan account: UMGENI	Other creditors	Operations and maintenance: Advance from DWS	Working capital Advance	Balance per project
	R million	R million	R million	R million	R million	R million	R million	R million	R million
VRS	429	-	-	-	-	426	-	-	855
BWP	2	-	3	-	-	3	-	-	8
VRESAP	39	-	4	-	-	14	-	-	57
MCWAP	13	-	(2)	-	-	29	-	-	41
MMTS-2	27	-	9	-	-	15	-	12	62
ORWRDP	-	-	5	-	-	43	-	49	97
KWSAP	2	-	3	-	-	16	-	-	20
KRIEL	-	-	-	-	-	-	-	13	13
UMGENI[(1)]	-	-	-	-	12	-	-	-	12
Balance at end of year	**512**	**-**	**22**	**-**	**12**	**546**	**-**	**74**	**1 165**

[(1)] *The loan account comprises of funds received from Umgeni Water (in terms of the Addendum to the MOA, November 2014) for the construction of the potable water pipeline from the water treatment works at the Spring Grove Dam to a terminal reservoir at Nottingham Road.*

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

13. NON-CONTRACTUAL AMOUNTS

Non-contractual amounts relate to liabilities and/or assets arising from legislation. This includes payments to the South African Revenue Service (SARS) relating to Value Added Tax (VAT), Skills Development Levy (SDL) and to the Unemployment Insurance Fund (UIF).

TCTA manages its projects separately and record the VAT payable or VAT receivable for each project. The net VAT payable is paid over to SARS.

As at year end there were no balances outstanding for SDL and UIF.

The table below indicates the net amount payable to SARS at the end of March:

13.1. Value Added Tax

	2018 R million	2017 R million
Net non-contractual amount		
Asset	-	2
Liability	(78)	(116)
Net payable	**(78)**	**(114)**

The tables below indicate the non-contractual assets and non-contractual liabilities, per project, as disclosed in the statement of financial position:

	2018	2017
Non-contractual assets - Value Added Tax		
BWP	-	2
Balance at end of year	-	2
Non-contractual liabilities - Value Added Tax		
VRS	(59)	(85)
BWP	(3)	-
VRESAP	(5)	(9)
MCWAP	(4)	-
MMTS-2	(1)	(3)
ORWRDP	(1)	(18)
KWSAP	-	(3)
MRWP	(5)	-
Balance at end of year	**(78)**	**(116)**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

13. NON-CONTRACTUAL AMOUNTS (CONTINUED)

13.2. Income Tax

TCTA is a not-for-profit organisation established by DWS (Government) to raise off-budget funding and implement projects (both on and off-budget) on its behalf. By allowing non-profit organisations preferential tax treatment, Government assist by augmenting their financial resources. TCTA applied for this preferential tax treatment as prescribed and its application for tax exemption in terms of the Income Tax Act, 1962, was approved. TCTA is exempted from Income tax as it is a Institution, Board, or Body established by or under any law as defined in the Income Tax Act, 1962.

14. PROVISIONS

Total provisions

The following provisions are the current and non-current provisions for the year:

	2018 R million	2017 R million
Current		
Provision for leave pay	12	10
Provision for compensation	17	20
Provision for incentives	10	20
Total Current Provisions	**39**	**50**
Non-Current		
Provision for compensation	282	290
Total Non-Current Provisions	**282**	**290**

Reconciliation of provisions - 2018	Opening balance	Additions	Utilised during the year	Reversed during the year	Change in discount factor	Total
Provision for leave pay	10	12	(10)	-	-	12
Provision for compensation	310	28	(12)	-	(27)	299
Provision for incentives	20	10	(8)	(12)	-	10
	340	**50**	**(30)**	**(12)**	**(27)**	**321**

Reconciliation of provisions - 2017	Opening balance	Additions	Utilised during the year	Reversed during the year	Change in discount factor	Total
Provision for leave pay	9	12	(11)	-	-	10
Provision for compensation	304	-	(40)	17	29	310
Provision for incentives	30	20	(19)	(11)	-	20
	343	**32**	**(70)**	**6**	**29**	**340**

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FOR THE PERIOD ENDED 31 MARCH 2018

14. PROVISIONS (CONTINUED)

Provision for leave pay

In terms of TCTA's policy, employees are entitled to accumulate annual leave not taken to a maximum of 40 working days. Accumulated annual leave exceeding the maximum of 40 working days is forfeited on 30 June of the succeeding year.

Provision for compensation

The provision for compensation payments are paid annually in cash to the LHDA for subsequent distribution to individuals affected by loss of income as a result of re-appropriation of land in respect of the LHWP project in Lesotho.

Provision for incentives

The TCTA remuneration policy allows for a performance bonus to be paid annually based on a formal assessment of each individuals job-related performance during the year. The 2017 gratuity was finalised and allocated to individuals during the 2018 financial year.

15. CASH AND CASH EQUIVALENTS

Cash and cash equivalents comprises cash at banks and cash on hand. Cash and cash equivalents also includes highly liquid investments that are readily available, generally on a "same day" basis.

TCTA prioritises liquidity across all it's projects, as such, most investments are allocated to Call and Money Market Funds.

	2018			2017		
	Cash	Call investments	Total	Cash	Call investments	Total
Project	R million	R million	R million	R million	R million	R million
VRS	-	2 910	2 910	-	1 525	1 525
BWP	20	52	72	-	80	80
VRESAP	-	82	82	-	60	60
MCWAP	-	474	474	-	447	447
MMTS-2	-	209	209	-	263	263
ORWRDP	-	1	1	-	30	30
KWSAP	-	70	70	-	154	154
TCTA-C	-	31	31	-	-	-
Total	**20**	**3 829**	**3 849**	**-**	**2 559**	**2 559**

Cash and cash equivalents consists of bank balances and petty cash. TCTA's cash management practice is to maintain a minimum amount of cash on hand.

[1] Cash and bank balances were less than R500 000 as at the end of March 2018 and March 2017.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

16. CONSTRUCTION REVENUE AND COSTS

TCTA constructs infrastructure on behalf of DWS and treats the cost of the construction in terms of IAS 11 Construction Contracts, as costs through the statement of comprehensive income.

Under the percentage of completion method, contract revenue is recognised as revenue in surplus or deficit in the accounting periods in which the work is performed. Contract costs include all capital, funding and administrative costs incurred by TCTA in relation to each project. The contra for the recognition of revenue will be the initial recognition of a financial asset. (Refer to note 9.4. for information on construction revenue earned and tariffs or transfers received from DWS during the period). DWS pays in full for the costs incurred resulting in revenue earned by TCTA equal to the costs incurred.

All these costs include staff costs.

Construction revenue	**2018**	**2017**
Project	**R million**	**R million**
VRS	249	372
MCWAP	73	94
MMTS-2	3	64
ORWRDP	203	140
MMTS-1	1	-
UMGENI	1	19
KRIEL	8	3
Balance at end of year	**538**	**692**

Construction cost	**2018**	**2017**
Project	**R million**	**R million**
VRS	(249)	(372)
MCWAP	(73)	(94)
MMTS-2	(3)	(64)
ORWRDP	(203)	(140)
MMTS-1	(1)	-
UMGENI	(1)	(19)
KRIEL	(8)	(3)
Balance at end of year	**(538)**	**(692)**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS
FOR THE PERIOD ENDED 31 MARCH 2018

16. CONSTRUCTION REVENUE AND COSTS (CONTINUED)

16.1. VRS: Construction costs

Construction costs for VRS relates to cost related payments made to the LHDA for Phase 2 of the Project and AMD.

Reconciliation	2018 R million	2017 R million
LHWP phase 2 construction costs for the year	(184)	(169)
AMD construction costs for the year	(36)	(190)
AMD Long-term solution construction costs for the year	(29)	(13)
Total Construction Cost	**(249)**	**(372)**

17. OTHER INCOME

Other income relates to services rendered and cost recoveries from the DWS. The other income each year will be recovering the expenses incurred for that project.

Other income	2018 R million	2017 R million
VRS	1 688	1 322
BWP	6	5
VRESAP	9	10
MCWAP	8	14
MMTS-2	8	20
KWSAP	6	6
Other income	**1 725**	**1 378**

All other projects excluded in the table above, have not earned other income during the year.

18. OPERATING COSTS FOR THE WORK IN LESOTHO

In accordance with the Treaty, the Government of the Republic of South Africa is responsible for the payment of all costs related to the operation and maintenance of the water transfer component of the LHWP. In Lesotho this work is carried out by the LHDA, with oversight by the LHWC. TCTA makes payments on a weekly cash flow schedule to enable this work to be undertaken.

Operating costs	2018 R million	2017 R million
VRS	(200)	(175)
Total operating costs	**(200)**	**(175)**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

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19. FINANCE INCOME AND COSTS

19.1. Finance income

2018	Interest income for financial assets at amortised cost			Total: Interest income for financial assets at amortised cost	Interest on compensation	Fair value gain or deficit on derivatives	Finance income per project
	Interest income on financial instruments	Interest income on the tariff receivable	Imputed interest on the financial asset				
	R million	R million	R million	R million	R million	R million	R million
VRS	292	1 901	2 648	4 842	-	-	4 842
BWP	6	63	-	69	-	-	69
VRESAP	10	385	-	395	-	-	395
MCWAP	30	83	-	113	-	-	113
MMTS-2	21	144	-	165	-	-	165
KWSAP	13	121	-	134	-	-	134
Finance income	**371**	**2 697**	**2 648**	**5 718**	**-**	**-**	**5 718**

2017	Interest income for financial assets at amortised cost			Total: Interest income for financial assets at amortised cost	Interest on compensation	Fair value gain or deficit on derivatives	Finance income per project
	Interest income on financial instruments	Interest income on the tariff receivable	Imputed interest on the financial asset				
	R million	R million	R million	R million	R million	R million	R million
VRS	368	1 736	2 562	4 666	-	6	4 672
BWP	7	79	-	86	-	-	86
VRESAP	7	385	-	392	-	-	392
MCWAP	26	109	-	135	-	-	135
MMTS-2	26	143	-	169	-	-	169
KWSAP	9	121	4	134	-	-	134
Finance income	**443**	**2 573**	**2 566**	**5 582**	**-**	**6**	**5 588**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS
FOR THE PERIOD ENDED 31 MARCH 2018

19. FINANCE INCOME AND COSTS (CONTINUED)

19.2. Finance costs

Finance costs for the year ended are analysed as follows:

2018	Interest expense for borrowings at amortised cost					Total: Interest income for financial assets at amortised cost	Interest on compensation	Fair value gain or deficit on derivatives	Finance cost per project
	Locally issued bonds	Other local debt	Foreign debt	Imputed interest on the financial asset	Fair value deficit on re-recognition of financial asset				
	R million	R million	R million	R million	R million	R million	R million	R million	R million
VRS	2 448	14	2	-	-	2 464	28	-	2 492
BWP	-	57	-	23	-	80	-	-	80
VRESAP	-	377	-	26	-	403	-	-	403
MCWAP	-	148	-	153	-	301	-	-	301
MMTS-2	-	181	-	10	-	191	-	-	191
KWSAP	-	128	-	36	-	164	-	-	164
Finance costs	**2 448**	**905**	**2**	**248**	**-**	**3 603**	**28**	**-**	**3 631**

2017	Interest expense for borrowings at amortised cost					Total: Interest income for financial assets at amortised cost	Interest on compensation	Fair value gain or deficit on derivatives	Finance cost per project
	Locally issued bonds	Other local debt	Foreign debt	Imputed interest on the financial asset	Fair value deficit on re-recognitionof financial asset				
	R million	R million	R million	R million	R million	R million	R million	R million	R million
VRS	2 263	23	5	-	-	2 291	28	8	2 328
BWP	-	69	-	15	-	84	-	-	84
VRESAP	-	372	-	3	-	375	-	-	375
MCWAP	-	144	-	-	-	144	-	-	144
MMTS-2	-	189	-	41	-	230	-	-	230
KWSAP	-	123	-	-	-	123	-	-	123
Finance costs	**2 263**	**920**	**5**	**59**	**-**	**3 247**	**28**	**8**	**3 284**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

20. ROYALTIES PAID

Royalties are paid to the Government of Lesotho in accordance with the Treaty for the benefit of receiving water from the LHWP. The royalties are based on the calculated net benefit of the construction of LHWP compared to a transfer scheme based entirely inside South Africa. The royalties comprise a fixed component and a variable component. The variable royalties are based on 811 million m³ (2017: 794 million m³) of water delivered adjusted for the increase in the Producer Price Index and the Eskom selling Price of electricity (ESI). Variable royalties in this financial year include the expected ESI (Eskom selling price) adjustment for the year that is expected to be settled in October 2018. The water volume delivered in this financial year is more than the agreed upon delivery of 780 million m³. In terms of the treaty, any differences will be adjusted in the following year..

Royalties paid	2018 R million	2017 R million
Fixed royalties	256	246
Variable royalties	658	609
Royalties	**914**	**855**

21. OTHER OPERATING EXPENSES

All construction costs including general administration costs that can be considered as construction overheads (specifically contracted to by DWS) are taken to surplus or deficit as part of project costs. Construction revenues will include this amount (note 16)

After construction, all administration/overhead expenses are expensed as operating expenses in the statement of comprehensive income. The projects listed below are in the post construction phase, and operating expenses are recognised in the statement of comprehensive income; all other projects are still in the construction phase. Other operating expenses include the following:

2018	Operating lease payments	Audit fees	AMD Operations and maintenance	Other expenditure	Total operating expenditure
Operating expenditure	R million	R million	R million	R million	R million
VRS	8	6	273	173	460
BWP	-	-	-	2	2
VRESAP	-	-	-	3	3
MCWAP	-	-	-	2	2
MMTS-2	-	-	-	2	2
KWSAP	-	-	-	2	2
Operating expenses recognised in surplus and deficit	**8**	**6**	**273**	**184**	**471**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

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21. OTHER OPERATING EXPENSES (CONTINUED)

2017	Operating lease payments	Audit fees	AMD operations and maintenance	Other expenditure	Total operating expenditure
Operating expenditure	**R million**	**R million**	**R million**	**R million**	**R million**
VRS	8	7	165	4	184
BWP	-	-	-	1	1
VRESAP	-	-	-	4	4
MCWAP	-	-	-	1	1
MMTS-2	-	-	-	6	6
KWSAP	-	-	-	2	2
Operating expenses recognised in surplus and deficit	**8**	**7**	**165**	**18**	**198**

Other costs incurred are in relation to insurance, non-audit services, repairs and maintenance, stationery and printing, the operating and maintenance costs incurred in terms of Protocol VI. In the TCTA model, administration costs are determined by aggregating the expected time to be spent on each project to determine the overall ratio of allocating overhead and administrative costs amongst our projects. During construction this recovery is included in the construction costs. Postconstruction these costs are recognised as other operating expenditure.

21.1. Operating leases

21.1.1. Leasing arrangements

The operating lease relates to a lease agreement for the office building with a lease term of 55 months. Lease payments escalate with 7.5% compounded with the first escalation taking effect on 1 January 2015 - the lease expired 31 December 2017.

The new lease agreement is a year-on-year agreement, commencing on the 1 January 2018 and expiring on 31 December 2018.

21.1.2. Payments recognised as an expense

	2018	2017
Operating lease payments	**R million**	**R million**
Minimum lease payments	-	8

21.1.3. Non-cancellable operating lease commitments

VRS

	2018	2017
Period	**R million**	**R million**
Less than one year	-	6
Greater than one year but less than 5 years	-	-
More than five years	-	-
	-	**6**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

21. OTHER OPERATING EXPENSES (CONTINUED)

21.2. Operation and maintenance costs in terms of Protocol VI

Included in VRS operating expenditure is the income and expenses relating to operations and maintenance for the works on South African soil. In terms of Protocol VI to the Treaty, signed on 4 June 1999, these amounts are separately identified and reported on.

21.2.1. VRS

Operating and maintenance	2018 R million	2017 R million
Revenue	1 701	1 057
Operating costs	(1 701)	(1 057)
Net operating and maintenance costs	**-**	**-**

21.3. Breakdown of staff related costs disclosed separately as well as costs included in construction costs

During the construction phase, all staff related costs are included in the construction costs for each individual project. The costs related to each project is calculated based on an approved cost recovery model.

Previously all costs recovered have been included in the other operating expense line on the statement of comprehensive income and have not been netted against the related expense. Management is of the opinion that by separating the costs which have been allocated to the operating expenses of a project compared to where the costs are still included as construction costs (which is a different line in the statement of comprehensive income information provided to the users of the annual financial statements would be improved.

	2018			2017		
	Costs disclosed separately	Staff related costs included as construction costs	Total staff related expense	Costs disclosed separately	Staff related costs included as construction costs	Total staff related expense
Staff costs	**R million**	**R million**	**R million**	**R million**	**R million**	**R million**
VRS	68	33	101	76	22	98
BWP	4	-	4	4	-	4
VRESAP	6	-	6	6	-	6
MCWAP	6	21	27	12	4	16
MMTS-2	4	-	4	13	4	17
ORWRDP	-	22	22	-	17	17
KWSAP	4	-	4	5	-	4
Balance at end of year	**92**	**76**	**168**	**116**	**47**	**162**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

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21. OTHER OPERATING EXPENSES (CONTINUED)

The total staff related costs which have been included in construction costs during the 2017 financial year is R172 million.

MCWAP, AMD and MMTS-2 received taking over certificates during the 2018 financial year. The staff costs have been split between construction costs and are disclosed separately upon receipt of the Taking Over Certificates.

22. RELATED PARTIES

TCTA is a state-owned entity established under the National Water Act. As such, TCTA is a government related entity and has applied the exemption in paragraph 25 of IAS 24 (Related Party Disclosure). These related parties are either controlled, jointly controlled or significantly influenced by the government of the Republic of South Africa. The significant transactions below are as a result of contractual agreements entered into between TCTA and the related parties in fulfilling TCTA's mandate in terms of directives issue in various projects.

22.1. Trading transactions

22.1.1. DWS

For related party transactions and balances with DWS refer to note 10.4.

22.1.2. DBSA

A government-related entity is an entity that is controlled, jointly controlled or significantly influenced by a government. TCTA and DBSA are both schedule 2 Major Public Entities in terms of the PFMA and report to National Government.

	Opening balance 1 April 2017	Drawdowns	Repayments	Closing balance 31 March 2018	Interest incurred for the period	Interest outstanding at 31 March 2018
Borrowings per Project	**R million**	**R million**	**R million**	**R million**	**R million**	**R million**
BWP	240	-	(20)	220	21	-
VRS	15	-	(15)	-	1	-
VRS -LHDA Loans	38	-	(4)	34	2	-
Total transactions with DBSA	**293**	**-**	**(39)**	**254**	**24**	**-**

	Opening balance 1 April 2016	Drawdowns	Repayments	Closing balance 31 March 2017	Interest incurred for the period	Interest outstanding at 31 March 2017
Borrowings per Project	**R million**	**R million**	**R million**	**R million**	**R million**	**R million**
VRS	31	-	(15)	15	2	-
VRS-LHDA Loans	45	-	(7)	38	4	-
BWP	260	-	(20)	240	23	-
Total transactions with DBSA	**336**	**-**	**(42)**	**293**	**29**	**-**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

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22.1.3. ESKOM

The following transactions which are collectively significant have occurred with Eskom:

Project	2018 R million	2017 R million
VRS	79	89[1]
MMTS-2	1	16
MCWAP-1	-	11
Total significant transactions with Eskom	**80**	**116**

Eskom includes Eskom Holdings Limited and Eskom Holdings SOC Limited. Payments to Eskom relates to electricity as required by the projects.

[1] *The VRS transactions relate to the AMD project amounting to R89 million.*

22.2. Other transactions

22.2.1. LHWC Costs

The Government of South Africa and the Government of Lesotho entered into a Treaty with the purpose to provide for the establishment, implementation, operation and maintenance of the LHWP. The LHWC is the body overseeing the two vehicles (TCTA and LHDA) mandated with the execution of the Treaty functions on behalf of the two governments. The LHWC is responsible and accountable for the project, acts on behalf of, advises the governments and is the channel of all government inputs relating to the project.

The running costs of the LHWC, is shared by the governments of the Republic of South Africa and the Kingdom of Lesotho. Each party is liable for the costs of its own delegation and all other costs are met by the parties on an equal basis.

The following amounts represents the costs relating to the LHWC paid for by TCTA:

Payments made to related party	2018 R million	2017 R million
LHWP		
LHWC Costs: RSA contribution and delegation costs	16	14

22.3. Compensation of directors and executive management

Short-term employee benefits

TCTA does not contribute to any defined retirement or medical aid fund. It does not have a liability for the provision of retirement funding. The emoluments paid to management include a sum for the provision of their own medical aid and pension benefits.

Total compensation to directors and executive management	2018 R million	2017 R million
Non-executive Directors	10	10
Executive Director	3	5
Executive Management	18	21
2016 Incentive paid in 2017 financial year	-	5
Total for the year	**31**	**41**

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22. RELATED PARTIES (CONTINUED)

22.3.1. Non-executive directors

Directors' emoluments and related costs	2018 R million	2017 R million
Emoluments	10	8
Other related costs	-	2
Total for the year	**10**	**10**

	ATTENDANCE FEES				
	Board fees R'000	Ad hoc fees R'000	Travel /other expenses R'000	REMCO / Nominations Committee R'000	Finance & Risk and Finance Committee R'000
2018					
M Hlahla	650	-	-	-	-
Z Manase	692	181	-	17	146
JRD Modise	960	-	-	58	-
S Makhathini	345	19	-	51	34
S Roopa	345	19	26	66	119
S Khondlo	345	-	-	51	-
DR J Ellman	345	10	-	17	104
M Chonco	330	235	9	34	102
	4 012	**464**	**35**	**294**	**510**
2017					
M Hlahla	1 137	55	1	23	-
Z Manase	910	48	-	16	-
JRD Modise	327	16	7	16	278
S Makhathini	327	32	-	16	161
S Roopa	327	33	1	16	145
S Khondlo	327	48	33	16	-
DR J Ellman	327	23	1	16	145
M Chonco	218	-	-	16	65
	3 900	**255**	**43**	**135**	**794**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

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ATTENDANCE FEES					
Audit Committee	Human Resources and Transformation Committee	Board meetings	Investment & Technical Committee	Sustainability committee	Grand total
R'000	R'000	R'000	R'000	R'000	R'000
-	88	-	-	49	787
53	-	535	-	66	1 690
222	-	420	-	51	1 711
104	88	22	68	-	731
34	236	237	-	68	1 150
34	88	194	97	68	877
121	-	151	68	17	838
-	102	194	68	-	1 074
568	**602**	**1 753**	**301**	**319**	**8 858**
-	145	284	-	-	1 645
189	-	227	-	-	1 390
116	-	102	-	-	862
-	161	102	-	-	799
-	490	102	-	-	1 114
132	145	102	-	-	803
100	-	102	-	-	714
-	-	102	-	-	401
537	**941**	**1 123**	**-**	**-**	**7 728**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS
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22. RELATED PARTIES (CONTINUED)

22.3.2. Executive director

2018	Date appointed or resigned	CTC[1]	Medical Aid	Total[4]
Director		R'000	R'000	R'000
L Radzuma (Acting Chief Executive)[2]	2018/02/26	2 691	31	2 722
O Busari (Acting Chief Executive)[3]	2018/03/23	78	-	78
Total executive director		**2 769**	**31**	**2 800**

[1] This amount refers to guaranteed portion of the Executives remuneration
[2] Mr L Radzuma has been acting as the Chief Executive Officer since 1 November 2016 until 28 February 2018
[3] Professor O Busari was appointed as the Acting Chief Executive Officer on the 23 March 2018
[4] There was no incentive payment relating to the 2017 financial year

2017	Date appointed or resigned	CTC[1]	Medical Aid	Total
Director		R'000	R'000	R'000
J Ndlovu (Chief Executive Officer)[2]	2016/10/31	3 339	18	3 357
L Radzuma (Acting Chief Executive)[3]	2016/11/01	1 160	14	1 174
		4 499	**32**	**4 531**

[1] This amount refers to guaranteed portion of the Executives remuneration.
[2] Mr J Ndlovu's contract came to an end on 31 October 2016.
[3] Mr L Radzuma was appointed as the Acting Chief Executive Office on 1 November 2016.

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22.3.3.Executive management

The remuneration of directors and key executives is determined by REMCO having regard to the performance of individuals and market trends.

2018	Position	Date appointed or resigned	CTC[1]	Medical Aid	Sums paid by way of expense[2]	Other[3]	Total
Executive Managers			R'000	R'000	R'000	R'000	R'000
J Nhlapho	Chief Operations Officer	2007/08/06	653	-	-	-	653
H Nazeer	Chief Financial Officer	2007/09/01	3 269	34	102	-	3 405
O Busari[4]	Chief Strategy Officer	2007/11/01	3 334	34	-	-	3 368
J Claassens	Executive: Project Management And Implementation	2007/04/01	3 138	34	71	-	3 243
L Radzuma[5]	Chief Risk Officer	2010/07/01	213	3	-	-	216
L Mnisi	Executive: Company Secretariat And Company Secretary	2008/11/01	-	-	-	1 003	1 003
N Nkabinde	Executive: Project Finance And Treasury	2015/09/01	2 243	34	1	-	2 278
L Gumede	Executive: Enterprise Wide Support Services	2016/02/01	1 963	34	-	-	1 997
H Botha	Executive: Human Resources And Organisational Development	2016/02/01	2 131	34	-	15	2 180
Total Executive Management Remuneration			**16 944**	**207**	**174**	**1 018**	**18 343**

(1) This amount refers to guaranteed portion of the Executives remuneration.

(2) This amount refers to travel reimbursements.

(3) This amount refers to long service award.

(4) O Busari appointed as Acting CEO on 23 March 2018

(5) L Radzuma resigned as Acting CEO on 28 February 2018

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

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22. RELATED PARTIES (CONTINUED)

22.3.3. Executive management (continued)

2017	Position	Date appointed or resigned	CTC[1]	Medical Aid	Sums paid by way of expense[2]	Other[3]	Total
Executive Managers			**R'000**	**R'000**	**R'000**	**R'000**	**R'000**
J Nhlapho	Chief Operations Officer	2007/08/06	1 817	13	-	-	1 830
H Nazeer	Chief Financial Officer	2007/09/01	3 253	32	95	15	3 395
O Busari	Chief Strategy Officer	2009/11/01	3 209	32	3	-	3 244
J Claassens	Executive: Project Management And Implementation	2007/04/01	2 949	32	66	-	3 047
L Radzuma[4]	Executive: Enterprise-Wide Support Services	2010/07/01	1 402	18	-	-	1 420
L Mnisi[5]	Executive: Company Secretariat And Company Secretary	2008/11/01	1 889	26	-	-	1 915
N Nkabinde	Executive: Project Finance And Treasury	2015/09/01	2 110	32	7	-	2 149
L Gumede	Executive: Enterprise Wide Support Services	2016/02/01	1 846	32	-	-	1 878
H Botha	Executive: Human Resources And Organisational Development	2016/02/01	2 005	32	-	-	2 037
Total Executive Management Remuneration			**20 480**	**249**	**171**	**15**	**20 915**

(1) This amount refers to guaranteed portion of the Executives remuneration.

(2) This amount refers to travel reimbursements.

(3) This amount refers to long service award.

(4) Mr L Radzuma was appointed as the Acting Chief Executive Officer on 1 November 2016.

(5) Ms L Mnisi's contract came to an end on 31 January 2017.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

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23. CAPITAL COMMITMENTS

2018 Project	< 1 Year R million	1-2 Years R million	2-3 Years R million	3-4 Years R million	>4 years R million	Total per project R million
BWP	-	4	-	-	-	4
VRESAP	-	2	-	-	-	2
MCWAP	40	12	170	142	66	430
ORWRDP	124	64	5	-	-	193
KWSAP	-	10	-	-	-	10
MMTS-2	21	15	13	4	8	61
AMD	58	79	47	-	-	184
MCWAP-2	49	196	1 204	2 594	6 958	11 001
LHWP2	271	962	2 450	815	17 453	21 951
AMD-LT	17	281	3 949	3 604	2 272	10 123
KRIEL	11	47	-	-	-	58
Total per period	**591**	**1 672**	**7 838**	**7 159**	**26 757**	**44 017**

2017 Project	< 1 Year R million	1-2 Years R million	2-3 Years R million	3-4 Years R million	>4 years R million	Total per project R million
BWP	4	-	-	-	-	4
VRESAP	10	-	-	-	-	10
MCWAP	67	162	139	20	1	389
ORWRDP	1 582	1 352	1 361	1 083	10	5 388
KWSAP	8	-	-	-	-	8
MMTS-2	49	7	-	-	-	56
VRS	1 509	2 457	8 194	8 475	11 568	32 203
MCWAP-2	156	1 244	2 572	2 587	4 417	10 976
KRIEL	2	-	-	-	-	2
Total per period	**3 387**	**5 222**	**12 266**	**12 165**	**15 996**	**49 036**

These capital commitments will be funded through loans.

These capital commitments are funded through on-budget transfers from the Department of Water and Sanitation.

Included in the project costs for MMTS-2 are the capital cost for the refurbishment project (MMTS-1), which is undertaken on behalf of DWS and the construction of a potable water pipeline on behalf of Umgeni Water (and funded by Umgeni Water).

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24. COMPLIANCE WITH THE PUBLIC FINANCE MANAGEMENT ACT, ACT NO. 1 OF 1999, AND TREASURY REGULATIONS

24.1. Irregular, fruitless and wasteful expenditure

Section 55(2)(b)(i) of the PFMA requires that a public entity disclose particulars of any material losses through criminal conduct and any irregular expenditure and fruitless and wasteful expenditure that occurred during the financial year.

Irregular expenditure that was incurred during the year under review is included in "Other operating expenses" in the aggregated statement of comprehensive income.

24.1.1. Irregular expenditure

"Irregular expenditure" means expenditure, other than unauthorised expenditure, incurred in contravention of or that is not in accordance with a requirement of any applicable legislation, including the PFMA or the State Tender Board Act, 1968 (Act No. 86 of 1968), or any regulations made in terms of that Act; or any provincial legislation providing for procurement procedures in that provincial government.

Irregular expenditure, the non-compliance must be linked to a financial transaction and it is incurred when a transaction, condition or an event linked to non-compliance is recognised as expenditure in the statement of comprehensive income in accordance with IFRS.

Other operating expenses in the aggregated statement of comprehensive income includes irregular expenditure that was incurred during the year under review.

Full economic value was derived for the irregular expenditure, and appropriate penal action will be taken against the employees responsible for the non-compliance.

Reconciliation of irregular expenditure	Note	2018 Rand	2017 Rand
Opening balance		**49 536 584**	957 534
Irregular expenditure current year		**260 727 283**	49 467 837
Acid Mine Draiwnage	24.1.1.1.	99 305 729	40 474 865
Claims	24.1.1.2.	96 257 051	-
Variation Orders	24.1.1.3.	35 486 798	-
Other	24.1.1.4.	29 677 705	8 992 980
Irregular expenditure from prior years identified and confirmed in the currrent year		**357 286 109**	-
Variation Orders	24.1.1.5	280 020 107	-
Acid Mine Drainage	24.1.1.6	66 796 009	-
Other	24.1.1.7	10 469 993	-
Condoned or written off		**(266 444)**	(888 787)
Irregular expenditure awaiting condonement		**667 283 532**	**49 536 584**

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2018			
24.1.1.1. Acid Mine Drainage			
Incident	**Authorisation**	**Amount Rand**	**Action taken**
AMD CENTRAL BASIN OPERATIONS AND MAINTENANCE: Contract – 08 – 030, Intelligent Water Solutions (IWS) Refer expanded note 24.1.2 Appointment of IWS to operate the AMD Central Basin. From 1 April 2016 to 30 July 2016 the Central Basin was being operated by Intelligent Water Solutions (IWS) through an interim contract awarded by the Accounting Authority. On the 1st August 2016 IWS was awarded a 30 month operations contract by the former Supply Chain Manager. This contract was cancelled in December 2016 on the basis of their irregular appointment. A settlement was agreed between TCTA and IWS with revised costs to operate the plant from the 1st January 2017 until 30 June 2017 to allow for an operator to be appointed through an open tender process. On the 29 June 2017, Board approved a three months extension for Intelligent Water Solutions (IWS) O&M contract from July to September 2017. The declared expenditure is for the period 1 April 2017 to 30 September 2017.	In process	**49 823 227**	Investigation completed and actions implemented.
AMD EASTERN BASIN & CENTRAL BASIN OPERATIONS AND MAINTENANCE: Suppliers of Consumables and Spares Contracts Single sourcing appointment of various suppliers for the operations and maintenance of both the Eastern and Central basin Acid Mine Drainage plants. On 29 September 2017, EXCO approved the strategy for TCTA to enter into a direct contract with the sub-contractors of the main operations and maintenance contracts (IWS and CMC PG MAVUNDLA JV). The sub-contractors, Proxa (Central Basin) and Tecroveer Thanda Manzi (Eastern Basin) were appointed to operate the plant and provide security services. TCTA entered into direct contracts with suppliers of consumables and spares for the operations and maintenance on both plants and provided it to the operators. Accordingly TCTA requested National Treasury approval for the appointment of the suppliers. National Treasury did not grant approval on any of these suppliers hence irregular expenditure was incurred. The declared expenditure is for the period 1 October 2017 to 31 March 2018.	Authorisation not yet initiated	**22 499 489**	Investigation to be initiated.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

24. COMPLIANCE WITH THE PUBLIC FINANCE MANAGEMENT ACT, ACT NO. 1 OF 1999, AND TREASURY REGULATIONS (CONTINUED)

2018			
24.1.1.1. Acid Mine Drainage			
Incident	**Authorisation**	**Amount Rand**	**Action taken**
AMD EASTERN BASIN OPERATIONS AND MAINTENANCE: Contract – 08 – 032, Tecroveer Thanda Manzi JV Single sourcing appointment of Tecroveer for the operations of the AMD Central Basin operations and maintenance. On the 30th September 2017, TCTA entered into a direct contract with CMC PG Mavudla's sub-contractor Tecroveer Thanda Manzi JV, by invoking the procurement clause in line with the Delegation of Authority, due to National Treasury not approving further extensions on the CMC PG Mavudla's contract. On the 1 November 2017 EXCO extended the contract of the operator on site by one month as TCTA Board had not approved the award of the open tender of the operation contract. On the 4th November 2017 Board again deliberated on the tender recommendations from the RFC and requested additional information. The Board was unable to award the operations tenders, as a result of which EXCO had to approve the extension of the current operating contracts until 28 February 2018. The Board approved the award on 23 February 2018 and the interim contract was further extended by one month to 31 March 2018 to allow for the finalisation of the contract negotiations. The declared expenditure is for the period 1 October 2017 to 31 March 2018.	Authorisation not yet initiated	**14 433 840**	Investigation to be initiated.
AMD CENTRAL BASIN OPERATIONS AND MAINTENANCE: Contract – 08 – 030, Proxa Propriety Limited Single sourcing appointment of Proxa for the operations and maintenance of the AMD Central Basin. On the 30th September 2017 TCTA entered into direct contract with Proxa Propriety Limited by invoking the procurement clause in line with the Delegation of Authority due to National Treasury not approving further extensions on the IWS contract. On the 1 November 2017 EXCO extended the contract of the operator on site by one month as TCTA Board had not approved the award of the open tender for the operation contract. On the 4 November 2017 Board again deliberated on the tender recommendations from the Risk and Finance Committee (RFC) and requested additional information. The Board was unable to award the operations tenders, as a result of which EXCO had to approve the extension of the current operating contracts until 28 February 2018. The Board approved the award on 23 February 2018 and the interim contract was further extended by one month to 31 March 2018 to allow for the finalisation of the contract negotiations. The declared expenditure is for the period 1 October 2017 to 31 March 2018.	Authorisation not yet initiated	**12 549 173**	Investigation to be initiated.
TOTAL ACID MINE DRAINAGE		**99 305 729**	

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

2018			
24.1.1.2. Claims			
Incident	**Authorisation**	**Amount Rand**	**Action taken**
CLAIMS: In accordance with the FIDIC conditions of contract a contractor's claim normally arises where the contractor believes he is entitled to additional compensation under the contract and notifies the PSP of his intention to submit a claim. FIDIC provides a claims resolution process that requires the PSP to issue a determination following consultations with both the client and the contractor on the claim as submitted by the contractor. Should any party not be satisfied it may refer the claim to the Dispute Adjudication Board (DAB). The DAB will make a decision based on further submissions by the client and contractor. Again, should any party be dissatisfied with the decision the matter may be referred to arbitration for a final ruling, unless an amicable settlement is reached. At each stage of adjudication the amount awarded, if any, must be paid to the contractor. Likewise if a lessor amount is awarded the contractor must pay the client the difference. The resolution of claims may only be finalised long after the contractor has incurred the expenditure or undertaken the works for which he claims additional compensation. The expense however is only recognised by TCTA at the time a ruling has been made in favour of the contractor by an adjudication party. By definition a claim relates to expenditure that has already been incurred and is subject to an independent adjudication process by professionals to quantify the amount due to in terms of the contract. It is therefore not practically possible to obtain the prior approval of National Treasury in terms of SCM Instruction Note 3 of 2016/17 effective 1 May 2016. Regardless of this practical constraint the expense is now deemed a contract expansion requiring National Treasury prior approval where the extent of contract expansions exceed the lower of 20% of contract value or R20 million.	Authorisation not yet initiated	**96 257 051**	Investigation to be initiated.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

24. COMPLIANCE WITH THE PUBLIC FINANCE MANAGEMENT ACT, ACT NO. 1 OF 1999, AND TREASURY REGULATIONS (CONTINUED)

2018			
24.1.1.2. Claims			
Incident	**Authorisation**	**Amount Rand**	**Action taken**
It is in this context that the claims per contract listed below are declared to be irregular expenditure.			
TOTAL CLAIMS		**96 257 051**	

DESCRIPTION	Rand
Acid Mine Drainage Project – Short Term Intervention (AMD STI)	
Contract 008-013: Construction of Eastern Basin water treatment plant	6 151 061
Mokolo Crocodile Water Augmentation Project – Phase 1 (MCWAP1)	
Contract No: TCTA 07-001 MCWAP 1 Construction Contract	24 428 309
Oliphant's River Water Resource Development Project – Phase 2c (ORWRDP 2C)	
Contract 005-002: Contraction of ORWRDP Phase 2C	65 677 681
Total	**96 257 051**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

2018			
24.1.1.3. Variation Orders			
Incident	**Authorisation**	**Amount Rand**	**Action taken**
CONSTRUCTION OF THE MMTS-2 WATER TRANSFER SYSTEM: CONTRACT NO. TCTA 04-005, WBHO Construction (Pty) Ltd. Extensions in the form of VOs was initiated to cover various close out items, this work falls within prescripts of National Treasury IN#3 of 16/17. These payments was withheld pending National Treasury approval which was not obtained as it was post facto.	In process	**12 956 427**	Investigation in process.
VARIATIONS ORDERS: TCTA uses the FIDIC conditions of contract in terms of which TCTA appoints a Professional Services Provider (PSP) to undertake the design, construction supervision and administration of the construction contract on behalf of TCTA. The Contractor, also appointed on a FIDIC contract, undertakes the construction of the project. All instructions to the Contractor are issued by the PSP. Contract expansions in the form of variation orders are delegated to Management within the contingency provision approved by the Board for a specific contract. The operational delegation gives the Executive Manager PMID the approval powers. TCTA appoints Project Managers and other professional staff to represent TCTA on the project sites where construction takes place. Approval of all variation orders within the approved contingencies are duly approved by the Executive Manager PMID. Due to practical realities on site, instructions by the PSP to the Contractor happens on a daily basis which gives rise to variation orders. In terms of the Contract the PSP may issue instructions up to a defined amount (normally R500 000) without obtaining TCTA prior approval. The PSP would consult with the TCTA Project Manager on any instruction that may exceed the PSP's delegated authority. The TCTA Project Manager would give consent for the instruction as recommended by the PSP. The Contract would normally appoint the Project Managers as TCTA's representative responsible for the administration of the contractual provisions thereby giving authority to give the required consent for an instruction by the PSP to the Contractor. Formal approval for any variation order would finally be given by the Executive Manager PMID once the required documentation has been compiled and reviewed by TCTA's professional staff and recommended for approval by the Executive. Given that the construction contract is a re-measurable contract, interim payments are certified by PSP and are subject to adjustment until the final payment certificate has been agreed and issued.	Authorisation not yet initiated	**9 112 754**	The matter still needs to be investigated. The Operational Delegation of Authority is under review to ensure consistency with the FIDIC method of contracting.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

24. COMPLIANCE WITH THE PUBLIC FINANCE MANAGEMENT ACT, ACT NO. 1 OF 1999, AND TREASURY REGULATIONS (CONTINUED)

2018			
24.1.1.3. Variation Orders			
Incident	**Authorisation**	**Amount Rand**	**Action taken**
In certain cases the explicit delegation to the Project Manager to act on behalf of TCTA has not been provided in the contracts, although the practice has been consistently applied across all TCTA contracts and projects. In such cases where prior approval by the Executive Manager PMID or TCTA Executive Committee or Board has not been obtained for a variation order such costs are deemed to have been incurred irregularly in terms of the PFMA. Irregular expenditure incurred on the specific projects and relevant contracts are listed below for the current financial year and prior years respectively:			

DESCRIPTION	2017/18 Rand
Acid Mine Drainage Project – Short Term Intervention (AMD STI)	
Contract 008-041: Professional Services Provider	1 945 488
Contract 008-013: Construction of Eastern Basin water treatment plant	1 249 044
Sub-Total	**3 194 532**
Mooi-Mgeni Transfer Scheme – Phase 2 (MMTS-2)	
Contract 004-041: Professional Services Provider	3 885 151
Contract 004-002: Construction of the Water Transfer System	1 236 692
Contract 004-003: Refurbishment of the Mearns Pump Station	796 378
Sub-Total	**5 918 222**
Total	**9 112 754**

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FOR THE PERIOD ENDED 31 MARCH 2018

2018			
24.1.1.3. Variation Orders			
Incident	**Authorisation**	**Amount Rand**	**Action taken**
MOKOLO PIPELINE: Contract 007-001, AVENG (AFRICA) LTD/ UMBUTHO CIVIL & ELECTRICAL JV: In January 2017, excessive rain caused extensive erosion damage within some sections of the pipeline servitude. Work required to repair and prevent further damage was undertaken. This work falls within prescripts of National Treasury Instruction Note. 3 of 16/17. Subsequently National Treasury rejected an application for approval on the basis that the request has become ex post facto and has stated that TCTA must make payment to Aveng (Africa) Ltd/Umbutho Civil & Electrical JV and then follow the condonation process.	In process	**5 682 360**	Investigation in process.
MMTS-2: Contract 004-041, AECOM SA (FORMERLY BKS) FOR CONSULTANCY SERVICES FOR MOOI MGENI TRANSFER SCHEME, PHASE 2. Extensions in the form of Variation Orders was initiated to cover various close out items, this work falls within prescripts of National Treasury Instruction Note 3 of 16/17. These payments were withheld pending National Treasury approval which was not obtained as it was ex post facto.	In process	**4 533 309**	Investigation in process.
Olifants River Water Resource Development Project: Contract 005-084 NEMAI Consulting, for services of the Environmental Control Officer, required by Ministerial Directive, on ORWRDP2 was contracted from July 2012 to April 2015. National Treasury approved extensions until 31 July 2017. A further extension was required to April 2018 due to delays by the contractor. Multiple requests have been sent to National Treasury for approval but they all have been rejected on the basis that the request has become ex post facto.	In process	**2 323 912**	Investigation in process.
MOOI MGENI TRANSFER SCHEME PHASE 1 (MMTS-1): CONTRACT NO. TCTA 04-003, REFURBISHMENT OF MEANS PUMP STATION. Extensions in the form of VO10 was initiated to cover the close out of the project. This work falls within prescripts of National Treasury IN#3 of 16/17. These payments was withheld pending National Treasury approval which was not obtained as it was ex post facto.	In process	**878 036**	Investigation in process.
TOTAL VARIATION ORDERS		**35 486 798**	

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

FOR THE PERIOD ENDED 31 MARCH 2018

24. COMPLIANCE WITH THE PUBLIC FINANCE MANAGEMENT ACT, ACT NO. 1 OF 1999, AND TREASURY REGULATIONS (CONTINUED)

2018			
24.1.1.4. Other			
Incident	**Authorisation**	**Amount Rand**	**Action taken**
Appointment of Edward Nathan Sonnerberg (ENS) through single souring to provide labour law advisory services to TCTA with regards to investigation and institution of disciplinary action. Request for deviation was rejected by National Treasury.	In process	**10 426 126**	Investigation in process.
Expenditure with respect to remuneration payments for the irregular appointed Executives (Executive HROD, Executive EWSS, Chief Strategy Officer) for a period 1 April 2017 to 31 March 2018.	Remedial action taken where applicable	**7 928 497**	Investigation done by EY and concluded.
The budget for legal fees for MMTS-2 and AMD was exceeded as a result of new legal matters which did not form part on the initial budget.	Authorisation not yet initiated	**3 417 686**	Investigation to be initiated.
Appointment of Tshisevhe Gwina Ratshimbilani Incorporated through single sourcing to render legal advisory services on fund raising activities for LHWP. Request for deviation was rejected by National Treasury.	In process	**1 320 047**	Investigation in process.
Lesotho Highlands Operations and Maintenance: Lifton Construction Continuous use of Lifton Construction to provide services to TCTA for the operations and maintenance of the LHWP on an open ended contract basis which contravenes National Treasury Instruction Number 3 of 2017/2016.	In process	**1 224 474**	Investigation in process.
DENTONS KAPDITWALA Inc. was appointed through a quotation process for R 404 408.00. This amount was then exceeded, given the extent of the matter.	Authorisation not yet initiated	**1 217 488**	Investigation to be initiated.

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FOR THE PERIOD ENDED 31 MARCH 2018

2018			
24.1.1.4. Other			
Incident	**Authorisation**	**Amount Rand**	**Action taken**
Lesotho Highlands Operations and Maintenance: PV Engineering TCTA needed to procure an additional butterfly valve to replace one of the existing valves in the tunnel installed in the early 1990's. The valve was required in October 2018, when a two month scheduled outage of the tunnel was scheduled. Due to operational requirements for the valve which had to be fully compatible with the existing valves and spares being interchangeable, a single sourcing strategy was initially proposed. National Treasury supported a deviation on condition that 3 quotes were obtained. Due to the size of the valves, which required specialised manufacturing equipment and capacity and DTI localisation requirements, applicable on the manufacturing of the valve, VAMCOSA, the local valve manufacturers organisation, was approached. A list of 20 qualifying suppliers was supplied and all were requested to quote. Four entities responded, one stating its inability to supply. Two of the other three quotes received were from different operating entities within the Premier Valve Group. Management highlighted this possible conflict in the initial Exco memorandum and on request engaged with the Group management, who explained the Group structure and the relationship between the various operating entities. It was confirmed the two separate quotes from Premier Valves and Premier Valves Engineering (PVE), although confusing, were independently provided by the respective entities. Based on this clarification, it was accepted that three independent quotes were received in accordance with National Treasury requirements and the lowest bidders quote was accepted. However, it was subsequently deemed that the process did not comply with Section 51 of the PFMA and NT Instruction Note 3of 16/17 and that the expenditure is irregular.	Authorisation not yet initiated	**685 251**	Investigation to be initiated.
Reappointment of the Chief Operations Officer, following a settlement agreement, the subject of a legal challenge by TCTA.	Subject to legal process	**679 298**	Subject to legal process
Appointment of Selomo Attorneys through single sourcing to represent and advise TCTA in labour disputes and disciplinary actions. Request for deviation was rejected by National Treasury.	In process	**531 198**	Investigation in process.

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FOR THE PERIOD ENDED 31 MARCH 2018

24. COMPLIANCE WITH THE PUBLIC FINANCE MANAGEMENT ACT, ACT NO. 1 OF 1999, AND TREASURY REGULATIONS (CONTINUED)

2018			
24.1.1.4. Other			
Incident	**Authorisation**	**Amount Rand**	**Action taken**
Procurement for goods and services with a value under R30 000 was followed after expiry of the contract with two travel agencies, whilst the tender process was being finalised. However, majority of travel agencies did not respond on time to requests for quotations. This resulted in the following travel agencies being awarded work in excess of the R30 000 limit.	In process	**439 557**	Investigation in process.
Appointment of Ellen of Overy law firm on a single source to represent TCTA on a dispute with Tecroveer.	Authorisation not yet initiated	**411 582**	Investigation to be initiated.
Appointment of Fluxman's attorneys on a single source to represent TCTA on a legal matter.	Authorisation not yet initiated	**387 481**	Investigation to be initiated.
Costs related to disciplinary hearing which only ended after 16 sittings. The hearing was originally planned for 5 sittings only. (Tokiso – Chairperson fees)	The ACEO condoned the expenditure	**222 631**	Condoned by the ACEO.
Appointment of Corporate Executive Board on a single source.	Authorisation not yet initiated	**222 620**	Investigation to be initiated.
Appointment of VUMA Reputation Management on a single source to manage an urgent media matter.	Authorisation not yet initiated	**189 810**	Investigation to be initiated.
Extension of Banqobi Consulting for the placement of a Senior Manager Company Secretary for a period of six months.	In process	**184 680**	Investigation in process.
Appointment of M2TD to provide Adobe license. Three (3) quotations not obtained.	Authorisation not yet initiated	**55 751**	Investigation to be initiated.
The request was made to edit the Corporate Plan before submission to Board. A discussion was held with SCM to undertake the work under the contract for the Annual Report as editing of the Corporate Plan and Annual Report are very similar. After the work was undertaken it was decided that because the editing of the Corporate Plan was not specifically included in the contract a deviation of the Scope of Work would be required.	The ACEO condoned the expenditure	**38 578**	Condoned by the ACEO.
Appointment of Werksmans on a single source basis to advise TCTA Board on a labour matter.	Authorisation not yet initiated	**27 379**	Investigation to be initiated.

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FOR THE PERIOD ENDED 31 MARCH 2018

2018			
24.1.1.4. Other			
Incident	**Authorisation**	**Amount Rand**	**Action taken**
International travel to Lesotho by Executive PMID, without ministerial approval, to attend Commission meetings on three occasions.	In process	**23 775**	Investigation in process.
The purchase of a laptop for a new employee in Project Finance exceeded the R30k annual threshold.	In process	**20 909**	Investigation in process.
Appointment of a service provider, in excess of the R30 000 annual threshold, to repair the faulty Data Centre Cooling System (DCCS) and restore the Domain Controller after it crashed. Both incidents, which occurred on different days, where the server room was flooding with water due to DCCS failure and the network was down due to the Domain Controller crash.	In process	**9 444**	Investigation in process.
An employee attended training without following proper internal processes, • A training form was signed off only after the employee attended the training. • There was no signed off PDP. • The employee secured service of another service provider whilst there was a service provider already appointed and SLA to provide similar training. • Employee failed to attend full two days of training • The line manager was suspended before the condonation was finalised.	In process	**8 208**	Investigation in process.
Appointment of a service provider, in excess of the R30 000 annual threshold, to provide catering services for the Board meeting of 24 January 2018.	The ACEO condoned the expenditure	**5 235**	Condoned by the ACEO.
TOTAL OTHER		**29 677 705**	
TOTAL IRREGULAR EXPENDITURE FOR THE YEAR		**260 727 283**	

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FOR THE PERIOD ENDED 31 MARCH 2018

24. COMPLIANCE WITH THE PUBLIC FINANCE MANAGEMENT ACT, ACT NO. 1 OF 1999, AND TREASURY REGULATIONS (CONTINUED)

Irregular expenditure from prior years identified and confirmed In the current financial year			
24.1.1.5 Variation Order			
Incident	**Authorisation**	**Amount Rand**	**Action taken**
VARIATION ORDERS: TCTA uses the FIDIC conditions of contract in terms of which TCTA appoints a Professional Services Provider (PSP) to undertake the design, construction supervision and administration of the construction contract on behalf of TCTA. The Contractor, also appointed on a FIDIC contract, undertakes the construction of the project. All instructions to the Contractor are issued by the PSP. Contract expansions in the form of variation orders are delegated to Management within the contingency provision approved by the Board for a specific contract. The operational delegation gives the Executive Manager PMID the approval powers. TCTA appoints Project Managers and other professional staff to represent TCTA on the project sites where construction takes place. Approval of all variation orders within the approved contingencies are duly approved by the Executive Manager PMID. Due to practical realities on site, instructions by the PSP to the Contractor happens on a daily basis which gives rise to variation orders. In terms of the Contract the PSP may issue instructions up to a defined amount (normally R500 000) without obtaining TCTA prior approval. The PSP would consult with the TCTA Project Manager on any instruction that may exceed the PSP's delegated authority. The TCTA Project Manager would give consent for the instruction as recommended by the PSP. The Contract would normally appoint the Project Managers as TCTA's representative responsible for the administration of the contractual provisions thereby giving authority to give the required consent for an instruction by the PSP to the Contractor. Formal approval for any variation order would finally be given by the Executive Manager PMID once the required documentation has been compiled and reviewed by TCTA's professional staff and recommended for approval by the Executive. Given that the construction contract is a re-measurable contract, interim payments are certified by PSP and are subject to adjustment until the final payment certificate has been agreed and issued. In certain cases the explicit delegation to the Project Manager to act on behalf of TCTA has not been provided in the contracts, although the practice has been consistently applied across all TCTA contracts and projects. In such cases where prior approval by the Executive Manager PMID or TCTA Executive Committee or Board has not been obtained for a variation order such costs are deemed to have been incurred irregularly in terms of the PFMA.	Authorisation not yet initiated	**280 020 107**	The matter still needs to be investigated. The Operational Delegation of Authority is under review to ensure consistency with the FIDIC method of contracting. Investigation to be initiated.

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Irregular expenditure from prior years identified and confirmed In the current financial year

24.1.1.5 Variation Order

Incident	Authorisation	Amount Rand	Action taken
Irregular expenditure incurred on the specific projects and relevant contracts are listed below for the current financial year and prior years respectively:			

DESCRIPTION	Rand
Acid Mine Drainage Project – Short Term Intervention (AMD STI)	
Contract 008-041: Professional Services Provider	28 884 394
Contract 008-008: Construction of Central basin water treatment plant	59 919 353
Contract 008-013: Construction of Eastern Basin water treatment plant	64 881 003
Contract 008-005: Abstraction pump systems for Central and Western basins	1 311 700
Sub-Total	**154 996 450**
Komati Water Supply Augmentation Project (KWSAP)	
Contract 006-041: Professional Services Provider	10 784 412
Contract 006-001: Construction of pipeline and pump station	12 175 566
Sub-Total	**22 959 978**
Mooi-Mgeni Transfer Scheme – Phase 2 (MMTS-2)	
Contract 004-041: Professional Services Provider	12 121 067
Contract 004-001: Construction of the Spring Grove Dam and Appurtenant Works	49 491 359
Contract 004-005: Construction of the Water Transfer System	22 545 892
Contract 004-003: Refurbishment of the Mearns Pump Station	17 905 360
Sub-Total	**102 063 678**
TOTAL	**280 020 107**
Analysis of Variation orders per prior year:	
2016/17	45 726 262
2015/16	47 835 203
2014/15	53 855 512
2013/14	87 395 051
2012/13	45 208 079
TOTAL	**280 020 107**

TOTAL FOR VARIATION ORDERS		**280 020 107**	

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FOR THE PERIOD ENDED 31 MARCH 2018

24. COMPLIANCE WITH THE PUBLIC FINANCE MANAGEMENT ACT, ACT NO. 1 OF 1999, AND TREASURY REGULATIONS (CONTINUED)

Irregular expenditure from prior years identified and confirmed In the current financial year			
24.1.1.6. Acid Mine Drainage			
Incident	**Authorisation**	**Amount Rand**	**Action taken**
AMD CENTRAL BASIN OPERATIONS AND MAINTENANCE: Contract – 08 – 030, Intelligent Water Solutions (IWS) Appointment of IWS to operate the AMD Central Basin. From 1 April 2016 to 31 July 2016 the Central Basin was being operated by Intelligent Water Solutions (IWS) through an interim contract authorised by the Accounting Authority. This appointment was not deemed irregular previously, but due to the findings of the forensic review it is now declared irregular. Refer expanded note 24.1.2	In process	**42 571 905**	Forensic review was conducted and recommended action is being implemented. Condonation application process to be initiated.
AMD CENTRAL BASIN OPERATIONS AND MAINTENANCE: Contract – 08 – 030, Intelligent Water Solutions (IWS) The December 2016 settlement agreement provided for the continued operations with revised costs to operate the plant from 1 January 2017 until 30 June 2017 to allow for an operator to be appointed through an open tender process. The irregular expenditure declared is for the period 1 January 2017 to 31 March 2017.	In process	**22 246 073**	Forensic review was conducted and recommended action is being implemented. Condonotation application process to be initiated.
AMD EASTERN BASIN OPERATIONS AND MAINTENANCE: Contract – 08 – 030, CMC-PG Mavundla TCTA entered into several contract extensions with CMC-PG Mavundla in respect of the Operations and Maintenance (O&M) on the Eastern Basin AMD plant. While National Treasury approval was sought and obtained for most of these, there were some periods during which expenditure was incurred without a corresponding National Treasury approval. NT approval was granted but the plant was operated for 14 days prior to approval from NT. The 14 days must be recognised as irregular expenditure. As well as NT approval was granted but the plant was operated for 2 days prior to approval from NT. The 2 days must be recognised as irregular expenditure. Operating costs for a period of 16 days without National Treasury approval is declared as irregular.	In process	**1 978 031**	An investigation was also conducted on this matter by the Audit and Risk Committee. Condonation application process to be initiated.
TOTAL FOR ACID MINE DRAINAGE		**66 796 009**	

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Irregular expenditure from prior years identified and confirmed In the current financial year			
24.1.1.7. Other			
Incident	**Authorisation**	**Amount Rand**	**Action taken**
Lesotho Highlands Operations and Maintenance: Lifton Construction Continuous use of Lifton Construction to provide services to TCTA for the operations and maintenance of the LHWP on an open ended contract basis which contravenes National Treasury Instruction Number 3 of 2017/2016.	Authorisation not yet initiated	**10 469 993**	Investigation to be initiated.
TOTAL FOR OTHER		**10 469 993**	
IRREGULAR EXPENDITURE FROM PRIOR YEARS IDENTIFIED AND CONFIRMED IN THE CURRENT FINANCIAL YEAR		**357 286 109**	

2017			
Incident	**Authorisation**	**Amount Rand**	**Action taken**
AMD CENTRAL BASIN OPERATIONS AND MAINTENANCE: Contract – 08 – 030, Intelligent Water Solutions (IWS) On the 1st August 2016 IWS was awarded a 30 month operations contract by former Supply Chain Manager, who did not have the delegated authority to do same. This contract was cancelled in December 2016 on the basis of their appointment. A settlement was agreed between TCTA and IWS from August 2016 to December 2016 to the value of R 40 474 856.44. This payment was declared as irregular in the previous financial year. Refer expanded note 24.1.2	Not yet condoned	**40 474 856**	The Supply Chain Manager went through a disciplinary process and was relieved of his duties. This followed from a forensics review that was commissioned by the Audit and Risk Committee. A fraud case has been opened with the SAPS. Condonation application process to be initiated.
Provision of Disaster Recovery services with Continuity SA after the contract had expired.	Not yet condoned	**58 965**	The matter was investigated and concluded by Internal Audit in October 2017. Condonation process to be initiated.
Irregular appointment of Ernst & Young to conduct forensic investigation on the appointment of three executives and awarding of a photocopier tender.	Not yet condoned	**749 721**	Condonation process to be initiated.

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24. COMPLIANCE WITH THE PUBLIC FINANCE MANAGEMENT ACT, ACT NO. 1 OF 1999, AND TREASURY REGULATIONS (CONTINUED)

2017			
Incident	**Authorisation**	**Amount Rand**	**Action taken**
Irregular expenditure requiring approval by the Minister of Water and Sanitation on all international travel as per the Directive issued by the Minister dated 10 July 2016. As part of implementation of the cost containment measures contained in the National Treasury Circular 4 of 2016/2017 and the National Treasury Travel Framework, the Minister instructed TCTA that all official international travel must be consulted with and should be approved by the Minister. During this financial year, there were seven International trips by TCTA officials for business purposes.	Not yet condoned	**513 659**	Condonation process to be initiated.
Irregular appointment of the EWSS, HR & OD and Strategy Executives.	Not yet condoned	**6 637 570**	The matter was investigated by EY. The Board is in the process of implementing the actions recommended. Condonation process to be initiated.
Irregular changing of the evaluation criteria for the photocopier tender.	Not yet condoned	**1 033 065**	The matter was investigated by EY. The Board is in the process of implementing the actions recommended. Condonation process to be initiated.
Total irregular expentiture for the year		**49 467 837**	

24.1.2. Reportable irregularity matter - IWS

In and around September 2016, management discovered a potential problem when invoices were being received for operations and maintenance at the Central Basin from IWS. Upon investigation management found that a letter of award had been issued by the former Supply Chain Manager, on 28th July 2016, awarding a three year contract to IWS to provide operations and maintenance services at the Central Basin AMD plant to the value of R243 million, excluding provisional sums. He did not have the authority to issue such letter of award as a contract to that value required the approval of the Board, which had not been obtained. Management then proposed the cancellation of the contract awarded to IWS, irregularly appointed by the Supply Chain Manager.

In November 2016, the Board approved the following:

1. The cancellation of the IWS contract
2. That management entered into negotiations and eventually settled with IWS in respect of services delivered between 1 August 2016 and 31 December 2016. This expenditure was deemed irregular expenditure and as a result the TCTA Board requested an investigation into the procuring of IWS's services.
3. An open tender process to secure the services of a contractor for the operations and maintenance of the Central Basin AMD plant.
4. Simultaneously, it was approved to use IWS in the interim pending the completion of an open tender process for a new service provider. The interim proposal was decided upon due to the risk of degradation

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to the environment resulting from rising acid mine water levels, including the contamination of ground water resources. Damage to the plant and equipment arising from vandalism, should the plant be left unattended and idle for an extended period, would result in potentially huge financial losses given the level of capital investment, alternatively recommencing the entire works, running into over a billion rand.

5. A forensics investigation needed to be undertaken.

On 29 May 2017, ENS Forensics (Proprietary) Limited ("ENS") was mandated by the TCTA Board to investigate the circumstances under which the contracts for the operations, maintenance and management ("O&M") services at the Central Basin acid mine drainage ("AMD") plant were awarded to Intelligent Water Solutions (Proprietary) Limited ("IWS").

On 29 May 2017, ENS Forensics (Proprietary) Limited ("ENS") was mandated by the TCTA Board to investigate the circumstances under which the contracts for the operations, maintenance and management ("O&M") services at the Central Basin acid mine drainage ("AMD") plant were awarded to Intelligent Water Solutions (Proprietary) Limited ("IWS").

The report was concluded in October 2017 and adopted by the Board.

The key findings of the report were, amongst others, as follows:-

- that there was fraud and corruption surrounding the award of the contract and circumstances surrounding the appointment of IWS, and
- Possible black empowerment fronting or fraud

The report recommended, amongst others, the following:-

- the conduct of the former CEO and Supply Chain Manager be reported to the SAPS for further investigation, with the charges that should be investigated being those of fraud and/or corruption.
- The conduct of IWS (WSSA and EGS) was also be reported to the SAPS for investigation for possible black empowerment fronting or fraud, as well as Directorate of Priority Crime Investigation in terms of section 34 of the Prevention and Combating of Corrupt Activities Act 2004.
- This report be referred to National Treasury's Specialised Audit Services for further consideration and possible further investigation in conjunction with the SAPS.

The following actions were implemented

- A case has been opened with the SAPS (case number is Lyttelton CAS 29/12/2017) for further investigation and prosecution, on the role of the former CEO and possible fronting by WSSA .
- The disciplinary actions have been taken as per the recommendation, and the Supply Chain Manager was released from his duties.
- The matters will also be referred to the National Treasury as recommended.

Notwithstanding that the investigation is complete and the matter already reported to the relevant authorities, the matter has been concluded to be a Reportable Irregularity by the External Auditors.

24.1.3. Fruitless and wasteful expenditure

"Fruitless and wasteful expenditure" is defined as expenditure which was made in vain and would have been avoided had reasonable care been exercised.

Reconciliation of fruitless and wasteful expenditure	2018 Rand	2017 Rand
Opening balance	38 967 401	38 764 901
Fruitless and wasteful expenditure for current year	266 494	196 848
VAT reported in previous year, which SARS ruled in favour of TCTA	(36 417 383)	-
To be recovered - contingent asset	-	5 651
Total at the end of the financial year	**2 816 512**	**38 967 400**

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FOR THE PERIOD ENDED 31 MARCH 2018

24. COMPLIANCE WITH THE PUBLIC FINANCE MANAGEMENT ACT, ACT NO. 1 OF 1999, AND TREASURY REGULATIONS (CONTINUED)

2018		
Incident	**Amount Rand**	**Action taken**
The Acting CEO accommodation in Lesotho, accommodation was confirmed, but the trip was cancelled last minute. Had to attend another meeting in Cape Town requested by the Minister. Full cancellation was charged as penalty for cancellation.	**3 080**	To be initiated upon completion of investigations.
Flights for CFO was booked and confirmed to travel to Durban on the 2nd May, due to the Parliament portfolio committee meeting being moved a new flight to Cape town had to be booked	**4 394**	To be initiated upon completion of investigations.
Executives missed flights from Mthatha to JHB on the 25th April, accommodation at Garden court East London had to be booked because no flights were available and new flights on the 26th April were booked to return to JHB to attend a meeting with the Minister. (Flights were not available due to South African Airways strike).	**42 146**	To be initiated upon completion of investigations.
Interest on the late payment of invokes exceeding 30 days for Telkom and Eskom.	**78 985**	To be initiated upon completion of investigations.
Accommodation was paid for an employee to attend training and he resigned in the week that he was already booked by TCTA. The invoice only came through in May.	**6 763**	To be initiated upon completion of investigations.
PAYE amount that was paid in May 2017 but was in respect of the previous tax year (2017), resulted in penalties & interest being incurred	**201**	Employee paid the money.
Withdrawal from conference attendance by the Executive PMID and Project Manager AMD on instruction of the Acting CEO. Penalty for late cancellation, a full conference fees.	**23 939**	To be initiated upon completion of investigations.
The expenditure was incurred as a result of the disciplinary hearing postponement after the services of the presiding officer secured and confirmed.	**7 700**	To be initiated upon completion of investigations.
A payment of R927 000 was not included in the cash flow for MMTS- resulting in an overdraft for one day. The payment was included in the schedule received from Finance, but was omitted from the Treasury daily cash flows. At an overdraft rate of 10.5%, the interest incurred was R236.19. However if R927 000 was borrowed at a rate of 7.47%, interest of R189.72.	**46**	To be initiated upon completion of investigations.
Payment of interest to Dihlabeng Municipality for the outstanding rates on TCTA 43 houses in Khubetswana township. The initial amount owing by TCTA is R750 791.07 which is 20 % discount of R 1 011 573.31 original interest (debt). Amount paid by end of September is R549 874.83	**99 239**	To be initiated upon completion of investigations.
Total fruitless and wasteful expenditure for the year	**266 494**	

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FOR THE PERIOD ENDED 31 MARCH 2018

2017		
Incident	**Amount Rand**	**Action taken**
Appointment of a service provider for an HR related matter, whose services were then no longer required due to the matter being with drawn after the service provider had commenced work. The service provider issued TCTA with an invoice of R19 000.	**19 266**	Investigation established no negligance or lack of due care.
Penalty for the short payment of tax to SARS.	**6 824**	A verbal discussion was held with the employee and comfirmation was filed on the employee's personal file.
A withdrawal notification to CPD was not received by the counterparty, resulting in the LHWP bank account being overdrawn with R99.8m for one day. At an overdraft rate of 10.5%, the interest incurred is R28 734.00. The interest earned on the funds at CPD was R19 781.00. The difference between interest incurred and the interest earned is R8 953,00.	**8 953**	The line manager repriminded the individual concerned in writing.
The employee was promised a contract extension without prior approval being obtained. The employee took the matter to CCMA when the contract was not extended and CCMA ruled in favour of the employee and ordered TCTA to pay one (1) month's salary.	**41 667**	A final written warning was issued to the responsible employee.
A payment of R7.7m was not included in the cash flow for MMTS – resulting in an overdraft for one day. At an overdraft rate of 10.5%, the interest incurred is R2 108.69 (actual cost).	**2 109**	A verbal discussion was held with the employee and comfirmation was filed on the employee's personal file.
Expenditure incurred as a result of penalties and interest paid to SARS for short payment in the month of October 2016.	**14 410**	Verbal warning was issued to the responsible employee.
Expenditure incurred on overdraft interest as a result of failure by the an employee to correctly record a withdrawal and by a second employee to note and correct this when speaking with the counterparty.	**7 663**	A verbal discussion was held with the second employee who was reminded of the importance of their job and not to make mistakes in order to successfully complete their probation period.
Excess data usage- employee exceeded allocated monthly usage for data by R 69 701.47.	**69 701**	This matter is still being investigated and management will only determine the appropriate action once the investigation has been finalised.
Unattended Training.	**5 435**	No action was deemed necesarry, the employee concerned had to attend to unplanned/ unforseen work that arose from the submissions made to the Risk Committee.

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24. COMPLIANCE WITH THE PUBLIC FINANCE MANAGEMENT ACT, ACT NO. 1 OF 1999, AND TREASURY REGULATIONS (CONTINUED)

2017		
Incident	**Amount Rand**	**Action taken**
Cancelled Shuttle penalty.	**2 500**	No action was necessary as the employee fell sick and could not use the shuttle service.
Cancelled Flight and Point to Point shuttle - Penalty.	**699**	No action was necessary as the employee fell sick and could not use the shuttle service.
Interest on the late payment of Eskom Invoice.	**17 622**	A warning was issued to the employee responsible.
Accommodation bookings made for an individual on the ORWRDP2 site was not honoured on three occasions namely 1June, 6 June and 14 June 2016.	**5 651**	Money to be recovered from individual.
Total fruitless and wasteful expenditure for the year	**202 500**	

24.2. Losses resulting from criminal conduct

Reconciliation of losses resulting from criminal conduct	**2018 Rand**	**2017 Rand**
Opening balance	585 000	585 000
Losses resulting from criminal conduct for the year	-	-
To be recovered - contingent asset	-	-
Total at the end of the financial year	**585 000**	**585 000**

2018: No losses for the financial year as a result of criminal conduct (2017: None)

25. CONTINGENT LIABILITY

25.1. Litigation and claims against TCTA

In the ordinary course of business, TCTA is involved in various legal actions and claims, including those related to contract awards, and property expropriation required to execute its directives. Although the outcome of the legal proceedings cannot be predicted with certainty, TCTA believes it will succeed in its action and that adequate provisions have been made for such matters. The litigation matters have been detailed below:

25.1.1 Vaal River Eastern Sub-system Augmentation Project - VRESAP

A summons was served on TCTA claiming R15 094 940 for damages suffered by the claimant arising out of land acquisition activities in the implementation of the VRESAP. TCTA instructed its attorneys to enter appearance to defend on TCTA's behalf. TCTA agreed with the claimants attorneys to explore the possibility of settling the matter by 31 July 2014 and consulted with Senior Counsel and attended a site visit to the claimants farm in order for the Senior Counsel to draft TCTA's plea on the summons.

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Meetings were held with Jordaan's attorneys at which it was agreed that TCTA will compute and determine whether there is any outstanding compensation relating to the servitude agreement for the period commencing in 2008 until October 2011 and he will furnish TCTA with the details of the leak on the pipeline for it to be fixed.

A site visit to the affected farm was undertaken together with counsel and the attorneys in July 2014 to discuss the claim with the landowner and his attorneys. Various experts have been instructed to give opinions on soil erosion, quality of the soil etc. TCTA received Notice of Intention to amend the particulars of claim amending the claim amount to R11 million. The three experts visited the property and submitted their reports to TCTA and Counsel. Discussions were held with DWS and MJS Attorney regarding the plea and TCTA's preparations for the plea. The plaintiff has not delivered an amended Particulars of Claim. The plaintiff bears the onus of taking further steps in this matter by delivering an amended Particulars of Claim. In view of this, TCTA has not filed its plea as yet.

The litigation matter in the High Court is continuously monitored in case further steps are taken.

25.1.2 Acid Mine Drainage Project (AMD)

An urgent application for an interdict was served to TCTA on 19 April 2013 by the landowner of a property adjacent to the proposed AMD treatment plant in the Central Basin, on which TCTA served an expropriation notice for the expropriation of land rights as part of its project implementation activities.

The initial amount claimed was R43 million, however following an assessment by the legal department together with expert valuers the actual value of the expropriated servitudes was determined to be R36 410. This amount including interest was paid in December 2017 and amounted to R47 410. The claimant has the right to claim a higher amount should they wish to, however they have not proceeded to do so to date

25.1.3 Phase II of the Mooi-Mgeni Transfer Scheme - MMTS-2

Summons was served at TCTA's premises and DWS on 30 July 2013 following expropriation of the land by TCTA. The landowner is claiming higher compensation but sued DWS instead of TCTA and subsequently brought an application to join TCTA into the proceedings. TCTA consented to the joinder application. TCTA filed its special plea on the basis that the claim prescribed in terms of the Expropriation Act. This claim follows the expropriation of property by TCTA. The claimed amount is R5.7 million or alternatively an amount of R4.5 million depending on the calculation of the financial loss of the plaintiff.

Both claims provide for interest to be paid as well as legal costs. It appears from the summons served that the party cited is the Minister, instead of TCTA as the expropriating authority. Upon advice from Counsel, TCTA consented to the joinder application. However, on receipt of the amended particulars of claim, TCTA filed its special plea on the basis that the claim has prescribed in terms of the Expropriation Act. The Department of Water Affairs filed its plea in the interim. A pre-trial conference took place on 2 December 2016. The trial was set down for 6 and 7 November 2017 in the High Court in Pietermaritzburg to deal with the technical point that was raised by TCTA in respect of prescription. A judgment on this point was handed down in this matter against TCTA and this in effect means that the Plaintiff is now free to pursue TCTA for the remainder of its claim, unless TCTA elects to settle the matter by paying it the difference between the amount it previously paid and the higher compensation sought to be paid by the plaintiff. The claimant has not taken further steps on the claim.

25.1.4 Phase II of the Mooi-Mgeni Transfer Scheme (New)

A dispute arose between TCTA and plaintiff arising out of additional construction costs claimed by TCTA from it due to breaches by plaintiff of the Engineering contract. The plaintiff referred the dispute to adjudication in terms of the contract between the parties. The parties agreed to the appointment of an adjudicator to hear the dispute, being Schalk Burger SC. The dispute resolution proceedings commenced through the service of a notice by plaintiff and the filing of its claim in the amount of R2.6 million on TCTA on 28 June 2017.

TCTA's total claim against plaintiff is approximately R12 million from which it deducted the R2.6 million from payments due to plaintiff and which is now the subject of plaintiff's claim against TCTA. TCTA filed its counterclaim for the balance of approximately R10 million (subject to adjustment) against plaintiff as part of the adjudication proceedings to which plaintiff filed its statement of defence. TCTA filed its reply to the statement of defence on 13 October 2017 and finalised its witness statements. The parties met with the Adjudicator on 14 November 2017

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25. CONTINGENT LIABILITY (CONTINUED)

to seek further direction as to whether oral evidence will be led etc. and on the further conduct of the matter. A decision by adjudicator was received from the Adjudicator where TCTA was ordered to pay plaintiff R2.6 million excluding VAT, plus interest at the prime overdraft interest rate of the Standard Bank of South Africa Limited on R2.2 million from 1 October 2016 and R354 887.67 from the 1 November 2016. TCTA issued a notice of dissatisfaction with the Arbitrator whilst reviewing its stance on whether or not it appeals the decision. The notice of dissatisfaction is to ensure that TCTA is able to proceed with the appeal should it decides to do so. A decision has not been made as yet.

25.1.5 Acid Mine Drainage Project (AMD)

TCTA was served with a summons by the landowner on 27 November 2015. TCTA and Minister of Water and Sanitation are cited as the first and second defendants respectively. TCTA expropriated 4 servitudes over properties belonging to the landowner for purposes of implementing the AMD project in the Central Basin.

The claim is as follows regarding the expropriated servitudes:

* Claim A: The landowner claims an amount of R4 million, together with interest and costs thereon on the basis that TCTA had accepted the offer, alternatively.
* Claim B: The landowner claims an amount of R3.6 million, together with interest and costs thereon, for suffering an actual financial loss as a result of expropriation of each of the 4 servitudes.

Following TCTA entering an appearance to defend the matter, the landowner brought an application for summary judgment based primarily on Part A of its claim i.e. that TCTA had accepted its offer. TCTA filed its opposing affidavits and shortly before the matter was due to be heard on 18 March 2016, the plaintiff's attorneys elected to withdraw the application for summary judgment, however the main action for increased compensation is still continuing. The matter is being defended and TCTA has filed its plea. No further steps have been taken by the plaintiff.

25.2 Human resource related matters

25.2.1 Human resource related matters

There is an arbitration matter relating to a previously employed executive manager claiming for non-payment of an incentive bonus and the extension of her contract of employment. The matter was heard at the CCMA and an arbitration award was issued in June 2016, in favour of the employee. On 30 June 2016, TCTA submitted its founding affidavit which calls for a review of the case. The CCMA's arbitration award was for approximately R3 million. TCTA attended the Labour Court for the pre-enrolment hearing on 2 June 2017 and the hearing for the review application took place on 2 May 2018. TCTA is awaiting the outcome.

25.2.2 Human resource related matters (New)

a) There is a matter relating to a claim received by a previously employed executive manager following a termination of the employee contract. TCTA had terminated the contract following legal counsel. The former employee has demanded reversal of the cancellation failing which an amount of R16mil be paid as a claim. TCTA has requested that the matter be held in abeyance and counsel has been appointed to advise TCTA on the dispute. TCTA is still awaiting further steps to be taken by the former executive.

b) TCTA also has a case lodged by a former manager citing unfair labour practice in disciplinary proceedings which were instituted against the employee. The matter was set down for conciliation on 04 May 2018, at which date the parties failed to conciliate. TCTA is awaiting set down date for arbitration.

c) A former fixed term employee has lodged a complaint against TCTA for unfair dismissal following the conclusion of the fixed term contract. The former employee took the matter to the CCMA and the General Public Service Sectorial Bargaining Council. A hearing took place on 23 May 2018 but this was adjourned to the 29 and 30 August 2018.

d) We have a VP matter which is set down for 22 August 2018. An employee is claiming non-payment of benefits (Variable Pay) from 2012 onwards, when the scheme was discontinued. TCTA received a new referral on 13 June 2018. This matter is set down for 22 August 2018. His claim could amount to plus/minus R1.4m.

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26. EMPLOYEE BENEFITS

Short-term employee benefits

TCTA does not contribute to any defined retirement or medical aid fund. It does not have a liability for the provision of retirement funding. The emoluments paid to individuals include a sum for the provision of their own medical aid and pension benefits.

27. EVENTS AFTER THE REPORTING PERIOD

TCTA has performed a liquidity stress test in order to assess its ability to meet its debt obligations in the next 12 months and beyond. The assessment was performed at 23 August 2018 and considers three scenarios, the first scenario which assumes the estimated time from the 23 August 2018 until the date that the cash resources are fully depleted assuming no cash is recovered through the tariff receivable and no additional funding is obtained and the second scenario which considers the estimated time from the 23 August 2018 until the date that the cash resources are fully depleted assuming that past due amounts owing from DWS are received and that forecast cash inflows from the tariff are received but no additional funding is obtained and third scenario is the scenario which TCTA management considers the most likely position considering the historic tariff receipt pattern. Refer to note 6.2.1 for this liquidity risk assessment.

28. GOING CONCERN

The underlying operating model for TCTA has remained the same as it has been in previous years, and continues to assure the long-term solvency of TCTA, as well as the ability to meet all its obligations as they fall due. TCTA's solvency is secured by the income agreements and explicit guarantees, that provide certainty that all costs incurred by TCTA will be fully funded either through the Department's recovery through the user tariff as the debt is repaid or through direct cost-recovery payments from the Department of Water and Sanitation. The guaranteees have been provided by the Department of Water and Sanitation and are to ensure that all costs incurred will be repaid.

TCTA's obligations to the funders of:

- Berg Water Project (BWP),
- Vaal River Eastern Sub-system Augmentation Project (VRESAP),
- Mokolo-Crocodile River (West) Water Augmentation Project (MCWAP),
- Komati Water Supply Augmentation Project (KWSAP) and
- Mooi-Mgeni Transfer Scheme Phase 2 (MMTS-2)

are secured by undertakings by the Minister of Water and Sanitation acting in concurrence with the Minister of Finance, to honour TCTA's obligations to its funders should TCTA fail to perform such obligations.

The obligations of TCTA to its funders in relation to the Vaal River System (VRS) are guaranteed by government, as required by the Treaty on the Lesotho Highlands Water Project (LHWP).

TCTA's management is certain that TCTA will have sufficient resources to continue in operational existence for the foreseeable future and for this reason the going concern basis continues to be adopted in preparing the financial statements for the year ended 31 March 2018. Furthermore, no material uncertainties related to events or conditions that may cast a significant doubt on the ability of TCTA to continue as a going concern have been identified.

ANNEXURE A - Segmental Statement of Cash Flows

FOR THE PERIOD ENDED 31 MARCH 2018

	Note(s)	TCTA-C R million	VRS R million	BWP R million
CASH FLOWS FROM OPERATING ACTIVITIES				
Cash receipts on tariff receivable		31	4 819	247
Cash paid to suppliers and employees		-	(2 528)	(75)
Cash generated from project activities	A	31	2 291	172
Interest paid	C	-	(1 420)	(59)
NET CASH FROM OPERATING ACTIVITIES		31	871	113
CASH FLOWS FROM INVESTING ACTIVITIES				
Purchase of property, plant and equipment	7	-	(1)	-
Sale of property, plant and equipment	7	-	1	-
Purchase of other intangible assets	8	-	(4)	-
Payments to acquire financial assets		-	-	-
Proceeds on the sale of financial assets		-	2 586	-
Interest received	B	-	282	6
NET CASH FROM INVESTING ACTIVITIES		-	2 864	6
CASH FLOWS FROM FINANCING ACTIVITIES				
Repayments on long-term borrowings		-	(2 248)	(127)
Proceeds from short-term borrowings		-	1	-
Repayments on short-term borrowings		-	(105)	-
NET CASH FROM FINANCING ACTIVITIES		-	(2 352)	(127)
Total cash movement for the year		31	1 385	(8)
Cash and cash equivalents at the beginning of the year		-	1 525	80
TOTAL CASH AND CASH EQUIVALENTS AT END OF THE YEAR	**15**	**31**	**2 910**	**72**

VRESAP R million	MCWAP R million	MMTS-2 R million	ORWRDP R million	KWSAP R million	MMTS-1 R million	UMGENI R million	KRIEL R million	TOTAL R million
432	300	203	49	114	22	-	-	6 218
(72)	(122)	(28)	(77)	(30)	(22)	-	-	(2 955)
360	178	175	(28)	84	-	-	-	3 263
(356)	(148)	(183)	(1)	(38)	-	-	-	(2 203)
4	30	(8)	(29)	46	-	-	-	1 060
-	-	-	-	-	-	-	-	(1)
-	-	-	-	-	-	-	-	1
-	-	-	-	-	-	-	-	(4)
-	-	-	-	-	-	-	-	-
-	-	48	-	-	-	-	-	2 634
10	30	23	-	13	-	-	-	364
10	30	71	-	13	-	-	-	2 994
(185)	(33)	(88)	-	(143)	-	-	-	(2 826)
203	-	39	-	-	-	-	-	244
(10)	-	(68)	-	-	-	-	-	(183)
8	(33)	(117)	-	(143)	-	-	-	(2 765)
22	27	(54)	(29)	(84)	-	-	-	1 290
60	447	263	30	154	-	-	-	2 559
82	**474**	**209**	**1**	**70**	**-**	**-**	**-**	**3 849**

ANNEXURE A - Segmental Statement of Cash Flows

FOR THE PERIOD ENDED 31 MARCH 2018

	TCTA-C R million	VRS R million	BWP R million
A. CASH (USED IN)/GENERATED FROM PROJECT ACTIVITIES			
Surplus for the year	-	2 350	(11)
Adjustments for non cash flow items:			
Depreciation on non-current assets	-	10	-
Net interest income/(expense)	-	2 200	51
Foreign exchange losses	-	-	-
Interest income and imputed interest on tariff receivable	-	(4 550)	(40)
Construction revenue	-	(249)	-
Other income	-	(1 688)	(6)
Non cash flow in operating expenses	-	(73)	-
Changes in working capital:			
Loans and other receivables	-	(28)	2
Prepayments	-	(35)	-
Payables and provisions (excluding interest payable)	31	28	2
Capitalised to/(removed from) tariff receivable	-	4 093	174
Non cash flow item in accounts receivable	-	230	-
Non cash flow item in accounts payable	-	3	-
	31	2 291	172
B. INTEREST RECEIVED			
Amount due at beginning of the year	-	62	-
Income during the year adjusted for non-cash items	-	238	6
Interest accrued	-	292	6
Bond premium amortised	-	(52)	-
Interest on RSA account	-	(2)	-
Amount due at the end of the year	-	(18)	-
INTEREST RECEIVED	-	282	6

VRESAP R million	MCWAP R million	MMTS-2 R million	ORWRDP R million	KWSAP R million	MMTS-1 R million	UMGENI R million	KRIEL R million	TOTAL R million
(8)	(188)	(26)	-	(30)	-	-	-	2 087
-	-	-	-	-	-	-	-	10
367	118	161	1	115	-	-	-	3 013
-	-	-	-	-	-	-	-	-
(359)	70	(135)	-	(85)	-	-	-	(5 099)
-	(73)	(3)	(203)	-	(1)	(1)	(8)	(538)
(9)	(8)	(8)	-	(6)	-	-	-	(1 725)
			-	-	-	-	-	(73)
-	-	4	(95)	-	(1)	(1)	7	(112)
-	-	-	74	-	-	-	-	39
(7)	(12)	9	(8)	(9)	1	1	(7)	29
377	271	(173)	-	99	-	-	-	5 187
-	-	-	203	-	1	1	8	443
-	-	-	-	-	-	-	-	3
360	178	(175)	(28)	84	-	-	-	3 264
-	-	3	-	-	-	-	-	65
10	30	20	-	13	-	-	-	317
10	30	20	-	13	-	-	-	371
-	-	-	-	-	-	-	-	(52)
-	-	-	-	-	-	-	-	(2)
-	-	-	-	-	-	-	-	(18)
10	30	23	-	13	-	-	-	364

ANNEXURE A - Segmental Statement of Cash Flows

FOR THE PERIOD ENDED 31 MARCH 2018

	TCTA-C R million	VRS R million	BWP R million
C. INTEREST PAID			
Amount not paid at beginning of the year	-	(431)	(2)
Expensed during the year adjusted for non-cash items	-	(1 354)	(57)
Amount expensed (excluding imputed interest)	-	(2 492)	(57)
Less: bond discount amortised	-	6	-
Capital adjustment to inflation-linked liability	-	1 104	-
Interest on compensation	-	28	-
Interest on Umgeni	-	-	-
Amount not paid at the end of the year	-	366	1
INTEREST PAID	-	(1 419)	(58)

	TCTA-C R million	VRS R million	BWP R million
D. RECONCILIATION OF FINANCIAL MARKET LIABILITIES TO FINANCING ACTIVITIES AS AT 31 MARCH			
Liabilities at beginning of year	-	19 427	720
Long term borrowings	-	17 074	653
Short term borrowings	-	2 353	67
	-	-	-
Cash flow from financing activities	-	(2 352)	(127)
Non cash flow items		1 058	-
- Capitalised interest	-	-	-
- Capital adjustment to inflation-linked liability	-	1 104	-
- Bond discount / premium	-	(46)	-
Liabilities as at end of year	-	18 133	592
Long term borrowings	-	9 672	515
Short term borrowings	-	8 461	77

VRESAP R million	MCWAP R million	MMTS-2 R million	ORWRDP R million	KWSAP R million	MMTS-1 R million	UMGENI R million	KRIEL R million	TOTAL R million
(39)	(13)	(27)	-	(2)	-	-	-	(514)
(354)	(148)	(181)	(1)	(36)	-	-	-	(2 131)
(377)	(148)	(181)	(1)	(128)	-	-	-	(3 384)
-	-	-	-	-	-	-	-	6
-	-	-	-	-	-	-	-	1 104
-	-	-	-	-	-	-	-	28
23	-	-	-	92	-	-	-	115
37	13	25	-	1	-	-	-	443
(356)	(148)	(183)	(1)	(37)	-	-	-	(2 202)
3 774	1 573	1 934	-	1 313	-	-	-	28 741
3 409	1 540	1 538	-	1 290	-	-	-	25 504
365	33	396	-	23	-	-	-	3 237
-	-	-	-	-	-	-	-	-
8	(33)	(117)	-	(143)	-	-	-	(2 764)
23	-	-	-	92	-	-	-	1 173
23	-	-	-	92	-	-	-	115
-	-	-	-	-	-	-	-	1 104
-	-	-	-	-	-	-	-	(46)
3 805	1 540	1 817	-	1 262	-	-	-	27 149
3 286	1 497	1 450	-	1 234	-	-	-	17 654
519	43	367	-	28	-	-	-	9 495

ANNEXURE A - Segmental Statement of Cash Flows

FOR THE PERIOD ENDED 31 MARCH 2018

	Note(s)	VRS R million	BWP R million	VRESAP R million
CASH FLOWS FROM OPERATING ACTIVITIES				
Cash receipts on tariff receivable		4 229	238	383
Cash paid to suppliers and employees		(1 708)	(12)	(5)
Cash generated from project activities	A	2 521	226	378
Interest paid	C	(1 557)	(69)	(351)
NET CASH FROM OPERATING ACTIVITIES		964	157	27
CASH FLOWS FROM INVESTING ACTIVITIES				
Purchase of property, plant and equipment	7	(5)	-	-
Sale of property, plant and equipment	7	10	-	-
Purchase of other intangible assets	8	(16)	-	-
Payments to acquire financial assets		(1 329)	-	-
Proceeds on the sale of financial assets		-	-	-
Interest received	B	277	7	7
NET CASH FROM INVESTING ACTIVITIES		(1 063)	7	7
CASH FLOWS FROM FINANCING ACTIVITIES				
Proceeds from long-term borrowings		-	-	150
Repayments on long-term borrowings		(799)	(127)	(175)
Proceeds from short-term borrowings		39	-	79
Repayments on short-term borrowings		(60)	-	(100)
NET CASH FROM FINANCING ACTIVITIES		820	(127)	(46)
Total cash movement for the year		(919)	37	(12)
Cash and cash equivalents at the beginning of the year		2 444	43	72
TOTAL CASH AND CASH EQUIVALENTS AT END OF THE YEAR	**15**	**1 525**	**80**	**60**

MCWAP R million	MMTS-2 R million	ORWRDP R million	KWSAP R million	MMTS-1 R million	UMGENI R million	KRIEL R million	TOTAL R million
227	176	246	127	-	-	-	5 626
(83)	(140)	(271)	(9)	-	-	-	(2 228)
144	36	(25)	118	-	-	-	3 398
(144)	(187)	-	(39)	-	-	-	(2 347)
-	(151)	(25)	79	-	-	-	1 051
-	-	-	-	-	-	-	(5)
-	-	-	-	-	-	-	10
-	-	-	-	-	-	-	(16)
-	-	-	-	-	-	-	(1 430)
-	(101)	-	-	-	-	-	-
26	25	3	9	-	-	-	354
26	(76)	3	9	-	-	-	(1 087)
400	-	-	-	-	-	-	550
(25)	(77)	-	(23)	-	-	-	(1 226)
-	295	-	-	-	-	-	413
-	(100)	-	-	-	-	-	(260)
(375)	(118)	-	(23)	-	-	-	(523)
(401)	(109)	(22)	65	-	-	-	(559)
46	372	52	89	-	-	-	3 118
447	**263**	**30**	**154**	**-**	**-**	**-**	**2 559**

ANNEXURE A - Segmental Statement of Cash Flows

FOR THE PERIOD ENDED 31 MARCH 2018

	VRS R million	BWP R million	VRESAP R million
A. CASH (USED IN)/GENERATED FROM PROJECT ACTIVITIES			
Surplus for the year	2 344	2	17
Adjustments for non cash flow items:			
Depreciation on non-current assets	6	-	-
Net interest income/(expense)	1 952	62	365
Foreign exchange gains	(6)	-	-
Foreign exchange losses	8	-	-
Interest income and imputed interest on tariff receivable	(4 298)	(64)	(382)
Construction revenue	(372)	-	-
Other income	(1 322)	(6)	(10)
Non cash flow in operating expenses	127	-	-
Changes in working capital:			
Loans and other receivables	4	(2)	-
Prepayments	122	-	-
Payables and provisions (excluding interest payable)	(232)	(2)	4
Capitalised to/(removed from) tariff receivable	4 334	236	384
Non cash flow item in accounts receivable	(125)	-	-
Non cash flow item in accounts payable	(21)	-	-
	2 521	226	378
B. INTEREST RECEIVED			
Amount due at beginning of the year	28	-	-
Income during the year adjusted for non-cash items	311	7	7
Interest accrued	368	7	7
Bond premium amortised	(53)	-	-
Interest on RSA account	(4)	-	-
Amount due at the end of the year	(62)	-	-
INTEREST RECEIVED	277	7	7

MCWAP R million	MMTS-2 R million	ORWRDP R million	KWSAP R million	MMTS-1 R million	UMGENI R million	KRIEL R million	TOTAL R million
(9)	(61)	-	11	-	-	-	2 304
-	-	-	-	-	-	-	6
118	163	(3)	114	-	-	-	2 771
-	-	-	-	-	-	-	(6)
-	-	-	-	-	-	-	8
(109)	(103)	-	(125)	-	-	-	(5 080)
(94)	(64)	(140)	-	-	(19)	(3)	(692)
(14)	(20)	-	(6)	-	-	-	(1 378)
-	-	-	-	-	-	-	127
36	(22)	19	-	-	(8)	6	33
-	1	(75)	-	-	-	-	48
(11)	(34)	34	(3)	-	8	(6)	(242)
227	175	-	127	-	-	-	5 483
-	-	140	-	-	19	3	37
-	-	-	-	-	-	-	(21)
144	36	(25)	118	-	-	-	3 398
-	2	-	-	-	-	-	30
26	26	3	9	-	-	-	389
26	26	3	9	-	-	-	446
-	-	-	-	-	-	-	(53)
-	-	-	-	-	-	-	(4)
-	(3)	-	-	-	-	-	(65)
26	25	3	9	-	-	-	354

ANNEXURE A - Segmental Statement of Cash Flows

FOR THE PERIOD ENDED 31 MARCH 2018

	VRS R million	BWP R million	VRESAP R million
C. INTEREST PAID			
Amount not paid at beginning of the year	(459)	(2)	(41)
Expensed during the year adjusted for non-cash items	(1 529)	(69)	(349)
Amount expensed (excluding imputed interest)	(2 320)	(69)	(372)
Less: bond discount amortised	1	-	-
Capital adjustment to inflation-linked liability	760	-	-
Interest on compensation	28	-	-
Interest capitalised to the principal amount	-	-	23
Accrued interest on switched bonds	2	-	-
Amount not paid at the end of the year	431	2	39
INTEREST PAID	(1 557)	(69)	(351)
D. RECONCILIATION OF FINANCIAL MARKET LIABILITIES TO FINANCING ACTIVITIES AS AT 31 MARCH			
Liabilities at beginning of year	19 528	847	3 798
Long term borrowings	18 673	770	3 422
Short term borrowings	855	77	376
Cash flow from financing activities	(820)	(127)	(46)
Non cash flow items	720	-	23
- Capitalised interest	-	-	23
- Capital adjustment to inflation-linked liability	760	-	-
- Bond discount / premium	(40)	-	-
Liabilities as at end of year	19 427	720	3 774
Long term borrowings	17 074	653	3 409
Short term borrowings	2 353	67	365

MCWAP R million	MMTS-2 R million	ORWRDP R million	KWSAP R million	MMTS-1 R million	UMGENI R million	KRIEL R million	TOTAL R million
(13)	(25)	-	(2)	-	-	-	(542)
(144)	(189)	-	(39)	-	-	-	(2 319)
(144)	(189)	-	(123)	-	-	-	(3 217)
-	-	-	-	-	-	-	1
-	-	-	-	-	-	-	760
-	-	-	-	-	-	-	28
-	-	-	84	-	-	-	107
-	-	-	-	-	-	-	2
13	27	-	2	-	-	-	514
(144)	(187)	-	(39)	-	-	-	(2 347)
1 199	1 816	-	1 252	-	-	-	28 440
1 187	1 627	-	1 229	-	-	-	26 908
12	189	-	23	-	-	-	1 532
375	118	-	(23)	-	-	-	(523)
-	-	-	84	-	-	-	827
-	-	-	84	-	-	-	107
-	-	-	-	-	-	-	760
-	-	-	-	-	-	-	(40)
1 573	1 934	-	1 313	-	-	-	28 741
1 540	1 538	-	1 290	-	-	-	25 504
33	396	-	23	-	-	-	3 237

The role of the private sector in water management will be determined by regulation, market forces and risk-return considerations. ***What will determine the role of the state?***

Water and energy are ***inter-related*** *in many ways, and even more so in circular water use. Should water and energy be* ***jointly managed****, at a regional level?*

What is required to ensure the state can continue to fulfil, in the long run, its ***Constitutional obligation*** *of according all citizens the* ***right of access*** *to sufficient water?*

How could the water sector become ***more attractive*** *to the limited pool of talent in the labour market?*

Questions to ponder

With water availability in most of our catchment areas already under pressure, an increase in circular water use seems unavoidable; the deliberate capture, treatment and reuse of waste water, and the desalination of seawater, will become ever more commonplace, in the years to come. This transition will require the water sector to adapt, fundamentally, in a number of areas.

The role demarcations of water sector institutions will become harder to define, as the boundaries between water services, sanitation and water resources become ever more blurred.

The technical complexity of water treatment will undergo a very big step-change; a tertiary water treatment or seawater desalination plant is far more complex than a wastewater treatment plant. Essentially a chemical plant, it needs to be operated within very narrow parameters, by highly-skilled personnel, with a great emphasis on optimal energy use.

Running such infrastructure will require a very robust operating model, along with prudent financial management. Even in countries with well-capacitated water utilities, the operation and maintenance of such plants is usually left to specialised companies.

Circular water use increases a water system's resilience to external shocks, like droughts and floods, and supply can be up-scaled, as required. That provides us with largely assured, commoditised water.

It is often being said that worthy solutions come from asking the right questions.

Given that circular water use will ***demand more robust management and technological acumen****, what should be the response of the state? Upskill and retain control, or cede roles to specialised companies, through risk-sharing partnerships?*

PART G: GLOBAL REPORTING INITIATIVE CONTENT INDEX

Ref No.	Description	Compliant	Comment
1.	Strategy and analysis		
1.1	Statement from the most senior decision-makers of the organisation	Fully	Refer to pages 6 and 12.
1.2	Description of key impacts, risks and opportunities	Fully	Refer to page 70.
2.	Organisational profile		
2.1	Name of the organisation	Fully	Trans-Caledon Tunnel Authority.
2.2	Primary brands, products and/or services	Fully	Refer to page 22.
2.3	Operational structure of the organisation, including main divisions, operating companies, subsidiaries and joint ventures	Fully	Refer to page 23.
2.4	Location of organisation's headquarters	Fully	TCTA operates from its offices in Centurion, Gauteng, South Africa.
2.5	Number of countries where the organisation operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report	Fully	TCTA is only active in South Africa. On Phase 2 of the Lesotho Highlands Water Project, it raises the money in South Africa for the water transfer component and pays it over to the Lesotho Highlands Development Authority for the implementation.
2.6	Nature of ownership and legal form	Fully	Refer to page 21.
2.7	Markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries)	Fully	Not applicable
2.8	Scale of the reporting organisation	Fully	Refer to Section B: Performance Information
2.9	Significant changes during the reporting period regarding size, structure or ownership	Fully	None
2.10	Awards received in the reporting period	Fully	None
3.	Report parameters		
3.1	Reporting period (e.g. fiscal or calendar year) for information provided	Fully	This report relates to the financial year from 1 April 2017 to 31 March 2018.
3.2	Date of most recent previous report (if any)	Fully	31 March 2017
3.3	Reporting cycle (annual, biennial, etc.)	Fully	Annual
3.4	Contact point for questions regarding the report or its contents	Fully	Feedback on the report is welcome. The Chief Executive Officer may be contacted in this regard.
3.5	Process for defining report content	Fully	Refer to page 9: About the Integrated Annual Report.
3.6	Boundary of the report (e.g. countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers)	Fully	The report covers the activities of TCTA with regard to the mandate and the directives received from the Minister and associated activities.

3.7	State any specific limitations on the scope or boundary of the report (see completeness principle for explanation of scope)	Fully	There were no specific limitations on the scope or boundary of the report.
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organisations	Fully	None
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report. Explain any decisions not to apply, or to substantially diverge from, the Global Reporting Initiative Indicator Protocols	Fully	Refer to page 26.
3.10	Explanation of the effect of any restatements of information provided in earlier reports, and the reasons for such restatement (e.g. mergers and acquisitions, change of base years or periods, nature of business, measurement methods)	Fully	Not applicable, as no information was restated.
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report	Fully	No significant changes were identified from the previous reporting period.
3.12	Table identifying the location of the Standard Disclosures in the report	Fully	Refer to pages 'Global Reporting Initiative content index'.
3.13	Policy and current practice with regard to seeking external assurance for the report	Fully	The predetermined objectives and the Annual Financial Statements are assured in line with the requirements of the Auditor-General.
4.	Governance, commitments and engagement		
4.1	Governance structure of the organisation, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organisational oversight	Fully	Refer to Section D: Governance.
4.2	Indicate whether the Chair of the highest governance body is also an executive officer	Fully	The Chairman of the TCTA Board is an independent non-executive director.
4.3	For organisations that have a unitary board structure, state the number and gender of members of the highest governance body that are independent and/or non-executive members	Fully	Refer to pages 64 to 66.
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body	Fully	In line with Treasury Regulations shareholder input is received through the Shareholder Compact.
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organisation's performance (including social and environmental performance)	None	

4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided	Fully	Refer to page 58.
4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees, including any consideration of gender and other indicators of diversity	Fully	Refer to pages 64 to 66 for details of Board. Process of determining composition is the prerogative of the Minister and occurs when the Board is appointed.
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation	Fully	Refer to Section C: Sustainability and Transformation.
4.9	Procedures of the highest governance body for overseeing the organisation's identification and management of economic, environmental, and social and labour performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct and principles	Fully	Refer to Section C: Sustainability and Transformation.
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental and social performance	None	
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organisation	None	
4.12	Externally developed economic, environmental and social charters, principles or other initiatives to which the organisation subscribes or endorses	Fully	In the implementation of its projects TCTA subscribes to the principles contained in the Construction Sector Charter.
4.13	Memberships in associations	Fully	Institute of Internal Auditors, South African National Committee on Large Dams, World Economic Forum, Water Institute of Southern Africa, Association of Corporate Treasurers of Southern Africa and Corporate Executive Board.
4.14	List of stakeholder groups engaged by the organisation	Fully	Refer to page 19.
4.15	Basis for identification and selection of stakeholders with whom to engage	Fully	TCTA implements projects on behalf of the Department of Water and Sanitation. Engagement with off-takers is through the Department's structures.
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group	Fully	Refer to page 19.
4.17	Key topics and concerns that have been raised through stakeholder engagement	Fully	Refer to page 46.
DMA EC	Disclosure on management approach: Economic		
Aspects	Economic performance	None	
	Market presence	Fully	Refer to pages 12.

	Indirect economic impacts	Fully	Refer to page 18. TCTA delivers in support of the Government Outcomes
DMA EN	Disclosure on management approach: Environmental		
Aspects	Materials	Partially	In line with other major organisations, TCTA does not report on the materials consumed in capital projects. Printed copies consumed in the head office is reported on page 42
	Energy	Partially	In line with other major organisations, TCTA does not report on the energy consumed in capital projects. Printed copies consumed in the head office is reported on page 42
	Water	Partially	In line with other major organisations, TCTA does not report on the water consumed in capital projects. Printed copies consumed in the head office is reported on page 42
	Biodiversity	Fully	Refer to page 42.
	Emissions, effluents and waste	Fully	None. In line with other major organisations, TCTA does not report on the emissions, effluents and waste produced in capital projects.
	Products and services	Fully	Refer to page 122.
	Compliance	Partially	Refer to page 47 for Health and Safety on site and page 42 for compliance against the Environmental Management Plan.
	Transport	Fully	None. In line with other major organisations, TCTA does not report on the transport requirement in capital projects.
	Overall	Partially	Each element reported separately
DMA LA	Disclosure on management approach: Labour		
Aspects	Employment	Fully	Refer to pages 48 and 49.
	Labour/management relations	Fully	Refer to page 51.
	Occupational health and safety	Partially	Refer to page 47 (for project sites).
	Training and education	Fully	Refer to page 52.
	Diversity and equal opportunity	Fully	Refer to pages 50 and 51.
	Equal remuneration for women and men	None	
DMA HR	Disclosure on management approach: Human Resources		
Aspects	Investment and procurement practices	Fully	Refer to page Note 24 in AFS for compliance.
	Non-discrimination	Fully	Refer to Employment Equity as reflected on pages 50 and 51.
	Freedom of association and collective bargaining	None	
	Child labour	Fully	All project sites comply with South African legislation

	Prevention of forced and compulsory labour	Fully	All project sites comply with South African legislation.
	Security practices	Fully	All project sites comply with South African legislation.
	Indigenous rights	Fully	TCTA complies with South African legislation in terms of employment equity.
	Assessment	Fully	Not required.
	Remediation	Fully	Not required.
DMA SO	Disclosure on management approach: Social		
Aspects	Local communities	Fully	Refer to page 45.
	Corruption	Partially	Refer to Note 24 in AFS
	Public policy	None	
	Anti-competitive behaviour	Fully	Not applicable
Compliance		Fully	TCTA seeks to create sustainable value for the Shareholder and establish itself as a leader in water infrastructure development. TCTA is committed to responsible business conduct and best practice. An ethical governance framework and a commitment to legal compliance guide all its organisational activities. TCTA upholds the principles expressed in the King IV Code that good governance combines both regulatory requirements and voluntary standards of excellence.
DMA PR	Disclosure on management approach: Product responsibility		
Aspects	Customer health and safety	Fully	Not applicable
	Product and service labelling	Fully	Not applicable
	Marketing communications	Fully	Not applicable
	Customer privacy	Fully	Not applicable
	Compliance	Fully	Not applicable
Performance indicators			
Economic			
EC1	Direct economic value generated and distributed	Fully	Not applicable. TCTA is a non-profit organisation and does not create a surplus or loss. Refer to page 21.
EC3	Coverage of the organisation's defined benefit plan obligations	Fully	Not applicable.
Market presence			
EC6	Policy, practices and proportion of spending on locally based suppliers at significant locations of operation	Partially	TCTA subscribes to the Construction Sector Charter, which stipulates employment, preferential procurement and enterprise development targets for local development on each project site.

EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation	Fully	TCTA is based in South Africa only and all staff are hired locally.
Indirect economic impacts			
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement	Fully	Refer to page 18.
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts	Fully	Refer to page 18.

Environmental			
Materials			
EN1	Materials used by weight or volume	None	None. In line with other major organisations, TCTA does not report on the materials consumed in capital projects.
EN3	Percentage of materials used that are recycled input materials	None	None. In line with other major organisations, TCTA does not report on recycled materials consumed in capital projects.
Energy			
EN3	Direct energy consumption by primary energy source	None	None. In line with other major organisations, TCTA does not report on direct energy consumption by primary energy source in capital projects.
EN4	Indirect energy consumption by primary source	None	None. In line with other major organisations, TCTA does not report on indirect energy consumption by primary energy source in capital projects.
EN5	Energy saved due to conservation and efficiency improvements	None	
EN6	Initiatives to provide energy-efficient or renewable energy-based products and services, and reductions in energy requirements as a result of these initiatives	None	On once-off capital projects, each of which is unique in nature and of limited lifespan, it is difficult to institute programmes which record reduction in consumption of energy.
EN7	Initiatives to reduce indirect energy consumption and reductions achieved (internal)	Fully	On once-off capital projects, each of which is unique in nature and of limited lifespan, it is difficult to institute programmes which record reduction in consumption of energy.
Water			
EN8	Total water withdrawal by source	None	Each project withdraws from the adjacent source and the head office draws water from the Vaal River System through Rand Water and Tshwane Metropolitan Municipality.

Biodiversity			
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Fully	Refer to Section C: Mitigation of Environmental Impacts on page 42.
EN13	Habitats protected or restored	Fully	Refer to Section C: Mitigation of Environmental Impacts on page 42.
EN14	Strategies, current actions and future plans for managing impacts on biodiversity	Fully	Refer to Section C: Mitigation of Environmental Impacts on page 42.
Emissions, effluents and waste			
EN16	Total direct and indirect greenhouse gas emissions by weight	None	Not applicable
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved	None	Not applicable
EN22	Total weight of waste by type and disposal method	None	Not applicable
EN23	Total number and volume of significant spills	Partially	Refer to page 44.
Products and services			
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	Fully	Not applicable
EN27	Percentage of products sold and their packaging materials that are reclaimed by category	Fully	Not applicable
Compliance			
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non¬compliance with environmental laws and regulations	Fully	No significant non-compliance with environmental laws and regulations was identified.
Transport			
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organisation's operations, and transporting members of the workforce	Fully	None. In line with other major organisations, TCTA does not report on significant environmental impacts of transporting products and other goods and materials used for the organisation's capital projects.

Social: Labour practices and decent work			
Employment			
LA1	Total workforce by employment type, employment contract and region, broken down by gender	Fully	Refer to page 50.

LA2	Total number and rate of new employee hires and employee turnover by age group, gender and region	Fully	Refer to page 50.
Labour/management relations			
LA4	Percentage of employees covered by collective bargaining agreements	None	
Occupational health and safety			
LA6	Percentage of total workforce represented in formal joint management–worker health and safety committees that help monitor and advise on occupational health and safety programmes	None	
LA7	Rates of injury, occupational diseases, lost days and absenteeism, and number of work-related fatalities by region and by gender	None	
Training and education			
LA10	Average hours of training per year per employee by gender and by employee category	Partially	Refer to page 52.
LA11	Programmes for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	None	
LA12	Percentage of employees receiving regular performance and career development reviews, by gender	Fully	All TCTA employees receive regular performance reviews and are required to submit a Personal Development Plan each year.
Diversity and equal opportunity			
LA13	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership and other indicators of diversity	Fully	Refer to pages 64 to 66.
Equal remuneration for women and men			
LA14	Ratio of basic salary and remuneration of women to men (internal)	None	

Social: Human rights			
Non-discrimination			
HR4	Total number of incidents of discrimination and actions taken	Fully	No incidents of discrimination were reported during the period under review.

Freedom of association and collective bargaining			
HR5	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights	Fully	No violations were identified.
Child labour			
HR6	Measures taken to contribute to the effective abolition of child labour	Fully	No violations were identified.
Forced and compulsory labour			
HR7	Measures to contribute to the elimination of all forms of forced or compulsory labour	Fully	No violations were identified.
Indigenous rights			
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken	Fully	No violations were identified.
Assessment			
HR10	Percentage and total number of operations that have been subject to human rights reviews and/ or impact assessments	Fully	None
Remediation			
HR11	Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms	Fully	None

Social: Society			
Local comcommunities			
SO1	Percentage of operations with implemented local community engagement, impact assessments and development programmes	Partially	Refer to Section C: Mitigation of Social Impact, page 45.
Public policy			
SO5	Public policy positions and participation in public policy development and lobbying	Fully	As a government institution, TCTA does not take any policy positions but works with Government in the development of policy to ensure a financially sustainable water sector.
SO6	Total value of financial and in-kind contributions to political parties, politicians and related institutions by country	Fully	None

Anti-competitive behaviour			
SO7	The total number of legal actions for anti-competitive behaviour, anti-trust and monopoly practices and their outcomes	Fully	Not applicable
Compliance			
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	Fully	No significant fines were incurred for non-compliance with laws and regulations.

Social: Product responsibility			
Customer health and safety			
PR1	Life-cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures	Fully	Not applicable
Product and service labelling			
PR3	Type of product and service information required by procedures and percentage of significant products and services subject to such information requirements	Fully	Not applicable
Marketing communications			
PR6	Programmes for adherence to laws, standards and voluntary codes related to marketing communications, including advertising, promotion and sponsorship	Fully	Not applicable
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion and sponsorship by type of outcomes	Fully	Not applicable
Customer privacy			
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	Fully	Not applicable
Compliance			
PR9	Monetary value of significant fines for non¬compliance with laws and regulations concerning the provision and use of products and services	Fully	Not applicable

LIST OF ABBREVIATIONS/ACRONYMS

AG	Auditor-General
AMD	Acid Mine Drainage
AMD-STI	Acid Mine Drainage - Short-term Intervention
AMD-LTS	Acid Mine Drainage - Long-term Solution
ASB	Accounting Standards Board
BER	Bureau for Economic Research
BPS	Basis Points
BWP	Berg Water Project
CCMA	Commission for Conciliation, Mediation and Arbitration
CCT	City of Cape Town
CGU	Cash Generating Units
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CODM	Chief Operating Decision Maker
CPI	Consumer price index
CPP	Commercial Paper Programme
DBSA	Development Bank of Southern Africa
DEA	Department of Environmental Affairs
DFI	Development Finance Institutions
DoA	Delegation of Authority
DTI	Department of Trade and Industry
DWS	Department of Water and Sanitation
EA	Environmental Authorisation
ECL	Environmental Critical Level
ECO	Environmental Control Officer
EIB	European Investment Bank
EMP	Environmental management programme
EMS	Environmental Management System
ERMF	Enterprise Risk Management Framework
ESI	Eskom Selling Price
EUR	Euro
EXCO	Executive Committee
FEC	Forward exchange contracts
FIDIC	International Federation of Consulting Engineers
FVOCI	Fair value through other comprehensive income
FVTPL	Fair Value through surplus or deficit
GoL	Government of Lesotho
IAS	International Accounting Standards
ICT	Information, Communication and Technology
IASB	International Accounting Standards Board
IESBA	International Ethics Standards Board for Accountants
IFRS	International Financial Reporting Standards
IRBA	Independent Regulatory Board for Auditors
ISA	International Standards on Auditing
ISDA	International Swap and Derivatives Association
ISMA	International Secureties Market Association
JHB	Johannesburg
JSE	Johannesburg Stock Exchange
JV	Joint-Venture
KWSAP	Komati Water Scheme Augmentation Project
LHDA	Lesotho Highlands Development Authority
LHWC	Lesotho Highlands Water Commission
LHWP	Lesotho Highlands Water Project
MCWAP	Mokolo-Crocodile River (West) Water Augmentation Project
MMTS	Mooi-Mgeni Transfer Scheme
MOA	Memorandum of Agreement
MRWP	uMzumvubu River Water Project
NT	National Treasury
NWA	National Water Act
O & M	Operations and maintenance
OCI	Other comprehensive income
ORWRDP	Olifants River Water Resource Development Project
OVTS	Orange-Vaal Transfer Scheme
PAA	Public Audit Act
PAYE	Pay as you Earn
PFMA	Public Finance Management Act
PPI	Producer Price Index

PSP	Professional Service Provider
RSA	Republic of South Africa
SAPS	South African Police Services
SARS	South African Revenue Service
SC	Senior Council
SCM	Supply Chain Management
SDL	Skills Development Levy
SIP	Strategic Integrated Project
SOE	State Owned Entity
TCTA	Trans-Caledon Tunnel Authority
UIF	Unemployment Insurance Fund
VAT	Value Added Tax
VRESAP	Vaal River Eastern Subsystem Augmentation Project
VRS	Vaal River System
WACC	Weighted Average Cost of Capital
WS03	Water stock number 3
WS04	Water stock number 4
WS05	Water stock number 5
ZAR	South African Rand

NOTES

Vision

"To be the leader in the sustainable supply of water in the region"

Mission

"Our mission is to facilitate water security through the planning, financing and implementation of bulk raw water infrastructure, in the most cost-effective manner that benefits water consumers"

Values

"Excellence, Integrity and Respect for one another, while promoting Unity of Purpose and the Growth of the Collective.

Excellence

We
- consistently give our best, and take pride in our achievements
- deliver excellent work, efficiently and on time
- think innovatively and creatively to improve our performance.

Integrity

We
- converse honestly and respectfully, stimulating constructive action
- honour our commitments and truly 'walk the talk'
- gain trust and credibility through fairness and mutually cooperative relationships.

Respect

We
- acknowledge, appreciate and embrace diversity
- honour, respect and consider diverse views and opinions
- are responsive to one another's needs and those of our communities and stakeholders.

Unity

We
- are united through common goals and the TCTA vision
- draw on the strengths and skills of our team
- contribute positively to the team's performance, spirit and morale.

Growth

We
- willingly share knowledge and information with each other
- are innovative and proactive in thought and in action
- support, encourage and provide opportunities for individual growth.

We conduct our business with professionalism, uncompromising integrity and diligence. We are committed to comply with internationally recognised standards of managerial and technical excellence. We cherish transparent and consultative relationships with all our stakeholders. We proactively align ourselves to meet the challenges of a dynamic environment. We pledge ourselves to uphold the principles of accountability and sound governance in executing our duties.

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TCTA
A new word for water