CORPORATE PLAN

TRANS-CALEDON TUNNEL AUTHORITY

FOR THE PERIOD 1 April 2020 to 31 March 2023

(Prepared in accordance with National Treasury Guidelines)

A new word for water

STATEMENT BY THE ACCOUNTING AUTHORITY

It is hereby certified that this Corporate Plan:

- was developed by the Executive Management of the Trans-Caledon Tunnel Authority of South Africa under the guidance of the Board of Directors, in line with the aspirations of the Executive Authority, the Minister of Human Settlements, Water and Sanitation;
- takes into account all the relevant policies, legislation and other directives for which TCTA is responsible; and
- accurately reflects the strategic outcome-oriented goals and objectives, which TCTA will endeavour to achieve over the period 2020/21.

The Corporate Plan is recommended for submission in terms of section 52 of the PFMA:

Signature: ______________________

Mr Percy Sechemane
Chief Executive Officer: TCTA
Date: 28 February 2020

Approved by:

Signature: ______________________

Mr Gerald Dumas
Chairperson of the Board: TCTA
Date: 28 February 2020

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1 OVERVIEW

1.1 THE PURPOSE OF THIS CORPORATE PLAN

The purpose of this Corporate Plan is to outline how TCTA will fulfil its mandate and the directives received from the Minister of Water and Sanitation, and in doing so, support and implement the Government's developmental agenda.

TCTA complies with section 52 of the PFMA in submitting its annual budgets and three-year Corporate Plan to National Treasury as guided by the National Treasury Practice Note 4 of 2009/10 and Treasury Regulation 29.

1.2 VISION

To be the world-class enabler of sustainable infrastructure for a water-secure South Africa.

1.3 MISSION

To plan, finance and implement sustainable and accessible water resource infrastructure.

1.4 STRATEGIC OVERVIEW

Both the National Development Plan and the National Water Resources Strategy underscore sound strategies for enhancing the capacity of South Africa's water resource infrastructure to meet competing needs across all sectors. Infrastructure development holds the key to South Africa's economic growth and transformation.

As and when directed by the Minister, TCTA continues with its critical role of ensuring the timeous development of infrastructure for the expanded supply of water to stimulate South Africa's economic growth, and to simultaneously deal with the historical imbalances relating to access to water.

1.5 VALUE PROPOSITION

In pursuit of a sustainable water supply, TCTA's objective is to provide water infrastructure at the lowest lifecycle cost to the end-consumer in the most sustainable socio-economic manner. To achieve this objective, it has developed its capability beyond simply raising finance and managing debt. It is involved in the following:

- Project management and implementation;

- Liability management;
- Structuring and raising of project finance;
- Knowledge management; and
- Local economic development.

Through a rigorous up-front consultative approach to costing of projects, debt modelling, consultation with end-users and a proactive approach to problem solving on the mega projects where delivery is occurring, TCTA continues to deliver within the parameters agreed with the Department of Water and Sanitation and other stakeholders.

1.6 OUR MANDATE

TCTA conducts its business as a state-owned entity tasked with the funding and implementation of water infrastructure projects. TCTA's mandate is set out in terms of the Notice of Establishment and directives issued from time to time by the Executive Authority.

TCTA's solvency is secured by the tariff methodology, income agreements and guarantees (explicit and implicit), that provide certainty that all costs incurred by TCTA will be fully funded either through user tariffs as the debt is repaid or through direct cost-recovery payments from the Department of Water and Sanitation. TCTA's tariffing methodology seeks to provide a stable planning platform for the future by smoothing the tariff over the period of repayment (usually 20 years after construction) which is significantly less than the project infrastructure useful life, while taking into account the end-user affordability.

Throughout the project lifecycle, the projects will reflect net surpluses and deficits depending on the phase and repayment profile of the project. This will result in the projects reflecting deficits in some years – merely because the project has an accumulated deficit in the particular year.

The tariffing methodology is a contributing factor to this as the tariffs recouped in any particular year, especially during the earlier years of the project, may be lower than the costs in the year because of the underlying principle of a smoothed tariff.

A further contributing factor is the interest expense at that point in time exceeding the interest on the financial asset, a factor that will always reverse by the time the financial asset is extinguished and the debt repaid. Management confirms that while the surplus/deficit position may vary during the life of a project, all projects will ultimately repay all their debt and hold no surplus or deficit when all the loans for the project are repaid. Hence, the going concern status of TCTA is assured.

2 BACKGROUND

2.1 LEGISLATIVE AND REGULATORY FRAMEWORK

TCTA operates within the regulatory framework of Chapter 10 of the National Water Act (Act 36 of 1998) as an implementing agency or special purpose vehicle of the Department of Water and Sanitation. TCTA is a Schedule 2 public entity as listed in the Public Finance Management Act, Act No.1 of 1999, as amended, and it therefore broadly operates within the ambit of Constitutional provisions including other relevant legislative prescripts like Environmental and Employment Laws etc.

2.2 ESTABLISHMENT DATE AND REASONS

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 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 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 36 of 1998).

In accordance with section 3 of the Notice of Establishment the objectives of TCTA are to:

a) implement, operate and maintain the part of Phase 1 of the Lesotho Highlands Water Project situated in the Republic of South Africa, in accordance with the provisions of the Treaty; and
b) perform the functions set out in clause 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.

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 local and foreign water management institutions with:

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

The above makes it clear that TCTA cannot undertake any function outside of its mandate without a directive from the Minister, unlike the Water Boards who are given such opportunity in terms of section 30 of the Water Services Act (Act 108 of 1997). The National Water Act requires that TCTA manage its different functions separately.

This is further emphasised in the Notice of Establishment for TCTA which states in section S20(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. Section 20(2) furthermore states that the Authority's treaty responsibilities are not applicable to its non-treaty responsibilities.

2.3 TCTA KEY COMPETENCIES

The competencies of TCTA reflect its growth and experiences from the days when it operated in a single project environment, following its establishment as a special purpose vehicle in 1986 specifically to fulfil South Africa's treaty obligations in respect of LHWP.

The scope of TCTA activities has expanded considerably in scale and complexity, from a single project (LHWP) to the management of the current portfolio of major infrastructure projects at varying stages in the project lifecycle. Activities also include extensive advisory services.

TCTA has developed sound expertise and an acknowledged track record in the efficient financing and project management of water infrastructure delivery. Its competency set renders it well placed to assume increased responsibilities and functions within an enhanced institutional framework.

2.4 MAJOR PRODUCTS AND SERVICES

In the course of fulfilling 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 provides the following services and associated products:

a) structuring and raising project finance;

b) project management and implementation of water infrastructure covering:

- design
- construction
- environmental compliance
- land acquisition

d) operation and maintenance;

e) debt management;

f) knowledge management;

g) risk management;

h) socio-economic transformation; and

i) tariff setting.

2.5 MAIN ACTIVITIES: DIRECTED AND POTENTIAL NEW PROJECTS

2.5.1 CURRENT DIRECTED PROJECTS

TCTA received directives from the Minister of Human Settlement Water and Sanitation to fund and implement the projects shown in Table 1. Currently there are 7 projects under debt management, 2 projects under preparation, 1 project at implementation phase, 1 project at closeout, 2 under operation and maintenance, 4 on hold and 4 advisory projects.

Table 1: Mandate and Current Directed Projects

Project	Date Directive received	Work to be undertaken in 2020/21							
		Planning	Funding & Debt	Implementation	Close-out	Operation and maintenance	Advisory	Payment agency	On-hold
Projects with Debt Under Management									
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	3 August 1994 (and incorporated into amended Notice of		√			√		√	

Project	Date Directive received	Work to be undertaken in 2020/21							
		Planning	Funding & Debt	Implementatio	Close-out	Operation and maintenance	Advisory	Payment agency	On-hold
Highlands Water Project and any other obligations on the Vaal River System (Acid Mine Drainage). (VRS)	Establishment, 24 March 2000)								
Berg Water Project (BWP)	6 May 2002		√						
Vaal River Eastern Subsystem Project (VRESAP)	6 October 2004		√						
Mooi–Mgeni Transfer Scheme – Phase 2 (MMTS-2)	29 November 2007		√		√				
Komati Water Scheme Augmentation Project (KWSAP)	29 September 2008		√						
Mokolo–Crocodile Water Augmentation Project – Phase 1 (MCWAP-1)	19 May 2010		√		√				
Projects under preparation									
Berg River Voëlvlei Augmentation Scheme (BRVAS)	18 May 2017	√	√						
uMkhomazi Water Project Phase 1 (uMWP-1)	25 February 2019	√	√						
Projects at Implementation Phase									
Mokolo–Crocodile Water Augmentation Project – Phase 2A (MCWAP-2A)	19 May 2010		√	√					

Project	Date Directive received	Work to be undertaken in 2020/21							
		Planning	Funding & Debt	Implementatio	Close-out	Operation and maintenance	Advisory	Payment agency	On-hold
Projects Under Close-Out Phase									
Olifants River Water Resources Development Project – Phase 2C (ORWRDP-2C)	17 June 2008 (directive revised 12 March 2012)				√				
Projects Under Operation and Maintenance									
Lesotho Highlands Water Project: Delivery Tunnel North (Treaty obligations) (LHWP)	12 December 1986		√			√			
Acid Mine Drainage- Short-term Solution (AMD-STS)	6 April 2011					√			
Projects on Hold									
Olifants River Water Resources Development Project – Phase 2B (ORWRDP-2B)	25 February 2015 (directive revised 22 October 2015)		√						√
Acid Mine Drainage (AMD-LTS)	19 May 2016		√						√
Water Offtake for Kriel Town (KT)	20 June 2015		√						√
uMzimvubu Water Project (MWP)	19 January 2019 (replaced previous directives)		√						√

Project	Date Directive received	Work to be undertaken in 2020/21							
		Planning	Funding & Debt	Implementation	Close-out	Operation and maintenance	Advisory	Payment agency	On-hold
Advisory Services									
Advisory Services to Water Management Institutions, Water Boards and DWS	17 May 2004						√		
Strategic Integrated Projects 3 (SIP-3)	10 November 2012						√		
Strategic Integrated Projects 18 (SIP-18)	26 February 2104						√		
Programme Management Services to DWS in relation to Water Infrastructure Projects.	1 April 2019						√		

As highlighted in the table above, there are a number of projects for which TCTA has received directives, but is unable to proceed, as the projects are on hold for a variety of reasons. The specific projects are as follows:

- **Phase 2B of the Olifants River Water Resources Development Project**, in respect of which off-take arrangements with mines have still not been secured to enable funding to be raised.
- **Long-term Solution for Acid Mine Drainage on the Witwatersrand**, for which no resolution has been reached between National Treasury and DWS, on the funding model, effectively preventing TCTA from utilising the borrowing programme on the Vaal River System. TCTA has issued a letter to the Department of Water & Sanitation to request the Minister to formally instruct TCTA to suspend the Directive.
- **uMzimvubu Water Project**, Following the site visit by the DGs of DWS, NT, DAFF, Presidency, Premier's office and TCTA CEO on 16 August 2019 and a further meeting on 2 September 2019 a decision was made to reconfigure the project. National Treasury has confirmed that this is a social project and should be funded as such.

In addition, there is the **Kriel Project**, which directive requires TCTA to assist with project management and procurement of long-lead items, TCTA is still awaiting transfer of funds from DWS for this project to be completed.

2.5.2 POTENTIAL DIRECTIVES

The Infrastructure Development division of the Department of Water and Sanitation (DWS-ID) approached TCTA on 14 October 2019 to assist with three projects, which are delayed for various reasons. The three projects include:

- Olifants ORWRDP-2 sub-phases 2D, 2E, 2F.
- Raising of Clanwilliam Dam.
- Nwamitwa Dam.

These projects are part of the directive on Programme Management Services to DWS in relation to Water Infrastructure Projects.

Clanwilliam Water Project (CWP)

The project entails raising the full supply level of Clanwilliam Dam by 13 m to improve the safety of the structure, including the construction of a new inlet tower and outlet works. The raising of the dam will lead to the annual yield being increased by 70 million m^3 and a portion will be made available to assist in the development of a resource to poor farmers.

The project further includes the upgrading and expansion of the existing conveyance network to distribute water downstream of Bulshoek Dam to the existing irrigation scheme as well as resource poor farmers and other communities.

ORWRDP-2D,2E and 2F

Phase 2 of Olifants River Water Resources Development Project (ORWRDP-2) bulk transfer pipelines (Phases 2B to 2F) as well as pump stations. Phase 2B and Phase 2C will be implemented by TCTA as per directives. Construction of Phase 2C has been completed and the project is at project close out stage.

DWS has requested TCTA assistance with the implementation of Phases 2D, 2E and 2F. TCTA has drafted a directive for consideration by DWS.

Phase 2D – entails construction of a transfer pipeline from Steelpoort to a new reservoir in Ga-Matipa near Mooihoek.

Phase 2E - construction of a 10 km long pipeline from Ga-Matipa reservoir joining LWUA pipeline, close to Twickenham.

Phase 2F - construction of a 46 km long transfer pipeline from Twickenham to Olifantspoort abstraction works.

Nwamitwa Dam project

The feasibility study of the development and management options in the Groot Letaba River proposes the construction of a dam at Nwamitwa and the possible raising of Tzaneen Dam as options for augmenting water supply from the Groot Letaba River. DWS is at this stage progressing the construction of Nwamitwa Dam.

2.5.3 STRATEGIC INTEGRATED PROJECTS: SIP-3 & 18

In April 2012, the Presidential Infrastructure Coordinating Commission (PICC) tasked specific state-owned entities to co-ordinate and monitor each of the Strategic Integrated Projects (SIPs).

TCTA was appointed as co-ordinator for SIP-3, focusing on the development of the South-Eastern Node and Corridor and SIP-18, covering water and sanitation infrastructure. The SIPs consist of projects prioritised by the PICC on the basis of their strategic and catalytic nature and grouped into clusters where synergies could be achieved. The synergies would be derived from the integrated planning of value chains, management of inter-dependencies, and leveraging of lessons learned across similar project environments, among others.

The SIPs coordination programme has the benefit of show-casing the convening power of TCTA as it brings together diverse and strategic stakeholders in mutual collaborative engagements and platforms. In particular, the coordination of SIP-18 provides TCTA the advantage of accessing its potential long-term project pipeline for timely positioning and business development.

SIP-3 consists of catalytic projects in the Eastern Cape mainly, and to a lesser extent the Northern Cape and KwaZulu-Natal provinces. At the onset of the SIPs programme, SIP-3 comprised nine very large projects spanning the sectors of mining, transport, energy and water, totalling about R200 billion. Since inception, three of the projects valued at R12.5 billion have been completed, with the remainder at various stages of implementation.

All the projects are being implemented by state-owned enterprises, with the exception of the two-manganese mining and beneficiation projects largely owned by Kalagadi Manganese, in which the IDC holds 20% equity. The primary aim of SIP-3 is to unlock economic opportunities in the Eastern Cape by supporting industrialisation, agriculture development, tourism, mining and the automotive sector.

SIP-18 is made up of strategic national water and sanitation projects located throughout South Africa. The programme includes projects across the water value-chain, extending from source to tap and back to source. SIP-18 is designed to address water and sanitation backlogs, and communities that remain under-served. Projects also aim to assure sustainable supply of water in support of economic growth, while simultaneously meeting social needs. These projects may provide new infrastructure, the rehabilitation and upgrading of existing infrastructure, as well as improving the management of water and sanitation infrastructure.

In the year ahead, TCTA will continue with diligent project tracking on both programmes, generating and presenting timeous reports to the PICC. Focus will also be directed towards unblocking project bottlenecks as well as supporting drought mitigation measures in view of the recurrent drought affecting several parts of the country.

Following the conclusion of the Transnet re-engineering and cost optimisation initiatives and corresponding strategy change, the SIP-3 programme will witness rejuvenated traction in the revised Manganese Ore Rail project. Also, following the completion of the Ngqura Transhipment Hub, the coming year will see the commissioning of the completed works. In this light, the SIP-3 programme will, in conjunction with the PICC, focus on tracking the revised rail project as well as reviewing the impact of projects on job creation, localisation, skills development, and industrialisation.

In addition, following the unprecedented contract termination of Mtentu Bridge construction contract by the JV contractor due to violent community protests, SANRAL has been diligently working to appoint a new contractor to continue with the implementation of the bridge. Also construction of the second major bridge, the Msikaba Bridge, has been gathering momentum. Resolution of the Mtentu bridge impasse, appointment of a new contractor to recommence works, as well as increased momentum on the Msikaba bridge will require focused coordination and support. In this vein, TCTA will closely track and monitor these activities, providing requisite coordination support. Notably, site disruption challenges are envisaged to remain. In this light, TCTA will heighten its focus on unblocking of challenges, supporting project partners and project implementing agents.

Despite expectations last year, decision on Mthombo Refinery project remains outstanding. With traction on the IRP, it is envisaged that in the coming year, the Department of Minerals and Energy will decide on whether to proceed (or not) with a feasibility study on the Mthombo Refinery Project. Also, following the signing of an agreement with Transnet and the completion of its mining ramp-up programme, Kalagadi Manganese is expected to decide on when construction of the smelter project will commence, including the decision on project location. In addition, the decision to review the uMzimvubu Water Project (MWP) for reconfiguration will see increased traction on the MWP. These initiatives will increase programme coordination requirements for SIP-3. In this light, TCTA looks forward to improved traction on these key projects, with corresponding increase in programme coordination, tracking, monitoring and reporting.

With respect to SIP-18, as in the previous year, TCTA will continue to give increased attention to facilitating the accelerated delivery of the critical and strategic projects, namely, BRVAS, Clanwilliam Dam, transboundary LHWP-2, MCWAP-2, uMkhomazi Project, uMzimvubu Water Project reconfiguration, and ORWDP-2. The water sector remains critical and in the spotlight for the country. Correspondingly, SIP-18 projects remain a key focus for the PICC and national government. In addition, drought conditions persist across the country with several parts of the country experiencing reduced rainfall. These factors will lead to increased attention on water and sanitation infrastructure. In the coming year, TCTA will double its coordination efforts on water infrastructure projects, tracking progress on critical projects including drought mitigation measures and related infrastructure projects across the country. TCTA will also focus on promoting fast-tracked implementation of such projects as BRVAS and the new uMkhomazi Water Project as well as unblocking impeding bottlenecks.

Multi-sector and multi-disciplinary stakeholder engagement remain pivotal to successful and meaningful SIP coordination. As in the past, TCTA will continue to closely engage key partners and stakeholders to ensure that effective coordination takes place and will reinforce efforts to convene the forum of executive authorities as an inclusive platform for political and technical interfacing.

2.6 CORPORATE VALUES

TCTA corporate values are driven by its desire to achieve excellence in everything it does and, consequently, its leadership imperatives underscore how everyone will *work better together* to achieve this end.

Corporate values emphasise Excellence, Integrity and Respect for one another, while promoting Unity of Purpose, the Growth of the Collective and an Enabling Environment where employees are encouraged to excel.

TCTA conducts its business with professionalism and uncompromising integrity and diligence. The organisation is committed to complying with internationally recognised standards and managerial and technical excellence. TCTA cherishes transparent and consultative relationships with all its stakeholders.

It proactively aligns itself to meet the challenges of a dynamic environment, and ascribes to accountability, sound governance and environmental sustainability in executing its mandate and directives.

3 INDUSTRY OVERVIEW

Over the past decades, South Africa has done well in managing its water supply-demand dynamics, including huge investments addressing expanding economic activities and the significant services backlogs in under-served and unserved communities. In recent years, however, strategic decisions for the development of critical infrastructure have witnessed unnecessarily long delays, with potential impact on water availability in significant nodes of economic growth and social upliftment.

In particular, institutional capacity within the water sector has eroded over several years, largely due to discontinuity in sector leadership, which has stalled much-needed reform, re-alignment and development. The net result is an under-performing sector, managing a resource that is vital to the economy and the country’s well-being.

The reform of the sector is at hand. This is evident from various multi-year initiatives involving sector-wide planning, institutional re-alignment and other actions, aimed at building the required capacity to be responsive to a changing strategic landscape and broadly, the achievement of the sixth Sustainable Development Goal. These initiatives are reflected in the 2018 National Water and Sanitation Master Plan (NWSMP) and include the establishment of new institutional capacity in various nodes, notably Catchment Management Agencies, a National Water Resources Infrastructure Agency, a National Sector Regulator and a Municipal Intervention Unit for Water and Sanitation.

Several programmes have also been identified for renewed impetus, to deal with non-revenue water, water allocation reform, the enforcement of water use licence conditions, water and agrarian reform, and conservation and demand management. Others relate to the metering and subsidisation of agricultural water, the adoption of alternative water sources, the turn-around of failing waste-water treatment works, Blue/Green/No-Drop certification, and research and development innovation. Furthermore, a cross-sectoral programme for the Water-Energy-Food Nexus has been launched, to coordinate policy formulation, governance, investment, research, innovation, capacity-building, knowledge and regional cooperation.

Water is the most pivotal natural resource for socio-economic development in South Africa; where and when its supply may be constrained, all forms of human endeavour suffer. Our water story is one of hardship and inequality, but also of ingenuity and pragmatism. Historically, South Africa has not been blessed with an abundance of water, and frequent droughts extract a heavy toll. We also face systemic challenges: A below-average precipitation is coupled with above-average evaporation rates, relative to global figures; we inherited a legacy of unequal infrastructure planning, and much of our economic activity is located along a watershed, far away from natural water resources.

In response to these challenges, South Africa has built a surface water system that captures two-thirds of all the river flows, and transfers much of it to where it is needed for livelihoods, through inter-basin transfer schemes.

Progressively however, demand is overtaking supply; the surface water system yields about 14.7 billion cubic metres (BCM) during an average year, at a high level of assurance, and a very dispersed groundwater resource could yield a further 7.5 to 10.3 BCM per annum, mostly to rural communities. Demand from all sectors should climb through the 16.3 BCM level by 2020, and a 2 BCM deficit is anticipated to occur across the three major economic hubs by 2025.

At least four factors are simultaneously widening this gap:

- Population growth of about 1.55%, coupled with a high rate of urbanisation (currently around 60-63%) drives ever-higher water demand in the cities.
- Due to a progressive slowing in the building of new dams since the nineties, there has been a steady decline in the per-capita water resource availability, from 1,329 m^3 in the late eighties, to 966 m^3 in the current era. Accordingly, South Africa is classified as a water-scarce country.
- The spectre of climate change looms large; a recent study by the Water Research Commission indicates a noticeable shift in the Standardised Precipitation Evapotranspiration Index (SPEI) across Southern Africa, having occurred during the eighties. And several climate models predict temperature increases above the global average to occur in Southern Africa.
- Non-revenue water, being the result of non-payment for water consumed, and water lost during reticulation, remains unacceptably high. The NWSMP estimates that municipalities lose about 1.66 BCM per year through non-revenue water, which amounts to R9.9 billion, at a unit cost of R6 per m^3.

The water sector will be required to respond to both the supply and demand-side challenges; alternative water resources need to be explored, along with a shift towards circular water use, on a large scale. Simultaneously, meaningful gains need to be made on non-revenue water, as well as conservation and demand management programs at a municipal level. Innovative approaches will be required, in many instances; the frameworks for planning and projection used in the past, may not be as relevant or accurate in the future.

In the current difficult economic climate, investment into the sector will be under pressure. The NWSMP indicates that South Africa invests R42 billion per year into water infrastructure, and R13 billion into sanitation. However, the estimated capital investment requirement is R90 billion per year over the next ten years, a substantial R35 billion per annum more than the current investment. It stands to reason that debt funding, underpinned by bankable infrastructure projects, will be required to close much of that deficit. Which is where TCTA, specifically set up as a debt-finance vehicle, comes in squarely.

3.1 INDICATIONS OF A CHANGING CLIMATE

Climate change impacts on water in South Africa could exacerbate existing water-related challenges and create new ones related to climate variability, extreme weather events and changing rainfall seasonality. This would affect a wide range of economic sectors and livelihoods and impact on the development of infrastructure into the future, including through water quality-related issues.

Projected impacts are due to changes in rainfall and evaporation rates, further influenced by climate drivers such as wind speed and air temperature as well as soils, geology, land cover and topography across South African water catchments. Hydrological modelling is essential for translating these complex interactions into potential water resource impacts.

In general terms, the effect of climate change on water availability would need to become more prominent in the mainstream dialogue in the sector, with more attention being given to climate-independent, renewable water resources.

3.2 INFRASTRUCTURE INVESTMENT IMPERATIVE

The South African water sector faces a significant challenge in respect of infrastructure funding. Recent estimates emanating from the Master Planning Initiative, indicate a first order estimate investment requirement of approximately R900 billion over a ten-year period.

Of the total investment required, about 42% would be for building new infrastructure, 15% for the upgrading of existing infrastructure and 43% for the rehabilitation of existing infrastructure. Across all the elements of infrastructure financing and related structuring, an expanding direct and advisory role is envisaged for TCTA.

3.3 INSTITUTIONAL SETTING

Thirteen institutions report to the Minister of Water and Sanitation, including the Trans-Caledon Tunnel Authority, the Water Research Commission, two catchment management agencies and nine water boards. In most of the entities, the building of institutional capacity is an ongoing challenge, currently leading to weaknesses in key operational areas.

However, strategies are underway to address the challenges. At a national level, the alignment of roles and functions between the TCTA and the Department of Water and Sanitation, particularly relating to infrastructure development, operation and maintenance, will be advanced through the planned establishment of the National Water and Sanitation Infrastructure Authority.

This development will benefit the sector through improved, more integrated project planning, early clarity on financing options and strategies, and greater continuity in the management of the asset lifecycle.

To conclude, the sector is responsive to the multi-pronged challenges of climate change, water resources allocation, institutional alignment and funding deficits, through the master planning initiative and the establishment of an infrastructure agency.

4 ECONOMIC OUTLOOK

4.1 ECONOMIC OVERVIEW

After nearly a decade of sustained growth in the 3.5 to 4% band, the global economy is beginning to slow down on the back of trade tensions and Brexit, factors which the IMF estimates will shave 0.8% off the global economic growth figure. While many of the large, developed economies have ageing demographic profiles, which constrains economic growth potential in the longer term, Sub-Saharan Africa is blessed with a young and entrepreneurial population, and several countries, notably Ethiopia, Rwanda and Kenya, are already growing within the 6 to 8% band.

In contrast, South Africa is experiencing the longest business cycle downturn since 1945, and business and consumer confidence remain at historical low levels. Economic growth is projected at merely 0.5% for 2019, which is wholly insufficient to create the employment opportunities and raise living standards required by our youthful population; the outlook is grim for South Africa’s 9.4 million unemployed adults. The underlying reasons for this will not be remedied in the short term, and per-capita GDP is expected to stagnate over the medium term.

Since 2013 when the global economy, along with many developing economies, rebounded from the 2008 financial crisis, South Africa's GDP growth trend has continued to decline (Figure 1), partly due to a failure to implement structural reforms, and to improve the quality of expenditure. As a result, weak economic growth has yielded a trend of revenue shortfalls (Figure 2), higher budget deficits and escalating government debt.

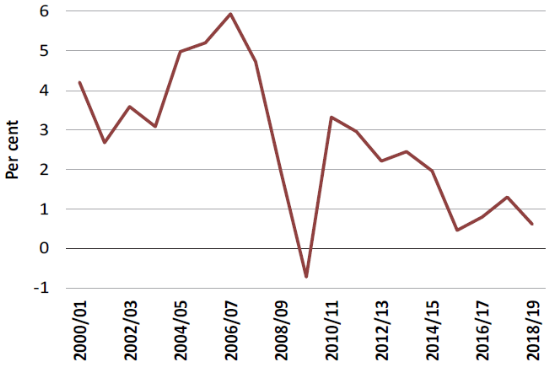


Figure 1: Real GDP Growth

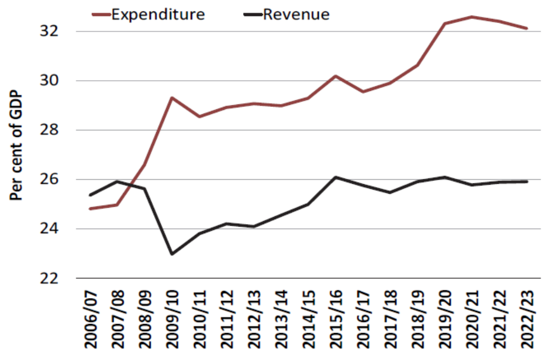


Figure 2: Main budget revenue and spending

Figure 3 illustrates the growth of public-sector debt over the past ten years, from about R1trn to about R3.5trn, on a GDP of about R5.2trn. The net Debt-to-GDP ratio currently stands at 56% but is expected to climb to 67.5% by 2022/23.

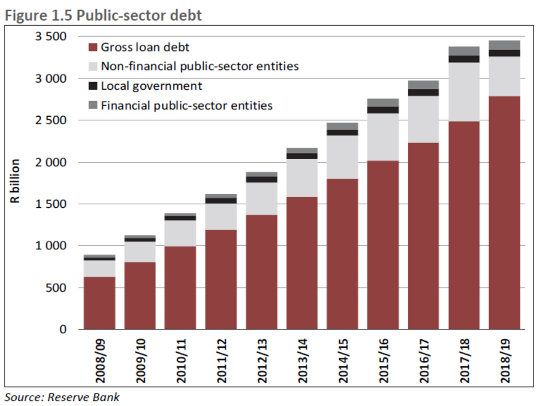


Figure 3: Public sector debt

The Medium-Term Budget Policy Statement (MTBPS) tabled by Finance Minister Mboweni on 30 October 2019, reflects on a struggling South African economy. Several SOEs are in distress, but Eskom's woes dominate. It is simultaneously being challenged to generate enough revenue to service R441bn in debt, and to provide uninterrupted power to the national grid. While it consumes fiscal resources through emergency funding (R23bn injection in February was followed by a further un-budgeted R26bn), Eskom struggles to avert periodic load-shedding, which stifles economic activity, and further diminishes revenue flow into the fiscus.

A budget deficit of R306bn, or 5.9% of GDP, is projected for 2019 as the trend of expenditure exceeding revenue continues. Several areas of expenditure are flagged for urgent attention, most notably the public sector wage bill, currently in excess of R500bn per annum, after having more than tripled since 2006, as well as emergency funding of under-performing SOEs, at around R60bn in the current year. Debt-service cost, being the result of the escalating public-sector debt, has grown to R204bn in 2019, and is projected to grow by 13.7% per annum in the medium term. Revenue is under pressure due to the struggling economy, and under-collection by SARS, as evidenced by a downward revision of R52.5bn in 2019. In the words of Minister Mboweni: *"Our problem is we spend more than we earn. It is as simple as that."*

In the short term, National Treasury plans to remove R150bn from government expenditure over the next three years, with the public-sector wage bill a core part of that. Also, restructuring of the energy sector, and a turn-around of poorly performing SOEs will be prioritised. Strong opposition from organised labour can be expected.

The rapidly deteriorating economic outlook, relative to a mere six months ago, has resulted in Moody's Investor Services cutting the outlook of the nation's Baa3 foreign- and local-currency assessments, both of which are one step above speculative grade, to negative. According to Bloomberg, South Africa has effectively three months to get its finances in order, and so avert a forced sell-off of billions of rand of its debt. Moody's rationale for their decision to change the outlook from stable to negative *"…reflects the material risk that the government will not succeed in arresting the deterioration of its finances through a revival in economic growth and fiscal consolidation measures".*

TCTA's role in the financing and implementation of water infrastructure is inextricably linked to the state of the economy. As a debt-finance vehicle, TCTA flourishes in an environment where an appetite for responsible debt exists, and where households have the means and confidence to consume utilities and pay for them. The current state, characterised by stagnant growth, high levels of unemployment and crippling state debt, is far from ideal. As a result, TCTA can expect a difficult trading environment to prevail in the medium term.

4.2 ECONOMIC IMPACT

The state of the economy impacts on the water sector in several ways. A higher level of growth translates into greater business and investor confidence, improved currency stability, and a greater capacity to borrow money for infrastructure development.
Furthermore, consumer confidence tends to improve on the back of greater employment and disposable income, which improves the likelihood that services could be paid for, and hence allows infrastructure loans to be serviced. Unfortunately, the converse also holds true:

economic distress raises the cost of borrowing and weakens the ability of consumers to pay for services.

Government is acutely aware of the immense challenges to accelerate progress and build a more inclusive society. Its vision and priorities to address them are outlined in the 2030 National Development Plan, which outlines two main strategic goals: 1) double the GDP by 2030 and eliminate poverty, and 2) reduce inequality as measured by the income Gini coefficient, from 0.70 to 0.60. The central target, however, requires a rate of growth that seems to be out of reach, currently.

TCTA projects like MCWAP2A will provide water security to the power generation industry thus ensuring that South Africa’s economic growth will not be constrained during times of drought.
Also, LHWP2, BRVAS and uMkhomazi will ensure water security in the major economic hubs of the country and thus providing an enabling environment for economic growth.

5 TCTA BUSINESS STRATEGY

TCTA occupies a unique position, being mandated to raise commercial finance for the development of national water infrastructure, with the assurance provided by the fiscus. This role exposes TCTA to an increasingly complex strategic landscape that embraces not just the water and construction sectors, but also private sector finance and National Treasury.

In deeply reflecting on its positioning, TCTA has recently refined its strategic frame to underscore the envisioned future of a world-class enabler of sustainable infrastructure for water-secure South Africa, with a more succinct and motivational mission statement providing a strong guide for action. In tandem, the medium-term strategy of TCTA is crafted within the context of a capable organisation striving to do more, beyond its statutory boundaries and constraints, within a generally sub-optimally performing sector and strategic landscape of increasing complexity.

The directive-driven, full cost recovery business model of TCTA has served the organisation well since its inception in 1986, and today the organisation is renowned for its project implementing capabilities, sound financial control and exemplary governance. However, the vulnerability and limitations of the business model, which relies exclusively upon Ministerial directives, and does not allow reserves to be accumulated, have become painfully apparent in recent years. Revenue disruptions and project pipeline uncertainty, emanating from a struggling water and sanitation department, along with the absence of a mandate to pursue other opportunities, have prompted initiatives to improve financial sustainability of the organisation, and to explore options for adopting a new business model.

A more balanced outlook, is towards the opportunity presented by the planned establishment of the National Water Resources Infrastructure Agency, as reflected in the National Development Plan. It is widely expected that this long overdue re-alignment of sector institutions will remedy many of the inefficiencies arising from role and demarcation uncertainties, and TCTA is poised to play a leading role in that transition.

The strategic outlook of TCTA is framed against the dynamics of the broader landscape, as it must position in relation to the opportunities and threats presented by the sector, as well as in the wider economy. Indeed, rather than being in a state of predictable steady flow, the global water landscape has dramatically escalated in strategic importance and complexity in recent years. The value of water is increasingly being understood within the water-energy-food nexus, and it has become essential for water to be managed within that context. Water governance is required to adapt to the challenges of tighter supply-demand imbalances and a less predictable climate, and all water institutions are pressed to raise the bar accordingly. Thus, TCTA is cognisant of the need for a shift in emphasis within new water infrastructure and supply systems, from the long-established linear use of mainly surface water resources, to circular water management, whilst drawing on a diverse portfolio of water resources, including potable reuse, aquifer recharge and seawater desalination.

But in the present day, the primary focus of TCTA is on the diligent and efficient execution of its directives and mandate. In doing so, TCTA needs to ensure that it creates and sustains the internal capacities to meet the demands of current and anticipated directives, and that stakeholders of TCTA remain assured of its competency and value proposition. In pursuit of this, TCTA has adopted a vision for 2022, to be achieved through portfolio growth, operational excellence, and a deliberate move to upscale its initiatives in socio-economic transformation. The business will be grown by more proactively converting the visible project pipeline into implementation projects, and by expanding the role of TCTA beyond its traditional domain, to become a leading node in large-scale desalination and water reuse. The organisation will strive to excel in all aspects of the business, delivering its wider spectrum of projects with greater agility and performance-centred professionalism, supported by efficient core business processes and integrated technology platforms. TCTA intends to move the procurement landscape to facilitate greater socio-economic transformation amongst historically disadvantaged groups, and to achieve real positive development impact in communities, while maintaining a high-integrity institution and bid system, with an entrepreneurial leadership team.

Future indicators point to an increasing proportion of water infrastructure being funded from the DFI or commercial lender markets, which will further entrench the principle that water is an economic commodity. As water pricing becomes more aligned with its economic value, the door should open for more risk-bearing public-private partnerships. TCTA's competency in institutional arrangements and procurement will become increasingly relevant.

The organisation believes that it is well-placed for a prominent role in a more complex and challenging water sector; it is a healthy, well-functioning institution with a sound reputation amongst its peers, financial regulators, the private construction sector and the lender market.

6 CORPORATE STRATEGIC OBJECTIVES

TCTA has the following corporate strategic objectives:

a) Implement capital projects in accordance with the timelines agreed with DWS
b) Operate and maintain designated projects in accordance with DWS requirements/ specifications
c) Raise funding for implementation of infrastructure (subject to signing of agreements by DWS by January 2020 and no event of default related to any project)
d) Manage debt within the approved borrowing limit
e) Effective control of corporate expenditure to match project workload
f) Resolve critical project matters identified during the year
g) Coordinate and monitor the efficient implementation of the projects within SIP-3 and SIP-18
h) Enhance the internal control environment, risk management and governance
i) Implement the ICT Strategic Plan and ERP system
j) Ensure the implementation of a fair, transparent, equitable, competitive, timeous and cost-effective supply chain management system
k) Position TCTA as a thought leader in critical aspects of water security
l) Ensure organisational culture is in support of business strategy
m) Develop skilled and capable employees

The measures, targets and indicators of these corporate strategic objectives are clearly described in the Balanced Scorecard contained in Annexure A.

7 OPERATING PRINCIPLES

The following key principles underpin TCTA's current business model:

a) Operating in a multi-project environment with each project separately accounted for;
b) A flexible approach to Capital Unit, Bulk Operations and Royalty Charges setting that accommodates specific requirements of major stakeholders including, but not limited, to off-takers or end-users;

c) Adopting a risk-averse philosophy;
d) Implementing best practice in project management approaches; and
e) Establishing best practice in environmental sustainability.

Each project is accounted for and managed separately. This includes the funding, revenue streams and liability management. TCTA funds and implements projects for which back-to-back implementation agreements have been concluded between TCTA and DWS and simultaneously Water Supply Agreements between DWS and off takers. This approach matches the income streams from off takers with an implied government guarantee on the income streams from DWS.

8 CAPITAL UNIT CHARGE

DWS, supported by TCTA and in consultation with stakeholders for a specific system/scheme, sets raw water use charges that will be levied on water users in accordance with the prevailing Pricing Strategy for Raw Water Use Charges.

The raw water use charge includes a Capital Unit Charge to enable TCTA to repay the project debt within a predetermined period. This repayment period is normally 20 years post the project construction period. The Capital Unit Charge is reviewed on an annual basis based on actual project costs incurred up to that point and forecast costs for the remainder of the debt repayment period.

Project agreements make provision for TCTA to revise the project costs (actual and forecast) annually, after consultation with stakeholders if triggers agreed upon at project inception materialise and for the Capital Unit Charge to be adjusted to recover the project costs over the remainder of the debt repayment period. This is to ensure that TCTA is always able to honour its obligations with regards to its funders.

Should a project realise savings in its implementation, those savings are passed on to the end-users through lower tariffs. The Capital Unit Charge is also smoothed in cases where future augmentation projects occur during the repayment period of a project. This avoids large increases in the Capital Unit Charge when a new project comes online.

9 RISK-AVERSE PHILOSOPHY

TCTA has adopted a Strategic Risk Framework and formulated policies, which results in the minimisation of financial and non-financial risks to the end consumer.

The operating principle takes the following into account: the specific risks associated with project implementation such as construction, environmental and geotechnical; the financial risks associated with the management of liabilities; and the ability of the risk management processes to reinforce the business objectives of the organisation.

10 BEST PRACTICE IN PROJECT MANAGEMENT APPROACHES

TCTA has a well-developed Project Implementation Methodology (PIM) based on the principles of the Project Management Body of Knowledge (PMBOK). PIM provides detailed processes and procedures on all project implementation activities which covers the project lifecycle from initial planning to project commissioning and handover.

PIM ensures standardisation of project implementation processes across all projects within the TCTA's multi-project environment. As part of TCTA's initiative on total quality management, ISO compliance for the PIM is an ongoing objective.

11 BEST PRACTICE IN ENVIRONMENTAL SUSTAINABILITY

TCTA's objectives-driven environmental management philosophy is designed for assurance of compliance with legal obligations, funder requirements and organisational commitments to good / best practice, risk management and sound governance. This includes using lessons learned during project implementation and knowledge sharing in professional fora for continual environmental management improvement.

The environmental management plan for each project provides the frame and scope for socio-economic strategies, environmental design guidelines, contractual specifications and monitoring of environmental impacts on the project area.

12 TRANSFORMATION STRATEGY

TCTA views transformation from internal and external perspectives. The implementation of TCTA projects provides the organisation with opportunities to contribute to the transformation of emerging enterprises, historically disadvantaged persons and affected communities. Further, it is through the implementation of procurement best practices that transformation is achieved.

Transformation targets are incorporated into tenders for professional service providers and construction contracts to facilitate skills development, enterprise development, preferential procurement and the creation of meaningful short-term employment opportunities.

The projects that will be implemented in 2020/21 financial year will mainly consist of procurement of engineering Professional Service Providers (PSP) who will undertake design and construction supervision and the procurement of a design and build contractor. The transformation targets in the procurement of these services will be in accordance with the BBBEE Codes of Good Conduct and the Preferential Procurement Regulation, 2017.

Internally, TCTA is positive about personal development for career growth and offers training opportunities to employees. Under Project Naledi, bursars are assisted to obtain qualifications in the fields of engineering, project finance and environmental management, amongst others, and to gain work experience and exposure through internships.

Within the Professional Services contracts, TCTA facilitates the training of interns by the PSPs such that at the end of the contract, the interns are able to obtain professional registration within their fields of study.

13 GOVERNANCE

TCTA is committed to and maintains the highest standards of corporate governance.

13.1 BOARD STRATEGY

The Board is responsible for developing and overseeing strategy, managing risk, driving performance and ensuring sustainability of the organisation. In doing so, the Board shall:

a) Provide strategic direction and effective leadership to Executive Management in order to implement and deliver water infrastructure as well as additional services, as may be directed from time to time by the Minister of Human Settlements, Water and Sanitation.

b) Oversee and ensure effective and efficient implementation of multiple projects, while providing support and ensuring alignment of TCTA's strategy to the strategic priorities and objectives of the Department of Water and Sanitation as well as the Government outcomes for the period from 2020/21 to 2022/23.

c) Oversee that the organisation issues an integrated report and ensure, amongst others, reporting on corporate governance, compliance, internal controls, risk and financial management, and ensure that reports such as the annual financial statements and sustainability reports comply with statutory requirements and reasonable information needs of material stakeholders.

d) Maintain full and effective control over the organisation and notwithstanding the delegation of responsibilities to its Committees and to Executive Management via the Chief Executive Officer, the Board shall remain responsible for the full control of the organisation.

e) Act in good faith in the best interests of the organisation and its stakeholders and avoid a conflict of personal interest with the interest of the organisation, whether directly or indirectly.

f) Act ethically, within the limits of its authority, exercise duty of care, skill and diligence in exercising its oversight responsibilities.

13.2 GOVERNANCE STRUCTURE

a) The Board is well structured to achieve strategic outputs as set out in the Notice of Establishment. The Board set the direction and parameters for the powers which are reserved for itself, and those which are delegated to management via the Chief Executive Officer. This Board approved the revised Strategic Delegation of Authority which is in line with section 5 of the Board Charter and section 16 (1) (a) (ii) and (b) of the Notice of Establishment. The Board has delegated some of its responsibilities to standing Board Committees to facilitate efficient decision making and to assist the Board in the execution of its duties, powers and authorities.

b) The Board is guided, amongst others, by directives issued by the Minister of Human Settlements, Water and Sanitation, the Notice of Establishment, the National Water Act, the Public Finance Management Act, the Strategic Delegation of Authority, the Code of Business Conduct, the King IV Code on Corporate Governance and other applicable legislation, regulations and policies whenever it executes its responsibilities.

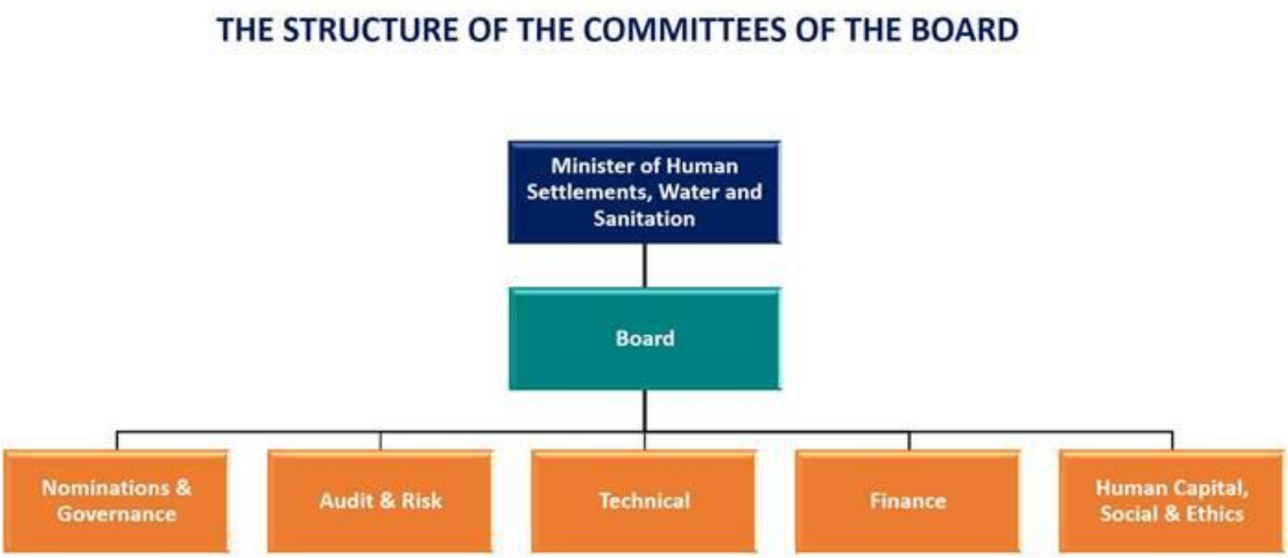
c) The standing Board Committees rely on this statutory framework as well as its Terms of References to implement Board’s directives, achieve the strategic business of TCTA, and to adhere to sound governance principles.

d) The Board has a charter setting out its responsibilities and meets at least quarterly in accordance with an approved Work Plan, outlining the commitments for the year ahead, to ensure board and board committee effectiveness and that adequate attention is given to the various board functions and responsibilities.

e) A Board strategy session is convened annually with Executive Management to realign the business strategy and ensuring organisational growth in line with new developments and additional mandates and directives issued by the Minister of Human Settlements, Water and Sanitation and with due consideration to achieve the appropriate balance between its various stakeholder groupings.

13.3 THE STRUCTURE OF THE COMMITTEES OF THE BOARD

TCTA reports to the Minister of Human Settlements, Water and Sanitation, and as a public entity to Parliament for overall oversight.

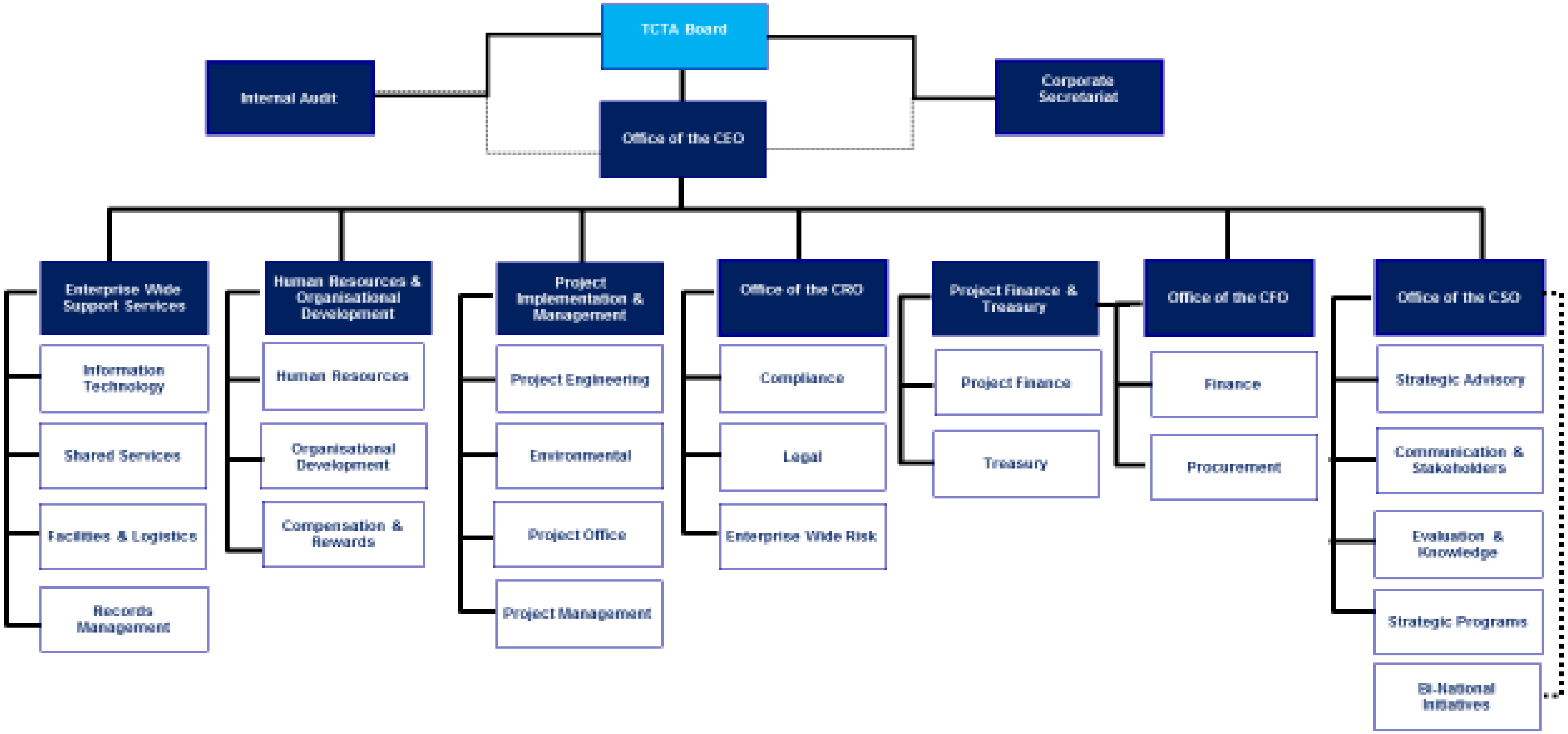


The Board has established five standing committees with specific focal areas and has accordingly delegated roles and responsibilities. As at the date of this plan, these were the Audit and Risk Committee, the Finance Committee, the Nominations and Governance Committee, the Human Capital, Social & Ethics Committee and the Technical Committee.

The Audit and Risk Committee is statutory committee, 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 other duties. 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 annually to ensure that such remain in line with relevant regulations, organisational requirements and best practices in corporate governance.

13.4 TCTA HIGH-LEVEL STRUCTURE (FY 2020/21)



14 FUNDING REQUIREMENTS

14.1 OVERVIEW

With respect to funding, TCTA ensures that it structures project financing such that projects are funded on a stand-alone basis with limited recourse to DWS and still achieve cost-effective funding to ensure end-user affordability and debt sustainability. Thereafter, once the project has been implemented and funded, the role of TCTA is to manage the debt, considering changing market circumstances, until such time that the debt has been fully repaid.

14.2 PREPARATION OF FUNDING REQUIREMENTS

TCTA prepares a rolling three-year budget on an annual basis. This budget is prepared on an accruals basis and identifies financial commitments in terms for the period and this is approved by the TCTA Board. From the budget, a funding requirement per project is developed, as illustrated in the following table.

Table 2: TCTA's Funding Requirements (Medium-Term) [1]

	2020/21 R' million	2021/22 R' million	2022/23 R' million	TOTAL R' million	FINAL DEBT REPAYMENT DATE
VRS	1 677	9 683	8 103	19 463	2043
BWP	-7	-5	-15	-27	2029
VRESAP	-10	26	16	32	2030
MMTS-2	-354	-459	-518	-1 331	2031
ORWRDP2C	152	7	3	162	N/A
KWSAP	-32	-25	-20	-77	2034
MCWAP-1	-139	55	162	78	2033
MCWAP-2A	329	2 333	2 552	5 214	N/A
uMWP	-2	-2	-2	-6	
BRVAS	6	7	7	20	N/A
MRWP	1	1	1	3	N/A
Total	**1 621**	**11 621**	**10 289**	**23 531**	

Notes on the above funding requirements:

a) **VRS**: The budget for the VRS amounts to R19 463 million for the three financial years from 2020/21 to 2022/23. The funding requirements for LHWP-2 and AMD-STI have been integrated into the funding of VRS under a single borrowing programme and revenue stream. AMD-LTS is on hold (Minister was requested to suspend the Directive

[1] Negative values indicate a surplus in net funding requirements.

pending resolution of the issues raised by the Minister of Finance) and not provided for in the funding requirement.

b) **BWP**: BWP is expected to have excess funding of R27 million in the next three financial years from 2020/21, after taking into account interest and capital payments.

c) **VRESAP**: For the next three financial years from 2020/21, VRESAP will require refinancing in the region of R32 million. The project's revolving credit facility is now fully utilised and only the Commercial Paper Programme, which is being raised by R100 million per annum is available to buffer these requirements as per the planned funding strategy.

d) **MMTS-2**: The project will have excess funds of R1 331 million between the 2020/21 and 2022/23 financial years. The accumulation of funds is as result of the additional tariff being introduced to accelerate the repayment of debt to 2024 from 2031.

e) **ORWRDP2C:** The project will require a further R162 million from the 2020/21 financial year to the 2022/23 financial year. This amount is expected to be funded using disbursements from the Department of Water and Sanitation.

f) **KWSAP**: The project is expected to have excess funding of R77 million cash-flow for the next three financial years from 2020/21. This amount will be utilised to service debt on the project.

g) **MCWAP:** Phase 1 of MCWAP will require funding of R78 million between the 2020/21 and 2022/23 financial years. Phase 2 of MCWAP is expected to commence soon and will initially require an estimated R5 214 million in the three financial years from 2020/21.

h) **MRWP:** The funding requirements for MRWP are premised on no implementation activities per the approved budget.

14.3 FUNDING AND DEBT MANAGEMENT STRATEGIES FOR 2020/2021

TCTA's current funding strategy leverages off committed facilities for each of its projects as well as the capital markets programme specifically set up to raise funding for projects funded through the Vaal River System (LHWP, AMD-STI). All the funding facilities available are ring-fenced to specific projects. On an annual basis, TCTA prepares its budget for the next three years and forecasts for the life of the project.

This budget, in turn informs the funding requirements for each project. Funding and debt management strategies are then developed based on these funding requirements and consider all facilities available as well as the economic climate (Refer to the Annexure C on the Borrowing Programme for more details). Funding for recent directives has been sourced from both the commercial banks and development finance institutions. The potential funding mix is also reflected in detail under Annexure C.

14.4 HEDGING STRATEGIES FOR FOREIGN FUNDING

Currently TCTA has no foreign currency funding.

Where facilities are in a foreign currency, the funds are drawn down in Rand at the prevailing exchange rate and repaid in Rand.

14.5 IMPACT OF FINANCIAL MARKETS ON FUNDING

All foreign exchange exposure is covered at 100% of the interest and capital portion of the loans. The impact of interest rate risk due to movements in financial markets is managed through the 70:30 fixed to floating policy. TCTA will continue to monitor the financial markets to minimise overall exposure to projects.

14.6 GOVERNMENT GUARANTEES

Because TCTA funds and implements all its projects on behalf of DWS, all its debt is either explicitly or implicitly guaranteed by the South African Government. An explicit government guarantee is in place for the VRS funding and is included for a portion of the future funding of MCWAP-2A, whilst implicit government guarantees are in place for all the other projects. These guarantees are enforced via the implementation agreements in which DWS undertakes to honour obligations in cases where TCTA is unable to do so. New guarantees were issued to lenders for the VRS in 2018 for R6.5 billion, while R9.3 billion in guarantees was released due to the repayment of the WS05 bond in August 2018. A further R4.5 billion loan guarantees are expected to be issued to DFIs for LHWP-2, as well as R30 billion towards a new DMTN programme.

15 CONCLUSION

TCTA, as an organ of state, is positioning itself to play a major role as a catalyst to enable Government to achieve its goal of making water available to drive economic growth and social development. The various projects already directed by Government for implementation in the next few years provide ample opportunity to be that catalyst, as well as contributing to the transformation of the socio-economic landscape across the country.

TCTA is confident that it will support Government's developmental agenda by undertaking the strategic coordination of critical infrastructure projects and promoting research that addresses water security issues, as well as leading the entire supportive chain of project finance and implementation.

Some of the strategic interventions planned in this context are as follows:

- Endeavouring that water infrastructure projects create jobs and improve livelihoods in and around project communities;
- Supporting Government with advice for strengthening the policy and strategic framework for sustainable water management, including effective water pricing and tariff determination, as well as innovative solutions to water security challenges;
- Leveraging organisational skills in project management and implementation, including state-of-the-art engineering know-how for successful project delivery; and
- Harnessing insights into the dynamics of financial markets, thus ensuring greater attractiveness for TCTA debt.

ANNEXURE A

TCTA CORPORATE BALANCED SCORECARD FOR 2020/21

TCTA CORPORATE BALANCED SCORECARD FOR 2020/21

Objective	Measure	Target	Means of Verification	Indicator				
				1	2	3	4	5
Financial Perspective (40%)								
1. Implement capital projects in accordance with the timelines agreed with DWS (5%)	Recommended approval of the Construction Tender by BAC (5%)	**MCWAP – 2A: MCWAP-2A** Approval by 31 March 2021, of the construction tender evaluation report by the Bid Adjudication Committee. (5%)	Bid Adjudication Committee Resolution	Projected approval after 30 April 2021, of the construction tender evaluation report by the Bid Adjudication Committee.	Projected approval by 30 April 2021, of the construction tender evaluation report by the Bid Adjudication Committee.	Approval by 31 March 2021, of the construction tender evaluation report by the Bid Adjudication Committee.	Approval by 28 February 2021, of the construction tender evaluation report by the Bid Adjudication Committee.	Approval before 28 February 2021, of the construction tender evaluation report by the Bid Adjudication Committee.
2. Operate and maintain designated projects in accordance with DWS requirements/ specifications (10%)	On the Western Basin, pump acid mine water to prevent uncontrolled decant (3%)	An average volume of water pumped in the Western Basin of between 24-27 Ml/d (3%)	Operational reports	An average volume of water pumped less than 20 Ml/d	An average volume of water pumped between 20 – 24 Ml/d	An average volume of water pumped in the Western Basin of between 24-27 Ml/d	An average volume of water pumped between 27 to 29 Ml/d	An average volume of pumped water above 29 Ml/d
	On the Central and Eastern Basins, acid mine water is pumped to maintain or reduce water levels within the mine voids (4%)	The water level in the Central Basin is lowered to between 6 - 10 m below ECL by 31 March 2021 (2%) • ***Note**: ECL is at 126m below ground level*	Certified water levels at 31 March 2020 by Project Manager	The water level in the Central Basin is above 2m below ECL by 31 March 2021	The water level in the Central Basin is lowered to between 2 – 6 m below ECL by 31 March 2021	The water level in the Central Basin is lowered to between 6 - 10 m below ECL by 31 March 2021	The water level in the Central Basin is lowered to between 10 - 14 m below ECL by 31 March 2021	The water level in the Central Basin is lowered to below 14 m, below ECL by 31 March 2021
		The water level in the Eastern Basin is maintained between 15.1 to 20 m below ECL by 31 March 2021 (2%) • ***Note**: ECL is at 106m below ground level*	Certified water levels at 31 March 2020 by Project Manager	The water level in the Eastern Basin rises to above 10.m below ECL by 31 March 2021	The water level in the Eastern Basin rises to between 10.1 and15.m below ECL by 31 March 2021	The water level in the Eastern Basin is maintained between 15.1 to 20 m below ECL by 31 March 2021	The water level in the Eastern Basin is lowered to between 20.1 to 25 m below ECL by 31 March 2021	The water level in the Eastern Basin is lowered to beyond 25.1 below ECL by 31 March 2021
	To ensure the water discharged from the Western Basin, Central and Eastern Basins plants, meets the DWS specification (3%)	90%-94% of water samples are compliant with DWS specification which has a 10% allowance (weighted average of all 3 basins) (3%)	Report on achievement against DWS specifications as per lab tests.	Less than 85% of water samples are compliant with DWS specification which has a 10% allowance (weighted average of all 3 basins)	85-89% of water samples are compliant with DWS specification which has a 10% allowance (weighted average of all 3 basins)	90%-94% of water samples are compliant with DWS specification which has a 10% allowance (weighted average of all 3 basins)	95-97% of water samples are compliant with DWS specification which has a 10% allowance (weighted average of all 3 basins)	Above 98% of water samples are compliant with DWS specification which has a 10% allowance (weighted average of all 3 basins)
3. Raise funding for implementation of infrastructure (subject to signing of agreements by DWS and no event of default related to any project) (5%)	Sufficient cash or funding facilities available to allow implementation of the project to proceed without delay (5%)	**MCWAP:** Cash or Facilities available for drawdown by 31 March 2021 (3%)	Letters of confirmation by lenders of availability of funding facilities or proof of cash balances	No attempt to procure funding facilities.	Cash or Facilities not available for drawdown by 31 March 2021	Cash or Facilities available for drawdown by 31 March 2021	Cash or Funding facilities available for drawdown between Jan – Feb 2021	Cash Facilities available for drawdown before 31 December 2020
		VRS: Cash or Facilities available for drawdown by 31 March 2021 (2%)	Letters of confirmation by lenders of availability of funding facilities / proof of registration of DMTN programme	No attempt to procure funding facilities.	Cash or Facilities not available for drawdown by 31 March 2021	Cash or Facilities available for drawdown by 31 March 2021	Cash or Funding facilities available for drawdown between Jan – Feb 2021	Cash or Facilities available for drawdown before 31 December 2020

Objective	Measure	Target	Means of Verification	Indicator				
				1	2	3	4	5
			memorandum with the JSE / proof of cash balances					
4. Manage debt within the approved borrowing limit 15%)	Debt managed within approved borrowing limits (15%)	Debt managed within the borrowing limits and all payment obligations are met: • VRS R20 600 million (4%) • BWP R573 million (2%) VRESAP R3 798 million (3%) • KWSAP R1 375 million (2%) • MMTS-2 R1 795 million (2%) • MCWAP R2 203 million (2%)	Borrowing Limit Utilisation Report	Borrowing limits breached OR failed to meet payment obligations on the due date, due to non-availability of commercial funding	Borrowing limits breached but payment obligations are still met by the due date.	Debt managed within approved borrowing limits AND all payment obligations are met by the due date.	Debt managed within borrowing limits, all payment obligations are met by the due date AND cash balances plus unutilised liquidity facilities cover 10% of outstanding debt	Debt managed within borrowing limits, all payment obligations are met by the due date AND cash balances plus unutilised liquidity facilities cover 15% of outstanding debt
5. Effective control of corporate expenditure to match project workload (5%)	% Deviation from approved Operational Expenditure budget (3%)	10% Deviation from the approved budget quarterly, due to operational efficiencies that do not compromise deliverables	General Ledger Management Accounts	More than 15% Deviation from the approved budget quarterly	11% - 15% Deviation from the approved budget quarterly	10% Deviation from the approved budget quarterly, due to operational efficiencies that do not compromise deliverables	10% Deviation from the approved budget quarterly, due to operational efficiencies that do not compromise deliverables, with demonstration of innovation to enable the target to be met	–
	% Deviation from approved Capital Expenditure budget (excluding LHWP2) (2%)	10% Deviation from the approved annual budget of planned expenditure	Management Accounts	More than 15% Deviation from the approved budget quarterly	11% -15% Deviation from the approved budget quarterly	10% Deviation from the approved annual budget of planned expenditure	10% Deviation from the approved budget with demonstration of innovation to enable the target to be met	–
Stakeholder Perspective (10%)								
6. Resolve critical project matters identified during the year (5%)	• % Resolution of critical project matters in the Implementation Plan (5%)	90-100% resolution of critical project matters by 31 March 2021 • UMkhomazi Borrowing Limit Approval (2%) • BRVAS Project Prep Funding (1%) • BRAVAS Borrowing Limit (1%) • DWS settling Outstanding Payments (1%)	Minutes of meetings, reports, letters and e-mails Completed Implementation Plan	Less than 50% resolution of critical project matters by 31 March 2021	50%-89% resolution of critical project matters by 31 March 2021	90-99% resolution of critical project matters by 31 March 2021	100% resolution of critical project matters 1 month before 31 March 2021	100% resolution of critical project matters 2 months before 31 March 2021
7. Coordinate and monitor the efficient implementation of the projects within SIP-3 and SIP-18 (5%)	Effective annual coordination and monitoring of Strategic Integrated Projects (5%)	Average effectiveness rating of 3, on SIPs coordination and monitoring annually (*Satisfactory feedback from key partners on the effectiveness of coordination and monitoring with feedback based on the adequacy*	Completed feedback Ratings from principals and partnership forums on survey	Average effectiveness rating of 1, on SIPs coordination and monitoring annually	Average effectiveness rating of 2, on SIPs coordination and monitoring annually	Average effectiveness rating of 3, on SIPs coordination and monitoring annually	Average effectiveness rating of 4, on SIPs coordination and monitoring annually	Average effectiveness rating of 5, on SIPs coordination and monitoring annually

Objective	Measure	Target	Means of Verification	Indicator				
				1	2	3	4	5
		of reports on programme progress, quality of quarterly Project Technical Forums, and timeliness of engagements to address and escalate challenges)						
Internal Business Processes (40%)								
8. Enhance the internal control environment, risk management and governance (25%)	Adequacy and effectiveness of the internal control environment (15%)	Unqualified audit opinion (*for the financial year under review*)	External and Internal Auditors reports and AG Management Letter	A disclaimer of opinion	Qualified Audit opinion	Unqualified audit opinion	Unqualified audit opinion with no emphasis of matters in the management letter	Clean audit opinion
	% Resolution of internal and external audit findings (5%)	90-100% of action plans to address reported audit findings implemented by the due date	Audit Tracking Report and Register tabled to Oversight structures	Below 80% of action plans to address reported audit findings implemented, by the due date resulting in repeat findings	80-89% of action plans to address reported audit findings implemented by the due date	90-100% of action plans to address reported audit findings implemented by the due date	100% of action plans to address reported audit findings implemented by the due date and no repeat findings on subsequent audits	100% of action plans to address reported audit findings implemented before the due date and no repeat findings on subsequent audits
	% Resolution of action plans (5%)	90-100% implementation of Actions Plans in the strategic risk register by the due date	% Implementation of Strategic risk register action plans	Below 80% Implementation of Actions Plans in the strategic risk register, by the due date	80-89% Implementation of Actions Plans in the strategic risk register, by the due date	90-100% implementation of Actions Plans in the strategic risk register by the due date	100% Implementation of Actions Plans in the strategic risk register, before the due date	-
9. Implement the ICT Strategic Plan and ERP system (10%)	% Implementation of an integrated ICT infrastructure solution with adequate business continuity measures (5%)	90-100% of the Integrated ICT infrastructure solution implemented by 31 October 2020	ICT Infrastructure Implementation Plan Project progress report	Below 80% of the Integrated ICT infrastructure solution implemented after 30 November 2020	80-89% of the Integrated ICT infrastructure solution implemented by 30 November 2020	90-100% of the Integrated ICT infrastructure solution implemented by 31 October 2020	100% of the Integrated ICT infrastructure solution implemented by 30 September 2020	100% of the Integrated ICT infrastructure solution implemented before 30 September 2020
	% Implementation of a responsive ERP solution (5%)	100% Implementation of Core elements of a responsive ERP solution ready for go-live by 31 March 2021	ERP Solution Implementation Plan Project progress report	No change in the status of the ERP system by 31 March 2021	100% Implementation of Core elements of ERP system improved but not ready for go-live by 31 March 2021	100% Implementation of Core elements of a responsive ERP solution ready for go-live by 31 March 2021	100% Implementation of Core and some non-core elements of a responsive ERP solution ready for go-live by 31 March 2021	100% Implementation of all core and non-core elements of a responsive ERP solution ready for go-live by 31 March 2021 without a 'snag list'
10. Ensure the implementation of a fair, transparent, responsible, equitable, competitive, timeous and cost-effective	Ensuring goods and services are procured in alignment with project timelines (3%)	6 – 8 weeks turnaround time *(Average number of weeks taken from the 1st submission to the BSC to the final recommendation by BAC excluding tender advert period)*	Agenda and Resolutions of BSC & BAC Planned vs Actual dates achieved for: Advert, Evaluation, Award	Greater than 12 weeks turnaround time	9 – 11 weeks turnaround time	6 – 8 weeks turnaround time	5 weeks turnaround time	4 weeks or less, turnaround time

Objective	Measure	Target	Means of Verification	Indicator				
				1	2	3	4	5
supply chain management system (5%)	% Achievement of the procurement plan for goods and services (*if services are no longer required, they will be removed from the plan*) (2%)	90-100% achievement against the procurement plan	Achievement against the procurement plan	Below 80% achievement against the procurement plan	80-89% achievement against the procurement plan	90-100% achievement against the procurement plan	100% achievement plus two additional unforeseen services procured	100% achievement plus more than two unforeseen additional services procured
Learning and Growth Perspective (10%)								
11. Position TCTA as a thought leader in critical aspects of water security (4%)	Contribution of innovative papers to reputable technical publications and conferences (2%)	3 business relevant papers written and submitted per annum	Paper and letter/e-mail of submission	Less than 2 business relevant papers written and submitted annually	2 business relevant papers written and submitted annually	3 business relevant papers written and submitted annually	4 business relevant papers written and submitted annually	5 business relevant papers written and submitted annually
	Specialist advisory to sector forums and institutions, including the bi-national program (2%)	Feedback rating of 3 out of 5, on quality of inputs and turnaround time (*Satisfactory feedback from institutions and forums advised, based on quality of inputs and turnaround time*) (1%)	Evidence of advisory input, plus feedback ratings from partner institutions and forums	Feedback rating of 1 out of 5, on quality of inputs and turnaround time	Feedback rating of 2 out of 5, on quality of inputs and turnaround time	Feedback rating of 3 out of 5, on quality of inputs and turnaround time	Feedback rating of 4 out of 5, on quality of inputs and turnaround time	Feedback rating of 5 out of 5, on quality of inputs and turnaround time
		2 institutions advised (1%) per annum	Advisory reports	Nil institution advised but only preparatory work done	1 institution advised per annum	2 institutions advised per annum	3 institutions advised per annum	4 institutions advised per annum
12. Ensure organisational culture is in support of business strategy (3%)	Achievement against the approved organisational climate improvement plan (3%)	90-100% achievement	Year-end progress report Quarterly progress report	Below 80% achievement	Between 80% - 89% achievement	90-100% achievement	90-100% achievement and an employee survey showing up to 5% improvement.	90-100% achievement and an employee survey that shows more than 5% improvement.
13. Develop skilled and capable employees (3%)	Post training evaluation feedback, measuring performance impact (2%)	Feedback rating of 3 out of 5 (*Satisfactory feedback from employees, based on performance improvement and impact of training attended*).	Post feedback training reports	Feedback rating of 1 out of 5	Feedback rating of 2 out of 5	Feedback rating of 3 out of 5	Feedback rating of 4 out of 5	Feedback rating of 5 out of 5

Performance Risks on the BSC

Objective 3. Raise funding for implementation of infrastructure

Not obtaining approval of the guarantee framework on the VRS presents the biggest risk to TCTA. If it is not timeously obtained, TCTA will be unable to raise additional funds which are required to repay the WSP05 and provide funding for LHWP2.

ANNEXURE B

CAPITAL EXPENDITURE PROGRAMME AND OPERATIONS & MAINTENANCE

1. INTRODUCTION

TCTA's capital expenditure programme comprises of projects that are categorized as projects at preparation phase, projects at construction phase, projects at close-out phase, completed projects and projects on-hold.

TCTA also oversees the operation and maintenance of the AMD treatment plants in the Western, Central and Eastern basins and on the Delivery Tunnel North of the Lesotho Highlands Water Project.

A summary of the key activities that will be undertaken during the financial year ending on 31 March 2020 is provided below.

1.1 Projects at Implementation Phase

- Mokolo And Crocodile River Water Augmentation Project - Phase 2A (MCWAP-2A)

1.2 Project at Close-out Phase

- Olifants River Water Resources Development Project - Phase 2C (ORWRDP-2C)

1.3 Completed Projects

- Mooi Mgeni Transfer Scheme - Phase 2 (MMTS-2)
- Mokolo and Crocodile Water Augmentation Project - Phase 1 (MCWAP-1)
- Acid Mine Drainage - Short Term Intervention (AMD-STI)

1.4 Projects at Preparation Phase (awaiting funding)

- uMkhomazi Water Project Phase 1 (uMWP-1)
- Berg River Voëlvlei Augmentation Scheme (BRVAS)
- Programme Management Services to DWS in relation to Water Infrastructure Projects

1.5 Projects on-hold

- Acid Mine Drainage - Long Term Solution (AMD-LTS)
- Olifants River Water Resources Development Project - Phase 2B (ORWRDP-2B)
- Off-take to the town of Kriel from the Komati Water Supply Augmentation Project
- Mzimvubu Water Project (MWP)

1.6 Operation and Maintenance

- Acid Mine Drainage (AMD)
- Lesotho Highlands Water Project (LHWP)

2. PROJECT AT IMPLEMENTATION PHASE

2.1. MOKOLO AND CROCODILE RIVER WATER AUGMENTATION PROJECT - PHASE 2A (MCWAP-2A)

2.1.1. STRATEGIC IMPACT

Additional water from MCWAP-2 is required to provide Medupi Power Station with enough water to operate the additional three Flue Gas Desulphurization (FGD) units, Matimba Power station and to operate their six FGD units, which could not be supplied from the MCWAP-1 pipeline. It will also provide the Lephalale Municipality with water for a growing population, who are using above their allocated MCWAP 1 capacity. MCWAP-2A will also unlock the coal resources in the Waterberg region for power generation which consist of Independent Power Producers (IPP's), coal supply to some of the Eskom's power stations, coal for export and other industrial developments.

Development of the Waterberg Coal Fields is the object of the PICC SIP-01 programme.

MCWAP-2A consists of an abstraction weir, a 160 km water transfer infrastructure with associated ancillary infrastructure and a River Management System.

2.1.2. KEY ACTIVITIES FOR 2020/21

MCWAP-2A is at Tender Design and Documentation Phase. The engineering Professional Service Provider (PSP) is two months behind schedule with the design activities but a recovery plan has been put in place to meet the key milestone date of completing the tender design and documentation phase in February 2020.

The Environmental Authorisation (EA) of the project is being appealed. TCTA and DWS have drafted responses to the appeals to enable the Department of Environmental Forestry and Fisheries (DEFF) to make decision on the matter and the outcome on the EA is expected in December 2019.

The key activities planned to be undertaken in 2020/21 financial year consist of:

- Finalise award of construction contracts.
- Conduct valuation of land to be acquired for construction activities.
- Secure Eskom power supply to the project.

3. PROJECTS AT CLOSE-OUT PHASE

3.1. OLIFANTS RIVER WATER RESOURCES DEVELOPMENT PROJECT - PHASE 2C (ORWRDP-2C)

3.1.1. STRATEGIC IMPACT

ORWRDP-2 bulk distribution system transfers water from the De Hoop and Flag Boshielo dams for municipal and mining needs in the middle Olifants river catchment area, unlocking significant social and economic development.

Phase 2C will improve water supply to the Jane Furse / Nebo Plateau and mining activities in the Steelpoort - Burgersfort area.

3.1.2. KEY ACTIVITIES FOR 2020/21

Construction of ORWRDP-2C has been completed and the project has been handed over to DWS for Operations and Maintenance.

The remaining items on the project include:

- Concluding contractual matters, including contractor claims and disputes - resolution of claims and disputes that have been referred to the Dispute Adjudication Board (DAB) are in progress.
- The statement at completion from the contractor as required by the contract has been received and the parties are resolving claimed entitlement on this statement. This statement outlines payment made to the contractor to-date including the amounts that the contractor believes to be still entitled to be paid.
- The projected cost at completion are still within the approved revised budget of R 2 544 million.

4. COMPLETED PROJECTS

4.1. MOOI MGENI TRANSFER SCHEME - PHASE 2 (MMTS-2)

4.1.1. STRATEGIC IMPACT

MMTS-2 entailed the construction of a 37.7m high dam with 139.5 million-m3 storage capacity; a pump station and 14.9km pipeline including 8.3 km of Umgeni Water (UW) potable pipe; and the refurbishment of MMTS-1.

MMTS-2 augments the yield of Mgeni System by 60 million to 394 million m3 per annum. The water benefits eThekwini Metropolitan Municipality, uMgungundlovu District Municipality, Msunduzi Local Municipality, Ugo Municipality and Ilembe Municipality representing the economic hub of KZN and will increase water security in the area.

4.1.2. KEY ACTIVITIES FOR 2020/21

MMTS-2 is complete and operational.

The remaining item to be concluded in 2020/21 is the implementation of the Biodiversity Offsets. A detailed implementation has been submitted to the Department of Environmental Affairs for approval. Upon approval of the plan, an agreement which is subject to approval by the National Treasury will be entered into with Umgeni Water for the implementation of the Biodiversity Offsets.

4.2. MOKOLO AND CROCODILE WATER AUGMENTATION PROJECT - PHASE 1 (MCWAP-1)

4.2.1. STRATEGIC IMPACT

MCWAP-1 consisted of acquisition of the old Exxaro Scheme and construction of a 43km of pipeline and pump station to deliver bulk raw water from the Mokolo Dam to Medupi and Matimba power stations, Exxaro and Lephalale Municipality. It also includes refurbishment of the old pipeline from Mokolo dam to the Matimba supply point.

Refurbishment- Refurbishment of the old pipeline is required to primarily provide 18-day redundant supply to the Municipality in case of maintenance of the new pipeline. It also provides a redundant supply to Exxaro and Eskom

4.2.2. KEY ACTIVITIES FOR 2020/21

MCWAP-1 is complete and operational.

The remaining activities to be concluded in 2020/21 consist of:

- Refurbishment of old pipeline – TCTA to obtain a resolution from the off takers to proceed with the refurbishment of the pipeline.
- Completing the project close-out report.

4.3. ACID MINE DRAINAGE - SHORT TERM INTERVENTION (AMD-STI)

4.3.1. STRATEGIC IMPACT

The project entailed implementation of the short-term action plan, which was recommended by the Inter-Ministerial Committee, in the Western, Central and Eastern Basins of the Witwatersrand Goldfields. The short-term action plan prevents decant in the Western Basin and the environmental critical level (ECL) from being breached in the Central and Eastern Basins catchment area.

Short term intervention consisted of upgrading the existing Western Basin water treatment plant and construction of two new high-density sludge (HDS) water treatment plants in the Central and Eastern basins.

4.3.2. KEY ACTIVITIES FOR 2020/21

AMD-STI is complete and operational. The treated water from the plant meets the DWS specifications.

The remaining activity to be concluded in 2020/20 is the project close-out report.

5. PROJECTS UNDER PREPARATION

5.1. UMKHOMAZI WATER PROJECT PHASE1 (uMWP - 1)

5.1.1. STRATEGIC IMPACT

Water requirements projection indicate that Mgeni System may experience a deficit and therefore there is a need for a new water resources - uMWP is to alleviate this deficit.

uMWP-1 consists of:

- A new dam at Smithfield on the uMkhomazi River
- Conveyance infrastructure (tunnel and pipeline) to the water treatment works (WTW) in the uMlaza River valley including a balancing dam
- A WTW in the uMlaza River valley, followed by a gravity pipeline to the UW bulk distribution system, connecting in the area of the Umlaas Road reservoir. From Umlaas Road, water will be distributed under gravity through existing infrastructure to eThekwini.

5.1.2. KEY ACTIVITIES FOR 2020/21

The Environmental Impact Report (EIR) on uMWP-1 of November 2016 was rejected by the Department of Environment, Forestry and Fisheries (DEFF) in February 2017 mainly due to:

- Insufficient information provided on the potential impact on Blue Swallow nesting sites.
- Siting of the balancing dam which would result in loss of the Blue Swallow foraging habitat, hence a fatal flaw.
- Re-alignment of R617 (road) into the Impendle Nature Reserve requiring a section of the Nature Reserve to be de-proclaimed.
- Lack of clarity on the location and acceptability of the potential offset sites.

As a result of the ‘fatal flaw’ with regards to the siting of the balancing dam; a decision was made to discard the option of a balancing dam. This has resulted in the requirement to dispose approximately 900 000 cubic metres of tunnel spoil which previously would have been spoiled in the balancing dam. A study has been commissioned to identify suitable spoil sites, which involves an environmental screening, as well as a technical assessment of the suitability of the new sites. This has resulted in the delay of the finalisation and submission of the EIR and the planned submission date is January 2020. It is anticipated that the EIA process will be concluded by July 2020.

The key activities to be undertaken in 2020/21 financial year include (dependent on unlocking funding for the project):

- Providing technical support to the EIA and obtainining Environmental Authorisation.
- Conducting a due diligence on the feasibility report and developing a procurement strategy for the required services.
- Procure an engineering Professional Service Provider (PSP).
- Finalise the institutional arrangements and secure funding.

5.2. BERG RIVER VOËLVLEI AUGMENTATION SCHEME (BRVAS)

5.2.1. STRATEGIC IMPACT

The 2012 Water Reconciliation Strategy for the Western Cape Water Supply System (WCWSS) indicated that the system is projected to be in deficit in the near future and should be augmented by at least 2019/20 to avert a serious shortfall. The urgent need for augmenting the WCWSS has become evident by the system’s inability to cope with the current drought situation. The BRVAS project has been identified as a solution to augment the system.

Notwithstanding the current extreme drought, which is equivalent to a 1:200 year event, the latest WCWSS reconciliation strategy status report indicates required augmentation by the BRVAS in 2021 (low scenario), while the average scenario reflects 2023. BRVAS will therefore provide relief to the Western Cape in the medium to long term

5.2.2. KEY ACTIVITIES FOR 2020/21

BRVAS has progressed to a point whereby the procurement of the engineering Professional Service Provider (PSP) has been completed. The Board approved PSP evaluation report in November 2018, however contract award has been kept on hold subject to finalization of institutional arrangements and funding for the project.

In parallel, TCTA progressed with the preparation of the Tender documents for Design-Build contract. These have been approved by the Operations Tender and Adjudication Committee (OTAC). Issuance of the tender documents to the market is pending review by the PSP whose appointment is still on hold.

TCTA has repeatedly requested funding from DWS for project preparation as per Directive. The latest information from DWS is that funds will be made available during the budget review process in December 2019. TCTA will award the PSP contract once the funds are secured.

The key activities to be undertaken in 2020/21 financial year include (dependent on unlocking funding for the project):

- Conclude appointment of PSP to undertake the technical evaluation, construction monitoring and administration/contract management.
- Apply for Eskom Power supply.
- Commence with acquisition of land required for construction.
- Procure a Design-Build contractor

5.3. Programme Management Services to DWS in relation to Water Infrastructure Projects

5.3.1. STRATEGIC IMPACT

DWS is facing a challenge of inadequate capacity for effective programme planning and co-ordination which is necessary for ensuring efficient project preparation, roll-out and delivery to specifications, on time and within budget. To address these challenges, DWS needs support with infrastructure programme planning and management services and has issued a directive to TCTA in this regard. TCTA is to utilise its capabilities and resources to increasingly support DWS in its infrastructure mandate, and leverage on the broader infrastructure development as a lever for social well-being, economic development and transformation.

5.3.2. KEY ACTIVITIES FOR 2020/21

TCTA was directed to provide Programme Management Services to DWS in relation to water infrastructure projects, including Olifants, Mzimvubu Water Project, Loskop Water Project, Xhariep Water Project, uMkhomazi Water Project and Clanwilliam Water Project. TCTA is in ongoing discussions with DWS to clarify and unpack the scope of the services required by DWS.

In the interim, TCTA has been analysing the scope of work for the required services based on preliminary information available from the SIPs. In this analysis, TCTA has identified two projects which it can implement on behalf of DWS if a directive is given. These include the Xhariep Bulk Water Supply Project and the remaining phases of ORWRDP-2.

Further engagements with DWS have taken place on the programme management. The Infrastructure Development division of the Department of Water and Sanitation (DWS-ID) approached TCTA on 14 October 2019 to request assistance with the implementation of three projects, which are delayed due to resource constraints. The three projects are:

- Olifants ORWRDP-2 sub-phases 2D, 2E, 2F and a draft Directive was submitted to DWS for consideration.
- Raising of Clanwilliam Dam project and a draft Directive has been developed for EXCO's consideration.
- Nwamitwa Dam project, a draft Directive is to be developed.

6. PROJECTS ON HOLD (AWAITING FUNDING)

6.1. ACID MINE DRAINAGE - LONG-TERM SOLUTION (AMD-LTS)

6.1.1. STRATEGIC IMPACT

AMD-LTS entails the desalination of the partially treated acid mine drainage water from the Short-term Intervention to a potable or industrial standard. Implementation of the long-term project will reduce the need for dilution releases from the Vaal Dam. Desalinated acid mine drainage from the Witwatersrand will augment water supplies to the Vaal River System (VRS) which will in turn delay the need for further augmentation of the VRS until 2030, as per current demand projections.

6.1.2. KEY ACTIVITIES FOR 2020/21

- DWS is assessing the Vaal River System yield and salinity model, with reference to the impact of AMD on the system. DWS is also reviewing the feasibility study on the AMD-LTS project and pending the outcome of an inter-Ministerial deliberation and the said review and assessment, TCTA has been instructed not to make any further use of the LHWP Borrowing Programme.
- TCTA has issued a letter to the Department of Human Settlements, Water & Sanitation to request the Minister to formally instruct TCTA to suspend the Directive until the forestated activities have been completed.

6.2. OFFTAKE PIPELINE TO THE TOWN OF KRIEL FROM THE KOMATI WATER SUPPLY AUGMENTATION PROJECT

6.2.1. STRATEGIC IMPACT

The offtake pipeline to the town of Kriel will provide backup for water supply, especially when the current water supply pipeline from Jericho Dam is out of service for scheduled repairs thereby providing additional assurance of water supply to the town of Kriel.

6.2.2. KEY ACTIVITIES FOR 2020/21

- Construction works slowed down due to DWS inability to procure long lead items required for constructing the pipeline.
- Following further engagements, the updated MoA and project costs were re-submitted to DWS on 24 July 2019 for sign off to enable the transfer of funds to TCTA.

6.3. OLIFANTS RIVER WATER RESOURCES DEVELOPMENT PROJECT - PHASE 2B (ORWRDP-2B)

6.3.1. STRATEGIC IMPACT

The ORWRDP-2 project involves a bulk raw water distribution infrastructure in the middle Olifants catchment. ORWRDP-2 is being implemented in phases consisting of Phase 2B, 2C, 2D, 2E and 2F. Construction of the bulk distribution infrastructure started with Phase 2C which has almost been completed. Through a revised directive, TCTA was requested by DWS to fund and implement Phase 2B of ORWRDP-2.

Phase 2B entails construction of a 71.1 km pipeline from Flag Boshielo Dam to Pruisen near Mokopane; three pump stations and three reservoirs. Phase 2B will augment the water supply to the Mogalakwena Municipality by 50 million m^3/a. The water will be used by mines and municipality.

6.3.2. KEY ACTIVITIES FOR 2020/21

- Project is on hold due to mines not signing offtake agreements which would have enabled TCTA raise commercial funding.
- TCTA has explored an alternative funding arrangement with DBSA - DBSA proposal is being considered by NT and DWS has requested inclusion of phases 2DEF in their bankability study.

6.4. MZIMVUBU WATER PROJECT (MWP)

6.4.1. STRATEGIC IMPACT

Two multi-purpose dams and associated infrastructure, Ntabelanga and Lalini dams, on the Tsitsa River which is a tributary of the Mzimvubu River, will be developed to provide for potable water supply, irrigation, hydropower and tourism.

Due to the catalytic role the project is expected play in the broader socio-economic development of the region, Government has classified the project as a Strategic Integrated Project under SIP-3.

The project will be implemented in stages:

Stage1: Advanced Infrastructure – consists of mainly access road and other advance infrastructure.

Stage2: Implementation of Ntabelanga Dam and Water Treatment Works.

Stage 3: Implementation of the bulk distribution system.

Stage4: Implementation of the Irrigation and Hydropower components– roads, staff housing. TCTA received a new directive on 16 January 2019 to provide project management services for Stage 1.

6.4.2. KEY ACTIVITIES FOR 2020/21

The revised Directive of 16 January 2019 requested TCTA to provide project management and advisory services for Stage 1 which is mainly related to the access road. The directive further requested the project to utilise DWS-Construction Unit as the contractor and DWS-Infrastructure Development as the implementer.

TCTA has progressed the implementation of Stage-1which includes:

- Conducting social facilitation in the project area including establishing community structures for local recruitment and procurement opportunities.
- Commencement of construction of the access road is pending the appointment of the Environmental Control Officer (ECO) and DWS seeking internal approvals to finalise this appointment.

Subsequent developments on MWP follows from the site visit by the DG's from DWS, NT, DAFF, Presidency, Premier's office and TCTA CEO on 16 August 2019 and a further meeting on 2 September 2019 whereby a decision was made to reconfigure the project. The reconfiguration of the project is being unpacked and this will include meeting the domestic water supply objective as opposed to water security approach, National Treasury has confirmed as such.

Key activities to be undertaken in 2020/21 include:

- Finalise reconfiguration of the project.
- Continue with stakeholder consultation meetings.
- Commence with the construction of the access road.

7. OPERATIONS AND MAINTENANCE

7.1. LESOTHO HIGHLANDS WATER PROJECT (LHWP) WITHIN RSA

- TCTA operates and maintains the South African portion of the Delivery Tunnel North of the Lesotho Highlands Water Project. Water deliveries to South Africa is in accordance with water delivery plan.
- In the 2020/21 financial year, TCTA will continue to fulfil the obligation of Operations and Maintenance of the delivery tunnel. In addition, TCTA will conduct the routine inspection and repair works as required.

7.2. ACID MINE DRAINAGE – SHORT-TERM INTERVENTION (AMD-STI)

TCTA is directed to operate and maintain (O&M) the AMD water treatment plants in the Western, Central and Eastern basins of the Witwatersrand area. The Western Basin plant is operated and maintained by Sibanye Stillwater in terms of an agreement concluded with TCTA. The costs are shared on a basis of 1/3:2/3 between Sibanye Stillwater and TCTA. The Central and Eastern Basin plants are operated and maintained by Water Solutions–Proxa Joint Venture in terms of two 30-month contracts which were awarded on 1 April 2018 and 1 May 2018 for the Central and Eastern basins respectively.

In 2020/21, TCTA will continue to operate and maintain the AMD plants in accordance with the water quality specifications issued by the DWS. TCTA will also procure new Operator's contracts as the current contracts will be ending in September 2020.

8. PROJECT COSTS

The status of TCTA projects and activities to be undertaken during 2020/21 financial year are summarised as follows:

<u>Project Summary Table (CAPEX):</u>

Projects	Cumulative Actual to	Forecast	Budget							Sub-Total	Contingency	DWS Contributions	Charter Value
	March'19	19/20	20/21	21/22	22/23	23/24	24/25	26/27	27/28				
R/Millions													
2.1 Projects at Preparation Phase													
uMWP-1		R ,15	R 355	R 439	R 3 290	R 3 980	R 4 009	R 2 124	R 996	R 18 974,64	R 4 269		R 23 243
BRVAS		R 52	R 36	R 191	R 224	R 219	R 38			R 764	-R 36		R 728
2.2 Projects at Implementation Phase													
MCWAP 2	R 14	R 202	R 256	R 2 315	R 2 497	R 2 553	R 1 891	R 262	R 16	R 10 666	R 2 642	-R 13	R 13 308
2.2 Projects at Close-Out Phase													
ORWRDP 2C	R 2 239	R 115	R 152							R 2 506	R 38,6		R 2 545
2.3 Completed Projects													
MMTS	R 2 063	R 16	R 25	R 1	R 14	R 6	R 6			R 2 131	R 99	-R 164	R 2 066
MCWAP-1	R 1 615	R 1		R 211	R 311					R 2 138	R		R 2 139
AMD-STI	R 2 256	R 4	R 4							R 2 263	R 330		R 2 593
BWP	R 1 657	R ,11	R 1	R 6						R 1 664	-R 111		R 1 553
TOTAL	**R 9 844**	**R 391**	**R 828**	**R 3 163**	**R 6 336**	**R 6 759**	**R 5 945**	**R 2 386**	**R 1 012**	**R 41 108**	**R 7 230**	**-R 177**	**R 48 174**

2.5. Projects on hold (due to funding)													
AMD-LTS	Project On Hold												
KRIEL	R 6									R 6			R 6
ORWRDP 2B	R 101									R 101			R 101
MRWP	**Project On Hold**												
TOTAL	**R 107**									**R 107**			**R 107**

The table above shows the capital expenditure for all current projects until the completion of uMWP-1

Project Summary Table (O&M):

Operations	Cumulative Actual to	Forecast	Budget				
	March'19	19/20	20/21	21/22	22/23	23/24	24/25
R/Millions							
2.6. Operations & Maintenance							
AMD O&M Central Basin	R 48	R 119	R 181	R 190	R 200	R 210	R 220
AMD O&M Western Basin	R 22	R 47	R 66	R 70	R 73	R 77	R 81
AMD O&M Eastern Basin	R 48	R 13	R 185	R 194	R 203	R 214	R 224
AMD Construction Costs			R 27	R 156			
LHWP O&M		R 21	R 1	R 1	R 1	R 1	R 1
TOTAL	**R 117**	**R 200**	**R 460**	**R 611**	**R 478**	**R 502**	**R 527**

Table 2 illustrates the operational expenditure of the AMD plants until 2024/25.

ANNEXURE C

BORROWING PROGRAMME, BUDGETS AND CASH PROJECTIONS

ANNEXURE C1

BORROWING PROGRAMME

1. EXECUTIVE SUMMARY

This section provides information on the consolidated funding programme for all the projects under the management of TCTA. TCTA is expected to have a funding requirement of R23 531million in the next three years from 2020/21 financial year (excluding the redemption portfolio and debt portfolio structuring). It is expected that the bulk of the funding will be raised from the financial markets with the balance funded from the fiscus.

The following challenges affect the prospect of successfully raising funding to meet the funding requirements:

- Vaal River System (VRS), comprising LHWP-1, LHWP-2 and AMD-STI:
  - Unless the government guarantee for the Domestic Multi-Term Note programme is approved before April 2020, there is serious risk of failure to raise funding for the repayment of the R9.5 billion WSP-5 bonds due on 1 May 2021. TCTA requested the guarantee in May 2019 but the concurrence of the Minister of Finance is still pending. Failure to repay the bond when due will be an event of default leading to cross-defaults and all of TCTA's outstanding debt (currently over R22 billion) becoming immediately due and payable.
  - It will not be possible to source new debt as detailed in this borrowing programme or to request disbursements to fund LHWP-2 construction, in terms of the planned R30 billion Domestic Multi-Term Note programme and new R4.5 billion loan facilities currently being negotiated with two international Development Finance Institutions (DFIs).
- BRVAS and uMWP-1: Sourcing of long-term funding for BRVAS and uMWP-1 is predicated on the approval of the respective borrowing limits once the project agreements have been concluded. TCTA is actively pursuing negotiations with water users for the conclusion of these agreements.

1.1. COMBINED FUNDING REQUIREMENTS

The combined funding requirements for all projects for 2020/21 and the following two years is shown in the following table.

Project	2020/21 R' million	2021/22 R' million	2022/23 R' million	TOTAL R' million	FINAL DEBT REPAYMENT DATE
VRS	1 677	9 683	8 103	19 463	2043
BWP	-7	-5	-15	-27	2029
VRESAP	-10	26	16	32	2030
MMTS-2	-354	-459	-518	-1 331	2031

Project	2020/21 R' million	2021/22 R' million	2022/23 R' million	TOTAL R' million	FINAL DEBT REPAYMENT DATE
ORWRDP (fiscus)	152	7	3	162	N/A
KWSAP	-32	-25	-20	-77	2034
MCWAP-1	-139	55	162	78	2033
MCWAP-2	329	2 333	2 552	5 214	N/A
uMWP	-2	-2	-2	-6	
BRVS	6	7	7	20	N/A
MRWP (fiscus)	1	1	1	3	N/A
Total	**1 621**	**11 621**	**10 289**	**23 531**	

The Government of the Republic of South Africa has authorised a maximum of R43 000 million of debt to be issued under the guarantee on the Vaal River System funding programme, which includes the funding of LHWP and AMD. The Minister of Finance's concurrence for the DMTN guarantee is pending. The funds raised from the DMTN are required principally to meet the funding requirements in 2021 for the repayment of the WSP-5 bond maturing on 1 May 2021.

The debt relating to the other projects is supported by undertakings by DWS in favour of the funders in terms of the project implementation agreements to honour TCTA's obligations.

2. PROJECT SPECIFIC INFORMATION

2.1. VAAL RIVER SYSTEM (VRS, COMPRISING LHWP-1, LHWP-2 AND AMD-ST AND AMD-LTS)

2.1.1. CAPITAL MARKET MATURITY LADDER

Bond Code	Issue Date	Maturity Date	Coupon	Authorised Limits	Nominal	Available
					R million	
WSP4	21-May-03	28-May-20	9.00%	1 000	97	903
WSP5	21-May-03	28-May-21	9.00%	10 000	9 433	567
				11 000	**9 530**	**1 470**

2.1.2. FUNDING REQUIREMENTS

The domestic funding requirements of the VRS (LHWP-1, LHWP-2, AMD-STS and AMD-LTS) are discussed below.

The VRS is expected to require funding of R19 463 million during the next three financial years (the medium term) due to accelerating capital expenditure on LHWP-2 and AMD and the large debt maturity (WSP5) in 2021/22.

Year	Incremental (R million)	Capital Repayment (R million)	Total Funding Requirement (R million)
2020/21	1 373	304	1 677
2021/22	-6	9 689	9 683
2022/23	7 836	2 67	8 103
TOTAL	**9 203**	**10 260**	**19 463**

Guarantees / Contingent Liabilities

The VRS is funded under the following guarantees issued by the Government of the Republic of South Africa:

- Consolidated Capital Market Guarantee - Under the guarantee, TCTA can issue up to R21 000 million of debt in the capital markets.
- Commercial Paper Programme - Under this guarantee, TCTA can issue up to R4 000 million.
- Bank loans – R6.5 billion was issued to three commercial lenders in 2018. A further R4.5 billion is being negotiated with two Development Finance Institutions.

Note that the above has since been consolidated into a single R43-billion guaranteed programme that includes LHWP-2 and AMD. Internally, the above limits are the current guiding principle for issuing paper and bonds.

All debt covenants, including conditions of the listed bonds, are complied with.

2.1.3. FUNDING TERMS

Almost all the funding for the VRS projects is sourced under the Capital Markets Programme and the commercial paper programme. R6.5 billion loan facilities were sourced from banks in 2018, with a further tranche of R4.5 billion to be sourced from DFIs in 2019. A new R30-billion domestic multi-note programme is in the process of being registered to issue bonds with varying maturities up to 2042. The registration is pending the concurrence of the Minister of Finance to issue guarantees to noteholders. In addition, long-term bank loans and revolving credit facilities are being arranged.

The purpose of the commercial paper is to fund the short-term liquidity positions, while the capital markets are used for long-term strategic and operational funding, operation and maintenance.

Success with the raising of funding depends on the timely renewal of the borrowing limit by 31 March 2019.

2.2. BWP

2.2.1. FUNDING REQUIREMENTS

The table below sets out the funding requirement for the following three financial years. It is projected that the project will generate a surplus of R27 million after debt service and administration payments in the medium term.

Year	Incremental (R million)	Capital Repayment (R million)	Total Funding Requirement (R million)
2020/21	-84	77	-7
2021/22	-82	77	-5
2022/23	-92	77	-15
TOTAL	**--258**	**231**	**-27**

Guarantees / Contingent Liabilities

There is no explicit government guarantee in place for BWP as this was funded purely on a project finance basis off balance sheet, where recourse is by design and only to the project cash flows. The robustness of agreements around the implementation of the project and the payment structure has resulted in the project obtaining an AA+ rating from Fitch Ratings.

All covenants are currently being complied with.

2.3. VRESAP

2.3.1. FUNDING REQUIREMENTS

VRESAP supplies water to Eskom's power stations in Mpumalanga and to Sasol. The project is in debt repayment phase but is projected to generate cash flow deficits in 2021/22 and

2022/23, which is a legacy of lower than forecast water demand. This has been corrected in recent years through engagements with Eskom and Sasol to adopt more conservative demand forecasts. The latest demand forecasts reflect the much-reduced generating capacity in power stations in Mpumalanga announced by Eskom. Water demand may be affected by changes in the country's energy mix.

The table below sets out the funding requirement for the medium term:

Year	Incremental (R million)	Capital Repayment (R million)	Total Funding Requirement (R million)
2020/21	-233	223	-10
2021/22	-212	238	26
2022/23	-239	255	16
TOTAL	-684	716	32

The project will require funding of R32 million in the medium term. The shortfall will be sourced from the commercial paper programme.

The size of the commercial paper programme was increased by R100 million in 2018/19. It will be raised by a further R100 million in 2019/20 and in every year of the medium term to accommodate the project's medium-term funding needs and to preserve the availability of liquidity support facilities.

Guarantees / Contingent Liabilities

There is no explicit government guarantee in place for the VRESAP as this was funded purely on a project finance basis where recourse is by design only to the project cash flows. The robustness of agreements around the implementation of the project and the payment structure have resulted in the project obtaining an AA+ rating from Fitch Ratings.

VRESAP complies with all loan covenants.

2.4. MMTS-2

2.4.1. FUNDING REQUIREMENTS

The table below sets out the funding requirement for the following three years:

Year	Incremental (R million)	Capital Repayment (R million)	Total Funding Requirement (R million)
2020/21	-442	88	-354
2021/22	-554	95	-459
2022/23	-616	98	-518
TOTAL	**-1 612**	**281**	**-1 331**

The project will have excess funding of R1 331 million in the medium term.

Guarantees / Contingent Liabilities

There is no explicit government guarantee in place for the MMTS-2 as this was funded purely on project finance basis where recourse is by design only to the project cash flows (debt service account in this case). The robustness of agreements around the implementation of the project and the payment structure have resulted in the project earning an AA+ rating from Fitch Ratings. MMTS-2 is currently complying with all loan covenants.

2.5. KWSAP

KWSAP faces the same water demand issues discussed under VRESAP, related to Eskom's power generating activities in Mpumalanga and dynamics in the country's future energy mix.

2.5.1. FUNDING REQUIREMENTS

The table below sets out the funding requirement for the following three years:

Year	Incremental (R million)	Capital Repayment (R million)	Total Funding Requirement (R million)
2020/21	-70	38	-32
2021/22	-71	46	-25
2022/23	-72	52	-20
TOTAL	**-213**	**136**	**-77**

The project is expected to have excess funds of R77 million in the medium term.

KWSAP complies with all loan covenants.

2.6. MCWAP-1

2.6.1. FUNDING REQUIREMENTS

The table below sets out the funding requirement for the following three years:

Year	Incremental (R million)	Capital Repayment (R million)	Total Funding Requirement (R million)
2020/21	-186	47	-139
2021/22	3	52	55
2022/23	105	57	162
TOTAL	**-78**	**156**	**78**

It is projected that MCWAP-1 will require funding of R78 million in the medium term.

MCWAP-1 complies with all debt covenants.

2.7. MCWAP-2A

2.7.1. FUNDING REQUIREMENTS

The table below sets out funding requirements for the following three years for MCWAP-2A.

Year	Total Funding Requirement (R million)
2020/21	329
2021/22	2 333
2022/23	2 552
TOTAL	**5 214**

MCWAP-2 is a new project. Its funding will be integrated with MCWAP-1 since the two have a combined borrowing limit. 11% of the project will be funded from the fiscus. The balance will be raised by means of commercial funding. The Global Bridging Facility will be utilised for the commercial funding while long-term loans are being arranged.

The funding requirements are based on the current approved water requirements scenario and funding model underlying the approved project capacity.

2.8. ORWRDP

2.8.1. FUNDING REQUIREMENTS

Funding requirements cover only Phase 2C of ORWRDP. A funding model for Phase 2B is under development and the project will only be included in the budget once a borrowing limit has been approved.

The table below sets out funding requirement for the following three years for ORWRDP.

Year	Funding Requirement R' million
2020/21	152
2021/22	7
2022/23	3
TOTAL	**162**

DWS is the only source of funding for the ORWRDP. No other funding sources are available.

2.9. BRVAS

2.9.1 FUNDING REQUIREMENTS

The table below sets out the funding requirement for the following three years for BRVAS:

Year	Incremental	Refinancing	Total Funding Requirement
2020/21	6	-	6
2021/22	7	-	7
2022/23	7	-	7
TOTAL	**20**	**-**	**20**

The project will require funding of R20 million in the medium term, which will be funded from the global facility and long-term loans.

BRVAS is a new project still in the structuring phase. It is a commercial project and will be funded by commercial loans. Once a borrowing limit has been obtained, funding will be sourced from the Global Bridging Facility and later from long-term loans to be arranged once offtake agreements have been secured.

2.10. MZIMVUBU WATER PROJECT

2.10.1 FUNDING REQUIREMENTS

Mzimvubu is funded by the fiscus. The implementation activities are on hold. The funding requirements are for minor operational requirements, mainly travelling on stakeholder engagements.

The table below sets out the funding requirement for the following three years for Mzimvubu:

Year	Incremental	Refinancing	Total Funding Requirement
2020/21	1	-	1
2021/22	1	-	1
2022/23	1	-	1
TOTAL	**3**	**-**	**3**

The project will require funding of R3 million in the medium term, which will be funded from the fiscus.

2.11. uMKHOMAZI WATER PROJECT PHASE 1

2.11.1 FUNDING REQUIREMENTS

Year	Incremental	Refinancing	Total Funding Requirement
2020/21	-2	-	-2
2021/22	-2	-	-2
2022/23	-2	-	-2
TOTAL	**-6**	**-**	**-6**

The project will have excess funding of R6 million in the medium term.

2.12. DETAILED DEBT MANAGEMENT AND FUNDING STRATEGIES

The detailed debt management and funding strategies are described in the report: **"2020 01 Funding and Debt Management Strategies 2020"**.

ANNEXURE C2

BUDGET FOR 2020/21

1. BACKGROUND

In terms of Section 52 of the Public Finance Management Act 1 of 1999 (PFMA), TCTA is required to submit to the Department of Water and Sanitation (DWS) and National Treasury, together with the corporate plan, an approved Budget for a period of three years, before the end of February of each year.

In preparing this medium-term budget, management has taken guidance from the broad legislative and planning frameworks such as the National Water Act (NWA), the National Water and Sanitation Master Plan (NWSMP), the National Water Resources Strategy (NWRS), the National Development Plan (NDP), the current economic and sectoral context, pronouncements by National Treasury, and the strategic frame of the organisation.

Whilst policy determines the priorities for national government, planning and budgeting serves as a transitional process between policy and implementation. TCTA aspires to fill a leading role in the implementation of national strategy, within the water sector.

2. SECTORAL AND CORPORATE CONTEXT

2.1. SECTORAL CONTEXT

A key challenge facing both the water sector and national policymakers is to ensure that water resources remain adequate and sustainable to support the achievement of national development goals. The critical importance of water security is frequently underestimated outside the water sector, and hence the imperative to elevate water security to the national policy dialogue. Throughout, the importance of water security in various sectors of economy, and in the social context needs to be recognised, and prudent water management needs to be prioritised. Both the NDP and the NWRS emphasise strategies for enhancing the capacity of our water resource infrastructure, to meet the competing needs of different sectors.

The institutional capacity within the water sector has eroded over several years, largely due to leadership discontinuity, which has stalled much needed reform, re-alignment and development. The net result is a weakened, under-performing sector, managing a resource that is vital to the economy and the country’s well-being.

Water is the most pivotal natural resource for socio-economic development in South Africa; where and when its supply may be constrained, all forms of human endeavour suffer. Our water story is one of hardship and inequality, but also of ingenuity and pragmatism. Historically, South Africa has not been blessed with an abundance of water, and frequent droughts extract a heavy toll. We also face systemic challenges: A below-average precipitation is coupled with above-average evaporation rates, relative to global figures; we inherited a legacy of unequal infrastructure planning, and much of our economic activity is located along a watershed, far away from natural water resources. In response to these challenges, we have built a surface water system that captures two thirds of the all the river flows, and transfers much of it to where it is needed for livelihoods, through inter-basin transfer schemes.

Progressively however, demand is overtaking supply; the surface water system yields about 14.7 billion cubic metres (BCM) during an average year, at a high level of assurance, and a very dispersed groundwater resource could yield a further 7.5 to 10.3 BCM per annum, mostly to rural communities. Demand from all sectors should climb through the 16.3 BCM level by 2020, and a 2 BCM deficit is anticipated to occur across the three major economic hubs by 2025.

At least four factors are simultaneously widening this gap:

• Population growth of about 1.55%, coupled with a high rate of urbanisation (currently around 60-63%) drives ever-higher water demand in the cities.

• Due to a progressive slowing in the building of new dams since the Nineties, there has been a steady decline in the per-capita water resource availability, from 1,329 m3 in the late Eighties, to 966 m3 in the current era. Accordingly, South Africa is classified as a water-scarce country.

• The spectre of climate change looms large; a recent WRC study indicates a noticeable shift in the Standardised Precipitation Evapotranspiration Index (SPEI) across Southern Africa, having occurred during the Eighties. And several climate models predict temperature increases above the global average to occur in Southern Africa.

• Non-revenue water, being the result of non-payment for water consumed, and water lost during reticulation, remains unacceptably high. The NWSMP estimates that municipalities lose about 1.66 BCM per year through non-revenue water, which amounts to R9.9 billion, at a unit cost of R6 per m3.

The water sector will be required to respond to both the supply and demand-side challenges; alternative water resources need to be explored, along with a shift towards circular water use, on a large scale. Simultaneously, meaningful gains need to be made on non-revenue water, at a municipal level. Innovative approaches will be required, in many instances; the frameworks for planning and projection we have used in the past, such as Unit Reference Values and system yield estimations, may not be as relevant or accurate in the future.

The state of the economy casts a further shadow over the sector; South Africa is in the longest business cycle downturn since 1945, business and consumer confidence remains low, and GDP growth is projected at a mere 0.5% for 2019. The underlying reasons for the downturn will not be remedied in the short term, largely due to crippling state debt, and per-capita GDP is expected to remain suppressed in the medium term.

In this economic climate, investment into the sector will be under pressure. South Africa currently invests R43.4 billion per year into water infrastructure, and R13.2 billion into sanitation (DWS, National Water Investment Framework, Sep 2017). However, the estimated capital investment requirement for new-build, upgrades and rehabilitation amounts to R89.9 billion per year over the next ten years, which is R33.3 billion per annum more than the current investment of R56.6 billion. It stands to reason that debt funding, underpinned by bankable infrastructure projects, will be required to close much of that deficit.

Nevertheless, South Africa needs to implement sustainable and affordable water and sanitation infrastructure that will build social capital and provide access to the un-serviced and marginalised. Activists, regulators, financiers and policymakers need to be responsive to the demands placed on the sector and adapt to changes in the landscape. The integration of sectoral plans, programs and strategies within the framework of national economic and social policy are of vital importance.

2.2. CORPORATE CONTEXT

Embedded within the sectoral context described above, is the corporate context. TCTA needs to be responsive to the demands of the sector and adapt to changes in the sectoral landscape.

The mission of TCTA 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 users. Its primary goals are to execute Ministerial directives to specification, on time and within budget, to ensure that all projects facilitate sustainable social transformation through jobs and empowerment, to operate in full compliance with the Public Finance Management Act (PFMA), to build capable hubs of thought leadership and innovation in niched areas of water management, and to ensure the continuous availability of high-calibre and motivated human capital for future delivery on the organisational mission. Furthermore, TCTA continues in a role of strategic program coordination, in a cross-sectoral context, in support of the Presidential Infrastructure Coordinating Commission. This budget, for the 2020/21 financial year, is intended to allocate the appropriate financial resources, required to fulfil this mission.

The current portfolio of TCTA includes projects in various stages of the project life cycle: Seven major projects are in debt management phase, three are in project preparation phase (Berg River Voelvlei Augmentation Scheme (BRVAS), the uMkhomazi Water Project (uMWP) and the Mzimvubu Water Project (MWP)), and one is under construction (Phase 2 of the Mokolo Crocodile Water Augmentation Project (MCWAP-2)). The current funding program encompasses the raising of funding for, inter alia, the second phase of the Lesotho Highlands Water Project (LHWP-2) of R32 billion, BRVAS (R750 million), and MCWAP-2 (R11 billion).

TCTA's role in the financing and implementation of water infrastructure is influenced by the state of the economy. As a debt-finance vehicle, TCTA thrives in an environment where an appetite for responsible debt exists, and where households have the means and confidence to consume utilities and pay for it. The current state, characterised by stagnant growth, high levels of unemployment and crippling state debt, is not ideal, and therefore TCTA anticipates difficult trading conditions in the medium term.

3. PRINCIPLES EMPLOYED IN THIS BUDGET

The 2020/21 Budget is set within the context of renewed government commitment to spend on critical infrastructure, but also the certainty that fiscal resources will fall well short of the intended capital expenditure in the water sector. However, the scope for borrowing to implement bankable projects is significant. Since TCTA may only proceed upon directives, the capital expenditure budget is based upon the specific infrastructure projects which TCTA has been directed to implement. Budget has only been catered for where projects have funding in place. Similarly, the operating budget reflects the planned level of activity associated with the projects being implemented.

The 2019/20 Actual/Forecast figures reflect the actuals from 1 April 2019 to 30 September 2019 and the forecast for the period 1 October 2019 to 31 March 2020. The Budget 2020/21 represents the period 1 April 2020 to 31 March 2021.

The following are the key principles applied in the preparation of the budget for 2020/21:

3.1. CAPITAL EXPENDITURE (CAPEX)

The capex budget is informed by the status of TCTA mandated projects. A conservative approach has been adopted because of significant underspend in past years that resulted in National Treasury and other stakeholders negatively perceiving TCTA. Where the probability of commencing a project is dependent on factors such as funding, DWS approvals and other factors outside TCTA control, the organisation has erred on the side of caution and budgeted conservatively.

TCTA has been directed by the Minister of Human Settlements, Water & Sanitation to fund and implement a portfolio of projects. Projects are categorised as projects at preparation phase, implementation phase, projects on hold, and potential projects for which mandates are anticipated.

TCTA further is responsible for the operation and maintenance of the AMD treatment plants in the Western, Central and Eastern basins and for the Delivery Tunnel North of the Lesotho Highlands Water Project.

Below is the current status of projects:

Projects at Preparation Phase

- Berg River Voëlvlei Augmentation Scheme (BRVAS)
- uMkhomazi Water Project Phase 1 (UMWP)

Projects at Implementation Phase

- Mokolo And Crocodile River Water Augmentation Project - Phase 2A (MCWAP-2A)

Projects at Close-out Phase

- Olifants River Water Resources Development Project - Phase 2C (ORWRDP-2C)

Projects On-hold

- Olifants River Water Resources Development Project - Phase 2B (ORWRDP-2B)
- Acid Mine Drainage - Long Term Solution (AMD-LTS)
- Off-take to the town of Kriel from the Komati Water Supply Augmentation Project

Potential Project

- Clanwilliam Dam Project
- ORWRDP Phases 2D, E and F

Advisory

- Programme Management Services to DWS in relation to Water Infrastructure Projects
- Mzimvubu Water Project (MRWP)

Projects where Directives have been received but uncertainties prevail

Although TCTA has received the directives for UMWP, BRVAS, ORWRDP-2B and AMD LTS, the capital expenditure has not been included due to uncertainty relating to the funding thereof. Should any project on hold proceed or any new project be mandated a supplementary budget will be submitted for Board approval to allow implementation to proceed.

3.2. ADMINISTRATIVE EXPENDITURE:

The budgeting for administrative costs is impacted on by the level of activity planned for the year in TCTA's key activities including project preparation, funding, implementation and debt management. A major consideration is also the level of organisation improvements planned for the year such as system and related infrastructure developments. Development of TCTA's human capital is equally an important consideration. Fixed overhead costs are based on historic costs adjusted taking in consideration appropriate indexes or contractual escalation provisions.

Key budgeting principles include:

- Zero-based budgeting while considering the current status of operational areas.
- Where prior funding has not been secured for new projects the initial project preparatory costs may be funded from the Vaal River System (VRS) on a loan account basis. These costs are relatively minor and relate mostly to travel and accommodation costs. The costs are fully recovered once DWS has provided a project preparatory facility or commercial sources have been secured.
- Inflation adjustment for MTEF is 5% per annum as per National Treasury guidelines.
- The salary calculation per division includes an average inflationary increase of 5%.
- Vacancies and new positions are budgeted in accordance with the projected date of placement for each vacancy. Positions contingent on new mandates have not been budgeted for.
- Office lease costs are based on existing contractual terms.
- All the overhead and administration costs for TCTA will be recovered via the TCTA corporate bank account.
- The cost-containment instructions from National Treasury have been adhered to in the preparation of this budget insofar as it relates to the mandatory elements of the instruction.
- In line with the cost-containment instruction, all consultancy fees that have been budgeted for and are supported by business cases for the Accounting Authority's approval.

3.3. COST RECOVERIES FROM PROJECTS

- TCTA is a Special Purpose Vehicle (SPV) operating on a cost recovery basis. Administrative costs not directly attributable to a project are recovered from mandated projects based on the level of planned activity on the respective projects during a particular year – see Table 1 below.

- Administrative costs directly related to a specific project are paid from the respective project's bank account. Other non-specific overhead costs are paid from the TCTA corporate account and recovered from the respective projects based on the approved recovery percentages for the year.
- From the Table 1 below it is evident that the percentage charged to VRS fluctuates dependent of the number of active mandated projects. Should the pipeline increase, the shared costs allocation to VRS would reduce. Should the project pipeline diminish severely, a realignment strategy will be required to reduce overheads. As projects approach completion and enters the debt service phase the recovery percentage reduces.

Shared costs are to be recovered from projects in the following proportions:

Projects	2019-20	2020-21	2021-22	2022-23
LHWP	44%	31%	29%	29%
BWP	2%	2%	2%	2%
VRESAP	3%	3%	3%	3%
ORWRDP	5%	3%	0%	0%
MMTS2	4%	3%	3%	3%
KWSAP	2%	2%	2%	2%
MCWAP1	3%	3%	3%	3%
UMWP	2%	10%	15%	15%
AMD	10%	10%	10%	10%
LHWP2	10%	10%	10%	10%
MRWP	2%	2%	2%	2%
MCWAP2	10%	15%	15%	15%
BRVAS	3%	6%	6%	6%
TOTAL	**100%**	**100%**	**100%**	**100%**

Table 1

4. RETROSPECTIVE ANALYSIS 2021 BUDGET vs ACTUAL FORECAST 2019/20

	Explanation Note Reference	Actual/Forecast 2019/20	Budget 2019/20	Actual/Forecast vs Budget	Budget 2020/21	Actual/Forecast 19/20 vs Budget 20/21
Tariff Revenue	6.1.	(7 294.36)	(7 095.00)	199.36	(7 902.33)	607.97
Operating Costs		1 779.01	2 031.10	252.09	2 277.67	(498.66)
Management Contingency		13.87	17.01	3.13	18.74	(4.87)
TCTA Admin Costs	6.2.	334.94	468.39	133.45	469.66	(134.72)
Operations and Maintenance	6.3.	306.26	374.08	67.83	433.71	(127.46)
Lesotho Operating Costs	6.4.	1 123.93	1 171.62	47.69	1 355.56	(231.62)
Operating Inflows/Outflows		**(5 515.35)**	**(5 063.91)**	**451.45**	**(5 624.66)**	**109.31**
Total Finance Charges	6.5.	1 865.29	2 176.01	310.72	1 904.37	(39.08)
Net Working Capital Cash (in)/outflows		**(3 650.06)**	**(2 887.90)**	**762.16**	**(3 720.29)**	**70.22**
Capital Repayments	6.6.	1 230.49	1 115.49	(115.00)	700.80	529.69
Fixed Assets		7.85	5.10	(2.76)	18.18	(10.33)
Capital Expenditure	6.7.	**1 712.66**	**2 888.57**	**1 175.91**	**4 745.33**	**(3 032.68)**
TCTA Projects		324.78	324.42	(0.36)	733.71	(408.94)
LHWP2		1 387.88	2 564.15	1 176.27	4 011.62	(2 623.74)
Non cash flow items and accruals		(697.65)	(497.96)	199.69	(142.78)	(554.87)
TOTAL FUNDING REQUIREMENT		**(1.42)**	**1 619.21**	**1 620.63**	**1 886.80**	**(1 888.22)**

Table: 2- values are in R'million

4.1. 4.1 TARRIF REVENUE

Project	Actual/Forecast 2019/20	Budget 2019/20	Increase/ (Decrease)	Budget 2020/21	Increase/ (Decrease)
LHWP1,LHWP2, AMD- VRS	(5 672.90)	(5 578.66)	94.24	(6 148.27)	475.37
BWP	(139.31)	(122.98)	16.32	(128.69)	(10.62)
VRESAP	(570.48)	(557.21)	13.27	(555.78)	(14.70)
MMTS	(479.61)	(495.16)	(15.55)	(618.89)	139.29
KWSAP	(152.06)	(165.85)	(13.79)	(170.69)	18.63
MCWAP	(280.01)	(175.14)	104.87	(280.01)	(0.00)
Total	**(7 294.36)**	**(7 095.00)**	**199.36**	**(7 902.33)**	**607.97**

Table: 3- values are in R'million

- The Actual/Forecast 2019/20 tariff revenue is expected to be marginally higher than budgeted for 2019/20 (R199 million or 2.8%) mainly due to actual volumes being slightly higher or lower than budgeted.
- The major variance on MCWAP (R105 million or 59%) is due to a higher actual tariff applied than what was budgeted. After consultation with stakeholders the tariff was increased from R7.92 to R12.67 to reduce the MCWAP 1 debt before MCWAP 2 commences. The increased tariff was approved by the Minister.
- Tariff revenue for the 2020/21 financial year is expected to be higher than the Actual/Forecast 2019/20 by R617.97m or 8.46% mainly due to higher tariffs. MMTS sees

a larger rise in tariff billing because of an increase in the tariff to include a prefunding portion for UMWP. MMTS budget is based on the income agreement for the period.

4.2. TCTA ADMIN COSTS

TCTA Admin costs consist of operating expenses of TCTA. The Actual/Forecast 2019/20 translates to 72% of the original budget envisaged to be spent. The increase in the budget for the 2020/21 financial year is expected to be R134.72 million, translating to an increase of 40% from the Actual/Forecast 2019/20. Below provides a summary of the movements between the Budget 2019/20 and the Actual/Forecast 2019/20 as well as the Budget 2020/21.

	Actual/Forecast 2019/20	Budget 2019/20	(Increase)/ Decrease	Budget 2020/21	(Increase)/ Decrease
Staff Costs	225.39	296.57	71.18	276.13	(50.74)
Directors Emoluments	9.97	17.19	7.23	11.00	(1.03)
Audit Fees	13.32	10.63	(2.69)	14.10	(0.78)
Consulting fees	21.44	64.42	42.97	72.64	(51.19)
Depreciation and Amortisation	6.83	5.93	(0.90)	12.96	(6.14)
Rent paid-Premises	8.86	11.86	2.99	9.69	(0.83)
Equipment Rentals	12.11	12.41	0.30	24.32	(12.21)
Communications	4.99	6.92	1.93	6.95	(1.96)
Other Operating Expenses	32.03	42.46	10.43	41.87	(9.84)
Total	**334.94**	**468.39**	**133.45**	**469.66**	**(134.72)**

Table: 4- values are in R'million

- **Staff costs:**

  Actual/Forecast 2019/20 vs. Budget 2019/20

  Lower staff costs mainly due to a revised resourcing strategy that allows flexibility when filling positions. Projects-related vacancies are filled when projects are confirmed, and funding has been secured. This reflects a cautious approach when appointing people, to manage administrative costs while ensuring that the right employees are placed in the right positions, at the right time. The savings in the Actual Forecast 2019/20 is mainly due to the delayed recruitment processes as it was dependant on the recruitment panel being appointed, which was delayed. However, the annual recruitment plan is in place and being implemented, thus it is envisaged that spend on staff cost will move closer to the budgeted amount as the year progress. Statutory staff costs are directly related to the salary bill, thus with a lower spend on the salary bill, there was a corresponding drop in statutory payments. Training costs are lower than budget due to fewer employees attending training mainly due to increase administrative activity in the business as it related to the extended and intense annual audit process. It is also worth mentioning that the cost associated with interns and bursars, which is accounted for under training cost, has lower spend due to 60% progress against the YTD plan.

Actual/Forecast 2019/20 vs. Budget 2020/21

The increase in expected expenditure in 2020/2021, is mainly due to current vacancies which should be filled by 31 March 2020, which means by implication that staff cost for a full employee workforce will be reflected in the monies, compared to this year where TCTA currently has 151/176 employees. Further, it may be noted salary increases are budgeted for at an average increase of 5%.

- **Directors Fees:**

Actual/Forecast 2019/20 vs. Budget 2019/20

Directors' Fees for the Actual/Forecast have a positive variance. The lower spend on fees for directors are as a result fewer members (eight vs. 10) when compared to budget. Board Ad Hoc Services has a lower spend since the budget had included costs for an international trip and additional hours that would need to be paid. There was one international trip that took place and the costs were lower than budget.

Actual/Forecast 2019/20 vs. Budget 2020/21

The budget 2020/21 increases due to higher Board advisory costs and ministerial related activities. Directors' Fees have been calculated based on the approved Directors' Remuneration Framework. The budget for 2020/21 does not include an increase. The budget also includes one international funding trip for two board members. The Governance Division strategic objectives for the budget 2020/21 are Board Governance, Training and Advisory Services on the future strategic path; Stakeholder Engagement and awareness and Board Site Visits.

- **Audit Fees:**

Actual/Forecast 2019/20 vs. Budget 2019/20

Audit fees are expected to be R2.7m higher. This is due to anticipated audit overruns due to the delay in finalising the 18/19 audit. The AGSA has lodged a claim for overruns which is yet to be approved by the Board.

Actual/Forecast 2019/20 vs. Budget 2020/21

For the 2020/21 financial year audit fees are expected to have a marginal increase.

- **Consulting Fees:**

For 2020/21 the main drivers for the increase in Consulting Fees are Legal Fees and IT Consulting fees.

Legal Fees:

Actual/Forecast 2019/20 vs. Budget 2019/20

Legal fees are expected to be lower than budget 2019/20. The budget for legal services was based on planned legal support for new projects. At present, the appointment of the legal panel has been set aside and a new procurement process is expected to be completed by year end. Legal support has largely been provided from internal resources. Also, provisions that were made in the budget were contingent.

Actual/Forecast 2019/20 vs. Budget 2020/21

The 2020/21 budget makes provision for ongoing legal matters and has contingency for legal support in defending contractual claims and assistance with the drafting of financing agreements.

- **IT Consulting:**

Actual/Forecast 2019/20 vs. Budget 2019/20

The Budget for 2019/20 had included costs for consulting fees with regards to the ERP System. It was expected that this project would have been completed and little consulting would have been required. The under spent is as a result of delay in the procurement process of the Oracle Assessment as well as the freezing of the Oracle Financials and SCM (no support was required).

Actual/Forecast 2019/20 vs. Budget 2020/21

Budget for 2020/21 for consulting fees is expected to be higher than the Actual/Forecast 2019/20. The following services are budgeted for:

- ERP HR Support- R4.25m
- Finance & SCM System Implementation- R15m
- Business Processes- R3m
- ERP Assessment- R2m
- Another IT Consulting- R2m

The main thrust of the proposed ICT budget for 2020/2021 is implementation of projects; a fair portion of it is set aside for maintaining business momentum. This budget will continue to fund existing contracts with service providers and suppliers and ensure a smooth and seamless transition from current to new systems. There will also be a significant amount of focus on the ERP Project to deal with the experienced technical challenges.

- **Rentals (Equipment & Premises):**

  Actual/Forecast 2019/20 vs. Budget 2019/20

  Overall rentals have a positive variance of R3.30m. The variance is mainly due to lower equipment rentals and rental of services.

  Actual/Forecast 2019/20 vs. Budget 2020/21

  The budget for 2020/21 includes:

  • Rent Payable (negative variance R0.83m). Higher rental is because of an annual rental increase of 7% from January 2020.

  • Equipment Rentals & Rental of Services (negative variance R12.22m). The higher costs are related to the infrastructure rollout project. The objective of the project is to provide for stable and reliable ICT infrastructure on which all the systems will be built.

- **Communications Costs:**

  Actual/Forecast 2019/20 vs. Budget 2019/20

  Communications spend is lower because of underspend on Advertising & Marketing, and Corporate Social Responsibility. Changes in strategy of the communications division will see increased spend in 2020/2021. A revised communications and stakeholder strategy was approved, but major projects are on hold pending approval. On Communication, projects are being re-evaluated in line with stricter cost-curtailment measures.

  Actual/Forecast 2019/20 vs. Budget 2020/21

  The strategy for 2020/21 includes initiatives such as promoting the TCTA brand and more stakeholder engagement initiatives.

- **Other Operating Expenses:**

  Actual/Forecast 2019/20 vs. Budget 2019/20

  Other expenses are lower mainly because of lower travel costs (R1m), subsistence costs (R2.4m) and team effectiveness costs (R1.7m). The lower costs for travel, subsistence, team effectiveness is directly related to the projects progress. The budget had expected higher travel, subsistence and other costs related to new projects. The slow pace in these projects has resulted in lower spend. Team effectiveness costs are lower due to fewer sessions taking place.

  Actual/Forecast 2019/20 vs. Budget 2020/21

  The budget 2020/21 caters for higher subsistence & travel costs (R2.9m), team effectiveness costs (R1m), repairs & maintenance costs (R2m) and higher stakeholder related costs

(R2m). These costs have been budgeted for based on expected deliverables in the projects and strategic plan.

4.3. OPERATIONS AND MAINTENANCE

	Actual/Forecast 2019/20	Budget 2019/20	(Increase)/ Decrease	Budget 2020/21	(Increase)/ Decrease
O & M:Eastern Basin	119.27	172.20	52.93	184.58	(65.31)
O & M:Central Basin	118.61	139.80	21.19	181.31	(62.70)
O & M:Western Basin	47.19	51.00	3.81	66.45	(19.26)
LHWP Ops & Maint	21.19	11.08	(10.11)	1.38	19.81
TOTAL Operations & Maintenance	**306.26**	**374.08**	67.83	**433.71**	**(127.46)**

Table: 5- values are in R'million

AMD

AMD operations and maintenance has a positive variance. The budget provides for a monthly provision for unforeseen maintenance to effectively run the plants, there has not been much additional maintenance requirements over the last 6 months. In addition, lower than budgeted chemical costs and electricity charges were incurred due to plant outages between May and August due to the vandalism of the electricity supply to the Western Basin plant.

The budget for 2020/21 is based on the actual cost of operating all three basins Allowances have been made for increases, escalation on the operators cost, increases on rates and taxes as well as electricity. There is a provision for an anticipated increase on the operators cost as the current contract will end in September 2020.

LHWP

The Actual Forecast expects a negative variance. The increase is due to the higher than previously estimated tendered rates for the tunnel maintenance.

The budget 2020/21 expects the tunnel maintenance to be completed in the 2019/20 financial year, and the maintenance cost for LHWP will normalise.

4.4. LESOTHO OPERATING COSTS

	Actual/Forecast 2019/20	Budget 2019/20	(Increase)/ Decrease	Budget 2020/21	(Increase)/ Decrease
LHDA operations and maintenance	250.00	250.00	-	319.68	(69.68)
RSA Contribution & Delegation Costs	23.68	23.68	-	24.98	(1.30)
Royalties	850.25	897.94	47.69	1 010.89	(160.64)
Total	**1 123.93**	**1 171.62**	**47.69**	**1 355.56**	**(231.62)**

Table: 6- values are in R'million

Lesotho Operating Costs comprise the Royalties, Lesotho Highlands Development Authority and Lesotho Highlands Water Commission costs.

- The Actual/Forecast 2019/20 has been kept the same as the budget as no better updated estimate is available. The budget figure for 2020/21 is based on an estimate provided by LHDA.
- The 2020/21 RSA Delegation costs have been escalated by 5% after consultation with the Delegation.
- The budget had expected higher royalties. Lower spend (R47m) is expected in the Actual/Forecast 2019/20. Royalty payments to Lesotho are lower due to lower volumes and a lower PPI. Higher royalties are expected for 2020/21 because of expected higher electricity price increases and a higher ESI adjustment. The budget also expects an additional 140mcm to be delivered during the period to catch up on demand quantities.

4.5. FINANCE CHARGES

	Actual/ Forecast 2019/20	Budget 2019/20	Variance	Total Budget 2020/21	(INCREASE)/ DECREASE on Actual/
Capital Market	863.12	872.75	9.64	857.73	5.39
Short Term Funding	(94.12)	(127.38)	(33.26)	(389.12)	295.00
Local Denominated Loans	1 096.31	1 430.63	334.32	1 435.77	(339.46)
TOTAL	**1 865.30**	**2 176.01**	**310.70**	**1 904.37**	**(39.07)**

Table: 7- values are in R'million

Finance Charges consist of interest that TCTA incurs in connection with the borrowing of funds.

Actual/Forecast finance charges are below the 2019/20 budget primarily because of lower funding utilised because of project delays. It is expected that auctions will be postponed because of delays in the finalisation of JSE regulatory requirements pertaining to the new bond programme.

The budget 2020/21 is expected to increase due to additional funding for new projects and auctions of R6.3bn for the redemption of WSP5 in May 2021.

4.6. CAPITAL REPAYMENTS

	Actual/Forecast 2019/20	Budget 2019/20	(Increase)/ Decrease	Budget 2020/21	(Increase)/ Decrease
LHDA capital repayments	11.03	11.03	0.00	7.46	3.57
TCTA capital repayments	1 219.46	1 104.46	(115.00)	693.34	526.12
Total	**1 230.49**	**1 115.49**	**(115.00)**	**700.80**	**529.69**

Table: 8- values are in R'million

The increase in the 2019/20 actual forecast capital repayments was because of R50m drawdown on the MMTS DBSA facility done in September 2019 that was not budgeted for. This will be paid in two instalments of R25m each in October and November 2019. The reason for the drawdown was to refinance commercial paper and proactively manage the borrowing limit. R50m was repaid on the BWP Absa facility. Also, R50m was drawn on 27 June 2018 on the BWP ABSA facility and repaid in April 2019. 31 March 2019 was a weekend, resulting in the DBSA capital payment of R10m being paid in April 2019. This was budgeted to be paid in March 2019

The budget for 2020/21 has significantly decreased due to the repayment of R500m ABSA revolving facility on the VRS project in 2019/20.

4.7. CAPITAL EXPENDITURE

The 2019/20 budget followed the National Infrastructure Plan, with capital expenditure on the implementation of MCWAP-2A and the conclusion of contractual matters related to contractor claims for ORWRDP-2C. Implementations of MMTS-2, MCWAP-1, AMD-STI, BWP and VRESAP have been completed and are fully operational.

UMWP and BRVAS are at project preparation phase and full implementation is pending finalization of institutional arrangement and securing funding.

AMD-LTS, Kriel, ORWRDP-2B and MRWP are on hold, pending securing of funding.
Table below provides a comparison of the 2019/20 budget as approved and the outcomes now expected as included in the Actual/forecast, as well the budget for 2020/21:

	Actual/Forecast 2019/20	Budget 2019/20	(Increase)/ Decrease	Percentage	Budget 2020/21
BWP	-	3.85	3.85	100%	0.15
ORWRDP2c	105.28	25.85	(79.43)	100%	139.08
VRESAP	0.13	-	(0.13)	0%	0.50
MMTS2	8.89	20.10	11.21	56%	20.60
MCWAP	0.72	1.45	0.73	51%	-
AMD	2.56	38.40	35.84	93%	29.40
AMDLT	-	51.44	51.44	100%	-
MCWAP2	169.22	168.78	(0.44)	0%	229.79
Kriel	3.05	24.95	21.90	88%	-
BRVAS	37.79	53.75	15.96	30%	20.94
UMWP	0.15		(0.15)		293.25
Subtotal	**327.79**	**388.57**	**60.78**	**16%**	**733.71**
LHWP2	1 384.87	2 500.00	1 115.13	45%	4 011.62
Total	**1 712.66**	**2 888.57**	**1 175.91**	**41%**	**4 745.33**

Table: 9- values are in R'million

- ORWRDP-2C: The Actual Forecast 2019/20 makes provisions for contractor claims. The Dispute Adjudication Board ruled in favour of the Contractor for a number of claims and reversal of negative certificate, as well as revised final re-measure quantities to conclude the final account. These resulted in an increase on the budgeted amount. The budget for 2020/21 is for the finalisation of rehabilitation works and possible claims. The PSP is expected to continue services until defects liability period and resolving remaining contractual issues are completed including project close out.

- AMD STI: A deferral in the planning and implementation of the Ergo sludge pipeline as a long-term solution for sludge disposal in the Eastern Basin has resulted in under expenditure. Implementation is now planned to commence in 2020/21.

- LHWP-2: Budget underspend is mainly because of delays in award of the advance infrastructure contracts. Progress has been achieved following the award of the key design and supervision contracts for the main dam and tunnel. In addition, some of the contracts for the construction of advance infrastructure such as access roads and site accommodation facilities have been concluded. Expenditure is expected to increase over the medium term as construction ramps up.

- MCWAP-2: There was a delay in the appointment of the PSP which was originally anticipated to be in February 2018. Board approval to enter into negotiations with the preferred tenderer was obtained in May 2018. Following successfully conclusion of the negotiations, contract award could not be concluded due to unavailability of funding. DWS subsequently transferred R 69 million to TCTA in January 2019 which enabled TCTA to award the PSP contract in March 2019. The full implementation of the project commenced thereafter with the PSP undertaking the designs activities of the project.

- Kriel Pipeline: Ongoing DWS funding constraints have resulted in a further delay in the completion of the project and under expenditure. Following TCTA's suspension of the works. No budget provision has been made pending receipt of further funding from DWS.

- BRVAS: Funding constraints have resulted in a delay in the award of the PSP contract and the reported under expenditure. No budget provision has been made pending resolution on the funding arrangements.

- UMWP: The directive for UMWP was received by TCTA on the 22 February 2019. Interim funding has been secured. The budget includes costs as per the project charter.

ANNEXURE C3

MEDIUM TERM EXPENDITURE FORECAST

1. PURPOSE

This document reflects expected net income generated from operations (Table 1) and the funding requirement after capital redemption and capital expenditures (Table 3) over the medium term. The main factors giving rise to the movements in the income/expenditure are items are explained.

The Medium-Term Budget for operating income and expenditure shows an increase in nett cash inflow from 2019/20 to 2022/23. This is largely because of the increase in the tariff income and lower interest costs as detailed below:

Medium Term Forecast for Operating Income and Expenditure

	Actual/ Forecast 2019/2020	Budget 2019/2020	TOTAL Budget 2020/2021	TOTAL Budget 2021/2022	TOTAL Budget 2022/2023
Tariff Billing	(7 294 359 740)	(7 095 003 459)	(7 902 329 757)	(8 360 119 343)	(8 741 084 414)
Total Receipts from Tariffs	**(7 294 359 740)**	**(7 095 003 459)**	**(7 902 329 757)**	**(8 360 119 343)**	**(8 741 084 414)**
Operating Costs	**1 779 005 800**	**2 031 098 012**	**2 277 669 460**	**2 346 166 842**	**2 458 475 808**
Management Contingency	13 873 254	17 005 895	18 740 000	19 677 000	20 660 850
TCTA Admin Costs	334 941 253	468 387 264	469 660 625	447 757 565	465 146 067
Project Cost Recoveries	(0)	-	0	-0	-0
Lesotho Operating Costs	1 123 934 607	1 171 620 666	1 355 556 802	1 423 334 643	1 494 501 375
Operations & Maintenance	306 256 686	374 084 188	433 712 033	455 397 635	478 167 516
Operating Inflows/Outflows	**(5 515 353 940)**	**(5 063 905 446)**	**(5 624 660 297)**	**(6 013 952 502)**	**(6 282 608 606)**
Finance Cost	1 865 303 132	2 176 007 627	1 904 374 449	1 983 233 757	2 537 493 008
Redemption Interest Received	(11 910)	-	-	-	-
	-	-	-	-	-
Total Finance Charges	**1 865 291 222**	**2 176 007 627**	**1 904 374 449**	**1 983 233 757**	**2 537 493 008**
Net Working Capital Cash (in)/outflows	**(3 650 062 718)**	**(2 887 897 820)**	**(3 720 285 847)**	**(4 030 718 745)**	**(3 745 115 598)**

Table 1- values in R

Tariff Income

Tariff billing increases from 2019/20 to 2022/23. The budgeted volumes and tariffs are based on Department of Water and Sanitation (DWS) estimates. LHWP (VRS) sees an increase which is largely attributable to a higher tariff. The water income for VRS, Berg Water Project (BWP) and Vaal River Eastern Subsystem Augmentation Project (VRESAP) continue to be billed in line with demand expectations as agreed with DWS, as well as the inflation-linked increases as per the water supply agreements/models. The Budget also includes the tariff for Mooi-Mgeni Transfer Scheme (MMTS), Komati Water Scheme Augmentation Project (KWSAP) and Mokolo and Crocodile River (West) Water Augmentation Project (MCWAP). The tariff billing for these projects is based on the water demands as received from DWS.
The table below shows the revenue per project for the medium term:

	Actual/Forecast 2019/2020			Budget 2019/2020			2020/2021			2021/2022			2022/2023		
Project	Tariff	Volume (mcm)	Billing (R million)	Tariff	Volume (mcm)	Billing (R million)	Tariff	Volume (mcm)	Billing (R million)	Tariff	Volume (mcm)	Billing (R million)	Tariff	Volume (mcm)	Billing (R million)
LHWP															
LHWP, LHWP2 & AMD- VRS	3.3370	1 700	5 673	3.2816	1 700	5 579	3.5133	1 750	6 148	3.8186	1 733	6 617	4.0038	1 731	6 931
BWP (3 months)1 April - 30 June	0.6000	92	55	0.6000	48	29	0.6000	62	37	0.4500	68	31	0.4275	76	32
BWP (9 months)1 July - 30 March	0.6000	140	84	0.6000	157	94	0.4500	203	91	0.4275	227	97	0.4061	230	93
VRESAP-ESKOM	1.7600	215	379	1.7601	208	366	1.7601	203	357	1.7380	195	338	1.8232	191	349
VRESAP-SASOL	2.2800	84	192	2.2759	84	191	2.3783	84	199	2.0548	84	172	2.1555	84	180
MMTS (3 months)1 April- 30 June	0.5510	117	64	0.5510	99	54	1.4980	99	148	1.5951	99	157	1.6988	99	167
MMTS (9 months)1 July- 30 March	1.4980	277	415	1.4920	296	441	1.5951	296	471	1.6988	296	502	1.8099	296	535
KWSAP	2.0100	76	152	2.0055	83	166	2.3791	72	171	2.4957	67	166	2.6180	66	173
MCWAP	12.6700	22	280	7.9249	22	175	12.6700	22	280	12.6700	22	280	12.6700	22	280
Total Tariff Receivable			**7 294**			**7 095**			**7 902**			**8 360**			**8 741**

Table 2: Volumes and Revenue in millions

Operating Costs

Overall, Operating costs increases by an average of 5.16% over the medium term. The main factors driving the increased expenditure are TCTA Admin costs and Lesotho Operating costs. Below are brief notes that provide reasons for the increases:

TCTA Admin Costs

TCTA Admin costs decreases by 3.26% and increases by 3.89% for 2021/22 and 2022/23 respectively. The net decrease in 2021/22 is due to the reduction of costs relating to consulting fees which required a higher budget in the 2020/21 financial year. The increase in 2022/23 expenditure is mainly driven by the inflation rate that has been applied as guided by the MTEF guidelines. Where costs were known for the medium term, they were budgeted for according to respective agreements and SLAs (e.g. office rentals, equipment rentals and rental of services and systems). With salaries being the highest cost for TCTA, the budget has made a provision for an average increment of 5%. Fixed overhead costs, where there are no contracts in place, are based on historic costs adjusted taking in consideration appropriate indexes or contractual escalation provisions.

Operations and maintenance

Operations and Maintenance is budgeted for in terms of agreements in place and expected outcomes over the medium term. The medium-term budget is based on the actual cost of operating all three basins and provision is made for increases, escalation and rates and taxes. The current contracts will end in September 2020; therefore the cost includes provision for a new contract and higher prices.

Lesotho Operating Costs

Lesotho operating costs have been increased by the projected escalation rates for 2021/22 and 2022/23 as per the MTEF guidelines. The main cost item relates to Royalty payments to Lesotho. Budgeted costs are based on LHDA cost projections and expected outcomes over the medium term.

Finance Charges

The marginal increase in the finance costs from 2020/21 to 2021/22 is due to the additional financing costs on the funding of the redemption portfolio for the WSP5 being largely offset by the investment income of the same.

The increase of 19.93% in 2022/23 is due to the additional funding required for LHWP2 to meet the escalation in the capital expenditure related to the award of the construction contracts of the main works (dam and tunnel).

Funding Requirements after Capital Repayments and Capital Expenditure

	Actual/ Forecast 2019/2020	Budget 2019/2020	TOTAL Budget 2020/2021	TOTAL Budget 2021/2022	TOTAL Budget 2022/2023
Net Working Capital Cash (in)/outflows	**(3 650 062 718)**	**(2 887 897 820)**	**(3 720 285 847)**	**(4 030 718 745)**	**(3 745 115 598)**
Capital Repayments	**1 230 486 149**	**1 115 486 949**	**700 798 354**	**10 197 026 273**	**806 351 409**
LHDA capital repayments	11 029 253	11 029 254	7 461 102	7 262 244	1 139 444
TCTA capital repayments	1 219 456 896	1 104 457 695	693 337 252	10 189 764 029	805 211 965
WS bond repayments	-	-	-	-	-
WS stock redemdemption assets redeemed	-	-	-	-	-
WS stock redemption assets purchased	-	-	-	-	-
Other Capital Repayments	-	-	-	-	-
Refinancing of short term debt	-	-	-	-	-
Fixed Assets	**7 851 367**	**5 095 381**	**18 178 099**	**5 568 750**	**9 197 188**
Furniture and fittings	489 000	900 000	500 000	525 000	551 250
Office equipment	450 000	450 000	525 000	551 250	578 813
Computer Hardware/Software	5 151 665	2 395 381	15 803 099	4 492 500	4 567 125
Building Contingency	1 350 000	1 350 000	1 350 000	-	-
Land & Buildings	-	-	-	-	-
Motor Vehicles	410 702	-	-	-	3 500 000
Capital Expenditure	**1 712 655 285**	**2 888 568 905**	**4 745 332 954**	**5 848 967 312**	**17 024 803 772**
TCTA Projects			-		
Main works	-	-	-	1 987 397 699	4 739 459 604
Infrastructure	118 437 398	50 500 000	134 325 717	326 424 854	479 861 287
Bulk power	-	-	-	-	-
Sundry Expenses	-	-	-	-	-
Ancillary Infrastructure	78 000 000	88 000 000	120 431 918	73 288 886	269 503 520
Main works	150 000	-	289 020 614	364 375 747	320 245 222
Infrastructure	115 286 647	143 092 795	152 867 044	138 564 386	148 720 534
Support Services	1 067 550	1 230 000	2 219 821	3 549 193	43 100 607
Other	-	-	-	-	-
Technical Support	133 818	-	-	-	-
Expropriation & land aquisition	7 024 050	11 223 952	18 476 886	77 475 886	105 731 913
Environmental	423 889	5 754 495	1 680 148	45 406 529	17 524 524
Natural	3 652 021	22 200 318	13 443 736	8 564 415	29 110 135
Social	-	15 000	-	6 906 110	49 130 226
Health & Safety	600 000	2 400 000	1 245 000	1 271 250	1 298 813
Subtotal	**324 775 373**	**324 416 560**	**733 710 883**	**3 033 224 954**	**6 203 686 387**
LHWP2					
LHWP2 Construction	1 387 879 913	2 564 152 345	4 011 622 071	2 815 742 358	10 821 117 385
Total funding requirement before adjustment for accruals and non-cash flow items	**(699 069 917)**	**1 121 253 415**	**1 744 023 560**	**12 020 843 590**	**14 095 236 769**
Recovery from DWS	**126 913 195**	**67 473 284**	**155 261 942**	**247 029 014**	**267 059 196**
Non cash flow items and accruals	(697 646 308)	(497 956 938)	(142 777 038)	(194 321 637)	910 747 332
TOTAL COMMERCIAL FUNDING REQUIREMENT	**-128 336 804**	**1 551 737 069**	**1 731 538 656**	**11 968 136 214**	**13 451 548 633**
TOTAL FUNDING REQUIREMENT	**-1 423 609**	**1 619 210 353**	**1 886 800 598**	**12 215 165 228**	**13 718 607 829**

Table 3- values in R

The lower than anticipated funding requirement for 2019/20 is mainly due to the lower capital expenditure on projects being delayed. From 2021/22 to 2022/23 a significant increase in the commercial funding requirements is expected due to the repayment of the maturing WSP5 bond (R9.43 billion) and a sharp increase in the capital expenditure.

Capital Repayments

LHDA and TCTA Capital repayments are in accordance with loan agreements. TCTA is expected to allocate R11 billion towards the redemption portfolio. Included in the medium-term costs are capital repayments of WSP4 and WSP5 in May 2020 (R96.52m) and May 2021 (R9.43bn).

Fixed Assets

Fixed Assets have been budgeted for based on expected acquisitions in the medium term.

Capital Expenditure (Capex)

Capex has been budgeted for in accordance with the Capital Expenditure Plans, contracts in place and charters of the projects, considering the revised timelines and the dynamics of each project. Capital expenditure of Phase II of the LHWP is the main contributor towards the increased capital expenditure over the medium term. The award of the main constructions for the Polihali Dam and connecting tunnel to the Katse Dam is planned for towards the end of 2020. Expenditure on Construction Infrastructure increases over the medium term. The medium term also includes costs for UMWP and BRVAS where initial funding has been secured from DWS.

The medium-term budget now includes the costs for potential new projects or directives where funding is in the process of being secured.

TCTA Projects

	Actual/Forecast 2019/20	Budget 2019/20	Budget 2020/21	Budget 2021/22	Budget 2022/23
TCTA Projects					
BWP	-	3 850 000	150 213	5 377 000	-
ORWRDP2c	105 281 145	25 848 905	139 080 851	-	-
VRESAP	133 818	-	500 000	-	-
MMTS2	8 888 928	20 100 000	20 600 000	100 000	13 125 000
MCWAP	717 525	1 450 000	-	228 350 000	329 767 500
AMD	2 558 688	38 400 000	29 400 000	-	-
AMDLT	-	51 440 000	-	-	
MCWAP2	169 220 434	168 780 000	229 785 159	2 245 718 309	2 427 810 873
Kriel	3 050 000	24 950 000	-	-	
BRVAS	37 786 750	53 750 000	20 940 346	179 873 559	211 538 774
MRWP	-	-	-	-	
UMWP	150 000	-	293 254 313	373 806 086	3 221 444 240
Subtotal	**327 787 288**	**388 568 905**	**733 710 883**	**3 033 224 954**	**6 203 686 387**
LHWP2	1 384 867 997	2 500 000 000	4 011 622 071	2 815 742 358	10 821 117 385
Subtotal	**1 712 655 285**	**2 888 568 905**	**4 745 332 954**	**5 848 967 312**	**17 024 803 772**

ANNEXURE D

RISK MANAGEMENT PLAN 2020/21

1. PURPOSE

The Risk Management Plan for the 2020/21 describes how risk management will be structured and performed to ensure that risks are managed and controlled to acceptable levels. This plan documents the processes, tools and procedures that will be used to manage and control those events that could have a negative impact to TCTA in achieving its business objectives. The objective of risk management processes is to minimise the impacts of unplanned incidents by identifying and addressing potential risks before significant negative consequences occur.

2. OBJECTIVE

The main objective of the risk management implementation plan is to facilitate the execution of risk management. The risk management implementation plan for TCTA is prepared to give effect to the implementation of the risk management policy and framework sets out all risk management activities for 2020/2021financial year. The plan provides an annual programme of risk management activities, associated timelines and responsibilities.

3. APPROACH

The development of the risk management implementation plan takes into account the approved risk management policy, the risk management framework and available resources and sustainability. The Risk Management team will implement a continuous risk management process focusing on risk assessment and mitigation. Risk assessment includes activities to identify risks, analyse and prioritise. Risk mitigation includes developing risk mitigation strategies as well as monitoring the impact of the strategies and residual risks.

4. DETAILED ANNUAL RISK MANAGEMENT PLAN

The attached risk management plan is in the form of a project plan which records tasks, names or responsible persons and target dates. The plan for 2020/2021 outlines the activities to be undertaken as well as the outputs and outcomes. Implementation against the plan will be monitored and activities updated on a continuous basis.

The detailed risk management implementation plan is outlined in Annexure D1.

5. KEY RISKS IDENTIFIED BY BOARD AND MANAGEMENT

The Board Risk workshop held in in February 2020, identified key risks likely to prevent TCTA from achieving its business objectives. The basis for the risks identification were the 2020/2021 business objectives and balanced scorecard. The risks, potential causes, existing controls and management actions were identified during the workshop. A detailed risk register is attached as Annexure D2.

6. CONCLUSION

The Board and Audit and Risk Committee will monitor the performance against the Annual Risk Management on an annual basis. Furthermore, the Audit and Risk Committee will monitor implementation of mitigation measures to reduce the risk to the desired levels.

RISK MANAGEMENT PLAN ACTIVITIES FOR 2020/21

ANNEXURE D1					
Objective	**No**	**Activity**	**Target Date**	**Responsible Person**	**Outcome**
BOARD OVERSIGHT					
Oversight on the implementation of the Risk Management Policy and Framework/Risk Management Strategy	1	Risk Management - Oversight	Quarterly – Scheduled Audit and Risk Committee Meetings	Audit and Risk Committee	Consideration of the Quarterly Risk Management Report
	2	Board Strategic Risk Assessment	Annually – January 2021	Board / Exco	Identification of Key Strategic Risks. Assessment Effectiveness of Controls Ranking- Inherent and Residual Risks. Development of Mitigation Measures. Assignment of Risk Owners and Due Dates.
Governance f Risks					
Effective planning of risk management processes	1	Monitoring the Implementation and Execution of the Risk Framework and Policy/ Functioning of the Risk Management Unit	January 2021	CRO Audit and Risk Committee	1. Development of the Annual Risk Management Plan. 2. Approval of the Annual Risk management Plan by the Audit and Risk Committee.
Development and Review of the Risk Management Frameworks and	2		April 2020	CRO/Risk Manager	Approval of the Risk Management Policy and frameworks by the Risk Committee

ANNEXURE D1					
Objective	**No**	**Activity**	**Target Date**	**Responsible Person**	**Outcome**
Policies and procedures		Review of the Risk Management Policy Review of the Risk Management Framework			
		Review of the Materiality and significance framework	November 2020	CRO/Risk Manager	Approval of the Materiality and Significance Framework by the Audit and Risk Committee.
		Review of the Treasury Risk Management policy Review of the Investment Policy	May/June 2020 November 2020	CRO/Risk Manager	Approval of the Treasury Risk Management policy
		Review Fraud Prevention Policy Review Fraud Prevention strategy and Plan	November 2020	CRO/Risk Manager	Approval of the fraud prevention policy, strategy and plan

ANNEXURE D1					
Objective	**No**	**Activity**	**Target Date**	**Responsible Person**	**Outcome**
		Review of the Business Continuity Policy and Framework	May 2020	CRO/Risk Manager	Approval of the Business Continuity Policy and Framework.
		Management of risks within acceptable levels	April 2021	CRO/Risk Manager	Development of TCTA risk appetite framework
Risk Management Awareness and Embedment of Risks Management within TCTA					
To raise organisational risk awareness		Create risk awareness sessions across the organisation.	April 2020, August 2020	Chief Risk Officer / Risk Manager	Training of All employees on risks management within TCTA to create Awareness. Compilation of the Risk Management articles on relevant topics and post on TCTA Intranet and distribute by email.
		Embedment of Risk Management within business processes and divisions.	April and August 2020	Chief Risk Officer / Risk Manager	Training of Risk Forum Members and Risk Champions

ANNEXURE D1					
Objective	**No**	**Activity**	**Target Date**	**Responsible Person**	**Outcome**
		Management and Monitoring of all risks within TCTA.	April, July, September 2020, March 2021	CRO/Risk Department	Risk Forum discusses and review the risks within the organisation.
Enterprise wide risk management					
DIVISIONAL RISKS					
Identification of the Divisional risks. *The basis for the risk assessment will be the 2020/2021 divisional business plans and objectives.*	1	Conducting and Facilitating Divisional Risk Assessments Workshops.	April 2020	CRO/Executive Management	Development of the Divisional risks registers reflecting their key risks.
Continuous Monitoring of Emerging Risks	2.	Review of the Divisional Risks	Monthly and Quarterly	CRO/Executive Management	Revised and Updated Risk Registers with the following: Emerging Risks Risks identified in the Internal Audit Reports Revised Mitigation measures and dates of implementation.
DEPARTMENTAL OPERATONAL RISKS					
Identification of the Operational Risks	1	Conducting and Facilitating Departments Risk Assessments	April 2020	Risk Manager/ Senior Managers	Development of the operational risk registers reflecting the

ANNEXURE D1					
Objective	**No**	**Activity**	**Target Date**	**Responsible Person**	**Outcome**
The basis for the risk assessment will be the 2020/2021 department business plans and objectives		Workshops I.e. Procurement			department operations risks.
Continuous Monitoring of Emerging Operational Risks	2	Review of the Departments operational Risks	Monthly and Quarterly	Risk Manager/ Senior Managers	Revised and Updated Risk Registers with the following: Emerging Risks Risks identified in the Internal Audit Reports Revised Mitigation measures and dates of implementation.
PROJECT RISKS					
Identification of the Projects Risks for all projects.	1	Conducting and Facilitating Projects Risk Assessments Workshops.	April 2020 and May 2020	Risk Managers/ Project Managers	Development of a projects risk registers reflecting all projects related risks.
Continuous Monitoring of Emerging Operational Risks	2	Review of the Projects Risks	Monthly and Quarterly	Risk Managers/ Project Managers	Revised and Updated Projects Risk Registers with the following: Emerging Risks Risks identified in the Internal Audit Reports Revised Mitigation measures and dates of implementation.

ANNEXURE D1					
Objective	**No**	**Activity**	**Target Date**	**Responsible Person**	**Outcome**
TREASURY RISKS					
Management of Treasury and Financial Risk	1	Monitoring Interest Rate Liquidity Risk Counterparty Risk Borrowing Limits	Daily and bi-weekly	Risk Manager/ Senior Risk Officers	Counterparty limit utilisation report, Interest rate risk report, Liquidity reports and borrowing limit report.
FRAUD RISK					
Identification of fraud risks emanating from the Business Operations.	1	Conducting and Facilitating Fraud Risk Assessments Workshops within the various division.	April, May 2020	CRO/EXCO	Development of a risk management register reflecting all treaty related matters.
Continuous Monitoring of Emerging Operational Risks	2	Review of Fraud Risks	Monthly and Quarterly	CRO/EXCO	Revised and Updated Fraud Risks Registers.
Business Continuity Management					
Implementation of the Business Continuity Management	1	Create business continuity awareness sessions across the organisation	May 2020	CRO/ Risk Manager	Training of Risk Champion on Business Continuity.

ANNEXURE D1					
Objective	**No**	**Activity**	**Target Date**	**Responsible Person**	**Outcome**
	2	Conduct Business Impact Assessment	June 2020	CRO/ EXCO	Divisional Business Impact Assessment reports and Consolidated Reports. Business Continuity Management Plan Disaster Recovery Plan
	3.	Test Effectiveness of the Business Continuity	August 2020	CRO/ EXCO	Assessment Report with findings and recommendation.
RISK FINANCING					
Management of risk financing (Insurance)	1	Conduct risk assessment of Corporate risk exposures to identify insurable risks.	May and June 2020	CRO/ Risk Manager	Insurance Report with the placement terms.
	2	Development of Insurance Policy and Procedures	September 2020	Risk Manager	Approved insurance policy.
Monitoring and Reporting					
Management and Monitoring of Risks	1	Provide risk management advisory	May 2021	CRO	key risk indicator trends and movements
	2	Electronic Management and Updating of Risk	June 2020	Risk Manager	Training of Risk Champions on the use

ANNEXURE D1					
Objective	**No**	**Activity**	**Target Date**	**Responsible Person**	**Outcome**
		Registers by the Divisions.			of the risk management systems.
Annual Report	3	Provide Assurance on the status of risk management within TCTA.	June, 2020	CRO/ Risk Manager	Risk Management section Annual Report
Efficiency and Effectiveness of the Risk Management Function	4	Appraise the Risk Management Process and Function	March 2021	Internal Audit	Internal Audit Report-Audit and Risk Committee.
Risk reporting	5	Exco Board	Monthly or bi-monthly Quarterly	CRO/ Risk Manager	Risk Management Reports

ANNEXURE D2

STRATEGIC THEMES	STRATEGIC OBJECTIVES	RISKS	RISK OWNER	CONSEQUANCES	POTENTIAL CAUSES	EXISTING CONTROLS	INHERENT RISK RATING	RESIDUAL RISK RATING	ACTION PLANS	ACTION PLAN OWNER	ACTION PLAN DUE DATE	COMMENTS
TECHNOLOGY	* Implement the ICT Strategic Plan and ERP system	11. Failure to implement ITC strategy in support of key business processes and strategic objectives	Ola Busari Chief Strategy Officer	* Business objectives not achieved. * Financial losses * Process inefficiencies - (lack of productivity)	Lack of appropriate skills and capacity	Oracle training path for internal resources	**EXTREME**	**HIGH**	1. Set up ICT Steering Committee 2. Appointment of service provider to provide Oracle HR support	1. Ola Busari Chief Strategy Officer 2. IT Manager	1. March 2020 2. March 2020	
					Procurement delays	Procurement improvement plan			None			
					Aging infrastructure - technology obsolescence	Infrastructure revamp plan			1.Infrastructure revamp plan: 5-year contract with service provider (Cloud) to assess, design, implement and maintain infrastructure 2. Monitoring the infrastructure revamp plan progress	1. IT Manager 2. IT Manager	1. Ongoing	
		12. ICT failure and loss of data	Ola Busari Chief Strategy Officer	* Business disruption * Project delays * Reputational damage	Lack of sufficient of disaster recovery	Infrastructure revamp plan	**EXTREME**	**EXTREME**	1.Infrastructure revamp plan: 5 year contract with service provider (Cloud) to assess, design, implement and maintain infrastructure 2. Monitoring the infrastructure revamp plan progress	1. IT Manager 2. IT Manager	1. Ongoing	
					Aging infrastructure - technology obsolescence							
					Failure to maintain systems and infrastructure							
					Inadequate back-up strategies	Data back-up policy Implemented procedure - back up daily (IS)			None			

ANNEXURE D2

STRATEGIC THEMES	STRATEGIC OBJECTIVES	RISKS	RISK OWNER	CONSEQUANCES	POTENTIAL CAUSES	EXISTING CONTROLS	INHERENT RISK RATING	RESIDUAL RISK RATING	ACTION PLANS	ACTION PLAN OWNER	ACTION PLAN DUE DATE	COMMENTS
		13. Cyber-attacks and data breach	Ola Busari Chief Strategy Officer	* Reputational damage * Non-compliance * Business disruption * Loss of critical data loss * Cost of securing new systems	Aging infrastructure - technology obsolescence	Infrastructure revamp plan	EXTREME	HIGH	1.Infrastructure revamp plan: 5-year contract with service provider (Cloud) to assess, design, implement and maintain infrastructure	1. IT Manager	1. Ongoing	
					Inadequate ICT security controls	ICT security policy Annual penetration test Awareness sessions (Annually) Phishing exercises			1. Review ICT security policy	1. IT Manager	1. End April 2020	
GOVERNANCE, COMPLIANCE AND COMBINED ASSURANCE	* Enhance the internal control environment, risk management and governance	9. Ineffective internal controls, corporate governance and risk management	Matumelo Masongwa Chief Internal Audit / Leonard Radzuma Chief Risk Officer	*Qualified audit opinions *Increase in irregular expenditure *Compromised governance processes * Reputational damage	Insufficient integrated combined assurance framework	Risk Forum	EXTREME	HIGH	1. Draft Combined Assurance Framework 2. Review of the Risk Forum Terms of Reference to include Combined Assurance 3. Development of a training and awareness Programme for implementation	1. Matumelo Masongwa Chief Internal Audit 2. Leonard Radzuma Chief Risk Officer 3. Leonard Radzuma Chief Risk Officer	1. March 2020 2. March 2020 3. March 2020	
					Siloed approach to assurance functions							
					Inadequate risk awareness culture	Insights - Risk Awareness Internal Communication (Quarterly)			1. Perform risk culture survey 2. Develop training and awareness programme based on the gaps identified during the Risk Culture survey	1. Leonard Radzuma Chief Risk Officer 2. Leonard Radzuma Chief Risk Officer	1. End March 2020 2. End April 2020	

ANNEXURE D2

STRATEGIC THEMES	STRATEGIC OBJECTIVES	RISKS	RISK OWNER	CONSEQUANCES	POTENTIAL CAUSES	EXISTING CONTROLS	INHERENT RISK RATING	RESIDUAL RISK RATING	ACTION PLANS	ACTION PLAN OWNER	ACTION PLAN DUE DATE	COMMENTS
		18. Disconnect between old treaty requirements and evolving regulatory requirements	Leonard Radzuma Chief Risk Officer	* Non-compliance * Reputational damage * Audit findings	Old treaty	None	EXTREME	EXTREME	1. Review of Treaty requirements to align with the current Governance Framework	1. Leonard Radzuma Chief Risk Officer	1. End 2021	
		10. Inadequate business intelligence / absence of management information for decision making	Ola Busari Chief Strategy Officer	* Inefficient business processes * Delays in decision making * Negative impact on organisational performance and productivity * Financial loss	Disconnect between strategy and planning	Exco structure (not currently effective addressing coordinating)	EXTREME	HIGH	1. Review and alignment of the business planning and strategic planning process	1. Ola Busari Chief Strategy Officer	1. End April 2020	
					Lack of capacity to perform business analysis	Appointed Business Analysis Function			1. Strengthen Function: Streamline and focus capacity on Business Analysis - Quarterly reporting 2. Ongoing organisation efficiency study	1. Ola Busari Chief Strategy Officer 2. Hanje Botha	1. End March 2020 2. End April 2020	
					Systems and tools to gather information (Slow manual information gathering)	ICT Strategy			1. Assessment of the effectiveness and adequacy of Oracle	1. IT Manager	1. End of July 2020	
HUMAN CAPITAL	* Ensure organisational culture is in support of business strategy * Develop skilled and capable employees	1. Inability to attract, retain and engage skilled individuals in alignment with achievement of strategic objectives	Hanje Botha Executive: HRM & OD	* Lack of productivity * Low Staff morale * Inability to achieve strategic objectives	Changing workforce expectations	Organisational climate response plan	HIGH	HIGH	1. Training and awareness: New world of work (At Leadership and management level) 2. Development of future of work response plan	1. Hanje Botha Executive: HRM & OD 2. Hanje Botha Executive: HRM & OD	1. End of 2020 2. Q1 2021	

ANNEXURE D2												
STRATEGIC THEMES	**STRATEGIC OBJECTIVES**	**RISKS**	**RISK OWNER**	**CONSEQUANCES**	**POTENTIAL CAUSES**	**EXISTING CONTROLS**	**INHERENT RISK RATING**	**RESIDUAL RISK RATING**	**ACTION PLANS**	**ACTION PLAN OWNER**	**ACTION PLAN DUE DATE**	**COMMENTS**
					Inconsistent application of HR policies and procedures	Training and awareness on critical policies and procedures Rolling plan of policy and procedure updates			1. Consequence management training	1. Hanje Botha Executive: HRM & OD	1. Feb-March 2020	
					Inadequate and ineffective performance and people management	Performance management policy, templates and training People Strategy and supporting strategies namely Talent Management, Employee Relations and Remuneration			1. Performance management implementation 2. Implement monitoring plan for consequence management	1.Hanje Botha Executive: HRM & OD 2. Hanje Botha Executive: HRM & OD	1. April 2021 2. April 2021 onward	
					Uncertainty in project pipeline leading to inability to do strategic resource planning	None			1. Presentation of the draft Notice of Establishment	1. Ola Busari Chief Strategy Officer	1. End March 2020	
					Inadequate and insufficient training and development programmes	Approved training plan - ROI monitoring			1. Training plan review	1. Hanje Botha Executive: HRM & OD	1. - Skills requirements: Aug2020 - Skills audit - End 2021	
					National Skills Shortage	Project Naledi - Scarce skills programme (Bursaries and internships)			1. Effectiveness of Scares Skills Programme review 2. Investigate exchange programme with Denmark to determine the back to office value	1. Hanje Botha Executive: HRM & OD 2. Hanje Botha Executive: HRM & OD	1. End 2020 2. Jan 2021	
					Historical open Employee	None			1. Ongoing monitoring and tracking of	1. Hanje Botha Executive: HRM & OD	1. Ongoing	

ANNEXURE D2												
STRATEGIC THEMES	**STRATEGIC OBJECTIVES**	**RISKS**	**RISK OWNER**	**CONSEQUANCES**	**POTENTIAL CAUSES**	**EXISTING CONTROLS**	**INHERENT RISK RATING**	**RESIDUAL RISK RATING**	**ACTION PLANS**	**ACTION PLAN OWNER**	**ACTION PLAN DUE DATE**	**COMMENTS**
					Relations cases				historical cases			
					Lack of adequate and sufficient internal communication	Employee Engagement Strategy (Year 1)			1. Review effectiveness of employee engagement strategy2. Development of a communications implementation plan for leadership, specialists and middle management	1. Hanje Botha Executive: HRM & OD2. (Combined effort with Communications Department)	1. April 20212. Mid 2020	
FINANCIAL SUSTAINABILITY	* Manage debt within the approved borrowing limit * Raise funding for implementation of infrastructure * Effective control of corporate expenditure to match project workload	2. Sustainability of TCTA business model	Ola Busari Chief Strategy Officer	* Inability to plan effectively * Negative cost spread (concentration of overheads) * Inability to meet financial obligations * Underutilization of resources and inability to do resource planning	Uncertainty of directives	Financial Sustainability Report	EXTREME	EXTREME	1. Presentation of the draft Notice of Establishment 2. Presentation of proposal for repositioning TCTA 3. Ongoing engagement with the shareholder	1. Ola Busari Chief Strategy Officer 2. Ola Busari Chief Strategy Officer 3. Ola Busari Chief Strategy Officer	1. End March 2020 2. April 2020 3. Ongoing	
					Full cost recovery basis - cost allocation							
		3. Failure to meet payment obligations	Nhlanhla Nkabinde Executive: Project Finance	* Reputational damage * Inability to access funding * Increase in cost of funding	Slowdown of economic growth and lower revenue collection / Weak government finances	Long term liquidity facility - committed facilities from Banks Commercial pay pal Government support	EXTREME	MODERATE	1. Ongoing stakeholder engagement to strengthen the relationship between TCTA and DWS and National Treasury 2. Ongoing engagement with the Banks	1. Board 2. Executive: Project Finance	1. Ongoing 2. Ongoing	
					Defaults leading to inability to access of funding	Agreements with DWS						
					DWS inability to pay TCTA - DWS financial sustainability	Take off agreements between DWS and User						

ANNEXURE D2

STRATEGIC THEMES	STRATEGIC OBJECTIVES	RISKS	RISK OWNER	CONSEQUANCES	POTENTIAL CAUSES	EXISTING CONTROLS	INHERENT RISK RATING	RESIDUAL RISK RATING	ACTION PLANS	ACTION PLAN OWNER	ACTION PLAN DUE DATE	COMMENTS
		4. Inability to raise funding	Nhlanhla Nkabinde Executive: Project Finance	* Project delays	Investors' appetite for exposure to TCTA credit	Governance structures	EXTREME	HIGH	1. TCTA profiling - Arrange investors roadshows 2. Expansion of funding base -	1. Nhlanhla Nkabinde Executive: Project Finance 2. Nhlanhla Nkabinde Executive: Project Finance	1. Financial year end 20/21 2. Financial year end 20/21	
					Poor operational results	(Link to risk: Ineffective internal controls, corporate governance and risk management)			None			
					Default on loan agreements	(Link to risk: Ineffective internal controls, corporate governance and risk management)			1. Ongoing engagement with lenders	1. Nhlanhla Nkabinde Executive: Project Finance	1. Ongoing	
					Ongoing perception of the state of SOE's	None			1. TCTA profiling - Arrange investors roadshows	1. Nhlanhla Nkabinde Executive: Project Finance	1. Financial year end 20/21	
					Failure to get borrow limit authorisations	Implementation agreements (ineffective - do not enforce rights)			1. Engagement with the DWS on the enforcement of the implementation agreements	1. Finance Department	1. End April 2020	
					Failure to get Government guarantees	None			1. Ongoing lobbying at shareholder level	1. Board	1. Ongoing	
					Funding structure not sound	Funding structure guideline Approval process			None			

ANNEXURE D2

STRATEGIC THEMES	STRATEGIC OBJECTIVES	RISKS	RISK OWNER	CONSEQUANCES	POTENTIAL CAUSES	EXISTING CONTROLS	INHERENT RISK RATING	RESIDUAL RISK RATING	ACTION PLANS	ACTION PLAN OWNER	ACTION PLAN DUE DATE	COMMENTS
		5. Fraud and corruption	Matumelo Masongwa Chief Internal Audit	* Reputational damage * Financial loss * Inability to access funding * Increase in cost of funding	Ineffective internal controls	Fraud and corruption policy Fraud hot-line Fraud prevention plan and strategy	HIGH	MODERATE	1. Development and implementation of fraud awareness programme	1. Risk Management Department	1. End June 2020 - thereafter quarterly	
		6. Default on loan agreements	Nhlanhla Nkabinde Executive: Project Finance	* Reputational damage * Inability to access funding * Increase in cost of funding * Call up of debt	Non-compliance to agreement requirements	Appointed Financial Planner (Compliance to Loan Agreements)	EXTREME	HIGH	1. Development of Compliance Universe and checklist for monitoring for each loan	1. Nhlanhla Nkabinde Executive: Project Finance	1. March 2021	
INNOVATION	* Position TCTA as a thought leader in critical aspects of water security	16. Inadequate drive of innovation across the organisation	Ola Busari Chief Strategy Officer	* Reputational damage * Inability to achieve strategic objectives	Lack of support for research and innovation (stringent compliance and reporting requirements)	Continues engagement the board and shareholders Partnership	HIGH	HIGH	1. Development of a Knowledge Plan (cover more business streams - integration and focus on innovation)	1. Ola Busari Chief Strategy Officer	1. May 2020	
					Organisational culture	Knowledge sessions						
SUPPLY CHAIN	* Ensure implementation of a fair, transparent, equitable, competitive, timeous and cost-effective supply chain management system	14. Ineffective supply chain management	Busisiwe Shongwe Chief Financial Officer	* Increase in number of failed tenders *Failure to procure goods on time * Project implementation delays *Fruitless and wasteful expenditure * Irregular expenditure *	Insufficient skills	Ad hoc training	EXTREME	HIGH	1. Development of training programme - Train a trainer programme	1. Procurement Manager	1. End March 2020	
					Lack of accountability and ownership	Appointment of Procurement Champions			1. Implementation of the delegation of authority roll-out plan - Includes training and awareness 2. Alignment procedures to the new DoA	Procurement Manager	1. Feb 2020 2. End April 2020	
					Changing regulatory requirements	National Treasury forum SOEF forum			None			
					Inadequate planning	Procurement plan			1. Measurements and monitoring to be included into the	1. Procurement Manager	1. End April 2020	

ANNEXURE D2												
STRATEGIC THEMES	**STRATEGIC OBJECTIVES**	**RISKS**	**RISK OWNER**	**CONSEQUANCES**	**POTENTIAL CAUSES**	**EXISTING CONTROLS**	**INHERENT RISK RATING**	**RESIDUAL RISK RATING**	**ACTION PLANS**	**ACTION PLAN OWNER**	**ACTION PLAN DUE DATE**	**COMMENTS**
									balance score card			
					CSD reliance	None			None			
					Insufficient capacity (unplanned procurement creating additional pressure)	Procurement plan			1. Review current structure - End April 2020	1. Procurement Manager	1. End April 2020	
		15. Non-compliance of the procurement process to the PFMA and related regulations	Busisiwe Shongwe Chief Financial Officer	* Irregular expenditure *Audit findings * Reputational damage	Insufficient skills	Procurement committee	**EXTREME**	**HIGH**	1. Development of training programme - Train a trainer programme	1. Procurement Manager	1. End March 2020	
					Unplanned procurement creating pressure	None			1. Review of current Procurement Function structure	1. Procurement Manager	1. End April 2020	
					Non-compliance to TCTA policies and procedures	Dedicated compliance resources			None			
PROJECT EXECUTION	* Implement capital projects in accordance with the timelines agreed with DWS * Operate and maintain designated projects in accordance with DWS requirements/specifications * Resolve critical project matters identified during the year * Coordinate and monitor the efficient implementation of the projects within SIP-3 and SIP-18	8. Failure to implement projects within time, budget, technical specifications and environmental requirements	Johann Claassens Executive: Project Management and Implementation	* Cost overruns * Environmental impact / fines * Reputational damage	Climate variability, extreme weather events and change in rainfall patterns	Stakeholder engagement programme per project planning - Contractor allocated - Insurance - FIDC - Contractor agreements	**EXTREME**	**MODERATE**	1. Investigate / Planning - Trends analysis to incorporate - Provision in contract in standing time	1. Johann Claassens Executive: Project Management and Implementation	1. End April 2020	
					Non-availability of funding	Implementation agreements Reasonable assurance			1. Investigate flexible contractual agreements	1. Johann Claassens Executive: Project Management and Implementation	1. End April 2020	
					Unreliable or insufficient power supply	Standby generators (maintenance mode)			1. Review conditions of contracts to take into account power supply	1. Johann Claassens Executive: Project Management and Implementation	1. April 2020	

ANNEXURE D2

STRATEGIC THEMES	STRATEGIC OBJECTIVES	RISKS	RISK OWNER	CONSEQUANCES	POTENTIAL CAUSES	EXISTING CONTROLS	INHERENT RISK RATING	RESIDUAL RISK RATING	ACTION PLANS	ACTION PLAN OWNER	ACTION PLAN DUE DATE	COMMENTS
					Poor performance of contractors / service providers	Contractor agreements Appointment of PSP (Contractor performance management)			None			
					Increase in prolonged and violent community unrest causing delays	Stakeholder engagement programme per project			1. Review conditions of contracts - Contractor obligations 2. Review stakeholder engagement strategy per project 3. Develop work instruction for crisis escalation	1. Johann Claassens: Executive PMID 2. Johann Claassens: Executive PMID/Wanda Mkutshulwa: Head of Communication 3. Johann Claassens: Executive PMID / Leonard Radzuma Executive: CRO	1. end May 2020 2. end May 2020 3. end May 2020	
					Inability to procure effectively (specifications)	Procurement Plan Quality assurance process on tender specs			None			
					Insufficient industry capacity and skills	Small Contractor Development Programme			None			
					Time lag between feasibility to implementation of projects	Due diligence process			None			
					Delays due to environmental compliance requirements	Environmental monitoring committee Environmental Policies			1. Technical support to applications	1. Johann Claassens Executive: Project Management and Implementation	1. Ongoing	

ANNEXURE D2

STRATEGIC THEMES	STRATEGIC OBJECTIVES	RISKS	RISK OWNER	CONSEQUANCES	POTENTIAL CAUSES	EXISTING CONTROLS	INHERENT RISK RATING	RESIDUAL RISK RATING	ACTION PLANS	ACTION PLAN OWNER	ACTION PLAN DUE DATE	COMMENTS
					Change in regulatory environment	Monitoring programme (Legal and Compliance) Training and awareness programme (Legal and Compliance)			1. Applied for exemption application to National Treasury 2. Approval of delegation of authority 3. Updated work instructions	1. Johann Claassens: Executive PMID/Azwianewi Nelwamondo: Procurement Manager 2. EXCO 3. Johann Claassen Executive PMID	1. end May 2020 2. end March 2020 3. end March 2020	
SOCIAL		17. Loss of social license to operate	Percy Sechemane Chief Executive Officer	* Reputational damage * Employee or contractor culture * Social unrest / boycotting * Inability to access funding	Association with unethical partners	FICA process - Know Your Client	**HIGH**	**MODERATE**	1. Development of a Compliance Risk Management Policy	1. Risk Management Department	1. End March 2020	
					Irresponsible impact on the social and natural environment	Social and environmental policies Environmental monitoring committee			1. Proactively implement approved stakeholder engagement strategy 2. Prioritising the project communities	1. Ola Busari Chief Strategy Office 2. Ola Busari Chief Strategy Office	1. Immediate 2. Ongoing	
					Discrimination	HR Policies Diversity training SCM Policies and Procedures			None			
					Breakdown in ethical business practices	Ethics Policy and Framework			1. Monitoring and reporting on Ethics	1. Risk Management Department	1. Ongoing	

ANNEXURE E

FRAUD PREVENTION PLAN

1. PURPOSE

The purpose of the Fraud Prevention Plan “the plan” is to outline the TCTA strategy and process towards fraud risk management, and to reinforce management commitment to prevent, mitigate and reduce the risk of fraud. The plan also provides mechanisms for the early detection of fraud, reporting and the investigation of fraud to minimise the fraud risk exposure and promote ethical behaviour within TCTA. The plan focuses on addressing the root causes of fraud and deter similar incidents of fraud from occurring.

The plan is dynamic, and it will continuously be reviewed as and when TCTA makes changes and improvements to its fraud risk management efforts. Furthermore, the plan is also aimed at raising fraud awareness amongst employees, service providers, as well as in dealings with other stakeholders (i.e. DWS, funders). Specific initiatives to be undertaken to prevent fraud are listed below and thereafter discussed in greater detail:

- Good corporate governance
- Implementation of the Code of Business Conduct
- Fraud awareness and training
- Performance of fraud risk assessment
- Enhancement of internal controls and systems
- Effective compliance, risk management and internal audit functions
- Independent auditors’ reviews
- Fraud reporting guidelines
- Whistle blowing facility
- Implementation of anti-money laundering policy
- Supplier and trading partner awareness
- Pre-employment vetting
- Expediting disciplinary processes
- Proactive fraud detection

The Fraud Prevention Plan relies on an effective corporate governance that utilises the risk-based approach to its work and ensures that compliance with internal controls is achieved, to minimise opportunities for fraud. The desired outcome of this commitment is to minimise the potential for fraud related activities against the TCTA by employees and/or external parties.

2. APPROACH TO THE DEVELOPMENT OF THE PLAN

The TCTA business risks were identified as part of the enterprise wide risk management process. A fraud risk register was developed as attached in **Annexure A**, and all the identified risks were considered during the development of the Fraud Prevention Plan. The identified risks are not all-encompassing and should not be an exhaustive list of all fraud risks relevant to the TCTA, but rather as an indication of types of fraud risks.

This Fraud Prevention Plan does not protect the TCTA from incidents of fraud but serves as an additional measure to assist in the management of fraud risks with a focus on creating awareness and promoting ethical conduct.

3. FRAUD DEFINITION

In South Africa, fraud is commonly defined as the unlawful and intentional making of a misrepresentation which causes actual prejudice, or which is potentially prejudicial to another. Fraud encompasses an array of irregularities and illegal acts characterised by intentional deception or wilful misrepresentation causing deprival or loss to the victim. It can be perpetrated for the benefit of the perpetrator or to the detriment of the organisation and by persons outside as well as inside TCTA. Fraud may involve:

- manipulation, falsification or alteration of records or documents
- misappropriation of assets
- suppression of omission of the effects of transactions from records or documents
- recording of transactions without substance
- corruption
- dishonesty

Fraud remains a threat to stakeholders' trust and confidence, it is therefore essential to recognise fraud prevention as an integral part of strategic management. It is important that the Board and Executive Management set the right tone for the prevention and management of fraud in TCTA.

4. UNDERSTANDING FRAUD

Fraud can be perpetrated internally by employees of the TCTA. This occurs because the employees have access to certain information, and they may see the opportunity to commit fraud. Fraud can also be perpetrated externally by individuals outside of the TCTA. Included in this type of fraud are procurement frauds, theft, fraud committed through cyber-crime techniques. And lastly, fraud can also be perpetrated through collusion between TCTA employees with each other as well as between TCTA employees and outside parties. This has been illustrated in figures 1 and 2 below.

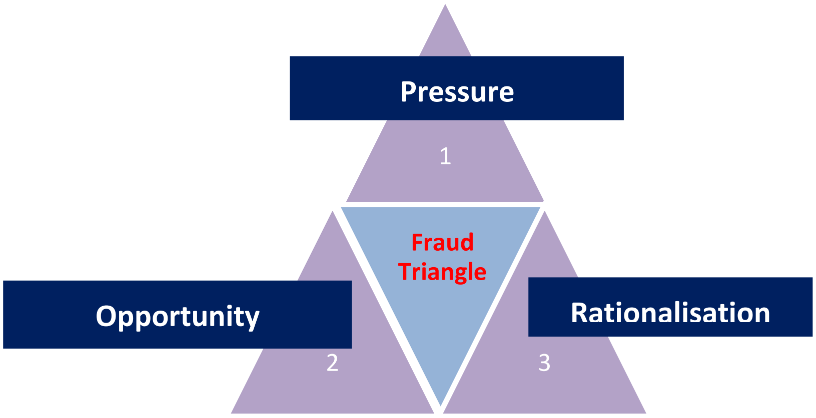


Figure 1: The Fraud Triangle

According to the fraud triangle the perceived opportunity is a contributing factor to the committing of fraud. Opportunity presents itself in an environment with weak controls, where controls can be overridden and where there is insufficient management supervision. The perceived motivation refers to the need to commit the fraud. This need can be as a result of several factors such as personal debt, compensation for good performance as well as pressure to achieve goals and targets. The rationalisation side of the fraud triangle refers to the perpetrator justifying the commission of the fraud. The perpetrator believes that it was not his/her fault that the fraud was committed, but that it was due to factors beyond his/her control

Pressures

- Financial Pressures;
- Personal Habits (Gambling, Drugs, Alcohol);
- Work-related Factors (Overworked, Underpaid, Not Promoted);
- Achieve Financial Results (Bonus, Compensation); and
- High Debt Level.

Opportunities

- Poor Internal Control;

- Low Fraud Awareness;
- Treat Fraudster with Leniency;
- Rapid Turnover of Employees;
- Use of Many Banks;
- Weak Subordinate Personnel; and
- Absence of Mandatory Vacations.

Rationalisation

- I am only borrowing the money and will pay it back;
- Nobody will get hurt;
- The Institution treats me unfairly and owes me;
- It is for a good purpose; and
- It is only temporary, until operations improve.

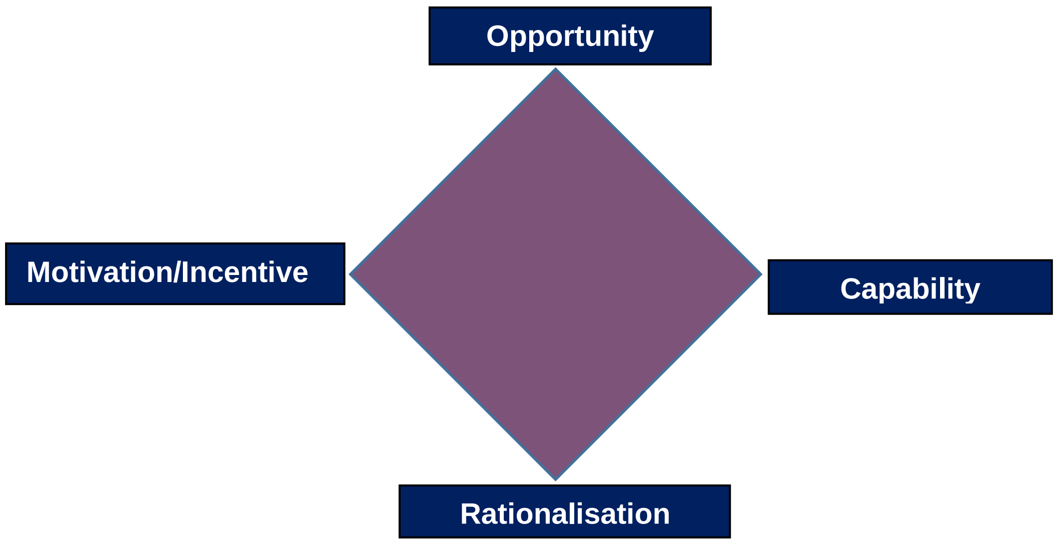


Figure 2: The Fraud Diamond

In addition to the three contributing factors to fraud as indicated in the fraud triangle, the fraud diamond contains a further factor that can contribute to the perpetration of fraud – CAPABILITY. Capability refers to the perpetrators level of authority, skills, knowledge of the systems and internal controls, as well as the ability to deal with the stress of the committing of the crime and the ability to live with a bad conscience.

5. SCOPE OF THE FRAUD PREVENTION PLAN

This Fraud prevention plan applies to all unethical conduct, fraud, corruption, or suspected irregularities of any nature involving employees, stakeholders, contractors, vendors and suppliers doing business with TCTA. TCTA undertakes to:

- Demonstrate the leadership to combat and eradicate corruption by continually improving governance and economic management, by striving to create a climate that promotes transparency, accountability and integrity.
- Establish budgetary and financial transparency and strong financial management systems.
- Enact and enforce a disciplinary code that will deal effectively with corruption offences by imposing severe penalties on individuals convicted of corruption or corrupt practices.
- Eliminate conflicts of interest by adopting and enforcing effective guidelines, ethical regulations and a code of conduct for all directors and employees, which include rules on conflict of interest and requirements for the regular disclosure of financial interests, assets, liabilities, gifts and other transactions.
- Continually improve the morale and integrity of employees.
- Promote transparency in procedures for procurement.
- Adopt a sound revenue collection system.
- Maintain adequate and accurate financial records and adhere to international financial accounting standards (IFAS) as well as international accounting standards.
- Establish and enforce a code of conduct.
- Promote standards for good corporate governance and the protection of shareholder value.
- Prohibit individuals found guilty of corruption from doing business with TCTA.
- Establish independent accountability and oversight mechanisms such as a compliance function (consisting of legal services and legal compliance systems), an internal audit function and the use of independent, external auditors.
- Adopt mechanisms and procedures for the public and personnel to submit complaints of corruption and corrupt practices, including the protection of witnesses and whistle blowers.
- Facilitate the cooperative investigation of cases involving corruption by rendering mutual legal assistance in obtaining evidence, documents, articles, records and witness statements.

6. STRUCTURAL STRATEGIES

Structural strategies represent the actions to be undertaken in order to address fraud and corruption at the level of organisational governance (**Annexure B**).

6.1 GOOD CORPORATE GOVERNANCE

TCTA's organisational culture is critical to help prevent fraud. The overall emphasis is on creating a working environment in which fraud is not tolerated, where employees play a role in protecting assets and perpetrators are fully prosecuted by law enforcement agencies.

An anti-fraud culture promotes good staff and industrial relations, defines an organisation's mission and clearly sets out its desired role in its economic and social environment. The Board of Directors is responsible for overseeing the business of TCTA, including its policies for managing risk and delegating the management of day-to-day activities to management.

The TCTA will annually reconfirm its commitment to an open governance process through which its stakeholders may derive assurance that the TCTA is being managed ethically and according to prudently determined risk parameters in compliance with best international practices.

The TCTA directors, management and employees will be committed to transparent, sound and ethical business practices as expressed in the TCTA Code of Business Conduct. The directors will subscribe to the philosophy of transparency and fair, reliable and easily understandable reporting to stakeholders.

The Board of the TCTA will be fully committed to maintaining the standards of integrity, accountability and openness required to achieve effective corporate governance. All directors, sub-committee members and employees of TCTA will comply with the Public Finance Management Act, Act no.1 of 1999.

The Board of Directors will strive for compliance to all relevant and applicable King VI Code of Corporate Practice recommendations.

6.2 RESPONSIBILITY FOR FRAUD RISK MANAGEMENT

The Chief Executive Officer bears the ultimate responsibility for fraud and corruption risk management. This includes the coordination of risk assessments and the delegated oversight of the function to the Chief Risk Officer.

The managing of fraud remains a managerial responsibility. The Audit Committee oversees the investigation of suspected fraud and corruption.

6.3 ETHICAL CULTURE

Each member of the Board, upon becoming a member will be furnished with a copy of the Code of Conduct for Directors, which should be signed by the member and returned to the company secretary.

All employees will sign the Code of Conduct for employees each year.

The Code of Conduct:

- commits TCTA to the highest standards of behaviour;
- is developed in such a way as to involve all employees so that the ethical culture is infused into TCTA;
- enjoys total commitment from the Board and Chief Executive Officer of TCTA;
- is embraced by all the stakeholders; and
- is sufficiently detailed as to give clear guide to the behaviour of all employees.

Furthermore, the Code of Conduct:

- demonstrates corporate intent;
- codifies unacceptable actions;
- emphasises consequences of non-compliance;
- is attested to by employees;
- removes ignorance as defence;
- is to be well publicised; and
- stresses management's commitment and behaviours.

It is the responsibility of the Chairperson of the Board to review and monitor adherence by the Board of Directors to the Code of Conduct. The Chair may delegate this responsibility to the Company Secretary.

6.4 ASSESSMENT OF FRAUD RISK

The diversity of fraud risk issues prompts the need for an enterprise-wide risk framework and internal risk-based audit approach that goes beyond the traditionally acknowledged areas of financial and internal control.

Fraud risk assessment is done on an annual basis in order to identify the relevant risks. These identified risk areas are analysed and weighted, mitigating controls evaluated and the residual risk defined. This residual risk is then assessed on a cyclical basis whereby the controls are analysed, and the necessary action plans are formulated. The action plans are deliberated at the Risk Forum meetings. Benchmarking is done on a regular basis.

A risk-based compliance framework will be established based on the risk assessment. Profile changes will be assessed by the Chief Risk Officer on a regular basis. Reviewing internal controls on a regular basis will enhance the prevention of fraud.

6.5 EMPLOYEE AWARENESS

The effectiveness of the fraud prevention strategy will be enhanced by raising the level of awareness to the risk of fraud and minimising temptation, motive and opportunity. Employees who are educated about the symptoms of fraud are more likely to identify and report their suspicions of criminal behaviour.

The return on an investment in appropriate training can be significant and contribute considerably to reducing losses and to more successful disciplinary actions and prosecutions. All employees will regularly attend training courses in fraud prevention and detection. Fraud awareness training will be TCTA specific.

7. OPERATIONS STRATEGIES

7.1 INTERNAL CONTROLS

The Board recognises and acknowledges its responsibility for the TCTA system of financial and operational internal controls.

The directors and management are responsible for the implementation of an adequate system of internal control to ensure the accuracy and integrity of the financial statements. The controls include written policies and procedures, clearly defined lines of accountability, and the delegation of authority which also includes TCTA's procurement policy and guidelines.

The responsibility for the adequacy, extent and operations of these systems is delegated to the Chief Executive Officer.

The effectiveness of the internal control system, including the potential impact of changes in the operating and business environments, will be monitored through regular management reviews, and reviewing and testing by the internal auditors' and independent auditors and other assurance providers.

The auditors have a responsibility to identify the relevant weakness in the controls, system or procedures. To ensure that the business practices are conducted in a manner that is above reproach under all reasonable circumstances, all employees are required to maintain the highest ethical standards.

Everything that comes to the attention of the directors to indicate any occurrence of material breakdown in the functioning of these controls, procedures and systems during the year under review should be reported in the annual financial statements.

Effective risk management is integral to the TCTA objective of consistently adding value to the business. Risk will be minimised by ensuring that the appropriate infrastructure, controls, systems and people are in place to manage risks.

Key policies and procedures will be employed in managing risk and may involve segregation of duties, transaction authorisation, monitoring, and financial and managerial reporting.

International pronouncements on risk management are evaluated on an ongoing basis and where appropriate, used to provide benchmarks to ensure continued compliance with international best practice.

The TCTA will adhere, where relevant and appropriate, to the recommendations of King IV Report on Corporate Governance, COSO framework and the Charter of Best Practice in Treasury Management.

The objective of systems of internal control of TCTA will ensure that TCTA is effective in achieving its objectives. It is imperative that management is accurately aware of the risks TCTA is exposed to which the overall performance of TCTA, as well as the performance of individuals within TCTA.

The performance review process of individuals within TCTA is structured in such a way that it ensures that the key performance areas of all employees are aligned with TCTA's primary purpose and mission statement. It is also important that management has relevant, timeous accounting information to assess the financial position and performance of TCTA.

TCTA will design its internal controls to ensure that:

- all transactions and commitments entered into are recorded and are within the scope of TCTA or the individual acting on behalf of TCTA;
- there are procedures to safeguard assets and control liabilities; and
- there are measures, so far as is reasonably practicable, including the extent to which employees are permitted to engage in personal account trading, to minimise the risk of losses to the business from irregularities, fraud or error and to identify such matters as they occur so that prompt remedial action may be taken by management.

7.2 PREVENTION STRATEGIES

Several initiatives result in an overall preventative environment in respect of fraud and corruption. These include the following:

PRE-EMPLOYMENT VETTING

To ensure that the TCTA limits its exposure to hiring potential fraudsters, the HR division must ensure that all relevant details about prospective employees are acquired prior to their employment.

The screening process will typically include a review of:

- References;
- Criminal records;
- Civil claims records;
- Disciplinary records;
- Insolvency;
- Other businesses;
- Qualifications – CV audit;
- Technical competence; and

- Psychometric testing results.

REFERENCES

When checking references of prospective employees, care will be taken to ensure that the prospective employee’s entire career history is disclosed. Gaps in employment are often disguised under the excuse of “working from home” or “tried my own business”, whereas that person may have been dismissed from their former employment.

The reference checking process can only be considered as complete when the TCTA has the assurance that there were no undisclosed acts of dishonesty relating to a prospective employee’s previous employment.

CRIMINAL RECORDS

It is difficult to obtain criminal records of prospective employees as such information is under the exclusive control of the South African Police Services, which is not authorised to release it on demand. It is important, however, for the employer to know whether a prospective employee has a criminal record as this would significantly affect the related risk profile.

Differentiation will be drawn between crimes involving dishonesty and crimes that are not likely to affect the employee’s work. It is therefore a requirement that all applicants submit full disclosure of any criminal records. In addition, a prospective employee must, prior to his/her appointment, accept in writing that the non-disclosure of a criminal record or pending criminal case is a dismissible offence.

CIVIL RECORDS

Civil records give a good indication of the track record of individuals. If a person is recruited for a management position, for example, it is important to determine whether that person has any civil judgments or adverse listings. A prospective manager may prove to be unsuitable for the post if his or her credit history reveals major financial indiscretions in his or her past. As civil judgments affect the risk profile of an individual, it is important to consider this factor before employment is confirmed. All records of civil judgments are easily obtained through any of the recognised credit bureaus.

As with criminal records, all prospective candidates shall be required to disclose any civil judgments against their names. This should include pending civil matters. Failure to disclose such information shall be regarded as a disciplinary offence.

DISCIPLINARY RECORDS

It is important for the TCTA to know whether a prospective employee has a history of disciplinary actions against him/her from previous companies. Learning about these falls in the category of "learning from other people's mistakes" and is invaluable in assessing the risk exposure the candidate presents before employment is confirmed. The disclosure of disciplinary cases shall include those that were settled or withdrawn as a result of the candidate's resignation.

INSOLVENCY

A person who has previously been declared insolvent is often a high fraud risk. It is therefore mandatory for prospective employees to disclose any declared insolvency. A credit bureau check would reveal such a fact and shall therefore be undertaken as a matter of course.

OTHER BUSINESSES

It is important to ascertain from all applicants whether they have other businesses in which they are involved or hold a share. This information is important as it could impact on the applicant's objectivity if he/she were to be able to favour that company or on his or her ability to commit fully to his or her responsibilities to the TCTA.

QUALIFICATIONS

Most applicants will submit curriculum vitae (CVs) in support of their application. These CVs will typically list all the applicant's academic, professional, technical and other qualifications. The TCTA is exposed to risk if it appoints a person who has submitted false qualifications. Apart from the obvious risks, this is also an indication of dishonesty. CVs shall therefore be carefully audited and investigated where necessary.

Consideration shall be given to, among others, the following:

- Whether the time span makes sense (two years to obtain a law degree, for example); and
- Whether the university or college offers these courses.

Most fraudsters who submit false qualifications will focus on qualifications which are difficult to check, especially those from foreign universities or universities which have since closed. Such qualifications should be considered as high risk. The qualification check shall be undertaken not only for prospective employees, but also for current employees as part of the fraud prevention initiatives and employee risk assessments.

TECHNICAL COMPETENCE

Assessing the technical competence of a prospective employee is an integral part of the screening process, but not directly linked to the fraud risk assessment. The past disciplinary records and reference checks in this regard shall be considered carefully.

PSYCHOMETRIC TESTING

There are several psychometric tests available on the market. Such tests may reveal characteristics of the applicant which could place him or her in a high-risk category. It is recommended that people earmarked for critical positions be subjected to appropriate psychometric testing that is compliant with the requirements of the Employment Equity Act.

The test used should, therefore, be acceptable to all cultures and designed to be non-discriminatory.

7.3 DETECTION STRATEGIES

INTERNAL ASSURANCE

TCTA has an in-house internal audit function to facilitate ongoing management assurance. By charter and in terms of the PFMA, internal audit covers the full scope of the organisation's operational and financial activities, including its core activities relating to treasury. A risk-based approach is used in assessing key focus areas and designing the audit programmes. Internal audit is also closely aligned with the organisation's strategic objectives.

It is expected that, wherever possible, reliance will be placed on the work of Internal Audit by the TCTA external auditors. Both internal and external auditors will have regular meetings with the intention of sharing information.

The scope of internal audit is strengthened by the functions of the Legal Compliance Officer. The scope of the internal audit function is to review the reliability, integrity and effectiveness of:

- the financial and operating information;
- the system of internal control;
- the safeguarding of assets;
- the managing of resources;
- the conduct of operations; and
- compliance with the Public Finance Management Act (Act No 1 of 1999) and any other legislation that becomes applicable.

EXTERNAL AUDITORS

The auditors have a responsibility to plan and perform the audit to obtain reasonable assurance on whether the financial statements are free of material misstatement, whether caused by error or fraud.

Because of the nature of audit evidence and the characteristics of fraud, the auditor can obtain reasonable, but not absolute, assurance that material misstatements are detected. Audits must include procedures designed to provide reasonable assurance of detecting illegal acts that would have a direct and material effect on financial statement amounts.

Each audit must include an evaluation of the ability of TCTA to continue as a going concern.

7.4 RESPONSE STRATEGIES

WHISTLE BLOWING

Through this service, all stakeholders can report suspected fraud. This service is a useful tool through which the momentum and interest in the fraud prevention initiatives can be maintained.

The TCTA has put in place mechanisms that comply with the Protected Disclosures Act, in terms of which employees and outsiders are encouraged to relay any information or reasonable suspicions on fraud that they may have. Mechanisms have been put in place to ensure that such information or suspicions are channelled to persons who will deal with them appropriately.

The TCTA has secured an independent contractor with specialist knowledge to manage the Tip-Off Anonymous service, which reports to the Chief Internal Auditor. Should the information received through this service be useful and result in fraud being uncovered, appropriate action/steps shall be taken against the perpetrator(s).

The Chief Internal Auditor shall identify and report to the Audit Committee cases involving:

- Hoax calls;
- Allegations of a criminal nature;
- Allegations which could potentially justify disciplinary action; and
- Other reported issues and/or alleged irregularities (i.e. human resources disputes, personality clashes, political or racial grievances, sexual harassment, xenophobia, etc.).

The report of the Chief Internal Auditor shall also identify specific tip-offs requiring further investigation. Information on non-fraud related matters will almost inevitably also be received, and provision has therefore been made for communicating such information to the relevant division and/or responsible manager. Such information should not be disregarded as it may result in the whistle blower losing faith in the system. Awareness of the Tip-Offs Anonymous hotline is crucial to its success. As a result, the promotion of awareness thereof shall form part of the communication strategy for the Fraud Prevention Plan.

Monthly call reports are forwarded to the Chief Internal Auditor, The Chief Financial Officer and the Chief Risk Officer. The reporting rules have an escalation structure where the service provider forwards reports to the Audit Committee Chair where EXCO members are allegedly involved in fraud or corruption.

How to report a complaint:

- If any employee of TCTA believes that fraud has taken place, he/she should report a complaint to the Chief Risk Officer, Chief Financial Officer, Chief Internal Auditor or Executive Manager: Human Resources. Should any of these persons be involved, the alleged allegations of fraud should be reported to the CEO or if the CEO is involved, to the Chairperson of the Audit Committee.
- Before contacting any of the members of the Fraud Risk Response Committee, the employee should review the facts as he/she knows them and write them down.

It will be mandatory for all employees to report incidents of corruption as soon as they become aware of them and any attempt to conceal such incidents may lead to charges of misconduct against the employee in question.

Intimidation by any employee, of any informant, member of the Fraud Risk Response Team, or any agent of the Fraud Risk Response Team contracted in for investigations or any witnesses involved in the investigation, could result in charges of misconduct.

Extortion of stakeholders by employees must be reported by stakeholders, failure of which could be considered as complicity and may result in cessation of any or all business dealings or restriction from further tendering.

The reporting mechanism is independently managed, anonymous, confidential, secure and internally promoted.

8. MAINTENANCE STRATEGIES

8.1 REVIEW OF THE EFFECTIVENESS OF THE FRAUD PREVENTION PLAN

TCTA will conduct a review of the Fraud Prevention Plan annually to determine the effectiveness thereof.

8.2 REVIEW AND UPDATING THE FRAUD PREVENTION PLAN

This plan should be maintained and reviewed annually to ensure that TCTA's focus of detection and prevention remains relevant as the internal and external operating environment continually changes the fraud risk profile.

The Chairperson of the Audit Committee shall have oversight and provide guidance on the review of the plan.

ANNEXURE E1

FRAUD PREVENTION PLAN

TCTA FRAUD RISK REGISTER

Reference	Risk	Root Cause	Consequences	Like's	Impact	Rating	Controls in place	Like'd	Impact	Rating	Responsible
Human Resources											
HR-1	Unauthorised payroll adjustments on employee benefits	1) Inadequate segregation of duties in Payroll 2) Possible management oversight	1) Financial losses 2) Reputational damage	**3**	**3**	**9**	1) Changes in employee benefits are approved by Executive: Human Resources prior to capturing into the system. 2) Checks are done on reports generated from information captured into the system. In addition, two signatories are required on payroll releases.	**1**	**2**	**2**	HR
HR-2	Payments to fictitious employees and accounts	1) Possible weaknesses in controls regarding the creation of payroll records 2) Payment of salaries to unverified bank accounts 3) Inadequate segregation of duties	1) Financial losses 2) Reputational damage	**3**	**2**	**6**	1) Payroll section keeps track of staff levels on a monthly basis and any new employees on the payroll are verified. 2) Payroll variance review	**1**	**2**	**2**	HR
HR-3	Inflated/fictitious reimbursement claims	1) Double claiming 2) Forging of receipts 3) Collusion of payroll personnel with other employees	Financial losses	**3**	**3**	**9**	1) Approval and review of claims by line managers 2) Verification of claims by finance department	**2**	**1**	**2**	Line Managers
HR-4	Salary advances not deducted from end-of-month payroll	1) Inadequate segregation of duties in Payroll 2) Management oversight	1) Financial losses 2) Reputational damage	**3**	**1**	**3**	Strict policy on salary advances	**1**	**1**	**1**	HR
HR-5	Abuse of sick leave	Fraudulent medical certificates	Loss of productivity	**3**	**4**	**12**	Adherence to Leave policy	**2**	**1**	**2**	Line Managers/HR
Supply Chain											

TCTA FRAUD RISK REGISTER

Reference	Risk	Root Cause	Consequences	Like's	Impact	Rating	Controls in place	Like'd	Impact	Rating	Responsible
SCM-1	Conflict of interest	1) Lack of openness by staff 2) Lack of supplier vetting	1) Financial losses (investigation costs, increased insurance premiums 2) Improper awarding of contracts and tenders 3) Delays in TCTA achieving its objectives 4) Legal costs from losing bidders 5) Reputational damage	**3**	**4**	**12**	1) Transparent tender approval system. The supplier selection process is handled by a multidisciplinary team within a three-bid committee system. The influence of a single individual in the supplier selection process is therefore minimised. 2) The code of business conduct requires all employees to disclose interest. 3) Declaration of interest also completed by DWA and Engineering Consultants (everyone who sits in the evaluation committee) and service providers.	**2**	**2**	**4**	Supply Chain
SCM-2	Bribery and Kickbacks	1) Collusion and collaboration between TCTA representative and service providers 2) Weak internal procurement controls 3) Acceptance of gifts, money and favours that may compromise independence	1) Overpaying for goods and services 2) Low quality goods/services 3) Financial losses (investigation costs, increased insurance premiums 3) Awarding contracts to unqualified/ undeserving supplies or service providers 4) Legal costs from losing bidders. 5) Reputational damage	**5**	**4**	**20**	1) Transparent tender approval system. The supplier selection process is handled by a multidisciplinary team within a three-bid committee system. The influence of a single individual in the supplier selection process is therefore significantly minimised. 2) Gift policy and register	**2**	**3**	**6**	Supply Chain

TCTA FRAUD RISK REGISTER

Reference	Risk	Root Cause	Consequences	Like's	Impact	Rating	Controls in place	Like'd	Impact	Rating	Responsible
SCM-3	Misrepresentation of goods and services/Counterfeit goods	1) Goods procured not inspected by Supply Chain on delivery 2) Poor contract management 3) No independent verification of work completed by service providers 4) Deliberate hiding of facts by service providers/suppliers	1) Financial losses (investigation costs, increased insurance premiums 2) Failure to achieve organisational objectives	**4**	**3**	**12**	1) All goods and services received are inspected by the Client Business unit which has intimate knowledge of its requirements as well as the quality. 2) All invoices are signed off by line management on satisfaction of the quality of the service / goods received. 3) SCM needs to introduce a system for monitoring that there is assurance of supplier performance monitoring.	**2**	**3**	**6**	Procuring Divisions
SCM-4	Rigged specifications to favour certain service providers.	1) Bid specifications for capital projects are prepared by Consulting engineers who may have links with certain contractors 2) Bid specifications prepared by procuring divisions 3) Lack of technical knowledge in approving committees	1) Financial losses (investigation costs, increased insurance premiums 2) Failure to achieve organisational objectives 3) Reputational damage 4) Legal cases against TCTA	**5**	**4**	**20**	1) Tender specification and evaluation documents for capital projects prepared by professional engineering service providers are compiled on an advisory basis for approval by a TCTA multidisciplinary Bid Specification Committee. 2) Evaluation of bids are approved by a TCTA multidisciplinary Bid Evaluation Team.	**3**	**4**	**12**	Supply Chain/Bid Committees
SCM-5	Inflated billing/False invoices	1) Inadequate review and checking of invoices against services performed 2) Collusion and collaboration between TCTA representative and service providers 3) Management override	Financial losses	**4**	**4**	**16**	Invoices are signed off by Executive of the procuring department.	**2**	**3**	**6**	All Division/Supply Chain

TCTA FRAUD RISK REGISTER

Reference	Risk	Root Cause	Consequences	Like's	Impact	Rating	Controls in place	Like'd	Impact	Rating	Responsible
SCM-6	Collusive bidding	1) Inadequate checking of pricing of tenders 2) Limited supplier base 3) Lack of market research by Trans Caledon Tunnel Authority 4) Price fixing 5) Withdrawal of previously submitted bid 6) Cover bidding (submitting bids that are too high or with special terms so as to lose and give the chosen bidder a chance)	1) Limits competition and exposes TCTA to higher prices 2) Financial losses (investigation costs, increased insurance premiums 3) Contracts awarded to undeserving suppliers/contractors who may produce poor quality work and delays in TCTA achieving its objectives 4) Legal costs from losing bidders 5) Reputational damage	**3**	**4**	**12**	1) TCTA obtains Engineer's estimate of prices and compares this to bid prices. 2) Bids awarded based on the highest total number of points and not necessarily to the lowest bidder. 3) The tender evaluation criteria are mainly objective with minimum subjectivity.	**3**	**4**	**12**	Supply Chain
Finance											
FIN-1	Misappropriation of petty cash	1) Theft of petty cash 2) Fraudulent invoices	Financial losses	**4**	**2**	**8**	1) Cash (R500 per project with the exception of LHWP - R1 000 and none for BWP) kept in a safe place and restricted to named personnel 2) Authorisation required to release cash after documents of requests are approved 3) Independent reconciliation of petty cash 4) Keep cash balances to a minimum 5) Access to the keys restricted to two people	**1**	**2**	**2**	Finance

TCTA FRAUD RISK REGISTER

Reference	Risk	Root Cause	Consequences	Like's	Impact	Rating	Controls in place	Like'd	Impact	Rating	Responsible
FIN-2	Adjusting financial records to perpetrate or conceal fraudulent activities	1) Inadequate system access controls or user profiles which may render weak access control to creditors balances 2) Collusion with external parties	Financial losses	3	3	9	1) All adjustments of records in the system require prior management approval and documentation 2) Segregation of duties and dual approvals with system user profiles aligned to level of authority 3) Password controlled access	1	2	2	Finance
FIN-3	Creating false records to support fraudulent claims	1) Specimen for authorising signatures not being updated. 2) Non-adherence to policy such as payment of claims with no documents or wrong rates applied.	Financial losses	4	3	12	1) All claims should be approved by claimant's manager and supported by appropriate documentation. 2) No member of staff can authorise payments to himself/herself. 3) Ensure correct rates for claims are used.	1	2	2	Finance
FIN-4	Inflated billing/False invoices	1) Inadequate review and checking of invoices against services performed 2) Weak controls on payment for unbudgeted items 3) Management override 4) Collusion and collaboration between TCTA representative and service provider	Financial losses	3	4	12	Invoices are signed off by Executive of the procuring department.	2	3	6	Finance
FIN-5	Recording fictitious vendors into the vendor database	1) Lack of segregation of duties between approval and entry of vendor information into the database. 2) Lack of review and validation of supplier information	Financial losses	3	4	12	Verification of banking details through Standard Bank database.	2	3	6	Finance

TCTA FRAUD RISK REGISTER

Reference	Risk	Root Cause	Consequences	Like's	Impact	Rating	Controls in place	Like'd	Impact	Rating	Responsible
FIN-6	False payment instruction (external) with forged signatures and bank details.	1) Collusion of employees and external parties. 2) Not checking/confirming bank details for our service providers. 3) Unexplained change of client bank details.	Financial losses	3	4	12	1) Ensure changes and additions to payee and banking details are in written form and properly authorised and accompanied by a blank cheque. 2) Verify banking details with service provider and the banking institution concerned. 3) Restrict and log system access for any changes to banking details. 4) Proof of payment is sent to Departments and service provider for early detection of fraudulent bank details. 5) Banking details are only changed if there is a provision for this in the contract	2	2	4	Finance
FIN-7	Misappropriation of assets	1) Ineffective access controls 2) Collusion between personnel 3) Ineffective security services 4) Pilferage of assets	Financial losses	4	4	16	1) Completion of asset movement forms 2) Security personnel verifying movement of assets 3) Barcoding of newly acquired assets 4) Bi-annual asset count 5) Regular asset register update 6) Monthly asset reconciliations 7) Private Security service provider 8) Established Safety & Security unit 9) CCTV security system	2	2	4	Finance/Facilities
Information Technology											

TCTA FRAUD RISK REGISTER

Reference	Risk	Root Cause	Consequences	Like's	Impact	Rating	Controls in place	Like'd	Impact	Rating	Responsible
IT-1	Override of system controls: Personnel may be able to access restricted data or adjust records fraudulently e.g. personnel with inappropriate access to the general ledger, subsystems, or the financial reporting tool can post fraudulent entries.	1) Weak system access controls (passwords) 2) User profiles not aligned to job requirements 3) Inadequate segregation of duties	1) Financial losses 2) Reputational damage	**4**	**3**	**12**	1) Authorisation required prior to any changes in records 2) General computer controls include restricted system access, restricted application access, and program change control policy and procedure.	**2**	**3**	**6**	IT/All
IT-2	Theft of assets: Individuals who have access to fixed assets and to the accounting systems that track, and record activity related to those assets can use IT to conceal their theft of assets e.g. someone may steal an asset and record the assets as disposed of, thus removing the asset from the balance sheet.	1) Lack of security controls 2) Inappropriate location of assets 3) Lack of reporting of security violations 4) Lack of procedures for the movement of IT assets	1) Financial losses (high insurance premiums) 2) Reputational damage 3) Loss of information	**4**	**3**	**12**	1) Assets verifications 2) Reconciliation of the assets register and accounting records 3) Awareness to staff on safe custody of assets (i.e. Laptops) 4) Insurance cover	**2**	**3**	**6**	IT/All
IT-3	Theft/Loss of sensitive information or Intellectual property e.g. Intruders can bypass TCTA IT security on their own or through the help of TCTA employees.	1) Hacking by intruders 2) Confidentiality breaches by TCTA employees. 3) Manipulation of data by internal staff.	1) Financial losses 2) Reputational damage 3) Loss of information	**5**	**5**	**25**	1) Firewalls and vulnerability tests 2) Access to sensitive information restricted to specific staff 3) Strict approval and access to financial transactions 4) Review of user access rights	**3**	**2**	**6**	IT/All
IT-4	Unauthorised changes to financial information	Non-adherence to the change management policy/process	Financial Losses	**4**	**4**	**16**	Change management policy	**2**	**1**	**2**	IT/All

ANNEXURE F

MATERIALITY AND SIGNIFICANCE FRAMEWORK

1. INTRODUCTION

In terms of regulation 28.3.1 of the Treasury Regulations of the Public Finance Management Act (PFMA) of 1999, TCTA is required to develop a framework of acceptable levels of materiality and significance with the relevant Executive Authority. The approved materiality framework must be included in the Corporate Plan of the organisation.

2. BACKGROUND

Risk Management is responsible for conducting an annual review and recommending to the Board the materiality and significance framework. The review takes into account the following:

- Guidelines issued by National Treasury.
- The nature of TCTA's business.
- The control and risk environment in which TCTA operates.
- TCTA materiality levels determined by External Auditors (if available).

Further, in order to comply with Section 54 (2) of the Public Finance Management Act (PFMA), the Board is expected to report on:

- The acquisition and disposal of a significant asset and /or
- The beginning of a significant business activity

3. DETERMINATION OF TCTA MATERIALITY LEVELS

TCTA's materiality is based on the practice note issued by National Treasury on 20 July 2006, and the principles applied by the auditing profession in their quantification of risk. The statement of Generally Accepted Accounting Practice AC000 defines materiality as follows:

> *"Information is material if its omission or misstatement could influence the economic decisions of users taken on the basis of the financial statements. Materiality depends on the size of the item or error, judged in the particular circumstances of its omission or misstatement. Thus, materiality provides a threshold or cut-off point, rather than being a primary qualitative characteristic which information must have if it is to be useful."*

This definition is generally used to describe audit materiality; however, it can also be used to derive a definition for materiality in general. Materiality should be considered for financial as well as non-financial matters such as fraud and misrepresentation.

4. TCTA MATERIALITY LEVELS

TCTA considers materiality both at strategic (project) and operational level. Two levels of materiality are determined:

- Strategic project materiality, which is based on project assets.
- TCTA corporate materiality which is calculated as a percentage of TCTA's total expenses.

5. MATERIALITY FRAMEWORK IN TERMS OF PFMA AND NATIONAL TREASURY PRACTICE NOTE

The table below shows that TCTA materiality levels are based on National Treasury Guidelines, (the National Treasury Practice Note Attached as Annexure A), the nature to TCTA's business (TCTA's project assets) and the control environment in which TCTA operates (TCTA is risk averse).

External Auditors did not provide their own materiality calculations during the past financial year; hence, a comparison could not be made.

The National Treasury Practice Note provides parameters for calculating materiality using the latest audited financial statements, taking into account judgment, consistency and qualitative factors. The parameters provided for in the National Treasury Practice Note are as follows:

Element	%age range to be applied against R value
Total Assets	1% - 2%
Total Revenue	0.5% - 1%
Profit after tax	2% - 5%

The Practice Note recommends that materiality be calculated based on the ranges shown above. Profit after tax is not applicable to TCTA as the organisation does not generate profit. TCTA is a risk averse organisation, hence, the organisation opted to apply 50% of the lower levels recommended by the Practice Note. The intention is to report materiality at lower levels and prevent unnecessary risks to the organisation. This report uses the 2018/19 audited figures as provided by the Auditor General.

The proposed 2020/21 materiality levels are shown in the table below;

6. 2020/21 STRATEGIC PROJECT MATERIALITY

In using the parameters under the National Treasury Practice Note the following results were arrived at:

		MATERIALITY CALCULATIONS BASED ON NATIONAL TREASURY PRACTICE NOTE														
Element	**Percentage**	**VRESAP**	**BWP**	**VRS(LHWP, AMD)**	**MMTS-2**	**KWSAP**	**ORWRDP**	**MCWAP-1**	**MMTS-1**	**UMGENI**	**KRIEL**	**MRWP**	**MCWAP-2**	**TCTA-C**	**BRVAS**	**Consolidated**
Total Assets		**4,471,000,000**	**693,000,000**	**15,356,000,000**	**1,733,000,000**	**1,273,000,000**	**70,000,000**	**1,400,000,000**	**0**	**17,000,000**	**6,000,000**	**24,000,000**	**69,000,000**	**14,000,000**	**7,000,000**	**25,133,000,000**
	1.0%	44,710,000	6,930,000	153,560,000	17,330,000	12,730,000	700,000	14,000,000	0	170,000	60,000	240,000	690,000	140,000	70,000	251,330,000
	2.0%	89,420,000	13,860,000	307,120,000	34,660,000	25,460.000	1400,000	28,000,000	0	340,000	120,000	480,000	1,380,000	280,000	140,000	502,660,000
Total Revenue		0	**0**	**598,000,000**	**2,000,000**	**1,000,000**	**60,000,000**	**0**	**0**	**0**	**1,000,000**	**7,000,000**	**16,000,000**	**0**	**7,000,000**	**692,000,000**
	0,5%	0	0	2,990,000	10,000	5,000	300,000	0	0	0	5,000	35,000	80,000	0	35,000	3,460,000
	1.0%	0	0	5,980,000	20,000	10,000	600,000	0	0	0	10,000	70,000	160,000	0	70,000	6,920,000
Profit After Tax (n/a)		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	2.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5.0%	0	0	0	0	0	0	0	0	0	0		0	0	0	0
					2019/2020 External Audit Materiality (At time of sign-off)											
2019/20 External Audit Materiality		n/a	n/a	n/a	n/a	n/a	n/a	n/a		n/a	n/a	n/a	n/a	n/a	n/a	n/a
					TCTA's 2020/21 Proposed Framework											
Total Assets	0.5%	22,355,000	3,465,000	76,780,000	8,665,000	6,365,000	350,000	7,000,000	0	85,000	30,000	120,000	345,000	70,000	35,000	**125,665,000**
Total Revenue	0.25%	0	0	1,495,000	5,000	2500	150,000	0	0	0	2500	17,500	40,000	0	17,500	**1,730,000**
Profit After Tax (n/a)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

7. PRIOR YEAR 2019/20 FOR INFORMATION PURPOSES

TCTA adopts materiality levels based on total assets because the costs incurred in implementing its projects are capitalized into the costs of each project and form part of the outstanding debt under each project. The table below shows prior year figures for comparison:

						MATERIALITY CALCULATIONS BASED ON NATIONAL TREASURY PRACTICE NOTE									
Element	**Percentage**	**VRESAP**	**BWP**	**VRS(LHWP, AMD)**	**MMTS-2**	**KWSAP**	**ORWRDP**	**MCWAP-1**	**MMTS-1**	**UMGENI**	**KRIEL**	**MRWP**	**MCWAP-2**	**TCTA-C**	**Consolidated**
Total Assets		**4,705,000,000**	**711,000,000**	**19,298,000,000**	**1,789,000,000**	**1,281,000,000**	**38,000,000**	**1,534,000,000**	**1,000,000**	**17,000,000**	**6,000,000**	**17,000,000**	**60,000,000**	**31,000,000**	**29,488,000,000**
	1.0%	47,050,000	7,110,000	192,980,000	17,890,000	12,810,000	380,000	15,340,000	10,000	170,000	60,000	170,000	600,000	310,000	294,880,000
	2.0%	94,100,000	14,220,000	385,960,000	35,780,000	25,620,000	760,000	30,680,000	20,000	340,000	120,000	340,000	1200,000	620,000	589,760,000
Total Revenue		0	**0**	**321,000,000**	**3,000,000**	**0**	**134,000,000**	**45,000,000**	**1,000,000**	**1,000,000**	**8,000,000**	**0**	**29,000,000**	**0**	**542,000,000**
	0,5%	0	0	1,605,000	15,000	0	670,000	225,000	5,000	5,000	40,000	0	145,000	0	2,710,000
	1.0%	0	0	3,210,000	30,000	0	1,340,000	450,000	10,000	10,000	80,000	0	290,000	0	5,420,000
Profit After Tax (n/a)		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	2.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0
								2018/19 External Audit Materiality (At time of sign-off)							
2018/19 External Audit Materiality		n/a	n/a	n/a	n/a	n/a	n/a	n/a		n/a	n/a	n/a	n/a	n/a	n/a
					TCTA's 2019/20 Proposed Framework										
Total Assets	0.5%	23,525,000	3,555,000	96,490,000	8,945,000	6,405,000	190,000	7,670,000	5,000	85,000	30,000	85,000	300,000	155,000	**147,440,000**
Total Revenue	0.25%	0	0	802,500	7,500	0	335,000	112,500	2,500	2,500	20,000	0	72,500	0	**1,355,000**
Profit After	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

		MATERIALITY CALCULATIONS BASED ON NATIONAL TREASURY PRACTICE NOTE													
Element	Percentage	VRESAP	BWP	VRS(LHWP, AMD)	MMTS-2	KWSAP	ORWRDP	MCWAP-1	MMTS-1	UMGENI	KRIEL	MRWP	MCWAP-2	TCTA-C	Consolidated
Tax (n/a)															

8. CORPORATE MATERIALITY

TCTA's balance sheet is only based on project assets, as the organisation does not have any corporate assets. In the absence of corporate assets, corporate expenditure has been used as a basis for calculating corporate materiality. The table below shows a comparison between the 2019/20 and 2020/21 corporate materiality calculated at 0.5%, 1% and 2% of total expenditure.

	2019/20	2020/21
Total Expenses	R 1 692 000 000	R 1 471 000 000
Materiality Level (2%)	R 33 840 000	R 29 420 000
Materiality Level (1%)	**R 16 920 000**	**R 14 710 000**
Materiality Level (0.5%)	R 8,460,000	R 7,355,000

Materiality is calculated at one (0.5) percent of total expenses. The table below shows the comparison between corporate materiality for 2020/21 and that of the previous year 2019/20.

9. SIGNIFICANCE FRAMEWORK IN TERMS OF PFMA

In terms of S54 (2) of the PFMA, TCTA has not concluded any of the following specific transactions and hence has no relevant information to submit to the National Treasury in this regard:

- no participation in a significant partnership, trust or unincorporated joint venture;
- no acquisition or disposal of a significant shareholding in a company;
- no acquisition or disposal of a significant asset;
- no commencement or cessation of a significant business activity; and
- no significant change in its interest in a significant partnership, trust or unincorporated joint venture.

Should TCTA wish to enter into any one of the above transactions, it would be incorporated into a directive issued by the Minister of Water and Sanitation as the executive authority. Should TCTA decide to enter into any one of the transactions under S54(2), the Board, as the accounting authority must inform the National Treasury of the transaction and relevant particulars of the transaction submitted to the executive authority for the approval of such transactions.

10. CONCLUSION

The materiality level based on the National Treasury practice note, at 1% of total assets is

R 251 330 000. The External Auditors did not provide the materiality figure for March 2019 for comparison purposes.

However, TCTA proposes to set its thresholds to lower limits in order to ensure that all risks are anticipated and reported at lower levels in line with the risk averse nature of the organisation. As a result, TCTA has set its materiality level for the financial year 2020/21 based on 50% of the lower figure of 1% recommended by National Treasury.

Hence:

- The recommended strategic materiality level for 2020/21 is R 125, 665,000.
- The recommended corporate materiality level for 2020/21 is R 7, 335,000.
- The approved materiality figures are effective from 01 April 2020 to 31 March 2021.

ANNEXURE F1

SIGNIFICANCE FRAMEWORK IN TERMS OF PFMA

SECTION	REQUIREMENT	MATERIAL/SIGNIFICANT
Section 51(1)(g)	An Accounting Authority for a public entity must promptly inform the National Treasury on any new entity which that public entity intends to establish or in the establishment of which it takes the initiative.	TCTA will inform the National Treasury of individual transactions covered by this section irrespective of the materiality or significance of the transaction.
Section 54(2)	Before a public entity concludes any of the following transactions, the accounting authority for the public entity must promptly and in writing inform the relevant treasury of the transaction and submit relevant particulars of the transaction to its executive authority for approval of the transaction:	**1. Quantitative factors** 1.1 **Sections 54(2)(a)-(e) :** Any transaction will be regarded as significant if its rand value exceeds **R167.2 million** as determined under 3 above. 1.2 **Section 54(2)(f) :** Any change in interest will be regarded as significant if the rand value exceeds **R 72.375 million** as determined under paragraph 3 above.
	(a) establishment or participation in the establishment of a company;	**2. Qualitative factors.** The following qualitative factors will be taken into account when determining the significance of transactions: 2.1 Any transaction of this nature that causes any interest (equity or loans) to be taken by TCTA in the company to be established requires approval from the Executive Authority irrespective of its materiality or significance. 2.2 Concerning participation in the establishment of a company, where an interest (equity or loans) is to be taken by TCTA in the company to be established, any involvement by TCTA in the establishment process will necessitate an application for approval, regardless of the degree of involvement by TCTA.
		2.3 For purposes of establishment of an entity as envisaged under section 51(1)(g), the above principles will also apply.
	(b) Participation in a ***significant*** partnership, trust, unincorporated joint venture or similar arrangement;	2.4 Any transaction that entails incorporation under the Companies Act (or similar foreign legislation) should be dealt with under 2.1 to 2.3 above. 2.5 For transactions not entailing incorporation, any transaction will be considered as significant - 2.5.1 If participation is in any partnership, trust, unincorporated joint venture or similar

		arrangement that is located outside the Republic.
	(c) acquisition or disposal of a ***significan****t* shareholding in a company;	2.6 Transactions are to be regarded as significant where - 2.6.1 ownership control is affected; or 2.6.2 TCTA's right to pass or block a special resolution is affected; or 2.6.3 there is a change in shareholding; or 2.6.4 for an acquisition, any transaction results in a shareholding.
	(d) acquisition or disposal of a ***significant*** asset;	2.7 Although the acquisition or disposal of shares or of an interest in an unincorporated entity, as envisaged by sections 54(2)(b), (c) and (f), would also be an acquisition or disposal of an asset. 2.8 Regarding the acquisition of assets through a finance lease, and current assets are not regarded as falling under this subsection.
	(e) commencement or cessation of a ***significant*** business activity; and	2.9 A business activity that falls within TCTA's core business is not regarded as falling under this subsection.
	(f) a ***significant*** change in the nature or extent of its interest in a ***significant*** partnership, trust, unincorporated joint venture or similar arrangement.	2.10 Where the nature changes between any of the entity (that is between a partnership, trust, unincorporated joint venture or similar arrangement), this will be regarded as significant.
Section 55(2)	The annual report and financial statements referred to in subsection 55(1)(d) must – (b) include particulars of – (i) any ***material*** losses through criminal conduct and any irregular expenditure and fruitless and wasteful expenditure that occurred during the financial year;	2.11 Losses in excess of **R50, 000** arising from criminal conduct are considered to be material and will be reported in accordance with the provisions of section 55(2) of the PFMA. 2.12 Any individual transaction arising from irregular expenditure and fruitless & wasteful expenditure will be considered to be material and will be dealt with in accordance with the provisions of section 55(2) of the PFMA irrespective of the rand amount involved.

ANNEXURE F2

PRACTICE NOTE ON APPLICATIONS UNDER SECTION 54 OF THE PFMA

3.7 Guidance on setting the parameters for the rand value determination of significance for purposes of 3.2.2, 3.4.3, 3.5.2 and 3.6.2 above

It should be noted that in terms of Treasury Regulation 28.3.1, acceptable levels of significance must be agreed with the Executive Authority. In arriving at acceptable levels of significance, the guiding principles set out below should be applied.

3.7.1 The parameters are derived from the rand values of certain elements of the individual public entity's audited annual financial statements, as follows:

Element:	% range to be applied against R value
Total Assets	1% - 2%
Total Revenue	0,5% - 1%
Profit after tax	2% - 5%

The finalised rand amount to be applied for purposes of determining the significance threshold for each public entity will require sound judgment:

- The rand value of the above elements will differ from one public entity to the next;
- The most appropriate % chosen within the range is also entity-specific;
- The rand amounts calculated per element may require averaging in the interests of prudence;
- Qualitative factors, for example, where the transaction is likely to result in large-scale retrenchments should also be taken into account.

3.7.2 The latest available audited financial statements should be used to calculate the above.

3.7.3 The elements as well as % range selected should be consistent from one year to the next.

3.7.4 The finalised rand amount should be reviewed at least annually.

ANNEXURE G

EXECUTIVE MANAGEMENT PROFILES

Surname	First Name	Gender	Race (African, Asian, Coloured and White)	Age	Qualifications	Current position and active membership on other organisations/companies/entities/ boards
Sechemane	Percy	Male	African	52	• BCom • MBA	**Current position:** Chief Executive Officer **Other directorships**: Director of National Planning Commission **Other board committee memberships:** Director of TCTA
Shongwe	Busisiwe	Female	African	43	• BCom (Accounting) • CA(SA) • MBA	**Current position:** Chief Financial Officer **Other directorships**: None **Other board committee memberships:** None
Radzuma	Leonard	Male	African	45	• BCom (Accounting) • MBL	**Current position:** Chief Risk Officer **Other directorships**: • Chairperson Risk Committee: Lejweleputswa District Municipality • Non-executive Director: Johannesburg City Parks **Other board committee memberships:** None

Surname	First Name	Gender	Race (African, Asian, Coloured and White)	Age	Qualifications	Current position and active membership on other organisations/companies/entities/ boards
Busari	Ola	Male	African	57	• BSc (Hons) Civil Engineering • MSc Engineering/Hydro-Geology • PhD Water Resource Optimization • Advanced (Env) Isotopes Program • Certificate in Project Management • MBA • Senior Executive Program	**Current position:** Chief Strategy Officer **Other directorships:** None **Other board committee memberships**: None
Claassens	Johann	Male	White	59	• BCompt • BCompt (Hons) • CA(SA) • Senior Executive Development Programme	**Current position:** Executive Manager: Project Management and Implementation. **Other directorships:** RSA Delegate to the LHWC of the Lesotho Highlands Water Project **Other board committee memberships:** None
Nkabinde	Nhlanhla	Male	African	56	• BSc (Eng.) Electrical Engineering • Master of Applied Science • Post-graduate course in mathematics & finance	**Current position:** Executive Manager: Project Finance & Treasury **Other directorships:** Blue Horizon 39 (Pty) Ltd **Other board committee memberships:**

Surname	First Name	Gender	Race (African, Asian, Coloured and White)	Age	Qualifications	Current position and active membership on other organisations/companies/entities/ boards
						None
Botha	Hanje	Female	White	45	• BA (Economics and Geography) • BA (Hons) GIS • MPhil (Professional and Leadership Coaching) • Leadership Development Programme – GIBS	**Current position:** Executive Manager HR & OD **Other directorships:** None **Other board committee memberships:** None

ANNEXURE H

BOARD MEMBERS' PROFILES

Surname & Initials	Gender	Race (African, Asian, Coloured and White)	Age	Skills, Knowledge and Experience		Terms of Board Appointment		Active membership on other organisations/companies/entities/ boards
				Qualifications	Field of Specialty	Date of first appointment	Exit Date	
Dumas, G	Male	African	68	• MBA • BSc • Municipal Executives Fin Prog	• Business Management • Finance • Operations Strategy	2019/05/01	2022/04/30	• Market Theater Foundation • Nethezeka Business Solution
Ramataboe, M	Female	African	64	• CA • MBA • Accredited Associate of the Institute for Independent Business	• Finance & Auditing • Project Management • Risk Management & Compliance • Strategy & Ethics • Corporate Governance • Corporate Treasury	2019/05/01	2022/04/30	• CSOS • UBank • MAE Risk Management • H.V Utilities
White, G	Male	White	59	• BA Admin (Hons) Development Studies • BA (Economics)	• HR • Finance • Economics • Governance	2019/05/01	2022/04/30	None
Roopa, S	Male	Indian	62	• BJuris • LLB • MPhil • Certificate: Transformation of Institutes of Higher Education • Certificate: Executive programme for Leaders in Government	• Legal • HR • Philosophy • Risk	2015/12/01	2022/04/30	• IMC Incident Management and Control • Roopa Ruysenaar and Associates • Litlalo • Invenia Africa • S Roopa Consultants • Afriforte

Surname & Initials	Gender	Race (African, Asian, Coloured and White)	Age	Skills, Knowledge and Experience		Terms of Board Appointment		Active membership on other organisations/companies/entities/ boards
				Qualifications	Field of Specialty	Date of first appointment	Exit Date	
				• Certificate: Negotiating International Contracts & Development Finance • Certificate: Global Housing Trends				• Mphete Ventures • Independent Commission for the Remuneration of Public Office Bearers
Dlamini, L	Female	African	33	• B.Sc Hons - Env and Water Science • BSc - Env Sc	• Environmental Management	2019/05/01	2022/04/30	None
Khondlo, SN	Male	African	52	• Dip: Civil Engineering • BSc Agric. Engineering • MSC Eng. Management • Dip: Project Management • Certificate: Property Practitioner Practice	• Engineering • Project Management • Audit	2006/07/01	2022/04/30	None
Baloyi, N	Male	African	45	• Advanced Diploma in Accounting Sciences • BSc Mathematics and Applied Mathematics • BSc Computer Science and Information Systems • Bcom Financial Management • Bcom Human Resource Management	• Financial Management • Risk Management • Strategic Leadership • Project Management • Infrastructure Development • HR	2019/05/01	2022/04/30	• SASRIA • SAHPRA

Surname & Initials	Gender	Race (African, Asian, Coloured and White)	Age	Skills, Knowledge and Experience		Terms of Board Appointment		Active membership on other organisations/companies/entities/ boards
				Qualifications	Field of Specialty	Date of first appointment	Exit Date	
				• BSc (Hons) Computational and Applied Mathematics • BCom (Hons) • PGDip Business Management • HDip Computer Auditing • MSc Applied Science in Electrical Engineering • MSc Electronics • MBA • MPhil Development Finance				
Maponya, M	Female	African	56	• LLB, Univ of North • B.Iuris, Univ of North • Admitted Attorney 2016	• HR • Audit • Planning and Strategy • Corporate Governance	2019/05/01	2022/04/30	None