CORPORATE PLAN

TRANS-CALEDON TUNNEL AUTHORITY

FOR THE PERIOD 1 April 2019 to 31 March 2022

(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 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 2019/20.

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 2019

Approved by:

Signature: _____

Ms Zodwa Manase

Chairperson of the Board: TCTA

Date: 28 February 2019

TABLE OF CONTENTS

SUPPORTING FRAMEWORK:

1 EXECUTIVE SUMMARY

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 is in compliance 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 STRATEGIC OVERVIEW

In 2018, TCTA celebrated 32 years of existence as a catalyst in infrastructure development. This anniversary provided an opportunity to re-emphasise that water is arguably the most pivotal natural resource for meeting the socio-economic needs of South Africa as a developmental state. 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 will continue 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.

1.3 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 has delivered within the parameters agreed with the Department of Water and Sanitation and other stakeholders.

In the context of mega multi-year projects, this is an achievement that TCTA is justly proud of. There are few organisations, whether private or public, that can compare with TCTA's track record in delivering multi-billion rand infrastructure projects before water supply is required and managing costs within approved budgets. Consider too that TCTA normally gets presented with emergency projects of national strategic importance that are highly complex and require innovative institutional funding and technical solutions. This is the value proposition that TCTA brings to any project that it implements.

1.4 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. It is a Schedule 2 public entity as listed in Public Finance Management Act, Act No.1 of 1999, as amended.

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 LHWP 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 Water and Sanitation to fund and implement the following projects:

Table 1: Mandate and Current Directed Projects

Project	Date Directive received	Work to be undertaken in 2019/20							
		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 2019/20							
		Planning	Funding & Debt	Implementation	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									
Mokolo–Crocodile Water Augmentation Project – Phase 2A (MCWAP-2A)	19 May 2010		√	√					
Berg River Voëlvlei Augmentation Scheme	18 May 2017		√	√					
Projects Under Construction									
Olifants River Water Resources Development Project – Phase 2C (ORWRDP-2C)	17 June 2008 (directive revised 12 March 2012)			√	√				
Water Offtake for Kriel Town (KT)	20 June 2015		√	√					

Project	Date Directive received	Work to be undertaken in 2019/20							
		Planning	Funding & Debt	Implementation	Close-out	Operation and maintenance	Advisory	Payment agency	On-hold
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		√						√
uMzimvubu Water Project (MWP)	19 January 2019 (replaced previous directives)			√			√		
Advisory Services									
Advisory Services to Water Management Institutions, Water Boards and DWA	17 May 2004						√		
Strategic Integrated Projects 3 (SIP-3)	10 November 2012						√		
Strategic Integrated Projects 18 (SIP-18)	26 February 2104						√		

As highlighted in the table above, there are a number of projects for which TCTA has received a directive, 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.
- **uMzimvubu Water Project**, where some critical issues need to be resolved, including, but not limited to, the scope of the project and allocation of sufficient funds in the Medium-Term Expenditure Framework, to allow meaningful implementation.

In addition, there is also the **Kriel Project**, which directive requires TCTA to assist with project management and procurement of long-lead items, but without the necessary funds being provided by DWS.

In the Shareholder Compact, TCTA has requested that the Minister gives guidance and clarity on each of these projects, so that an appropriate decision can be made to either effectively support TCTA to proceed, or to withdraw the relevant directive.

2.5.2 NEW DIRECTIVES

Umkhomazi Water Project (uMWP)

On 25 February 2019 TCTA received a Ministerial Directive to fund and implement the uMWP-1's Raw Water Component.

During the current financial year the project preparatory activities will commence.

The Mgeni System is the main water source that supplies about six million people and industries in the eThekwini Metro, Msunduzi Local Municipality, Ilembe, Ugu and UMgungundlovu District Municipalities' areas of jurisdiction, all of which comprise the economic powerhouse of KwaZulu-Natal.

Water requirement projection indicates that the Mgeni System is anticipated to experience a deficit and therefore there is a need for new water resources. The infrastructure components of uMWP consist of a dam at Smithfield in the Umkhomazi River, a tunnel between the Umkhomazi and the Umlazi; a 5, 9 km raw water pipeline to the water treatment plant and balancing dam.

2.5.3 PROJECTS IN THE PIPELINE

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 m3 and a portion will be made available to assist in the development of a resource to poor farmers.

The project further included 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.

TCTA is anticipating a Ministerial Directive to provide project management services on the implementation of CWP.

2.5.4 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 program 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 program, 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 program 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 in particular 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, as in the previous year, priority will be given to diligent project tracking on both programs, generating and presenting incisive reports to the PICC and SIP chairpersons. Dedicated attention will also be directed to unblocking challenges and bottlenecks impeding project progress.

In the coming year, following the conclusion of the Transnet re-engineering and cost optimisation initiatives, the SIP-3 program should record improved traction in the implementation of the Manganese Ore Rail project and the completion of the remaining 4% of the works for the port terminal infrastructure at the Ngqura Container Terminal.

On the other hand, following the unprecedented contract termination for the recently awarded Mtentu Bridge construction contract by the JV contractor due to violent community protests, momentum will slow down around the implementation of the N2-Wild Coast Highway. This will, correspondingly, heighten TCTA's unblocking activities, particularly around the challenges related to the contract termination incident. Also, it is envisaged that works on the recently awarded tender for the second major bridge, the Msikaba Bridge, will increase momentum on the road project.

After a prolonged quiet period, the coming year is expected to witness a decision by the Department of Energy to proceed (or not) with a feasibility study on the Mthombo Refinery Project; pronouncement by Kalagadi Manganese on when construction of the smelter project,

anchored in the Coega IDZ, will commence; and some traction on the implementation of the Mzimvubu Water Project.

With respect to SIP-18, as in the previous year, TCTA will continue to give increased attention to facilitating the accelerated delivery of the seven prioritised strategic projects, namely, MCWAP-2, ORWDP-2, LHWP-2, AMD, Clanwilliam Dam, Sedibeng Sanitation Scheme and Mzimvubu Water Project, the latter being shared with SIP-3. In particular, it is anticipated that the challenges that have slowed down the critical projects of ORWDP 2, AMD LTS and Mzimvubu Water projects will be addressed to a large extent, to pave way for improved implementation.

The SIP-18 projects remain critical, and are a key focus for the PICC in the water and sanitation sector. In addition, persistent severe drought conditions in the Western Cape should see heightened focus on tracking progress on drought mitigation measures in the region, including the fast-track implementation of the new BRVAS project.

Multi-sector and multi-disciplinary stakeholder engagement remain pivotal to successful and meaningful SIP coordination. As such, 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

The South African water sector is in an era of strategising and reconfiguration, as evidenced by the National Water and Sanitation Master Plan initiative, and the progression towards the establishment of the National Water and Sanitation Infrastructure Authority. These two multi-year initiatives, will lead to enhanced levels of integrated planning, thus enhancing the sector's ability to address the multiple challenges of climate change, infrastructure backlogs, institutional capacity and the long-term water security of the country.

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 WATER RESOURCES SETTING

South Africa is a water scarce country, with an average of only 495mm rainfall per annum, compared to a global average of 1033mm. An excessive evaporation rate causes more than 90% of the rainfall to be lost before it becomes runoff.

The Mean Annual Runoff, in other words the total volume of water flowing in all our rivers in a year, amounts to 49 billion cubic meters (BCM), and this is likely to reduce progressively in

the long term, or become less reliable, due to the effect of climate change. Total dam storage amounts to about 31 BCM; two thirds of all the water flow per annum can be stored.

Under non-drought conditions, the surface water system yields 10.24 billion m^3/a, after allowing for an ecological reserve of 9.5 billion m^3/a. This is supplemented by about 2 billion m^3 from groundwater and 1.9 billion m^3 from agricultural, domestic, industrial and mining return flows, rendering a total reliable yield of close to 15 billion m^3/a. On the demand side, around 17 billion m^3/a has already been allocated. Actual usage is estimated at between 15 and 16 billion m^3/a.

The risk of a marginal supply – demand balance is compounded by a high level of non-revenue water – as much as 37% of all water supplied is either unbilled, un-metered or simply lost through leakages. With much of the water supplied to urban and rural areas being inadequately managed, it increases the risk that overall demand could rise unchallenged to around 20 billion m^3/a.

In general, South Africans are not conservative water users; our average per capita consumption is a rather high 235 litres per capita per day, compared to a global mean of 173. Our water resource custodianship also leaves much to be desired: overall, 60% of the country's 223 river ecosystems are classified as threatened by contaminants, with 25% of them being regarded as critically endangered.

The major causes of the deterioration of water quality are agriculture, mining, energy production and municipal waste.

A number of key basins in the country are already in a water deficit situation, even under non-drought conditions. This emphasises the need to develop alternative water resources, to improve the efficiency with which mining, industry and agriculture sectors use water in economic production, and to reduce the water wasted during distribution and reticulation. The National Water and Sanitation Master Plan aims to address these matters through specific focal areas.

3.3 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 which R278 billion is at the municipal level, and R196 billion is required in sanitation.

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.

3.4 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 BACKGROUND

The South African economy is struggling to emerge from a period of tough economic conditions, and very low growth. The economic data for 2014-2017 indicates that GDP growth has been consistently below 1.5%, and in this period, the unemployment rate has increased by 2.4% to 27.5%, public debt by 6% to 53%, and external debt by 8.2% to 48.8% of GDP. Simultaneously, sovereign risk downgrades during 2017 increased the cost of capital.

This regression occurred amid increasingly adverse conditions, both external and internal. According to the World Bank, the slowdown in South Africa was not only as a result of the fall in global commodity prices and the deceleration of Chinese growth, but also due to missed opportunities to build fiscal and external buffers during the commodity super cycle. Domestic factors included the impact of the 2015-16 drought on agriculture (prolonged in the Western Cape until 2017), and growing policy uncertainty.

Turning to near-term prospects, the SA economy is forecast to grow by 1.5% in 2018 and by 1.8% in 2019, as per the latest outlook from National Treasury. Analysts expect the economy to have exited the short-lived recession by year-end, partly as a result of the government's efforts to stimulate activity; President Ramaphosa's undertaking to stimulate growth, attract investment, address the SOE challenges and root out the corruption, is gradually yielding results. However, analysts are concerned that constitutional amendments that could weaken property rights, will deter investment.

Despite elevated risk factors on a global scale, the world economic growth is at the highest level since 2014, and on the ascent in all major economies. The International Monetary Fund (IMF) forecasts global growth of 3.9% in 2018. This continues to provide a supportive platform for South Africa to expand trade and investment.

According to the OECD, South Africa's economic outlook in the medium-term is projected to pick up slowly in 2019-20, driven mainly by exports, but also private consumption, as wages increase moderately. Unemployment will however remain high, weighing on demand and confidence. Investment is foreseen to recover, as policy uncertainty is assumed to ease gradually. The government budget deficit is set to remain high relative to GDP.

To strengthen the economy, the OECD recommends that credible structural policy reforms be made to broaden competition and economic opportunities, in order to support growth. These sentiments echo local calls for strong political and business leadership, greater clarity in the policy environment and on land reform, and a restructure of the state; reforms which should lead to stronger domestic confidence and higher levels of business investment.

Table 1: Selected Economic Data, 2013 to 2017. Source: http://www.focus-economics.com/

South African Economic Data	2013	2014	2015	2016	2017
Population (million)	53.1	53.9	54.8	55.6	56.5
GDP per capita (USD)	6,715	6,635	6,097	5,341	6,281

South African Economic Data	2013	2014	2015	2016	2017
GDP (USD bn)	357	358	334	297	355
Economic Growth (GDP, annual variation in %)	2.5	1.8	1.3	0.6	1.3
Unemployment Rate	24.7	25.1	25.4	26.7	27.5
Public Debt (% of GDP)	44.1	47.0	49.3	51.6	53.0
Inflation Rate (CPI, annual variation in %)	5.8	6.1	4.6	6.3	5.3
Exchange Rate (vs USD, aop)	9.65	10.85	12.78	14.70	13.31
Exports (USD billion)	93.3	94.9	84.7	76.2	90.5
Imports (USD billion)	101	102	89.6	75.1	84.5
International Reserves (USD)	44.8	44.3	41.8	42.7	45.3
External Debt (% of GDP)	38.3	40.6	37.2	48.1	48.8

The state of the economy impacts on the water sector in a number of 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: double the GDP by 2030 and eliminate poverty, as well as reduce inequality as measured by the income Gini coefficient, from 0.70 to 0.60. The central target, however, requires a rate of growth which, currently, seems out of reach.

4.2 ECONOMIC PROSPECTS

After reaching 3.1 percent in both 2017 and 2018, global growth is expected to moderate over the next two years as global slack dissipates, major central banks gradually remove policy accommodation, and the recovery in commodity exporters matures.

- Progress in per capita income growth will be uneven across emerging market and developing economies, and generally insufficient to tackle extreme poverty in Sub-Saharan Africa.

- The outlook is subject to significant downside risks, including the possibility of disorderly financial market movements, escalating trade protectionism, heightened policy uncertainty, and rising geopolitical tensions.
- To confront these risks and bolster long-term growth, policymakers need to rebuild policy buffers and accelerate reforms to boost competitiveness, adapt to technological change, and promote trade openness.

In South Africa, the recent increases in oil prices and recent Rand weakness pose a risk to the inflation outlook.

South Africa faces a number of challenges which underpin its low growth expectations. These include political uncertainty, weak business and consumer confidence, subdued fixed investment activity and the destabilising impacts of further credit ratings downgrades on the economy.

HSBC notes that the ratings agencies have tended to focus on three variables as explaining South Africa's ratings downgrades in recent years:

- Slow growth and the lack of progress on structural reforms meant to raise the economy's growth potential;
- The deteriorating fiscal condition because of high deficits and the rise in government (and SOE) debt and contingent liabilities (mostly state guarantees to SOEs); and
- Weakening institutional framework due to political risk and uncertainty.

4.3 POSSIBLE ECONOMIC IMPACTS

South Africa slipped into recession in Q2 2018, GDP fell 0.7% q/q annualised, after posting a -2.6% q/q annualised decline in Q1 2018. Sectors that contributed the largest to the slowdown in growth were, Agriculture (decreased by 29.2%, contributing -0.8 percentage points to the decline), transport (decreased by 4.9%, contributing -0.4 percentage points to the decline) and trade (decreased by 1.9%, contributing -0.3% to the decline). Positive contribution to growth came from the mining industry, finance, real estate and business services (Stats SA, Gross Domestic Product, and Q2 2018).

Household expenditure is expected to remain under pressure as Rand weakness and rising international oil prices set new record highs every month which seem set to continue. The price of Brent Crude oil has risen from $66/b to $86/b between Jan and Oct 2018, while the Rand weaken from R12.34/$ to E14.32/$ over the same period (Reuters). Despite this, inflation seem to have moderated in 2018 with the expectation that it will remain within the

SARB's 3-6% target band, but closer to upper limit of the target band. The SARB kept rates unchanged in the September MPC meeting, although the vote was close with 3 MPC members voting to hike rates against 4 who voted to keep rates unchanged. Most analysts anticipate a rate hike in the first quarter of 2019.

Bloomberg consensus now forecasts growth at 0.7%, 1.8% and 2.1% for 2018, 2019, and 2020, which is significantly lower than the forecast in June 2018 (which was at 1.6%, 2.0% and 2.3%). Inflation is forecast at 4.7% for 2018 and 5.2% for both 2019 and 2020.

Poverty has remained largely constant at about 16% since 2011. This contributes to South Africa having one of the highest inequality rates in the world, with a Gini coefficient of 0.69, based on income. In essence, poverty perpetuates inequality and exclusion.

The state of the economy impacts on the water sector in a number of 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 MCWAP provides 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 ensure water security in the major economic hubs of the country and thus provided an enabling environment for economic growth.

5 TCTA BUSINESS STRATEGY

The strategy of TCTA should be regarded 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 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 even raised existential concerns within TCTA.

A more balanced outlook, is towards the opportunity presented by the planned establishment of the National Water Resource Authority, an element of Minister Nkwinti's turn-around strategy for the water sector. 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 roles and functions which should reside in the Authority are the subject of current debate, as is the implementation pathway, where a few options are being explored. One such option would be an incremental approach, whereby the role of TCTA could be expanded through the transfer of functions into TCTA, over a period of five years. Progressively, TCTA would gain the capacity and commensurate mandate envisaged for the Authority. This implementation pathway is believed to present less overall risk, and lower implementation cost than a green-field approach, as much of the transition will be undertaken by internal resources, and migration will be between existing institutions.

The strategic outlook of TCTA is framed against the dynamics of the broader landscape, as it must position itself 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 energy-food-climate 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 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, including extending capability in Acid Mine Drainage, 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) Manage a sustainable and cost effective implementation of capital projects to meet the objectives of DWS

b) Operation and maintenance of designated projects in accordance with DWS requirements/ specifications

c) To obtain the necessary agreements to allow funding to be raised

d) Raise funding for implementation of infrastructure

e) Manage debt within the approved borrowing limit

f) Effective control of corporate expenditure to match project workload

g) Proactively engage DWS to ensure effective execution of shareholder strategy

h) Coordinate and monitor the efficient implementation of the projects within SIP-3 and SIP-18

i) Enhance the internal control environment with respect to internal business processes

j) Position TCTA as a thought leader in critical aspects of water security

k) Ensure organisational culture is in support of business strategy

l) Development of 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 of time. 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 in a position 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 focused talent management practices that transformation is achieved.

Transformation targets are incorporated into contracts 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 2019/20 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.

The minimum targets in the tender documents, as set out in our Transformation Policy will be as follows:

- Ownership reflecting a minimum of 45% participation by black owned enterprises in PSPs;

- Ownership reflecting a minimum of 30% participation of black owned enterprises for infrastructure development: contractors;
- Procurement of general goods and services from emerging micro-enterprises or qualifying small enterprises that are at least 51% owned by black people;
- Development of black-owned entities through enterprise and supplier development, enterprise development, supplier development and preferential procurement;
- Creating job opportunities for black individuals; and
- Skills development in the various project communities including provision of bursaries.

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 in a position 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 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 2019/20 to 2021/22.

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 also 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, 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 delegation framework is in line with section 8 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 by directives issued by the Minister, 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 the Committee Terms of Reference 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 Board Plan, outlining the commitments for the year ahead, to ensure board 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 ensure the growth of the organisation in line with new developments and additional mandates and directives issued by the Minister and with due consideration to achieve the appropriate balance between its various stakeholder groupings.

13.3 THE STRUCTURE OF THE COMMITTEES OF THE BOARD

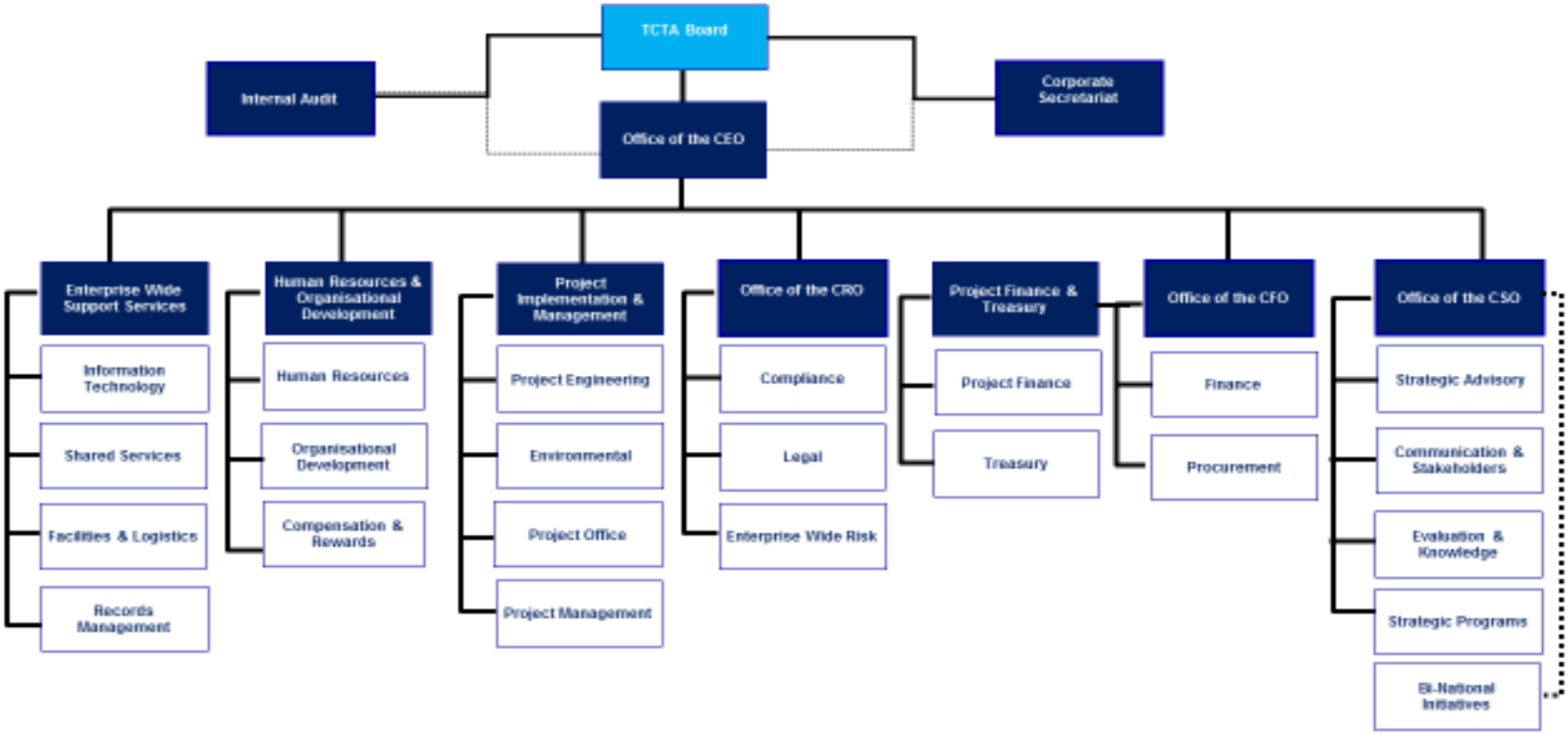
TCTA reports to the Minister of Water and Sanitation, and as a public entity to Parliament for overall oversight.

The Board has established six standing committees with specific focal areas and has accordingly delegated roles and responsibilities. As of 28 February 2019, these were the Audit & Risk Committee, the Finance & Procurement Committee, the Governance & Sustainability Committee, the Human Capital, Social & Ethics Committee, the Technical Committee, and the Nominations Committee.

The Audit & Risk Committee is statutory, as prescribed by Sections 76(4) (d) and 77 of the PFMA; the other committees support the Board in the fulfilment of its governance, oversight and 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 2019/2020)



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 project 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]

	2019/20 R' million	2020/21 R' million	2021/22 R' million	TOTAL R' million	FINAL DEBT REPAYMENT DATE
VRS	1 449	-889	11 031	11 591	2043
BWP	16	31	36	83	2029
VRESAP	1	54	57	112	2030
MMTS-2	-164	-82	33	-213	2031
ORWRDP	38	4	4	46	N/A
KWSAP	-9	11	24	26	2034
MCWAP-1	-24	-26	-37	-87	2033
MCWAP-2	232	619	2 352	3 203	N/A
BRVS	81	83	85	248	N/A
MWP	1	1	1	3	N/A
Total	**1 621**	**-194**	**13 586**	**15 012**	

Notes on the above funding requirements:

a) **VRS**: The budget for the VRS amounts to 11 591 million for the three financial years from 2019/20 to 2021/22. The funding requirements for LHWP-2, AMD-ST and AMD-LT (no funding requirement in 2020/21 and 2021/22) have been integrated into the funding of LHWP under a single borrowing programme and revenue stream.

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

b) **BWP**: The BWP is expected to require a net cash outflow of R83 million in the next three financial years from 2019/20, after taking into account interest and capital payments.

c) **VRESAP**: For the next three financial years from 2019/20, VRESAP will require refinancing in the region of R112 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 R213 million between the 2019/20 and 2021/22 financial years.

e) **ORWRDP:** The project will require a further R46 million from the 2019/20 financial year to the 2021/22 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 require a total of R26 million cash-flow for the next three financial years from 2019/20. This amount will be utilised to service debt on the project.

g) **MCWAP:** Phase 1 of MCWAP has excess funds of R87 million between the 2019/20 and 2021/22 financial years. Phase 2 of the MCWAP project is expected to commence soon and will initially require an estimated R3 203 million in the three financial years from 2019/20.

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 2019/20

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). 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

Within the VRS funding portfolio there is a negligible component of foreign currency funding. This is hedged by the Foreign Exchange Contract. 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-2, 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 is 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 2019/20

TCTA CORPORATE BALANCED SCORECARD FOR 2019/20

Objective	Measure	Target	Means of Verification	Indicator				
				1	2	3	4	5
Financial Perspective (55%)								
Implementation of water delivery infrastructure projects by applying best practices and innovative solutions to ensure that stakeholder requirements are met.								
1. **Manage a sustainable and cost effective implementation of capital projects to meet the objectives of DWS (5%)**	Achievement of critical project milestone dates (5%)	**MCWAP-2A:** 100% of Tender design and documentation completed within 10 months after award of PSP Contract.	Tender Specification	100% of Tender design and documentation completed more than 11 months after award of PSP Contract.	100% of Tender design and documentation completed within 11 months after award of PSP Contract.	100% of Tender design and documentation completed within 10 months after award of PSP Contract.	100% of Tender design and documentation completed within 9 months after award of PSP Contract.	100% of Tender design and documentation completed in less than 9 months after award of PSP Contract.
2. **Operation and maintenance of designated projects in accordance with DWS requirements/ specifications (15%)**	On the Acid Mine Drainage project, that sufficient water is pumped to maintain or reduce water levels within the mine voids	An average volume of water pumped in the Western Basin of between 30 – 33 Ml/d (4%)	Operational reports	An average volume of water pumped less than 25 Ml/d	An average volume of water pumped between 25.0 – 30 Ml/d	An average volume of water pumped between 30 – 33 Ml/d	An average volume of water pumped between 33 to 35 Ml/d	An average volume of pumped water above 35 Ml/d
		The water level in the Central Basin is lowered to between 8 m above ECL and ECL 31 March 2020 (3%) ***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 not lowered to less than 12 m above ECL by 31 March 2020	The water level in the Central Basin is lowered to between 12 to 8 m above ECL by 31 March 2020	The water level in the Central Basin is lowered to between 8 m above ECL and ECL 31 March 2020	The water level in the Central Basin is lowered to between ECL and 4 m below ECL by 31 March 2020	The water level in the Central Basin level is lowered to more than 4 m below ECL by 31 March 2020
		The water level in the Eastern Basin is lowered to between 10 – 15 m below ECL by 31 March 2020 (3%) ***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 is lowered to less than 5 m below ECL by 31 March 2020	The water level in the Eastern Basin is lowered to between 5 to 10 m below ECL by 31 March 2020	The water level in the Eastern Basin is lowered to between 10.1 – 15 m below ECL by 31 March 2020	The water level in the Eastern Basin is lowered to between 15.1 to 20 m below ECL by 31 March 2020	The water level in the Eastern Basin level is lowered to more than 20m below ECL by 31 March 2020
	Quality of treated water from the Western Basin, Central and Eastern Basins treatment plants10% tolerance allowed) (weighted average for all plants)	Quality of treated water from plants between 90 - 94% of DWS specifications (5%)	Report on achievement against DWS specifications as per lab tests.	Quality of treated water from plants less than 85% of water quality specification	Quality of treated water from plants between 85-89% of water quality specification	Quality of treated water from plants between 90%-94% of water quality specification	Quality of treated water from plants between 95-97% of water quality specification	Quality of treated water from plants above 98% of water quality specification
Structure projects for bankability and define institutional arrangements; raise commercial funding for bankable projects; and manage funding until debt has been repaid								
3. **To obtain the necessary agreements to allow funding to be raised (10%)**	Progress on obtaining necessary agreements to proceed with the raising of funding	**BRVAS:** Submission of request for the borrowing limit to the Minister of Water and Sanitation (2%)	Copy of a submission to the Minister of Water and Sanitation requesting a project borrowing limit.	Request for the borrowing limit is not submitted to the Minister of Water and Sanitation.	Request for the borrowing limit submitted to the Minister of Water and Sanitation more than 3 months after signing of Water Supply Agreements	Submission of request for the borrowing limit to the Minister of Water and Sanitation 2-to-3 months after signing of Water Supply Agreements	Submission of request for the borrowing limit to the Minister of Water and Sanitation 1-to-2 months after signing of Water Supply Agreements	Submission of request for the borrowing limit to the Minister of Water and Sanitation earlier than 1 month after signing of

Objective	Measure	Target	Means of Verification	Indicator				
				1	2	3	4	5
								Water Supply Agreements
		MCWAP-2A: Submission of Income Agreement to DWS for signing by June 2019 (8%)	Submission to DWS of Income Agreement.	Income Agreement is not submitted to DWS for signing.	Submission of Income Agreement to DWS for signing after June 2019.	Submission of Income Agreement to DWS for signing by June 2019	Submission of Income Agreement to DWS for signing by May 2019.	Submission of Income Agreement to DWS for signing before 30 April 2019.
4. **Raise funding for implementation of infrastructure (5%)**	Progress or sufficient cash or funding facilities available to allow implementation of the project to proceed without delay	**BRVAS:** Adjudication of long-term funding facilities tender 100% complete 3 – 5 months after approval of medium-term borrowing limit (1%)	Letters of award	No attempt to procure funding facilities.	Adjudication of long-term funding facilities tender not finalised more than 5 months after approval of medium-term borrowing limit	Adjudication of long-term funding facilities tender 100% complete 3 – 5 months after approval of medium-term borrowing limit	Adjudication of long-term funding facilities tender 100% complete 1 – 3 months after approval of medium-term borrowing limit.	Adjudication of long-term funding facilities tender 100% complete within 1 month after approval of medium-term borrowing limit.
		MCWAP: Cash or Facilities available for drawdown by March 2020 (2%)	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 2020	Cash or Facilities available for drawdown by March 2020	Cash or Funding facilities available for drawdown between Jan – Feb 2020	Cash Facilities available for drawdown before 31 December 2019
		VRS: Cash or Facilities available for drawdown by March 2020 (2%)	Letters of confirmation by lenders of availability of funding facilities / proof of registration of DMTN programme memorandum with the JSE / proof of cash balances	No attempt to procure funding facilities.	Cash or Facilities not available for drawdown by 31 March 2020	Cash or Facilities available for drawdown by March 2020	Cash or Funding facilities available for drawdown between Jan – Feb 2020	Cash or Facilities available for drawdown before 31 December 2019
5. **Manage debt within the approved borrowing limit (10%)**	Debt managed within approved borrowing limits	Debt managed within the borrowing limits and all payment obligations are met: ○ VRS (this target will be confirmed once the borrowing limit is issued) (2%) ○ BWP R660 million including 10% contingency (1.5%) ○ VRESAP R3 936 million including 10% contingency (2%) ○ KWSAP R1 399 million including 10% contingency (1.5%) ○ MMTS-2 R1 814 million including 10% contingency (1.5%) ○ MCWAP R6 934 million including 10% contingency (1.5%)	Borrowing Limit Utilisation Report	Borrowing limits breached OR failed to meet payment obligations due to non-availability of commercial funding	Borrowing limits breached but payment obligations are still met.	Debt managed within approved borrowing limits AND all payment obligations are met	Debt managed within borrowing limits, all payment obligations are met AND cash balances plus unutilised liquidity facilities cover 10% of outstanding debt	Debt managed within borrowing limits, all payment obligations are met AND cash balances plus unutilised liquidity facilities cover 15% of outstanding debt
TCTA is seen as providing 'value for money'								
6. **Effective control of corporate expenditure to**	Demonstrated control of corporate expenditure	Actual spend on operational costs is between 90-100% of budgeted operational costs (10%)	General Ledger	Actual spend on operational costs exceeds 110% of	Actual spend on operational costs is between 101-110%	Actual spend on operational costs is between 90-100% of	Actual spend on operational costs is between 85-89.9% of budgeted	Actual spend on operational costs is less than 85% of budgeted

Objective	Measure	Target	Means of Verification	Indicator				
				1	2	3	4	5
match project workload (10%)				budgeted operational costs	of budgeted operational costs	budgeted operational costs	operational costs due to operational efficiencies that do not compromise on deliverables	operational costs due to operational efficiencies that do not compromise on deliverables
Stakeholder Perspective (20%)								
7. Proactively engage DWS to ensure effective execution of shareholder strategy (20%)	• Corporate achievement against Water Authority Project Plan developed by TCTA (15%)	• 70-79% achievement of the key milestones in the Water Authority Project Plan by 31 March 2020	Progress reports, minutes of meetings	Less than 60% achievement of the key milestones in the Water Authority Project Plan by 31 March 2020	51-89% achievement of the key milestones in the Water Authority Project Plan by 31 March 2020	90-100% achievement of the key milestones in the Water Authority Project Plan by 31 March 2020	101-105% achievement of the key milestones in the Water Authority Project Plan by 31 March 2020	Above 105% achievement of the key milestones in the Water Authority Project Plan by 31 March 2020
	• Resolution of critical project matters identified during the year (5%)	90-100% resolution of critical project matters by 31 March 2020	Minutes of meetings, reports, letters and emails	Less than 50% resolution of critical project matters by 31 March 2020	51-89% resolution of critical project matters by 31 March 2020	90-100% resolution of critical project matters by 31 March 2020	100% resolution of critical project matters by 28 February 2020	100% resolution of critical project matters by 31 January 2020
8. **Coordinate and monitor the efficient implementation of the projects within SIP-3 and SIP-18 (5%)**	• Effective coordination of Strategic Integrated Projects (5%)	Satisfactory feedback from key partners on the effectiveness of coordination with feedback based on the adequacy of reports on programme progress, quality of quarterly Project Technical Forums, and timeliness of engagements to address and escalate challenges	Ratings from principals and partnership forums on survey	Average effectiveness rating of 1	Average effectiveness rating of 2	Average effectiveness rating of 3	Average effectiveness rating of 4	Average effectiveness rating of 5
Internal Business Processes (10%)								
9. Enhance the internal control environment with respect to internal business processes (10%)	• Adequacy and effectiveness of the internal control environment (4%)	• Unqualified audit opinion	External and Internal Auditors reports and management comment letter	Qualified Audit opinion	Findings resulting in modification of audit opinion	Unqualified audit opinion	Unqualified audit opinion with no significant findings in the management letter from external auditors	Clean unqualified audit opinion
	• % Resolution of internal and external audit findings (2%)	• 90-100% Implementation of action plans to address reported audit findings	Audit Tracking Report and Register tabled to Oversight structures	Below 50% of action plans to address reported audit findings implemented, resulting in repeat findings	51% - 89% of action plans to address reported audit findings implemented	90-100% of action plans to address reported audit findings implemented	100% of action plans to address reported audit findings implemented and no repeat findings	100% of action plans to address reported audit findings implemented and no adverse opinion

Objective	Measure	Target	Means of Verification	Indicator				
				1	2	3	4	5
	• Management of Risks to Acceptable levels (2%)	• 90-100% implementation of Actions Plans identified in the organisation strategic risk register	implementation of action plans highlighted in the strategic risk register	Below 50% Implementation of Actions Plans reducing the risks satisfactorily level	51% - 89% Implementation of Actions Plans reducing the risks satisfactorily level	90%-100% Implementation of Actions Plans reducing the risks satisfactorily level.	100% Implementation of Actions Plans reducing the risks satisfactorily level	100% Implementation of Actions Plans reducing the risks satisfactorily level
	• Management of ICT Risk to ensure continuous operating environment (1%)	• 4 of 5 ICT risks reduced to an acceptable level	Audited Risk report	Less than 3 risks addressed	3 out of 5 risks addressed	4 out of 5 risks reduced to an acceptable level by 31 March 2020	All ICT risks reduced to an acceptable level by 31 March 2020	All ICT risks reduced to an acceptable level by 30 October 2019
	• New systems architecture that prepares TCTA for the future (1%)	• Independent assessment and implementation of the ERP system by 31 March 2020	Assessment report	Independent assessment and implementation of the ERP system not conducted	Independent assessment and implementation of the ERP system after March 2020	Independent assessment and implementation of the ERP system by 31 March 2020	Independent assessment and implementation of the ERP system by 31 December 2019	Independent assessment of the ERP system by September 2019
Learning and Growth Perspective (10%)								
10. **Position TCTA as a thought leader in critical aspects of water security (4%)**	Contribution of innovative papers to reputable technical publications and conferences (4%)	Four business relevant papers written and submitted	Paper and letter/email of submission	Less than 3 business relevant papers written and submitted	3 business relevant papers written and submitted	4 business relevant papers written and submitted	5 business relevant papers written and submitted	5 business relevant papers written and submitted, plus one proposal for business development
11. Ensure organisational culture is in support of business strategy (3%)	Improvement in organisational climate as a reflection of culture (3%)	90% - 100% achievement against the approved organisational climate improvement plan	Year-end progress report	Below 50% achievement against the organisational climate improvement plan	Between 51% - 89% achievement against the organisational climate improvement plan	90%-100% achievement against the organisational climate improvement plan	100% achievement against the organisational climate improvement plan and conducted an employee survey.	100% achievement against the organisational climate improvement plan and conducted an employee survey that shows improvement.
12. Development of skilled and capable employees (3%)	Achievement against organizational learning and development plan (3%)	90%-100% achievement against training plan	Training report	Less than 50% achievement against training plan	Between 51% - 89% achievement against training plan	90-100% achievement against training plan	100% achievement against training plan and one unplanned training intervention implemented.	100% achievement against training plan and two or more unplanned training intervention implemented.

Performance Risks on the BSC

Objective No. 1. Manage a sustainable and cost effective implementation of capital projects to meet the objectives of DWS

MCWAP-2A: 100% of Tender design and documentation completed within 10 months after award of PSP Contract.

On condition that DWS commit to fund the difference between the capacity of the pipeline and the demand that can be secured against off-take agreements (approval of the borrowing limit) and the issuing of the Record of Implementing Decisions.

Objective No. 3. To obtain the necessary agreements to allow funding to be raised

On condition that DWS concludes the agreements with off-takers.

Objective No. 4. Raise funding for implementation of infrastructure

Funding is available for project implementation **on condition** that DWS concludes institutional arrangements so that the process of raising funding can begin, and if not, the performance against this objectives will be zero weighted.

ANNEXURE B

CAPITAL EXPENDITURE PROGRAMME AND OPERATIONS & MAINTENANCE

1. INTRODUCTION

TCTA's capital expenditure programme comprises of projects that are categorized as projects under preparation, 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 Preparation Phase

- Mokolo And Crocodile River Water Augmentation Project - Phase 2 (MCWAP-2)
- Berg River Voëlvlei Augmentation Scheme (BRVAS)
- Mzimvubu Water Project (MWP)

1.2 Projects at Construction Phase

- Olifants River Water Resources Development Project - Phase 2C (ORWRDP-2C)
- Off-take to the town of Kriel from the Komati Water Supply Augmentation Project

1.3 Projects at Close-Out Phase

- 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 Completed Projects

- Berg Water Project BWP
- Komati Water Scheme Augmentation Project (KWSAP)
- Vaal River Eastern Subsystem Augmentation Project (VRESAP)

1.5 Projects on-hold

- Acid Mine Drainage - Long Term Solution (AMD-LTS)
- Olifants River Water Resources Development Project - Phase 2B (ORWRDP-2B)

1.6 Projects in the Pipeline

- Clanwilliam Dam Project
- uMkhomazi Water Project (uMWP)

1.7 Operation and Maintenance

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

2. PROJECTS UNDER PREPARATION

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

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-2 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-2 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 2019/20

The draft 2018 Integrated Resource Plan of Department of Energy indicates less coal fired power stations to support the energy demand of the country resulting in speculation around the DoE guarantee commitment to MCWAP-2A. This will have a substantial impact on the sizing of the MCWAP-2A transfer infrastructure.

Following a briefing meeting that TCTA held with the Minister of Water and Sanitation on 3 October 2018, it was resolved that the project will proceed on the pipeline design capacity of 75 million m3/annum.

TCTA is providing DWS with assistance in completing the Environmental Impact Assessment (EIA) as per DWS request. The EIA has been successfully completed and the

Environmental Impact Report was submitted in December 2018 to the Department of Environmental Affairs (DEA). DEA is scheduled to grant authorisation within three months.

The procurement of the engineering Professional Service Provider (PSP) for the provision of design and construction supervision services is almost complete. Negotiations with the preferred PSP tenderer have been concluded and the award will follow signature of the MoU.

DWS has transferred the allocated funding to TCTA of R 69 million in 2018/19 for the social component of the project. This will enable TCTA to award the PSP contract.

The critical matters on MCWAP-2 consist of conclusion of the water supply agreements, implementation agreement and securing long term funding.

Upon conclusion of the appointment of the PSP, TCTA will commence with the tender design and documentation phase of the project in Q1 of 2019/20. Land acquisition activities will run in parallel with the design phase.

2.2. BERG RIVER VOËLVLEI AUGMENTATION SCHEME (BRVAS)

2.2.1. 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

2.2.2. KEY ACTIVITIES FOR 2019/20

In order to shorten the implementation programme of BRVAS within an acceptable risk framework, a Design and Build contracting approach has been adopted. This entails appointing an engineering Professional Service Provider (PSP) to undertake technical evaluation, construction monitoring and administration/contract management. Thereafter, a

Design and Build contractor will be appointed to undertake the construction of the infrastructure.

The Environmental Authorization (EA) issued by the Department of Environmental Affairs (DEA) received two appeals, one was rejected as it fell outside of the appeal period. The other relating to loss of a portion of the landowner's commercial orchard was adjudicated, resulting in the acceptance of a proposal to place the pipeline in the existing DWS canal servitude.

The procurement of the engineering PSP has been completed and Board approval was obtained. Award of the construct is subject to securing funding.

In parallel, TCTA is preparing the tender document for the Design and Build contractor.

The critical matters on BRVAS entails the cconclusion of offtake agreements to enable TCTA to raise commercial long-term funding and provision of interim project preparatory funding.

In the 2019/20 financial year, TCTA plan to appoint the PSP and issue the tender documentation for the appointment of the Design and Build contractor. The land acquisition activities will commence in parallel to ensure that access to the construction site is available at the commencement date of the construction contract.

2.3. MZIMVUBU WATER PROJECT (MWP)

2.3.1. 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.

2.3.2. KEY ACTIVITIES FOR 2019/20

In recognition of the challenges hindering the implementation of the project, in 2018 the Minister of Water and Sanitation established the Mzimvubu Project Task Team (MPTT) with the aim of re-focussing the project under a new implementation model with funding from the fiscus. An implementation model with input from TCTA was developed for the implementation of MWP.

The implementation model seeks to address the affordability challenges and achieve cost-effectiveness by maximising the use of state institutions and resources in the form of TCTA, DWS Infrastructure Development branch and DWS Construction Unit. It also seeks to promote socio-economic transformation and state institutional capacity by prototyping a template for accessing private sector expertise and partnerships while retaining state control.

On 16 January 2019, the Minister of Water and Sanitation directed TCTA to provide project management and advisory services for Stage 1 of the Mzimvubu Water Project. This directive replaces all previous directives that were issued to TCTA in connection with MWP.

In accordance with the directive, TCTA has commenced with assisting DWS with the preparation of a project charter and activities towards establishing a Project Management Office (PMO). TCTA has been participating in stakeholder engagements whereby the Minister of Water and Sanitation visited the project area, including engagements with the traditional leadership and communities on MWP.

In the 2019/20 financial year, TCTA will facilitate stakeholder engagements with the affected communities, land acquisition and start construction of Stage 1.

2.4. UMKHOMAZI WATER PROJECT (uMWP)

2.4.1. 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 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.

2.4.2. KEY ACTIVITIES FOR 2019/20

Feasibility study has been completed recommending the development of the uMWP to deliver water by 2024 including the finalization of the institutional and funding arrangements.

The Environmental Impact Assessment is in progress. The Environmental Impact Report (EIR) which was done in November 2016 was rejected by the Department of Environmental Affairs in February 2018. DWS is attending to the reasons that led to the rejection of the EIR through an addendum.

In the 2019/20 financial year, TCTA is expecting to receive the Ministerial Directive for the funding and implementation of the uMWP. Following receipt of the directive TCTA will commence with the project preparatory, funding and implementation activities.

3. PROJECTS UNDER CONSTRUCTION

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 for mining activities in the Steelpoort - Burgersfort area.

3.1.2. KEY ACTIVITIES FOR 2019/20

Construction of Phase 2C is complete. The Taking over Certificate (TOC) was issued on 14 December 2018, representing that the Contractor has fulfilled its contractual obligations to construct and commission the works in accordance with specifications.

The TOC was issued in full recognition that the commissioning and trail operations were limited to “dry” commissioning of the pumps and motors due to the implementation of Phase 2D being postponed and the institutional arrangements to connect the Phase 2C infrastructure with the Lebalelo Water Users Association infrastructure not having been resolved by DWS.

LNW was officially appointed by DWS to take over the operations and maintenance of ORWRDP-2C since 1 February 2019.

The main activities in 2019/20 involves concluding contractual matters which includes the contractor claims, completing the rehabilitation of pipeline servitude and finalising the project close-out report.

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

3.2.1. 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.

3.2.2. KEY ACTIVITIES FOR 2019/20

The Ministerial Directive on Kriel provides for TCTA to plan, design, undertake environmental work and provide project management, whilst DWS Construction East Unit is to undertake the construction of the works.

Progress on the construction of the sedimentation tank which forms part of the water treatment upgrade was made up to a point whereby construction slowed down due lack working capital by DWS. According to the implementation plan, DWS was to procure the long lead items required for constructing the pipeline which was not achieved.

In order to enable construction of the pipeline to commence, TCTA developed a revised strategy in which TCTA is to procure long lead items and free issue these to DWS Construction East. An addendum to the MoA was subsequently concluded between DWS and TCTA in order to implement this strategy. The MoA was submitted to DWS on 11 December 2018. TCTA is awaiting the transfer of the required funds to proceed with the procurement of the long lead items.

As such, there has been no progress on the implementation of this project due to funding constraints.

In the 2019/20 financial year TCTA will, conditional upon receiving the required funds from DWS, complete the construction of the Kriel Project and conclude the project close-out report

4. PROJECTS AT CLOSE-OUT

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 2019/20

MMTS-2 is complete and operational.

The remaining item to be concluded in 2019/20 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 2019/20

MCWAP-1 is complete and operational.

The remaining activities to be concluded in 2019/20 consist of:

- Refurbishment: TCTA has been advised by DWS that the refurbishment of the existing pipeline will now be undertaken by DWS - TCTA awaits a formal instruction from DWS in this regard.
- Completing rehabilitation of the pipeline servitude.
- Completing the project close-out report.

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

4.3.1. STRATEGIC IMPACT

The project entails implementation of the short-term action plan, as recommended by the Inter-Ministerial Committee, in the Western, Central and Eastern Basins of the Witwatersrand Goldfields. The short-term action plan is to prevent 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 2019/20

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

The remaining activity to be concluded in 2019/20 is the project close-out report.

5. PROJECTS ON HOLD

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

5.1.1. 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.

5.1.2. KEY ACTIVITIES FOR 2019/20

The project implementation activities have progressed to a point whereby the design is complete and tender documents for construction including a procurement strategy have been completed. However, due to lack of sufficient funding to proceed to the construction phase, the project implementation activities have been put on hold.

The lack of funding is a result of the mines not signing offtake agreements which would have enabled TCTA to raise commercial funding for the project. TCTA has subsequently explored an alternative funding strategy with DBSA. In March 2018, the DBSA Board approved the funding proposal for the entire ORWRDP-2B including underwriting of the debt without signed off-take agreements. The borrowing limit and funding proposal will however require National Treasury approval and the motivation will be based on the market survey on future platinum development.

TCTA is currently pursuing the conclusion of this funding proposal from DBSA with National Treasury. The project will only progress to the next phase of construction once funding has been secured.

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

5.2.1. 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.

TCTA received a directive to fund and implement AMD-LTS in May 2016.

5.2.2. KEY ACTIVITIES FOR 2019/20

The implementation activities have progressed to a point whereby the procurement of engineering consultant (PSP-1) to undertake the optimisation of the layout of desalination plant/s including water offtakes is complete. Award of the PSP contract is pending due to clarity required on the implementation of the AMD LTS following the National Treasury (NT) letter of 16 March 2018 which requested the Minister of DWS to consider and respond to concerns raised by NT. The funding of the AMD LTS has been excluded from the VRS borrowing program at the request of NT.

TCTA had also commenced with the Environmental Impact Assessment activities on the project. As a result of the delay in the award of the PSP contract the EIA could not proceed without information on the scheme configuration.

The project is thus on hold pending clarity on the funding model of AMD-LTS.

6. PROJECTS IN THE PIPELINE

6.1. CLANWILLIAM DAM PROJECT

6.1.1. STRATEGIC IMPACT

The raising of the Clanwilliam dam and associated infrastructure 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.

- With the raising of the dam; the annual yield will be increased by 70 million m3 and a portion will be made available to assist in the development of a resource to poor farmers.
- Upgrading and expanding 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.

6.1.2. KEY ACTIVITIES FOR 2019/20

TCTA is anticipating a Ministerial Directive to provide project management support to the DWS on the implementation of the Clanwilliam Dam Project. As is the case for the MWP, TCTA has engaged DWS on implementation models and defining TCTA's role in support of DWS.

In the 2019/20 financial year, TCTA will provide project management support to the DWS upon receipt of a Directive.

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.

A planned outage for the inspection and possible minor repair work on the TCTA Delivery tunnel is planned for 2019. Procurement of the PSP for the planned outage is in progress.

In the 2019/20 financial year, TCTA will continue to fulfil the obligation of operations and maintenance of the delivery tunnel. In addition, TCTA will manage the activities on the planned the outage of the tunnel and conduct 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 awarded following the conclusion of an open tender process. The contracts were awarded effective from 1 April 2018 and 1 May 2018 for the Central and Eastern basins respectively.

In 2019/20, TCTA will continue to operate and maintain the AMD plants in accordance with the water quality specifications issued by the DWS.

8. PROJECT COSTS

Project Summary Table (CAPEX):

R Millions	Cumulative Actual to	Forecast	Budget								Dec 2018 excl Contingency	Contingency	Charter
	March'18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27			
2.2 Projects under Preparation													
MCWAP 2	R 9	R 53	R 237	R 603	R 2,326	R 2,423	R 2,416	R 1,850	R 628	R 159	R 10,695	R 1,606	R 12,301
BRVAS			R 10	R 68	R 163	R 182	R 179	R 13	R 1		R 616	R 112	R 728
2.3 Projects at Construction Phase													
ORWRDP 2C	R 2,181	R 40	R 35								R 2,255	R 11.4	R 2,267
KRIEL	R 6	R 23	R 26								R 55	R 1	R 56
2.4 Projects at Close-Out Phase													
MMTS	R 2,052	R 27	R 26	R 3	R 1	R 13	R 11				R 2,133	R 97	R 2,066
MCWAP-1	R 1,621	R 8	R 2								R 1,631	R 508	R 2,139
AMD-STI	R 2,239	R 21	R 43	R 91							R 2,394	R 199	R 2,593
2.5 Completed Projects													
BWP	R 1,656	R	R 4								R 1,661	-R 109	R 1,553
KWSAP	R 1,048										R 1,048	R 52	R 1,100
VRESAP1	R 2,861										R 2,861	R 24	R 2,885
TOTAL	**R 13,673**	**R 171**	**R 383**	**R 765**	**R 2,490**	**R 2,618**	**R 2,606**	**R 1,863**	**R 628**	**R 159**	**R 25,349**	**R 2,426**	**R 23,702**
6. Projects on hold (due to funding)													
AMD-LTS		R 22	R 74								R 95	R .0	R 95
ORWRDP 2B	R 101										R 101	R .0	R 101
MRWP	Project On Hold												
TOTAL	**R 101**	**R 22**	**R 74**								**R 196**	**R**	**R 196**

Project Summary Table (O&M):

R Millions	Cumulative Actual to	Forecast	Budget				
	March'18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24
Operations & Maintenance							
AMD O&M Central Basin	R 391	R 101	R 140	R 147	R 156	R 164	R 173
AMD O&M Western Basin	R 173	R 40	R 51	R 54	R 57	R 60	R 63
AMD O&M Eastern Basin	R 199	R 97	R 172	R 182	R 192	R 202	R 213
TOTAL	**R 762**	**R 239**	**R 363**	**R 383**	**R 404**	**R 426**	**R 450**

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 requirements of R15 012million in the next three years from 2019/20 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 & LTS:
    - The existing borrowing limit for the VRS will expire on 31 March 2019, and unless it is renewed by then the outstanding R23.604 billion debt (as of 31 December 2018) will be in breach of the PFMA and debt covenants, and absent the waiving of the ensuing event of default by lenders, will become due and payable.
    - It will also not be possible to raise new debt facilities as detailed in this borrowing programme or 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).
    - The matters raised by the Minister of Finance in his letter to the Minister of Water and Sanitation in connection with the inclusion of AMD-LTS in the VRS guarantee.
- BRVAS: The request for the Minister of Finance's concurrence for a project borrowing was declined on the basis that water supply agreements should be concluded with the water users in the Western Cape Water Supply System. Due to the complexity of technical issues it is likely to take time to meet this requirement, even though the users have expressed a strong commitment to the project and its cost recovery through water tariffs. It will not be possible to raise funding until the borrowing limit is granted.

1.1. COMBINED FUNDING REQUIREMENTS

The combined funding requirements for all projects for 2019/20 and the following two years is shown in the following table.

Project	2019/20 R' million	2020/21 R' million	2021/22 R' million	TOTAL R' million	FINAL DEBT REPAYMENT DATE
VRS	1 449	-889	11 031	11 591	2043
BWP	16	31	36	83	2029
VRESAP	1	54	57	112	2030
MMTS-2	-164	-82	33	-213	2031
ORWRDP (fiscus)	38	4	4	46	N/A
KWSAP	-9	11	24	26	2034
MCWAP-1	-24	-26	-37	-87	2033
MCWAP-2	232	619	2 352	3 203	N/A
BRVS	81	83	85	248	N/A
MRWP (fiscus)	1	1	1	3	N/A
Total	**1 621**	**-194**	**13 586**	**15 012**	

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 borrowing limit for the VRS will expire on 31 March 2019 and approval by the Minister of Water and Sanitation, acting in concurrence with the Minister of Finance, for its renewal is awaited.

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	
WSP3	21-May-03	28-May-19	9.00%	1 000	32	968
WSP4	21-May-03	28-May-20	9.00%	1 000	97	903
WSP5	21-May-03	28-May-21	9.00%	10 000	9 464	536
				12 000	**9 593**	**2 407**

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 R11 591 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)
2019/20	706	743	1 449
2020/21	-1 193	304	-889
2021/22	1 237	9 794	11 031
TOTAL	**750**	**10 841**	**11 591**

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. 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 deficit of R83 million after debt service and administration payments in the medium term. Deficits will be funded from cash balances.

Year	Incremental (R million)	Capital Repayment (R million)	Total Funding Requirement (R million)
2019/20	-61	77	16
2020/21	-46	77	31
2021/22	-41	77	36
TOTAL	**-148**	**231**	**83**

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 2019/20 and 2020/21, 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)
2019/20	-208	209	1
2020/21	-170	224	54
2021/22	-182	239	57
TOTAL	-560	672	112

The project will require funding of R112 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)
2019/20	-252	88	-164
2020/21	-170	88	-82
2021/22	-62	95	33
TOTAL	**-484**	**271**	**-213**

The project will have excess funding of R213 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)
2019/20	-41	32	-9
2020/21	-27	38	11
2021/22	-22	46	24
TOTAL	**-90**	**116**	**26**

The project is expected to require funding of R26 million in the medium term, which will be funded from cash and short-term borrowing.

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)
2019/20	-67	43	-24
2020/21	-74	48	-26
2021/22	-89	52	-37
TOTAL	**-230**	**143**	**-87**

It is projected that MCWAP-1 will have excess funding of R87 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)
2019/20	232
2020/21	619
2021/22	2 352
TOTAL	**3 203**

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
2019/20	38
2020/21	4
2021/22	4
TOTAL	**46**

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
2019/20	81	-	81
2020/21	83	-	83
2021/22	85	-	85
TOTAL	**248**	**-**	**248**

The project will require funding of R248 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
2019/20	1	-	1
2020/21	1	-	1
2021/22	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. DETAILED DEBT MANAGEMENT AND FUNDING STRATEGIES

The detailed debt management and funding strategies are described in the report: **"2019 01 Funding and Debt Management Strategies 2019"**.

ANNEXURE C2

BUDGET FOR 2019/20

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 the medium-term budget, management has taken guidance from recent developments in the water sector, the National Development Plan (NDP), National Water Act, Strategic Plan of the Shareholder, and pronouncements of the National Treasury.

TCTA has an important role in assisting its Shareholder to achieve the objective of implementing quality, affordable water and sanitation infrastructure that will build social capital. Furthermore, the infrastructure must allow for growing businesses and provide marginalised communities with decent access to water.

Planning and budgeting systems are a pathway for promoting effective water management. Whilst policy determines the priorities for national government, planning serves as a transitional process between policy and implementation. TCTA aims to play a leading role in identifying and unlocking the appropriate implementation strategies. This budget strives to highlight priorities for action through resource allocation while identifying potential constraints within the sector.

This budget document is presented to the Board for approval.

2. SECTORAL AND CORPORATE CONTEXT

2.1. SECTORAL CONTEXT

TCTA needs to be responsive to the demands of the sector and adapt to changes in the sectoral landscape. The integration of sectoral water plans and programmes within the framework of national economic and social policy are important for action. TCTA plays a crucial role in assisting its shareholder to achieve the objectives of implementing quality, affordable infrastructure that will build social capital, allowing growing businesses and providing marginalised communities with decent access to water.

Ensuring that water resources remain adequate and sustainable to support the achievement of national development goals is a key challenge facing both the water sector and national policymakers. The critical importance of water security to broad development goals is

frequently underestimated outside the water sector. It is, therefore, imperative that the strategic importance of water security be elevated in the national policy dialogue. The important role of water security in various sectors of economy and in the social context need to be recognised. In addition, prudent water management needs to be prioritised. In responding to these challenges, TCTA continues to play an active role in elevating the importance of water security beyond the water sector through engagement with, among others, the Presidential Infrastructure Coordinating Commission.

Some key areas identified in the National Water and Sanitation Masterplan include:

- 14.1 million people do not have access to safe sanitation
- Only 64 % of households have access to a reliable water supply service
- 56% of waste water treatment works and 44% of water treatment works are in a poor or critical condition. 11% are dysfunctional
- More than 50% of South Africa's wetlands have been lost, and of those that remain, 33% are in poor ecological condition
- Only 5% of agricultural water used is by black farmers
- 41% of municipal water does not generate revenue. 35% is lost through leakage
- Municipalities are losing about 1660 million m³ per year through non-revenue water. At a unit cost of R6/m³ this amounts to R9.9 billion each year
- R33 billion more is needed each year for the next 10 years to achieve water security

(http://www.dwa.gov.za/National%20Water%20and%20Sanitation%20Master%20Plan/Documents/NWSMP%20Call%20to%20Action%20Final%20Draft%20PDF.pdf)

2.2. CORPORATE CONTEXT

The corporate context of TCTA is embedded within the sectoral setting set out above. The primary objective of TCTA is to provide water infrastructure at the optimal lifecycle cost to the South African economy on a sustainable socio-economic basis. For the 2018/19 financial year, TCTA will continue to focus on its primary operational objectives:

- Cost-effective financial management of corporate operations
- Sustainable and cost-effective implementation of capital projects
- Cost-effective and environmentally-sustainable operation and maintenance of designated projects
- Facilitate socio-economic development and transformation through TCTA projects

- Structure project funding, establish institutional arrangements and obtain authorisation for funding to be raised
- Raise funding for implementation of infrastructure
- Manage the redemption of debt through an adequate water charges and liquidity facilities to meet the annual debt service obligations. Furthermore, managing the debt in a cost-effective manner within the approved borrowing limit and redemption within the contractual repayment period.
- In response to the dynamics and challenges of the water sector in recent years, TCTA has adopted a broader corporate role that also needs to be considered by the 2019/20 Budget. Some the changes include:

  - **A strategic role in the water sector:** Water is the most pivotal natural resource for socio-economic development in South Africa. Both the NDP and the National Water Resources Strategy emphasise strategies for enhancing the capacity of our water resource infrastructure to meet the competing needs of different sectors. As the sole national entity tasked with off-budget bulk water infrastructure development, TCTA has a crucial role to play in the execution of those strategies. Through knowledge competences developed internally over the past seven years, TCTA is well-positioned to respond to growing demand for large-scale desalination and reuse infrastructure. This competency will grow through the implementation of the long-term Acid Mine Drainage (AMD) solution on the Witwatersrand, which is essentially a large-scale desalination project, and the creation of potential for further growth into this market. TCTA is also the coordinator of the 18th Strategic Integrated Project (SIP-18), the scope of which encompasses water infrastructure “from source to tap to source”. Finally, with its origins in bi-national undertakings, TCTA is well-placed to explore cross-border water infrastructure planning and development, for mutual benefit, within the South African Development Community.

  - **Enhancement of TCTA business Model:** Since inception more than 32 years ago, the TCTA business model has served the institution and its projects well; the revenue stream required to fund project implementation, capital debt redemption and corporate operations was secure. In addition, robust management contributed to the required assurances that allowed competitively-priced project finance to be attracted from the market. During 2017/18, the revenue stream has come under risk because of institutional and financial constraints within DWS. These circumstances are beyond the influence of TCTA and, therefore, difficult to mitigate. Without a solid balance sheet, TCTA has limited means to buffer the impact of cash-flow disruptions, which increases the risk of capital loan default and business interruption of the entity. More onerous covenant conditions attached to recent loans recent secured from local

funders reflect heightened risk profile. Two financial mechanisms, namely the sustainability and liquidity reserves, with which to buffer the impact of revenue disruption were considered during 2018/19. However, DWS and National Treasury did not approve them and had to be reversed. Further sustainability measures will be explored during 2019/20.

- **A Relationship-building Strategy:** Formerly an area of weakness, this function has now been structured and resourced for a more strategic role. Key objectives include the improved visibility of a project pipeline, enhanced collaboration during capital project planning and the establishment of selected intergovernmental partnerships.
- **Enhancement of the TCTA brand:** Already well-recognised among infrastructure financiers and developers, the TCTA brand needs to be enhanced among a broader array of chosen stakeholders. The strategy is for establishing relations through public relations, leading to positive exposure of the TCTA brand.
- **Business process improvements:** This outcome comprises several goals aimed at enhancing business operations and placing the organisation on a more sustainable path. Some of these goals are:

- Employ strategic resourcing as a method to attract, engage, motivate and reward high-calibre, high-performance staff.
- Optimise the core business processes in Supply Chain, Human Resources and Finance, through finalisation of the implementation of an Enterprise Resource Planning (ERP) solution. The implementation of the ERP has taken longer than expected and still has significant challenges that are being addressed
- Consolidate IT infrastructure, cloud computing, disaster recovery, server infrastructure and improved connectivity;
- Building TCTA's knowledge and strategic advisory capability to bolster its role of thought leadership.

3. PRINCIPLES EMPLOYED IN THIS BUDGET

As current construction projects approach completion, the focus of management shifts to achieving the implementation readiness of projects that had been in planning: Phase 2A of the Mokolo-Crocodile Water Augmentation Project (MCWAP-2A), the Berg River Voëlvlei Augmentation Scheme (BRVAS) and the funding of Phase 2 of the Lesotho Highlands Water Project (LHWP-2). Uncertainty exists on the Long-Term Solution to the Acid Mine Drainage on the Witwatersrand (AMD-LTS) where National Treasury has raised concerns on the funding model and implementation-related matters. Pending the resolution of these matters, limited budgetary provision has been made.

The 2019/20 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. Similarly, the operating budget reflects the planned level of activity associated with the projects being implemented.

The following are the key principles applied in the preparation of the budget for 2019/20:

3.1. CAPITAL EXPENDITURE (CAPEX)

The capex budget is determined by the implementation status of current infrastructure and new ones TCTA has been directed to implement. A conservative approach has been adopted in this cycle because of significant underspend in past years that resulted in National Treasury and other stakeholder 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. The following projects are within scope:

- **Completed projects** (The budget for completed works includes finalisation of works and defects):
  - Berg Water Project (BWP)
  - Vaal River Eastern Subsystem Augmentation Project (VRESAP)
  - Komati Water Scheme Augmentation Project (KWSAP)
- **Projects nearing completion or in the one-year defects liability period** (The budget is for engineering, environmental, health and safety and construction costs):
  - Mooi Mgeni Transfer Scheme Phase 2 (MMTS-2)
  - Olifants River Water Resources Development Project - (ORWRDP-2C)
  - Mokolo and Crocodile Water Augmentation Project – Phase 1 (MCWAP-1)
  - Acid Mine Drainage - Short Term Interventions (AMD STI)
  - Kriel Pipeline – Capex for Kriel is dependent on the DWS availing funding. It has been noted that the Annual Performance Plan DWS has prepared for the 2018/19 financial year has not allocated any funding for Kriel.
- **New projects** (The budget is for engineering, environmental, health and safety and construction costs):
  - Berg River Voëlvlei Augmentation Scheme (BRVAS)
  - Lesotho Highlands Water Project Phase 2 (LHWP-2)
  - Mokolo and Crocodile River Water Augmentation Project Phase 2 (MCWAP-2).

- Acid Mine Drainage Long-Term Solution (AMD - LTS). This project has been conservatively budgeted for because of the uncertainty related to the funding of the 2/3 social component.

- **Projects where Directives have been received but uncertainties prevail**

Although TCTA has received the directives for UMzimvubu and ORWRDP-2B, the capital expenditure has not been included due to uncertainty relating to the funding thereof.

3.2. OPERATING EXPENDITURE:

As stated above, operating expenditure follows on from capex, albeit not directly related. The following principles have been adopted:

- Zero-based budgeting while considering the current status of operational areas.
- Costs for preparatory works on potential and new directives have been initially charged to the Vaal River System (VRS) (i.e. SIP, BRVAS and MRWP). These are mainly travel costs. When funding has been sourced, these costs will be settled.
- Inflation adjustment for MTEF is 5.5% per annum as per guidance from National Treasury.
- The salary budget has been calculated showing an average increase of 7.3%, noting stratified increases are implemented.
- Vacancies are budgeted for in accordance with the projected date of placement as per the annual recruitment plan.
- Office lease costs are based on extending the current lease.
- 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 are supported by business cases for the Accounting Authority's approval.
- The 2018/19 Actual/Forecast figures reflect the actuals from 1 April 2018 to 30 September 2018 and the forecast for the period 1 October 2018 to 31 March 2019. The Budget 2019/20 represents the period 1 April 2019 to 31 March 2020.

3.3. COST RECOVERIES FROM PROJECTS

- TCTA is a specialised liability management body with no other source of funding apart from that available through the various project directives issued.

- All overhead and administrative costs TCTA incurs, which are not directly attributable to a specific project, are initially paid for from the VRS and subsequently recovered from all of the projects in proportion to the level of activity in each as illustrated in the table below. These costs are settled monthly. Overhead and administrative costs are categorised into Staff Costs, Governance, Public Relations, Facilities, Financial Services and Support Services.
- As projects approach completion, the cost-recovery proportions from them decrease in line with reduced activity. As a result, the projected future recoveries from VRS will tend to escalate, simply because the table does not yet reflect future directives and, as other projects are completed, the recovery burden on VRS increases. Should the project pipeline diminish severely, a realignment strategy will be required to reduce overheads. On the other hand, should the pipeline increase, the shared costs allocation VRS takes up VRS would reduce. Shared costs are to be recovered from projects in the following proportions:

Projects	2018-19	2019-20	2019-20	2020-21	2021-22
LHWP	34%	41%	179 549 641	48%	51%
BWP	2%	2%	8 758 519	2%	2%
VRESAP	3%	3%	13 137 779	3%	3%
ORWRDP 2C	2%	2%	8 758 519	0%	0%
MMTS2	7%	4%	17 517 038	4%	2%
KWSAP	3%	2%	8 758 519	2%	2%
CMWAP	3%	3%	13 137 779	3%	3%
AMD	10%	10%	43 792 595	10%	10%
LHWP2	10%	10%	43 792 595	10%	10%
MRWP	0%	0%	-	0%	0%
CMWAP2	13%	15%	65 688 893	15%	15%
AMD - LT	10%	5%	21 896 298	0%	0%
BRVAS	3%	3%	13 137 779	3%	2%
ORWRDP 2B	0%	0%	-	0%	0%
TOTAL	**100%**	**100%**	**437 925 954**	**100%**	**100%**

Table 1.

4. PROJECT LIQUIDITY

TCTA has in the past year experienced serious challenges with the timely payment of water tariff invoices by DWS. The total water tariff receivable was about R2.2 billion as of 30 September 2018, down from R2.3 billion at 30 June 2018.

Invoices that remained outstanding beyond the agreed payment terms at 30 September 2018 were overdue by an average of 14 days. Projects with invoices outstanding for the longest times were VRESAP with 28 days and MMTS-2 with 20 days, while LHWP had the highest outstanding amount of R1.8 billion at 12 days.

This trend of late payments became more noticeable from the third quarter of 2016/17. Failure to pay water tariff invoices threatens TCTA's ability to meet its commitments to contractors, other service providers and funders. In addition, it risks is capacity to fund its operational costs. Non-payment of contractors and service providers risks progress on the implementation of critical projects and escalates costs. Furthermore, the potential reputational risk could negatively affect TCTA's ability to attract reputable service providers in future and impact on effective project implementation.

In a similar vein, TCTA has obligations to pay interest on loans and repay its debt. Any default on a loan payment has a serious impact on the ability to raise funding for projects. This is particularly important now as TCTA has mandates to raise significantly large amounts of funding for critical projects such as MCWAP-2, LHWP-2, AMD-LTS and the Berg River-Voëlvlei Augmentation System (BRVAS).

It is also important for credit ratings of the projects to maintain payments within contractual terms. Significant arrears could affect ratings. Without a positive rating, TCTA's ability to raise debt will be seriously compromised.

TCTA's normal liquidity assurance measures of cash and liquidity facilities could be tested to breaking point if the problem continues. In view of this, the Board has been insistent that stronger measures must be put in place. DWS and National Treasury did not support the attempts to establish sustainability and liquidity reserves but discussions on these and other options will be revived with the stakeholders.

Retrospective analysis on the 2018/19 Budget and onward to the 2019/20 Budget

	Explanation Note Reference	Actual/Forecast 2018/19	Budget 2018/19	Actual/Forecast vs Budget	Budget 2019/20	Actual/Forecast 18/19 vs Budget 19/20	% Variance
Tariff Revenue	1	(6 243.65)	(6 219.78)	(385.21)	(7 095.00)	851.35	14%
O&M Tariff		-	(409.08)		-	-	100%
		-	-			-	100%
Management Contingency		-	20.41	20.41	17.01	17.01	
Directly Controllable Expenses	2	353.52	476.82	123.30	468.39	114.87	32%
Operations and Maintenance	3	240.61	415.39	174.78	374.08	133.48	
Indirectly Controllable Expenses	4	1 148.50	1 164.18	(159.11)	1 171.62	(110.36)	-10%
Operating Inflows/Outflows		**(4 501.03)**	**(3 867.45)**	**633.58**	**(5 063.91)**	**(562.88)**	
Total Finance Charges	5	2 577.88	5 802.81	3 224.94	2 281.10	(296.77)	-12%
Net Working Capital Cash (in)/outflows		**(1 923.15)**	**1 935.36**	**(3 858.51)**	**(2 782.80)**	**859.65**	
Capital Repayments	6	11 338.13	9 440.56	(1 897.58)	1 115.49	(10 222.65)	-90%
Fixed Assets		7.93	1.96	(5.97)	5.10	(2.84)	-36%
Capital Expenditure	7	661.17	1 687.41	1 026.24	2 888.57	2 227.40	337%
Non cash flow items and accruals	8	156.44	3 111.12	2 954.68	(394.71)	(551.15)	-352%
TOTAL FUNDING REQUIREMENT		**9 927.65**	**9 954.17**	**26.52**	**1 621.06**	**(8 306.59)**	**-84%**

Table: 2

TCTA continues to operate within directed mandates with costs incurred within approved budgets. Although tariff billed is higher than budgeted, it should be noted that the timely receipt of the tariff revenue remains a challenge.

Overall the projected spend for the remainder of 2018/19 is below budget and each element is discussed below as well as the budget for 2019/20.

4.1. TARIFF REVENUE

Project	Actual/Forecast 2018/19	Budget 2018/19	Increase/ (Decrease)	Budget 2019/20	Increase/ (Decrease)
LHWP1,LHWP2, AMD- VRS	-4 906.33	-4 892.69	13.64	-5 578.66	672.33
BWP	-129.46	-173.63	-44.17	-122.98	-6.47
VRESAP	-549.30	-520.59	28.71	-557.21	7.91
MMTS	-213.53	-213.76	-0.23	-495.16	281.62
KWSAP	-165.02	-139.10	25.92	-165.85	0.83
MCWAP	-280.01	-280.01	-	-175.14	-104.87
Total	**-6 243.65**	**-6 219.78**	**23.87**	**-7 095.00**	**851.35**

Table: 3

- The Actual/Forecast 2018/19 tariff revenue is expected to be R16.84m higher than projected in Budget 2018/19 as higher volumes have been experienced in VRS and KWSAP. Furthermore, marginally lower volumes are expected in VRESAP and MMTS. The marginally higher tariff billing in LHWP is because of the actual tariff being higher than provided for in the budget. BWP tariff billing is lower because of the downward revision of the volumes for the remainder of the financial year. This is in line with prior year trends where TCTA has had to repay CCTC due to lower actual volumes consumed in the year. VRESAP tariff billing is higher because the Eskom tariff and volumes are higher than budget. KWSAP has higher revenue because the tariff and volumes are higher than budget.
- Tariff revenue for the 2019/20 financial year is expected to be higher than the Actual/Forecast 2018/19 by R851.35m. Higher tariffs are expected in VRS, VRESAP, MMTS and MCWAP, while BWP and KWSAP will see reductions in tariffs in accordance with the tariff models. LHWP tariff billing increases due to an increase in volumes (94mcm) and an increase in the tariff. MMTS sees a large rise in tariff billing because of an increase in the tariff. This is due to the introduction of an additional tariff that was meant to be introduced in the 2018/19 financial year as approved by the Minister. The decrease in tariff billing in MCWAP is because of a decrease in the tariff rate for the period.

Project	Actual/Forecast 2018/2019			Budget 2018/2019			2019/2020			2020/2021			2021/2022		
	Tariff	Volume (mcm)	Tariff Billing (R million)	Tariff	Volume (mcm)	Tariff Billing (R million)	Tariff	Volume (mcm)	Tariff Billing (R million)	Tariff	Volume (mcm)	Tariff Billing (R million)	Tariff	Volume (mcm)	Tariff Billing (R million)
LHWP															
LHWP, LHWP2 & AMD- VRS	3.0550	1 606	4 906	3.0465	1 606	4 893	3.2816	1 700	5 579	3.4439	1 701	5 858	3.5901	1 751	6 288
BWP (3 months)1 April - 30 June	0.6000	142	85	0.6000	68	41	0.6000	48	29	0.6000	46	27	0.4688	48	23
BWP (9 months)1 July - 30 March	0.6000	73	44	0.5700	233	133	0.6000	157	94	0.4688	149	70	0.4923	140	69
VRESAP-ESKOM	1.5800	231	364	1.5820	212	336	1.7601	208	366	1.6247	203	329	1.7060	201	343
VRESAP-SASOL	2.1800	85	185	2.1800	85	185	2.2759	84	191	1.8904	84	158	1.9849	84	166
MMTS (3 months)1 April- 30 June	0.5180	108	56	0.5180	100	52	0.5510	99	54	1.4920	99	147	0.4513	99	44
MMTS (9 months)1 July- 30 March	0.5510	286	158	0.5509	294	162	1.4920	296	441	0.4513	296	133	0.4739	296	140
KWSAP	1.9100	86	165	1.9091	73	139	2.0055	83	166	2.0125	72	145	2.1131	66	140
MCWAP	12.6700	22	280	12.6700	22	280	7.9249	22	175	8.3211	22	184	8.7372	22	193
Total Tariff Receivable			**6 244**			**6 220**			**7 095**			**7 052**			**7 406**

Table: 4

4.2. DIRECTLY CONTROLLABLE EXPENSES

Directly controllable expenses consist of operating expenses of TCTA. The Actual/Forecast 2018/19 translates to 74% of the original budget envisaged to be spent. The increase in the budget for the 2019/20 financial year is expected to be R104.43 million, translating to growth of 30% from the Actual/Forecast 2018/19. Table 5 below provides a summary of the movements between the Budget 2018/19 and the Actual/Forecast 2018/19 as well as the Budget 2019/20.

Directly Controllable Expenditure	R' million
Original Budget 2018/19	**476.8**
Reduced staff expenses as appointment of staff is delayed due to project delays, as well as associated costs such as training	(24.9)
Staff costs	
Training and team building	
Other Board related costs	(6.7)
Lower project activity resulting in reduced consultancy fees, communication costs and travel costs	(38.3)
Travel and subsistence	
Communication costs	
Consulting fees - non audit services and consulting fees	
Higher costs due to increased audit and legal fees	4.3
Reduced spend related to the deferred spend on IT and Facilities related costs (office rental, equipment rental, depreciation and repairs and maintenance)	(9.0)
Equipment rentals	
Repairs and maintenance	
Other expenses - mainly due to the sustainability reserve that has not been budgeted for in 2019/20	(48.8)
Actual/Forecast 2018/19	**353.5**
Increase in key staff necessary to successfully implement all mandates as per approved resource plan (staff costs and training costs); this includes incentives	64.5
Staff costs - salaries and bursaries	
Training and team building	
Directors fees	6.2
Agency work included in 2018/19 not budget in 2019/20	32.6
Increased travel costs including, local projects travel costs, overseas travel for funding trips	4.1
Other overseas travel	
Local Travel for projects	
Increased spend on communications	4.4
Higher costs associated with the IT equipment rentals	3.8
Equipment rentals	
Other expenses	(0.7)
Budget 2019/20	**468.4**

Table: 5

- This underspend on staff cost is mainly because the organisation has adopted a flexible resourcing approach that allows positions to be filled only when projects are confirmed and funding has been secured. This reflects a cautious approach when appointing people, with the objective to manage administrative costs while ensuring that the right employees are placed in the right positions, at the right time. 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.
- Furthermore, the saving on training is due to fewer employees being able to attend training as a result of urgent and competing work deliverables, being prioritised over training attendance.
- Directors' fees were lower in the Actual/Forecast 2018/19 as the budget had anticipated more expenditure to be incurred for Board Ad-hoc costs, Board Advisory Services and Ministerial engagements. The increase in 2019/20 financial year makes higher allowance for Board costs since it is expected that a new board will be appointed.

- Legal fees are expected to be higher than budget 2018/19 provision due to current legal matters and Board requests. Provision continues to be made in the 2019/20 financial year.
- Audit fees forecasted to be R10m in the actual/forecast from previous financial year to cater for the change in auditors as the AG takes over the audit in the 2018/19 year. For the 2019/20 financial year audit fees have been increased by 5.3%.
- Communications spend is lower because of underspend on Exhibitions & Projects, Advertising & Marketing, and Corporate Social Responsibility. The change in strategy of the communications division will see increased spend in 2019/2020. The CSI strategy was approved, but major projects are on hold pending the approval of an implementation plan. On Communication, projects are being re-evaluated in line with stricter cost-curtailment measures. The strategy for 2019/20 includes initiatives such as promoting the TCTA brand and more stakeholder engagement initiatives.
- Rental equipment (systems-related costs): In 2018/19, several key IT projects (e.g. ICT Infrastructure Renewal, Risk Management Solution and Audit Management Solution) were delayed because of different reasons. There is also over-expenditure of more than about R3 million on the 2018/19 budget mainly because of the procurement of laptops and Oracle support. The focus for the next six months will be on finalising tender processes, commencing with implementation of projects and keeping the business momentum.

  In 2019/20, the focus will be on implementation of projects, especially those aiming to improve the ICT infrastructure to resolve the current. There will also be a significant amount of focus on the ERP Project to deal with the experienced technical challenges. This will be achieved through the procurement of a service provider with Oracle expertise to render support services.
- Other expenses are lower mainly because of treasury-related charges that were expected but did not materialise. The lower spend was because the absence of market-makers fees as no auctions took place. The actual forecast includes secondary market-makers fees. New bonds (R4.8bn) will be auctioned in 2019/20, resulting in the primary fees.

4.3. OPERATIONS AND MAINTENANCE

The Actual/Forecast for 2018/19 is based on the actual operating cost of the AMD plant, while the original budget of 2018/19 was based on the best available cost estimate. AMD operations and maintenance has a positive variance of R174.78m. The budget was based on the costs of a temporary operator as well as chemicals. After the appointment of the permanent operator, these operational costs have reduced.

The budget for 2019/20 is based on the actual cost of operating all three basins and have been adjusted to factor in the planned escalations and variable performance increases in terms of the contract. The budget also caters for utilities and a planned shutdown.

4.4. INDIRECTLY CONTROLLABLE EXPENSES

Indirectly controllable expenses comprise the royalties and Lesotho Highlands Water Commission costs.

- Higher royalties were budgeted as a result of electricity price increases. Lower spend (R16.36m) is expected in the Actual/Forecast 2018/19. The reason is lower Eskom Sustainability Index (ESI) adjustment. When Eskom publishes the ESI every year, an adjustment is done to the calendar year of variable royalties that have been paid. In this year, the ESI adjustment due was lower than budget.

- Lower royalties for 2019/20 are expected because of expected lower electricity price increases (R55.30m reduction). In the 2019/20 year, expected planned outages and maintenance will lead to water delivery volumes of 700mcm as opposed to 780mcm.

- The budget for cost-related payments for operations in Lesotho are based on the submission from the LHWC and includes costs related to LHWP2 operations. Due to timing differences, the amounts are still tentative, but the approved budget will be forwarded shortly. It is not expected that there will be significant amendments.

4.5. LIQUIDITY RESERVE

The budget includes a liquidity reserve, which has been built up from savings that were experienced on projects. The liquidity reserve for 2017/18 was R500 million and R600 million for 2018/19. These entries were reversed because of adverse audit findings and the non-acceptance of this principle by DWS and National Treasury.

4.6. FINANCE CHARGES

Finance Charges consist of interest that TCTA incurs in connection with the borrowing of funds. Actual/Forecast finance charges are below the 2018/19 budget primarily because of lower funding utilised because project delays. The postponement to the 2019/20 year of the auction of new bonds because of delays in the finalisation of JSE regulatory requirements pertaining to the new bond programme. These decreases are offset by the increase in the finance charges for the WS05 bond due to the actual CPI (103.2) being higher than the budgeted rate of 102.7.

4.7. CAPITAL REPAYMENTS

The increase in the 2018/19 actual forecast capital repayments was because of a payment for the revolving facilities for the VRS. This had to be raised for the redemption of WS05, which was originally budgeted to be funded via auctions.

The budget for 2019/20 has significantly decreased as the redemption of the bonds and repayment loans in the budget is lower with the next large bond (being that of WSP05) redemption only in May 2021.

4.8. CAPITAL EXPENDITURE

The 2018/19 budget followed the National Infrastructure Plan, with capital expenditure on current mandates continuing and groundwork being undertaken on recent mandates. Ready-for-Operation status has been achieved on AMD STI, ORWRDP 2C, MMTS-2 and MCWAP 1. Except for ORWRDP 2C, all TCTA projects are operational and fully functional. ORWRDP 2C is being handed over to DWS to operate and maintain. Fully-functional operations are dependent on DWS implementing further phases of the project. It is expected that 39% of the approved budget will be spent.

Table below provides a comparative of the 2018/19 budget as approved and the outcomes now expected as included in the Actual/forecast, as well the budget for 2019/20:

	Actual/Forecast 2018/19	Budget 2018/19	(Increase)/ Decrease	Percentage	Budget 2019/20	(Increase)/ Decrease
LHWP	-	-	-		-	-
BWP	0.21	3.81	3.60	6%	3.85	(3.64)
ORWRDP2c	25.86	63.96	38.10	40%	25.86	-
ORWRDP2b	-	-	-		-	-
VRESAP	-	1.58	1.58	0%	-	-
MMTS2	8.63	15.45	6.82	56%	20.10	(11.48)
KWSAP	0.02	9.65	9.63	0%	-	0.02
MCWAP	7.11	11.96	4.85	59%	1.45	5.66
AMD	38.70	79.18	40.47	49%	38.40	0.30
AMDLT	0.24	281.26	281.03	0%	51.44	(51.20)
LHWP2	541.25	961.89	420.64	56%	2 500.00	(1 958.75)
MCWAP2	20.51	195.51	175.00	10%	168.78	(148.26)
Kriel	16.14	46.65	30.51	35%	24.95	(8.81)
BRVAS	2.50	16.52	14.02	15%	53.75	(51.25)
MRWP	-	-	-		-	-
Total	**661.17**	**1 687.41**	**1 026.24**		**2 888.57**	**(2 227.40)**

Table: 6

The significant under expenditure on CAPEX is predominantly because of the following the following:

- ORWRDP-2C: The under spend in the actual forecast is mainly due to a delay in the finalisation of contractors claims and the rehabilitation works. The budget in 2019/20 is for the finalisation of rehabilitation works and possible claims. The PSP is also expected to remain on site until all works have been completed including the defects liability period.

- ORWRDP-2B: Project implementation activities remain on hold pending the securing of funding. TCTA has achieved progress in pursuing alternative funding arrangements with DBSA. There are ongoing engagements with the infrastructure-projects funder and National Treasury.

- 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 2019/20 and completion is expected during 2020/21.

- AMDLT: National Treasury concerns on the funding model and certain implementation aspects in the TCTA Directive have resulted in execution activities not proceed as planned and major underspending. Award of the PSP contract is on hold pending clarity from DWS on the way forward. The environmental impact assessment studies have been suspended as further project implementation is dependent on the scheme configuration to be provided under the PSP contract. Due to the remaining uncertainties, a conservative approach has been adopted in planned expenditure for 2019/20.

- 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 following budget period.

- MCWAP-2: Project implementation activities were delayed mainly because a delay in the award of the PSP contract and funding constraints resulting in the R175 million under expenditure. The award of the PSP contract is now planned for January 2019 after which implementation activities will escalate. Ministerial intervention resulted in the pipeline capacity being confirmed at 75 million m3/annum including the guarantee arrangements for the project and initial DWS funding contribution for the social component. The implementation and off-take agreements are being finalised and will pave the way for the raising of commercial funding for 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, DWS committed further funding and completion is now planned during 2019/20.
- BRVAS: Funding constraints have resulted in a delay in the award of the PSP contract and the reported under expenditure. Finalisation of the institutional arrangements is required for National Treasury approval of the borrowing authority for TCTA to raise commercial funding. Interim funding by DWS, as provided for in the TCTA directive, is being pursued. Award of the PSP contract is now planned for the first quarter of 2019/20.

ANNEXURE C3

MEDIUM TERM EXPENDITURE FORECAST

1. PURPOSE

This document reflects expected income, capital and operating expenditure on the projects over the next three years and the resultant funding requirement.

The Medium-Term Budget shows an increase in Net cash outflow from 2018/19 to 2021/22. This is largely because of an increase in directly and indirectly-controllable expenditure, and finance charges as is detailed below:

Medium Term Forecast currently tabled:

	Actual/ Forecast 2018/2019	Budget 2018/2019	TOTAL Budget 2019/2020	TOTAL Budget 2020/2021	TOTAL Budget 2021/2022
Tariff Billing	(6 243 649 254)	(6 219 780 121)	(7 095 003 459)	(7 052 699 226)	(7 405 667 326)
O&M Tariff	-	(409 080 000)	-	-	-
Total Income	**(6 243 649 254)**	**(6 628 860 121)**	**(7 095 003 459)**	**(7 052 699 226)**	**(7 405 667 326)**
Running Expenditure	**1 742 623 131**	**2 761 410 126**	**2 031 098 012**	**1 749 099 056**	**1 844 037 304**
Management Contingency	-	20 406 802	17 005 895	17 941 219	18 927 986
Directly Controllable Expenses	353 516 724	476 818 807	468 387 264	494 550 674	519 910 199
Project Cost Recoveries	0	-		-0	0
Operations and Maintenance	240 606 680	415 391 650	374 084 188	394 680 986	416 411 873
Indirectly Controllable Expenses	1 148 499 727	1 164 176 757	1 171 620 666	1 236 607 164	1 305 199 119
Sustainability Reserve		84 616 110			
Liquidity Reserve		600 000 000			
Operating Inflows/Outflows	**(4 501 026 123)**	**(3 867 449 995)**	**(5 063 905 446)**	**(5 303 600 170)**	**(5 561 630 022)**
Finance Cost	2 712 167 600	2 790 994 816	2 176 007 627	2 290 042 328	2 243 422 606
Redemption Interest Received	16 693 523	-	-	-	-
Interest on Tariff Receivable	(150 985 622)	3 011 816 285	105 095 219	(1 978 442 397)	(1 826 575 903)
Total Finance Charges	**2 577 875 501**	**5 802 811 101**	**2 281 102 845**	**311 599 931**	**416 846 703**
Net Working Capital Cash (in)/outflows	**(1 923 150 623)**	**1 935 361 106**	**(2 782 802 601)**	**(4 992 000 239)**	**(5 144 783 319)**

Table 1

Tariff billing for the medium term has been budgeted for based on the income agreements and projected water volumes. Running expenditure has been accounted for at average increments of 5.55% and 5.44% for 2020/21 and 2021/22 respectively for those expenses where the costs are not known. This average is a combination of CPI increases as per medium-term expenditure framework (MTEF) guidelines as well growth in costs per contract. All Capital Expenditure has been budgeted for based on the Long-Term Cost Plan, contracts in place and Project Charters of each project. The notes below expand further on the Medium-Term budget.

2. WATER INCOME

Tariff billing increases from 2018/19 to 2020/21. The budgeted volumes and tariffs are based on Department of Water and Sanitation (DWS) estimates. In the Vaal River System (VRS) – which includes Lesotho Highlands Water Project (LWHP), LWHP - Phase 2 (LHWP2) and Acid Mine Drainage (AMD), the increase is largely attributable to a higher tariff in the bulk raw water charge. 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 2018/2019			Budget 2018/2019			2019/2020			2020/2021			2021/2022		
Project	Tariff	Volume (mcm)	Tariff Billing (R million)	Tariff	Volume (mcm)	Tariff Billing (R million)	Tariff	Volume (mcm)	Tariff Billing (R million)	Tariff	Volume (mcm)	Tariff Billing (R million)	Tariff	Volume (mcm)	Tariff Billing (R million)
LHWP															
LHWP, LHWP2 & AMD- VRS	3,0550	1 606	4 906	3,0465	1 606	4 893	3,2816	1 700	5 579	3,4439	1 701	5 858	3,5901	1 751	6 288
BWP (3 months)1 April - 30 June	0,6000	142	85	0,6000	68	41	0,6000	48	29	0,6000	46	27	0,4688	48	23
BWP (9 months)1 July - 30 March	0,6000	73	44	0,5700	233	133	0,6000	157	94	0,4688	149	70	0,4923	140	69
VRESAP-ESKOM	1,5800	231	364	1,5820	212	336	1,7601	208	366	1,6247	203	329	1,7060	201	343
VRESAP-SASOL	2,1800	85	185	2,1800	85	185	2,2759	84	191	1,8904	84	158	1,9849	84	166
MMTS (3 months)1 April- 30 June	0,5180	108	56	0,5180	100	52	0,5510	99	54	1,4920	99	147	0,4513	99	44
MMTS (9 months)1 July- 30 March	0,5510	286	158	0,5509	294	162	1,4920	296	441	0,4513	296	133	0,4739	296	140
KWSAP	1,9100	86	165	1,9091	73	139	2,0055	83	166	2,0125	72	145	2,1131	66	140
MCWAP	12,6700	22	280	12,6700	22	280	7,9249	22	175	8,3211	22	184	8,7372	22	193
Total Tariff Receivable			**6 244**			**6 220**			**7 095**			**7 052**			**7 406**

Table 2: Volumes and Revenue in millions

3. RUNNING EXPENDITURE

Overall, running expenditure increases by an average of 2.06% over the medium term. The main factors driving the increased expenditure are directly and indirectly controllable expenditures. Below are brief notes that provide reasons for the increases:

3.1 DIRECTLY CONTROLLABLE EXPENDITURE

- Directly-Controllable Expenditure increases by 5.55% and 5.29% for 2020/21 and 2021/22 respectively. The increase in this 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 7.1%.
- Costs for a specific year have been excluded in the medium term.

3.2 OPERATIONS AND MAINTENANCE

Operations and Maintenance is budgeted for in terms of agreements in place and expected outcomes over the medium term.

3.3 INDIRECTLY CONTROLLABLE EXPENDITURE

Indirectly-Controllable Expenditure increases by 5.5% for 2020/21 and 2021/22 as per the MTEF guidelines. Budgeted costs are based on expected outcomes over the medium term.

3.4 FINANCE CHARGES

Finance Charges increase by 5.24% in 2020/21 and decreases by 2.04% in 2021/22. The main factors driving the increased finance charges are the higher interest rates and larger volumes of funding mainly in the VRS because of LHWP2. These costs are based on the actual funding requirement in the medium term.

Capital Expenditure for the Medium Term

	Actual/ Forecast 2018/2019	Budget 2018/2019	TOTAL Budget 2019/2020	TOTAL Budget 2020/2021	TOTAL Budget 2021/2022
Net Working Capital Cash (in)/outflows	**(1 923 150 623)**	**1 935 361 106**	**(2 782 802 601)**	**(4 992 000 239)**	**(5 144 783 319)**
Capital Repayments	**11 338 134 068**	**9 440 556 722**	**1 115 486 949**	**778 922 233**	**10 302 915 633**
LHDA capital repayments	13 721 857	10 100 017	11 029 254	7 461 102	7 262 244
TCTA capital repayments	11 874 992 112	9 430 456 705	1 104 457 695	771 461 131	10 295 653 389
WS bond repayments	-	-	-	-	-
WS stock redemdemption assets redeemed	-	-	-	-	-
WS stock redemption assets purchased	(550 579 901)	-	-	-	-
Other Capital Repayments	-	-	-	-	-
Refinancing of short term debt	-	-	-	-	-
Fixed Assets	**7 934 448**	**1 960 000**	**5 095 381**	**5 381 027**	**5 682 692**
Furniture and fittings	200 000	200 000	900 000	951 300	1 005 524
Office equipment	118 194	60 000	450 000	475 650	502 762
Computer equipment	6 766 254	1 700 000	2 395 381	2 527 127	2 666 119
Building Contingency	450 000	-	1 350 000	1 426 950	1 508 286
Land & Buildings	-	-	-	-	-
Motor Vehicles	400 000	-	-	-	-
Capital Expenditure	**661 166 919**	**1 687 411 244**	**2 888 568 905**	**1 755 142 905**	**6 009 991 123**
			-		
Construction			-		
Main works	624 184 521	1 049 736 182	2 564 152 345	1 317 673 745	5 684 731 212
Infrastructure	47 749 884	108 299 532	50 500 000	83 061 982	-
Bulk power	-	-	-	-	-
Sundry Expenses	-	-	-	-	-
Ancillary Infrastructure	7 679 142	25 120 000	88 000 000	188 532 352	106 507 935
Engineering			-	-	-
Main works	-	-	-	-	-
Infrastructure	(31 633 140)	255 235 574	143 092 795	78 576 093	124 780 856
Support Services	825 000	6 528 136	1 230 000	5 066 734	39 870 540
Other	-	-	-	-	-
Environmental			-	-	-
Technical Support	-	75 000	-	-	-
Expropriation & land aquisition	925 452	196 179 000	11 223 952	64 771 948	30 331 387
Environmental	1 711 591	4 924 095	5 754 495	6 082 501	6 429 203
Natural	9 702 184	28 480 329	22 200 318	2 766 380	4 044 424
Social	22 285	9 833 396	15 000	6 074 371	10 414 168
Health & Safety			-	-	-
Health & Safety	-	3 000 000	2 400 000	2 536 800	2 881 398
Total funding requirement before adjustment for accruals and non-cash flow items	**10 084 084 812**	**13 065 289 072**	**1 226 348 634**	**(2 452 554 074)**	**11 173 806 129**
Recovery from DWS	**86 247 851**	**67 473 284**	**67 473 284**	**8 458 987**	**3 465 694**
Non cash flow items and accruals	156 437 074	3 111 118 471	(394 713 322)	(2 258 355 327)	-2 405 401 324
TOTAL COMMERCIAL FUNDING REQUIREMENT	**9 841 399 888**	**9 886 697 316**	**1 553 588 671**	**-202 657 734**	**13 582 673 146**
TOTAL FUNDING REQUIREMENT	**9 927 647 739**	**9 954 170 601**	**1 621 061 956**	**-194 198 747**	**13 586 138 840**

Table 3

Total funding requirement for the medium term decreases from the Actual/Forecast of R9 927 million to R1.61 billion in 2019/20. This then decreases to R-194 million (2020/21) and increases to R13.58 billion in 2021/22. The factors driving the movements are:

3.5 CAPITAL REPAYMENTS

LHDA and TCTA Capital repayments are in accordance with loan agreements. Between 2018/19 and 2020/21, TCTA is expected to allocate R12 billion towards the redemption portfolio.

3.6 FIXED ASSETS

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

3.7 CAPITAL EXPENDITURE (CAPEX)

Capex has been budgeted for in accordance with the Long-Term Cost Plans, contracts in place and charters of the projects, considering the revised timelines and the dynamics of each project. Expenditure on Construction Infrastructure increases over the medium term. The Budget includes capex costs for potential new projects.

4. BUDGET 2019/20 and MTEF 2020/21 to 2021/22: PRESENTED IN THE FINANCIAL STATEMENT FORMAT

In line with Practice Note 52, the budget presented above has been converted to the financial statement format similar to that used for the published Annual Financial Statements and include a Balance Sheet, Income Statement and Cash-flow.

This presentation of the budget does not amend the funding requirement and any of the other components of the budget as detailed above – it only presents the budget as it would be reported in the financial statements of TCTA.

Salient elements to note in the budget as presented below

It is important to note the following which does not translate into additional spend or income, but arises from the accounting treatment adopted:

- Tariffs billed to DWS on a cash flow basis are not reflected as income, but rather reduce the financial asset as they are expected to be received;
- Capital expenditure, operating expenses and interest expenses for the projects that are in construction are included in Construction Costs in the Statement of Comprehensive Income. Construction Revenue matching the construction costs is raised and reflected in the Statement of Comprehensive Income, with a contra being reflected as an increase to the Tariff Receivable in the Statement of financial position;
- For projects where construction has been completed, the operating expenses are disclosed separately with corresponding and matching income in the statement of comprehensive income;
- Included in net interest is the interest income on the financial asset as well as the imputed interest on the financial asset.

Statement of Financial Position

	Actual 2017/18 R million	2018-19 Budget R million	2018-19 Actual/ Forecast R million	2019-20 Budget R million	2020-21 Budget R million	2021-22 Budget R million
ASSETS						
Non-current Assets	25 918	24 169	21 949	17 771	18 103	20 339
Property Plant and Equipment	6	1	14	14	14	16
Intangible asset	14	5	8	8	6	4
Tariff Recievable	25 898	24 162	21 927	17 750	18 084	20 319
Long-term financial market market investments	-	-	-	-	-	-
Current Assets	7 571	6 222	2 755	10 816	15 632	7 720
Tariff Receivable	3 052	324	296	2 183	305	491
Loans and Other Receivables	211	586	1 202	2 432	3 353	6 243
Short-term financial market investments	371	1 055	-	-	-	-
Prepaid Expenditure	88	-	25	-	-	-
Non-contractual Amounts	-	-	-	-	-	-
Cash and Cash Equivalents	3 849	4 256	1 232	6 201	11 974	986
TOTAL ASSETS	33 489	30 391	24 703	28 587	33 735	28 059
EQUITY AND LIABILITIES						
Reserves and Surplus	4 753	2 745	2 262	-16	-312	-703
Accumulated Surplus/(Deficit)	4 753	1 526	2 262	-16	-312	-703
Sustainability Reserve	-	119				
Liquidity Reserve		1 100				
TOTAL EQUITY	4 753	2 745	2 262	-16	-312	-703
LIABILITIES						
Non Current Liabilities	17 935	26 707	21 616	27 556	32 344	24 652
Long-term financial market liabilities	17 653	26 707	21 616	27 556	32 344	24 652
Provision	282	-	-	-	-	-
Current Liabilities	10 801	939	826	1 047	1 703	4 110
Trade and Other payables	1 188	164	278	526	1 136	3 465
Non-contractual amounts	78	-	-	-	-	-
Provisions	39	-	-	-	-	-
Derivative financial instruments	0	-	-	-	-	-
Short-term financial market liabilities	9 496	775	548	522	568	645
TOTAL LIABILITIES	28 736	27 645	22 441	28 603	34 048	28 762
TOTAL EQUITY AND LIABILITIES	33 489	30 391	24 703	28 587	33 735	28 059

Statement of Comprehensive Income

	Actual 2017/18 R million	2018-19 Budget R million	2018-19 Actual/ Forecast R million	2019-20 Budget R million	2020-21 Budget R million	2021-22 Budget R million
CONSTRUCTION REVENUE	693	1 872	811	3 050	1 981	6 258
CONSTRUCTION COSTS	-693	-1 872	-811	-3 050	-1 981	-6 258
OTHER INCOME	1 378	1 847	1 659	1 872	2 008	2 121
OPERATING EXPENSES	-1 378	-1 837	-1 659	-1 872	-2 008	-2 121
OPERATING SURPLUS/(DEFICIT)	-	10	-	-	-	-
SUSTAINABILITY EXPENSE		-85				
LIQUIDITY EXPENSE		-600				
NET FINANCE COSTS	2 304	-1 279	-2 545	-2 280	-298	-393
Finance Income	5 589	3 059	3 195	3 867	2 616	2 030
Finance Costs	-3 285	-4 338	-5 740	-6 146	-2 913	-2 422
SURPLUS/(DEFICIT) FOR THE YEAR	2 304	-1 953	-2 545	-2 280	-298	-393
OTHER COMPREHENSIVE INCOME						
TOTAL COMPREHENSIVE SURPLUS/(DEFICIT) FOR THE YEAR	2 304	-1 953	-2 545	-2 280	-298	-393

Statement of Cash Flows

		Actual 2017/18 R million	Budget 2018/19 R million	Act forecast 2018/19 R million	Budget 2019/20 R million	Budget 2020/21 R million	Budget 2021/22 R million
CASH FLOW FROM OPERATING ACTIVITIES							
Cash receipts from customers		6 218	6 917	8 350	7 632	8 131	8 423
Cash paid to suppliers and employees		-2 955	-4 176	-5 611	-4 942	-4 523	-9 211
Cash generated from project activities	A	3 264	2 741	2 738	2 691	3 608	-787
Interest paid	B	-2 203	-2 523	-2 175	-2 305	-2 808	-2 202
Net cash (outflow)/inflow from operating activities		1 060	218	563	385	801	-2 989
CASH FLOW FROM INVESTING ACTIVITIES							
Payments to acquire financial assets		0					
Proceeds on the sale of financial assets		2 634		371			
Interest received	C	364	429	147	195	637	203
Purchase of intangible assets		-4		-0	-1	-1	-1
Sale of property, plant and equipment		1					
Purchase of property, plant and equipment		-1	-2	-8	-4	-4	-4
Net cash (ouflow) from investing activities		2 994	427	510	190	632	197
CASH FLOW FROM FINANCING ACTIVITIES							
Proceeds from long-term borrowings		0	6 180	7 500	6 577	5 495	2 405
Repayments on long-term borrowings		-2 826	-9 518	-12 372	-1 193	-779	-10 303
Proceeds from short-term borrowings		244	128	1 182	15	54	96
Repayments on short-term borrowings		-183	-1 016	-	-1 006	-430	-394
Net cash inflow from financing activities		-2 765	-4 227	-3 690	4 394	4 340	-8 196
Net (decrease) in cash and cash equivalents		1 290	-3 582	-2 616	4 969	5 773	-10 988
Cash and cash equivalents at beginning of period		2 559	7 838	3 849	1 232	6 201	11 974
Cash and cash equivalents at end of period		3 849	4 256	1 232	6 201	11 974	986

Notes to the Statement of Cash Flows

		Budget 2018/19 R million	Act forecast 2018/19 R million	Budget 2019/20 R million	Budget 2020/21 R million	Budget 2021/22 R million
A. CASH GENERATED FROM PROJECT ACTIVITIES						
Net deficit for the year	2 087	-1 953	-2 545	-2 280	-298	-393
Adjustment for non cash flow items:						
Construction revenue	-538	-1 872	-811	-3 050	-1 981	-6 258
Other income	-1 725	-1 847	-1 659	-1 869	-2 005	-2 118
Depreciation	10	15	7	6	7	5
DWS receivable interest	-5 099	-2 630	-2 878	-2 204	-1 978	-1 826
Other non cash flow items		1 118	2 727	2 309	0	0
AG8 adjustment	-73					
Net finance costs shown separately shown separately	3 013	2 791	2 696	2 175	2 276	2 219
	-2 325	-4 378	-2 462	-4 913	-3 979	-8 370
Changes in working capital						
Debtors	-73	187	-928	-1 208	-924	-2 894
Creditors	29	15	-2 221	1 179	380	2 054
Rec from Dwa	5 187	64	70	53	21	18
Capitalised to / (removed from) tariff receivable		6 853	8 279	7 579	8 110	8 406
Cash generated from project activities	3 264	2 741	2 738	2 691	3 608	-787
B. INTEREST PAID						
Interest expense shown separately	-3 384	-3 220	-2 843	-2 370	-2 913	-2 422
Capitalised interest	115	22	14	26	63	182
WS05 Cpi adjustment	1 104	692	641	-	-	-
Amortisation of bonds	6	-50	-11	5	8	2
Compensation	28	33	25	34	35	37
Accrued interest on switch auctions	-71					
Loss on switch		-	-	-	-	-
Interest paid	-2 202	-2 523	-2 175	-2 305	-2 808	-2 202
B. INTEREST RECEIVED						
interest income	371	429	147	195	637	203
Bond premium	-54					
Movement in interest receivable	47	-		-	-	-
Interest received	364	429	147	195	637	203

ANNEXURE D

RISK MANAGEMENT PLAN 2019/20

1. PURPOSE

The purpose of this document is to outline the 2019/2020 Annual Risk Management Plan. The plan describes how risk management will be structured and performed within Trans Caledon Tunnel Authority (TCTA) to ensure that risks are managed and controlled to acceptable levels. 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 strategy and sets out all risk management activities for 2019/2020. The main aim of the risk management plan is to provide an annual programme of risk management activities, associated timelines and responsibilities for achieving these. Hence, the risk management implementation plan sets out all risk management activities planned for 2019/2020.

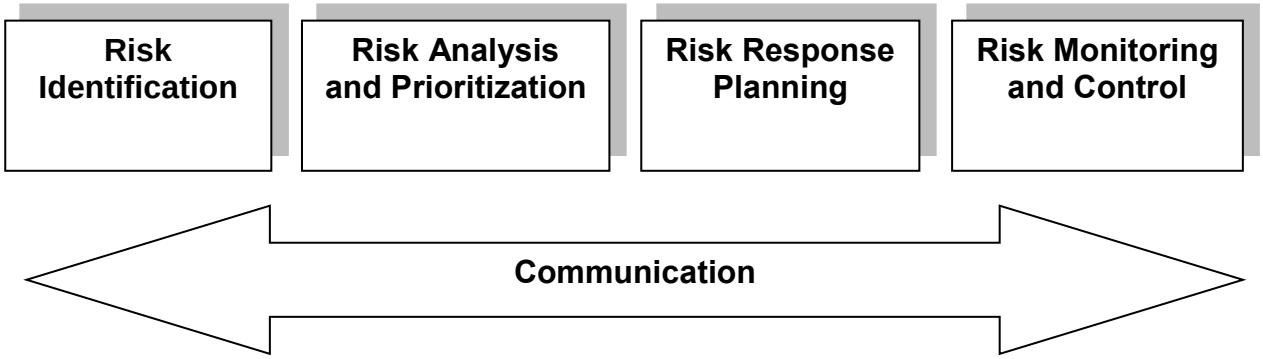
3. DEFINITION OF RISK MANAGEMENT

Risk management is the formal process by which risk factors are systematically identified, assessed and responded to. Risk management focuses on identifying and controlling events that have a potential of causing unwanted change. A risk is a potential undesirable and unplanned event, anticipated in advance, which could prevent TCTA from achieving one or more of its objectives.

4. 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.

The diagram below shows the risk management process to be followed.



Risks will be prioritised and key risks reported to the Risk and Finance Committee. The focus will be on risks that are rated high.

5. ROLES AND RESPONSIBILITIES OF THE RISK DEPARTMENT

The main objectives of the Risk Management function are as follows:

- Championing the establishment and embedding of risk management within TCTA.
- Creating and instilling a culture of risk awareness and accountability.
- Development of the risk management policy, framework as well as risk appetite for the organisation.
- Communicating the risk management policy, strategy and implementation to all stakeholders.
- Development of the risk management implementation plan of TCTA.
- Continuously drive the risk management process towards best practice
- Participating in combined assurance for TCTA.
- Ensuring effective information systems exist to facilitate overall risk management within TCTA.

Effective risk management implementation means that TCTA's efforts to minimise its risk exposure is systematic, structured and addresses critical areas of risk in order to create a risk aware organisation such that risk management achieves its main objectives and add measurable value to the organisation.

Effective risk management is ultimately tied to systems and structures being in place to drive and support the risk management activities and these are achieved through Risk Management Critical Success Factors in place.

6. RISK MANAGEMENT CRITICAL SUCCESS FACTORS

In order to achieve overall risk management objectives, there should be specific Critical Success Factors (CSF) in place to achieve effective risk management implementation through-out the organisation.

Risk Management's Critical Success Factors are those measures that need to be in place as a foundation to enable the risk management activity to function adequately and achieve the intended goals; value-add and success within the organisation.

These CSF's are indicated as follows in Figure 1 below:

No.	Critical Success Factor	Considerations
01.	Leadership commitment and support	Board of Directors/ Chief Executive Office / Executive Committee commitment and Accountability.
02.	Governance of Risk Management/ERM Infrastructure	ERM Framework, Policy, Philosophy and Policies. Committees (Risk Forum, The Board, Risk Management Committee and Reporting).
03.	Risk Function Capacity	Risk function Structure, Capability and Competency

04.	Risk Management Methodology	Risk Framework and Policy and Plans; Risk Assessment Systems and Processes
05.	Good Communication & Training	Management and employee awareness, training, development and workshops.
06.	Organisational Structure	Incorporation of risk practices in policies, plans, process and procedures for day-to-day implementation. Risk Management influencing Control Environment.
07.	Information and Technology	Facilitates effective and efficient implementation of risk management through data storage and risk reporting
08.	Organisational ERM Culture	Adopted risk management behaviour in day-to-day operations and risk-based decision making.

7. PERFORMANCE EVALUATION

The Audit and Risk Committee will annually undertake an assessment of the management of risks within the organisation. The results of the assessment and recommendations will form part of the inputs to the next risk management plan.

8. REVIEW OF THE PLAN

The Audit and Risk Committee will annually review the plan to ensure that it remains relevant to the committee's purpose, authority, objectives and responsibilities.

9. OVERVIEW OF THE TCTA RISK MANAGEMENT FRAMEWORK

The framework provides a practical guide to assist management with the effective identification, evaluation and control of risks that may impact on the achievement of the set corporate objectives and priorities. Enterprise risk management considers risks from an organisation-wide perspective, which takes an approach that each Division or Business Unit develops a composite assessment of risks and strategies taking into account the impact of the risk/controls on the whole organisation. All identified risks are recorded in the organisational risk registers and management identifies options for treating these risks.

The organisation has a continuous, proactive and systematic way of identifying potential events that may pose risks. The approach enables the organisation to manage risks within acceptable tolerance levels to ensure that organisational goals are achieved.

TCTA is exposed to the following broad categories of risks:

9.1 STRATEGIC RISKS

These are potential exposures that may deter the organisation from achieving its strategic goals, and emanate from among others: business policy decisions, changes in the economic environment, legal and regulatory changes, stakeholder relationships and government expectations such as transformation requirements. These risks are managed through implementation of proper business strategies and plans that respond to changes in the economic and operating environment.

9.2 OPERATIONAL RISKS

These are unique to the internal operations of the institution and are mainly related to employees, processes, systems and events. These are day to day issues that the organisation is confronted with, and can be driven by factors such as regulation, internal controls, information systems and organisational culture. Such risks are managed by policies and procedures and a comprehensive system of internal controls, such as segregation of duties and proper delegation of authority.

9.3 PROJECT RISKS

These risks emanate from project management and implementation function of the organisation, and by their nature these risks are inherent in construction projects. The risks may cause delays in completion of projects which might have an adverse impact on ability to deliver water on time to the stakeholders and further result in the delay of revenue streams.

To manage these risks, there are contractual agreements with contractors and consultants providing remedies for delays and incentives for early completion, ensuring compliance with legislative requirements for construction projects and implementation of sound and efficient internal processes.

9.4 TREASURY RISKS

TCTA debt management activities expose the organisation to financial risks which have implications for the organisation's asset and liability management strategies. The Risk Committee monitors the organisation's exposure to treasury risks. The risk management department regularly monitors treasury risks in order to ensure that controls in place are working effectively and are in line with the approved Risk Management Framework and Treasury Risk Management Policy.

9.5 POLITICAL RISKS

This is the risk that TCTA's returns could be affected by political changes or instability in a country. A change in government and legislative bodies, for instance, may lead to instability and may affect TCTA's ability to make repayments.

9.6 PROJECT FUNDING RISK

This risk is associated with the impact on a project's cash flow from higher funding costs or lack of availability of funds to finance the project. Some of the strategies put in place to mitigate this risk include appropriate and sound project institutional arrangements to secure good credit ratings and building strong relationships with local and international financiers.

9.7 INFORMATION TECHNOLOGY RISK

The risk emanate from failure to protect information and information systems from unauthorised access, use, disclosure, disruption, modification or destruction. TCTA has IT policies and frameworks which enhance business continuity and minimise business damage by preventing or limiting the impact of security breaches.

10. 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 2019/2020 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 below.

11. RISK MANAGEMENT REPORTING

Risk Management reporting will take place on a quarterly basis to ensure that the Board of Directors are well informed with regards to the performance against the TCTA's Risk Profile. Reporting plays a pivotal role in ensuring that management remains accountable for risk mitigation actions and that such actions are effective and adequate in minimizing the risk exposure to TCTA.

The reporting will highlight progress on the following features:

- the implementation of mitigation actions/ further controls;
- the success of mitigation strategies (risk- declining, rising or unchanged);
- challenges experienced; and
- Corrective actions to be taken.

12. CONCLUSION

The risk management plan details when, how and by whom the risk management activities are carried out. This ensures the effectiveness of the Risk Management Function and improvement in its maturity levels.

RISK MANAGEMENT PLAN ACTIVITIES FOR 2019/20

Objective	No	Activity	Target Date	Responsible Person	Outcome
Tone at the top					
Leadership and commitment	1	Risk awareness sessions to Board and Management	Quarterly	CRO/CEO	Creation and Facilitation of organisational risk culture
	2	Management of key risks by the Exco / Board	Quarterly	The Board / ECXO	Improvement in TCTA's risk profile (Management of risks within the tolerance levels)
	3	Conduct a Board strategic risk assessment workshop	January 2020	CRO/CEO	Strategic risk registers for the organisation (Top key risks)
Governance of risks					
Effective planning of risk management processes	1	Development of annual risk management plan	November 2019	CRO/Risk Manager	Annual Risk Management plan
Ensure up to date frameworks and policies	2	Development and review of the following: - Risk Management Philosophy - Risk Management Policy - Risk Management Framework - Materiality and significance framework - Treasury Risk Management policy - Review Fraud Prevention Policy	 March 2020 November 2019 November 2019 November 2019	CRO/Risk Manager	Approved policies and frameworks by Risk Committee

Objective	No	Activity	Target Date	Responsible Person	Outcome
		- Review Fraud Prevention strategy - Review Fraud Prevention - Plan - Business Continuity Management Policy, Framework and Plan - Disaster recovery plan	November 2019 March 2020		
Raising risk management awareness					
To raise organisational risk awareness		Risk awareness sessions across the organisation Make presentations on risk management at Risk Forum and Committees	March 2020	Chief Risk Officer / Risk Manager	All employees made aware of risk management Organisational risks managed to acceptable levels
		Risk Management articles developed and posted on the Intranet	March 2020	Risk Management Team	Organisational risks managed to acceptable levels
Ensure TCTA has early warning risk indicators	3	Monitoring the key risk indicator trends and movements	Quarterly	CRO/Risk Department	Quarterly key risk indicators report
Enterprise wide risk management					
Create organisational risk awareness	1	Conduct risk awareness session	Quarterly	CRO/Risk Department	Improvement in risk management culture
	2	Publish risk management articles -2 papers per employee per annum	March, 2020	CRO/Risk Department	

Objective	No	Activity	Target Date	Responsible Person	Outcome
	3	Make presentations at Risk Forums and risk register update sessions	Quarterly		Improvement in risk management culture
Facilitating Risk Assessments	1	Strategic risk assessments/ facilitate risk identification and assessment sessions/ analyse information, monitor implementation of controls and update risk registers	Quarterly	CRO/Risk Department	Divisional strategic risk registers
	2	Project risk assessments / facilitate risk identification and assessment sessions/ analyse information, monitor implementation of controls and update risk registers	Monthly/Quarterly	CRO/Risk Department	Projects risk registers
	3	Treasury risk assessments / monitor treasury risks and prepare risk reports	Daily, /Monthly/Quarterly	CRO/Risk Department	Treasury risk registers / Treasury report
	4	Review of counterparty limits	November 2029	CRO/Risk department	Reviewed counterparty limits
	5	Operational risk assessments / facilitate risk identification and assessment sessions/ analyse information, monitor implementation of controls and update risk registers	Bi-Monthly	CRO/Risk Department	Operational risk registers

Objective	No	Activity	Target Date	Responsible Person	Outcome
	6	Special projects risk assessment	Weekly/Monthly	CRO/Risk Department	Treasury Management System risk register Enterprise Resource Planning
	7	Monitoring the key risk indicator trends and movements	Quarterly	CRO/Risk Department	Quarterly key risk indicators report
	8	Fraud risk assessments	bi-annually	CRO/Risk Department	Fraud risk register
	9	Assess risks controls effectiveness	Monthly, bi-monthly, Quarterly	Risk department	Risks mitigated to acceptable levels
Ensure Business Continuity	1	Review and update divisional Business Impact Assessments	March, 2020	CRO/Risk Department	Divisional Business Impact Assessment reports
	2	Review of Business Continuity implementation plan	March, 2020	CRO/ Risk Department	BCM Plan
Management of risk financing (Insurance)	1	Conduct risk assessment of Corporate risk exposures and place covers	Monthly/Quarterly/Annually	CRO/Risk Department	Adequate insurance cover
	2	Place corporate insurance covers	June 2019	CRO/Risk department	Corporate risks covered
	3	Development of Insurance Policy	September, 2019	CRO/ Risk Department	Effective management of insurance
	4	Development of Insurance Procedures	March, 2020	CRO/Risk Department	Effective management of insurance
Risk Management software	1	Rollout of risk management software	June, 2019	CRO/Risk Department	Risk managed from a central point in real time

Objective	No	Activity	Target Date	Responsible Person	Outcome
Development of TCTA risk appetite framework	2	Review and implementation of TCTA risk appetite	April, 2019	CRO/Risk Department	Better quantification of loss
Monitoring and Reporting					
Monitor Risk Profile	1	Assess risks controls effectiveness	Monthly, bi-monthly, Quarterly	Risk Department	Risks reduced to acceptable levels
Report TCTA's risk profile	1	Reporting to Executive Management	Quarterly	CRO/Risk Department	Quarterly reports
	2	Reporting to Board and Risk and Finance Committee	Quarterly	CRO/Risk Manager	
Annual Report	1	Prepare risk section of the Annual Report	30 June, 2019	CRO/ Risk Manager	Risk Management section included in the Annual Report

ANNEXURE E

FRAUD PREVENTION PLAN

1. PURPOSE

The purpose of the Fraud Prevention Plan is to outline how the TCTA will implement the measures to address risk of fraud. The Fraud Prevention Plan relies on an effective corporate governance that utilises the risk-based approach and ensures that compliance to internal controls is achieved, to minimise opportunities for fraud. The desired outcome 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, and all the identified risks were considered during the development of the Fraud Prevention Plan. The identified risks are not all-inclusive and should not be an exhaustive list of all possible fraud risks relevant to the TCTA, but rather as an indication of potential fraud risks.

This Fraud Prevention Plan does not make TCTA immune to incidents of fraud but serves as an additional measure to assist in managing fraud risks with a focus of 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 committed for the benefit of the perpetrator or to the detriment of the organisation. Fraud may be committed 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.

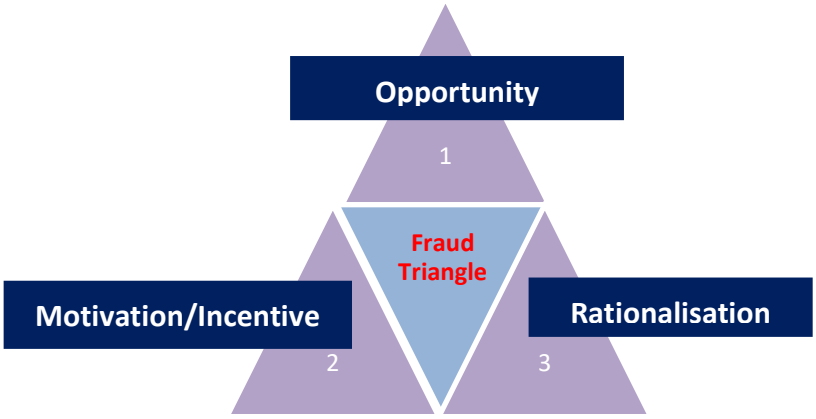


Figure 1: The Fraud Triangle

According to the fraud triangle the perceived opportunity is a contributing factor to the commission 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 caused by 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 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

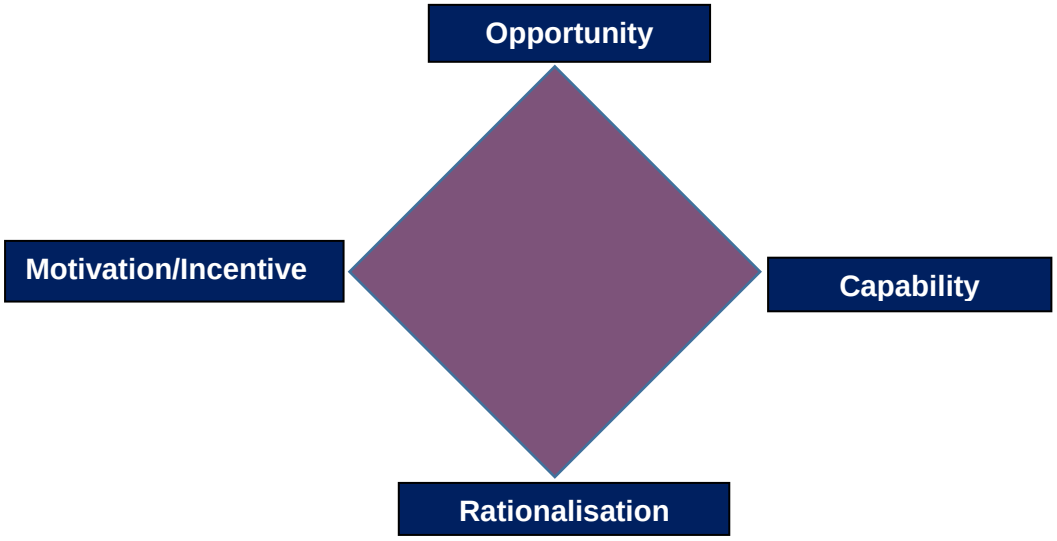


Figure 2: The Fraud Diamond

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, confidence (arrogance that they will never be caught) as well as the ability to deal with the stress of committing the crime and the ability to live with a bad conscience.

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 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.

ANNEXURE E1

FRAUD PREVENTION PLAN

INITIATIVE	OBJECTIVE	ACTION	RESONSIBLE PERSON	TIMING	STATUS (see legend below)
Good corporate governance	To create a corporate culture that sets a tone for prevention of fraud	Setting the culture of zero tolerance for fraud.	CEO and EXCO	Ongoing	
		Promotes and review corporate governance processes	Company secretary	Annually	
		Reinforcement of fraud prevention through audit recommendations	Internal Audit	Ongoing	
Implementation of the Code of Conduct	To ensure adherence by all staff, board members and stakeholders of the TCTA Code of Conduct	Review and monitor adherence to the Code of Conduct	Executives and Senior Management	Ongoing	
Fraud awareness, training and fraud reporting guidelines	Provide comprehensive and formalised training to assist in highlighting the risks of fraud; thereby empowering employees to recognise fraud in its infancy and act	Fraud awareness training to all staff.	Chief Internal Auditor	Ongoing	
		Identification and reporting of fraud	All TCTA staff	Ongoing	
Performance of fraud risk assessment	To ensure all fraud risks are considered and adequately managed	Reviewing the fraud risk registers to ensure that the risk of fraud is adequately managed within their area of responsibility	Executives	Ongoing	
		Facilitation of fraud risk assessments and monitoring the	CRO	Bi-Monthly	

INITIATIVE	OBJECTIVE	ACTION	RESONSIBLE PERSON	TIMING	STATUS (see legend below)
		implementation of mitigation measures			
		Fraud prevention through audit plan execution	CIA	Ongoing	
Enhancement of internal controls and systems	Ensure adequacy and effectiveness of internal controls	Promoting a sound control environment	CEO and EXCO	Ongoing	
		Reviewing the adequacy and effectiveness of internal controls to prevent and detect fraud.	CIA	Ongoing	
Effective compliance and internal audit functions	Ensure existence of an effective compliance and internal audit functions	Monitor the status of compliance to ensure that TCTA adheres to South African legislation and regulations.	CEO and EXCO	Ongoing	
		Review resource needs to ensure that the functional areas of compliance and internal audit are well-staffed and adequate in performing all planned risk-based audits.	CRO and CIA	Ongoing	
Independent auditors reviews	To ensure concerns of external auditors regarding fraud are considered and recommendations implemented	Identify and manage fraud risk to ensure that TCTA is not exposed and become vulnerable to fraud.	EXCO	Ongoing	
		Co-ordinating contact with external auditors to ensure adherence to all disclosure requirements.	CFO	Annually	

INITIATIVE	OBJECTIVE	ACTION	RESONSIBLE PERSON	TIMING	STATUS (see legend below)
		Follows-up on the implementation of external audit recommendations	CIA	Ongoing	
Whistle blowing facility	Implement a communication strategy for TCTA-wide awareness of the whistle blowing hotline	Use of the whistle blowing facility/fraud hotline.	All TCTA staff	Ongoing	
		• Ensure its successful utilisation • Create regular awareness of the hotline facility by means of posters, pamphlets, and other internal communications • Provide regular feedback to the Audit Committee on the number of calls received from Tip-Offs Anonymous	CIA	Ongoing	
Implementation of anti-money laundering policy	Adequate and effective anti-money laundering policy	Monitor the implementation of anti-money laundering policies and practices to ensure that it forms part of TCTA's culture.	CEO/EXCO	Quarterly	
		Co-ordinating adherence to anti-money policy and FICA.	CRO	Annually	
		Executing a risk-based audit plan that may recommend improvements to the	CIA	Ongoing	

INITIATIVE	OBJECTIVE	ACTION	RESONSIBLE PERSON	TIMING	STATUS (see legend below)
		implementation of anti-money laundering policy.			
Supplier and trading partner awareness	Implement supplier and trading partner awareness programmes to limit the supplier's exposure to, and participation in unethical business practices	Monitor the implementation of the ethics framework and policy to ensuring that TCTA is not exposed to, participation in unethical business practices.	Executives	Ongoing	
		Co-ordinating the compilation of a supplier code of conduct and submitting to the board for approval and implementation;	CFO	Annually	
		Maintaining gift declaration registers	CS	Ongoing	
Pre-employment vetting	Ensure that staff vetting processes, which limit exposure to hiring potential fraudsters, are in place	Ensuring that: • An adequate process is in place for the vetting of prospective employees and staff • Staff vetting procedure is continuously assessed to determine its effectiveness	Executive HR	Ongoing	
Expediting disciplinary processes	Ensure prompt finalisation of matters in terms of the applicable disciplinary processes	Implementing the disciplinary policy to ensure that disciplinary actions are conducted when required.	Executives	Ongoing	
		Co-ordinating training to equip line managers to effectively deal with the disciplinary process	Executive HR		

INITIATIVE	OBJECTIVE	ACTION	RESONSIBLE PERSON	TIMING	STATUS (see legend below)
Proactive Fraud Detection	Identify fraud-prone environments and review underlying root causes to detect fraud. Conduct annual data analytics.	Proactive fraud detection throughout TCTA	Executives	Ongoing	
		Plan and execute audits aimed at proactively detecting fraud within the vulnerable areas of the TCTA	CIA	Annually	

Action plan status	Number	%
Action plans achieved		
Action plans partially achieved		
Action plans overdue		
Action plans within timeline		.
Total		**100%**

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 and agree a framework of acceptable levels of materiality and significance with the relevant Executive Authority. This is for purposes of material, section 55 (2) of the PFMA and significance, section 54 (2) of the PFMA. 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 making recommendations to the Board regarding 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 2017/18 audited figures as provided by Ernst and Young Inc.

The proposed 2019/ 2020 materiality levels are shown in the table below:

6. 2019/20 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**	**MMTS-1**	**UMGENI**	**KRIEL**	**MRWP**	**Consolidated**
Total Assets		**3,995,000,000**	**577,000,000**	**24,679,000,000**	**1,805,000,000**	**1,215,000,000**	**107,000,000**	**1,039,000,000**	**1,000,000**	**17,000,000**	**6,000,000**	**17,000,000**	**33, 458, 000 ,000**
	1.0%	39,950,000	5,770,000	246,790,000	18,050,000	12,150,000	1,070,000	10,390,730	10,000	170,000	60,000	170,000	334,580,000
	2.0%	79,900,000	11,540,000	493,580,000	36,100,000	24,300,000	2, 140,000	20,700,000	20,000	340,000	120,000	340,000	669,160,000
Total Revenue		**3,913,000,000**	**505,000,000**	**21,299,000,000**	**1,523,000,000**	**1,145,000,000**	**0**	**565,000,000**	**0**	**0**	**0**	**0**	**28,950,000,000**
	0,5%	19,565,000	2,525,000	106,495,000	7,615,000	5,725,000	0	2,825,000	0	0	0	0	144,750,000
	1.0%	39,130,000	5,050,000	212,990,000	15,230,000	11,450,000	0	5,650,000	0	0	0	0	289,500,000
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
	2.0%	0	0	0	0	0	0	0	0	0	0		0
	5.0%	0	0	0	0	0	0	0	0	0	0		0
		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
		TCTA's 2019/20 Proposed Framework											
Total Assets	0.5%	19,975,000	2,885,000	123,395,000	9,025,000	6,075,000	535,000	5,195,000	5,000	85,000	30,000	**85,000**	**167,290,000**
Total Revenue	0.25%	9,782,5000	1,262,500	53,247,500	3,807,500	2,862,500	0	1,412,500	0	0	0	0	72,375,000
Profit After Tax (n/a)	0	0	0	0	0	0	0	0	0	0	0	0	0

7. PRIOR YEAR 2018/19FOR 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**	**MMTS-1**	**UMGENI**	**KRIEL**	**Consolidated**
Total Assets		**3,982,000,000**	**716,000,000**	**23,665,000,000**	**1,941,000,000**	**1,307,000,000**	**115,000,000**	**1,273,000,000**	**0**	**16,000,000**	**13,000,000**	**33, 028, 000, 000**
	1.0%	39,820,000	7,160,000	236,650,000	19,410,000	13,070,000	1, 150,000	12,730,000	0	160,000	130,000	330,280,000
	2.0%	79,640,000	14,320,000	473,300,000	38,820,000	26,140,000	2, 300,000	25,460,000	0	320,000	260,000	660,560,000
Total Revenue		**0**	**0**	**372,000,000**	**64,000,000**	**0**	**140,000,000**	**94,000,000**	**0**	**19,000,000**	**3,000,000**	**692,000,000**
	0.5%	0	0	1,860,,000	320,000	0	700,000	470,000	0	95,000	15,000	3,460,000
	1.0%	0	0	3,720,,000	640,000	0	1,400,000	940,000	0	190,000	30,000	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
	2.0%	0	0	0	0	0	0	0	0	0	0	0
	5.0%	0	0	0	0	0	0	0	0	0	0	0
	2017/18 External Audit Materiality (At time of sign-off)											
2017/18 External Audit Materiality		n/a	n/a	n/a	n/a	n/a	n/a	n/a		n/a	n/a	n/a
	TCTA's 2018/19 Proposed Framework											
Total Assets	0.5%	19,910,000	3,380,000	118,325,000	9,705,000	6,535,000	575,000	6,365,000	0	80,000	65,000	**165,140,000**
Total Revenue	0.25%	32,500	0	930,000	160,000	0	350,000	235,000	0	47,500	7,500	1,730,000
Profit After Tax (n/a)	0	0	0	0	0	0	0	0	0	0	0	0

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, it has been agreed that corporate expenditure be used as a basis for calculating corporate materiality. Materiality is calculated as one (1) percent of total expenses. The table below shows the comparison between corporate materiality for 2019/20 in comparison to that of the previous year 2018/19.

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 2018/19 and 2019/20 corporate materiality calculated at 0.5%, 1% and 2% of total expenditure.

	2018/19	**2019/20**
Total Expenses	R 1 378 000 000	R 1 725 000 00
Materiality Level (2%)	R 27 560 000	R 34 500 000
Materiality Level (1%)	**R 13 780 000**	**R 17 250 000**
Materiality Level (0.05%)	R 6 890 000	R 8 625 000

Materiality is calculated at one (1) percent of total expenses. The table below shows the comparison between corporate materiality for 2019/20 and that of the previous year 2018/19. Hence, the proposed corporate materiality for 2019/20 is

R17 250 000.

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 R334, 580,000. The External Auditors did not provide the materiality figure for March 2018 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 2019/20 based on 50% of the lower figure of 1% recommended by National Treasury, hence:

- The recommended strategic materiality level for 2019/20 is R 167, 290,000.
- The recommended corporate materiality based on total expenses for the 2019/ 2020 financial year is R17 250 000.

The approved materiality figures are effective from 01 April 2019 to 31 March 2020.

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 ***significant*** 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.

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	50	• BCom • MBA	**Current position:** Chief Executive Officer **Other directorships**: Director of National Planning Commission **Other board committee memberships:** Director of TCTA
Radzuma	Leonard	Male	African	44	• 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
Nazeer	Halima	Female	Indian	50	• BCom • BCompt (Hons) • CA(SA) • Senior Executive Development Programme	**Current position:** Chief Financial Officer **Other directorships**: None **Other board committee memberships**: GPG Audit Committee Member
Busari	Ola	Male	African	57	• BSc (Hons) Civil Eng.	**Current position:**

Surname	First Name	Gender	Race (African, Asian, Coloured and White)	Age	Qualifications	Current position and active membership on other organisations/companies/entities/ boards
					• MSc (Eng.) Hydro-Geology • PhD Water Resource Management • Advanced (Environmental) Isotopes • MBA • Senior Executive Programme	Chief Strategy Officer **Other directorships:** None **Other board committee memberships**: None
Claassens	Johann	Male	White	58	• 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	55	• BSc (Eng.) Electrical Engineering • Master of Applied Science • Post-graduate course in mathematics & finance	**Current positon:** Executive Manager : Project Finance & Treasury **Other directorships:** Blue Horizon 39 (Pty) Ltd **Other board committee memberships:** None
Gumede	Lindani	Male	African	39	• National Diploma: Information Technology	**Current positon:** Executive Manager : EWSS

Surname	First Name	Gender	Race (African, Asian, Coloured and White)	Age	Qualifications	Current position and active membership on other organisations/companies/entities/ boards
					• Post Graduate Diploma in Management	**Other Directorships:** None **Other Board Committee memberships:** None
Botha	Hanje	Female	White	44	• BA (Economics and Geography) • BA (Hons) GIS • MPhil (Professional and Leadership Coaching) • Leadership Development Programme – GIBS	**Current positon:** 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	
Manase, ZP	Female	African	57	• BCom • BCompt (Hons) • HDip - Tax • CA(SA)	• Accounting • Audit • Finance • Leadership • Risk	2015/12/01	2018/12/31 **extended to** 2019/04/30	• Trustee - Nelson Mandela Children's Fund • Chairperson- Isizinda Aluminium • Chairperson- Alusha Natural Resources
Modise, JRD	Male	African	52	• BCom • BAcc • CA(SA), SAICA • MBA • Advance Management Programme	• Accounting • Audit • Finance • Leadership	2015/12/01	2018/12/31 **extended to** 2019/04/30	• NERSA • Batsomi subsidiaries and associated companies • Trustee - Nelson Mandela Children's Fund
Roopa, S	Male	Indian	61	• BJuris • LLB • MPhil • Certificate: Transformation of Institutes of Higher Education • Certificate: Executive programme for Leaders in Government • Certificate: Negotiating International Contracts & Development Finance	• Legal • HR • Philosophy • Risk	2015/12/01	2018/12/31 **extended to** 2019/04/30	• Gautrain Management Agency • iSimangaliso Wetland Park Authority

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: Global Housing Trends				
Makhathini, SFS	Female	African	32	• BCom (Accounting) • BCom (Hons) Accounting Sciences • Post Grad Diploma: Accounting Sciences • Certificate: Theory in Accounting • CA(SA), SAICA	• Audit • Accounting • Finance • Risk	2015/12/01	2018/12/31 **extended to** 2019/04/30	• Health Professions Council of South Africa – Professional Board • National Library of South Africa • Mpumalanga Tourism and Parks Agency • Iziko Museum of South Africa
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	2018/12/31 **extended to** 2019/04/30	• Buffalo City Development Agency

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	
Chonco, MM	Male	African	38	• BSc • BSc (Hons) Hydrogeology • PDBA • MBA	• Hydro Engineer • Project Management • Business Leadership • Strategy and Risk	2016/08/02	2018/12/31 **extended to** 2019/04/30	• Trustee – SAB Provident Fund • National Business Initiative (NBI) • South African Business Coalition on Health and AIDS (SABCOHA)
Ellman, MJ	Male	Coloured	71	• BSc (Chem Eng.) • MSc (Chem Eng.) • PhD (Chem Eng.) • MBA	• Business Leadership • Engineering • Risk	2015/12/01	2018/12/31 **extended to** 2019/04/30	• Bloemwater • Advisory Board – Department of Chemical Engineering University of Pretoria
Moahloli, DT	Female	African	36	• BSc • BA (Hons) Economics • MA Economic Science	• Economic Science • Audit • Finance	2015/12/01	2018/12/31 **extended to** 2019/04/30	None