



CORPORATE PLAN

TRANS-CALEDON TUNNEL AUTHORITY

FOR THE PERIOD 1 April 2022 to 31 March 2025

**(Prepared in accordance with National Treasury
Guidelines)**

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 2022/23.

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

Compiled by:

Signature: _____

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Approved by:

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Chairperson of the Board: TCTA

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SUPPORTING FRAMEWORK:

ANNEXURE A	- TCTA CORPORATE BALANCED SCORECARD FOR 2022/23
ANNEXURE B	- CAPITAL EXPENDITURE PROGRAMME AND OPERATIONS & MAINTENANCE
ANNEXURE C	- BORROWING PROGRAMME, BUDGETS AND CASH PROJECTIONS
ANNEXURE D	- RISK MANAGEMENT PLAN
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1. OVERVIEW

1.1 THE PURPOSE OF THIS CORPORATE PLAN

The purpose of this corporate plan is to outline how the Trans Caledon Tunnel Authority (TCTA) will fulfil its mandate and implement the directives received from the Minister of Water and Sanitation, and in doing so, support the Government's developmental agenda.

TCTA as a Schedule 2 public entity complies with section 52 of the Public Finance Management Act, Act No.1 of 1999 as amended, which provides that,

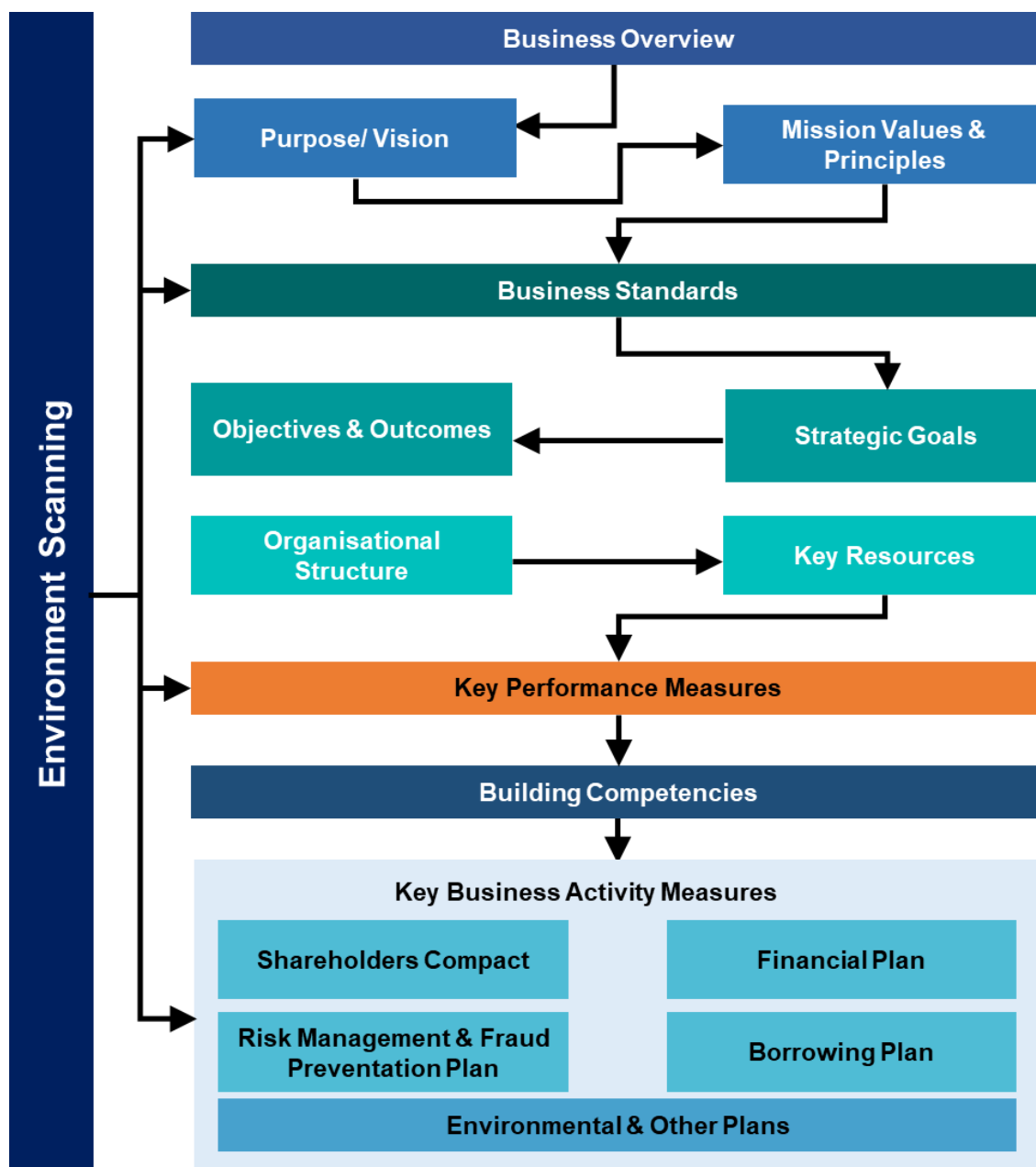
'The accounting authority for a public entity listed in Schedule 2 or a government business enterprise listed in Schedule 3 must submit to the accounting officer for a department designated by the executive authority responsible for that public entity or government business enterprise, and to the relevant treasury, at least one month, or another period agreed with the National Treasury, before the start of its financial year—

- a) a projection of revenue, expenditure, and borrowings for that financial year in the prescribed format; and*
- b) a corporate plan in the prescribed format covering the affairs of that public entity or business enterprise for the following three financial years, and, if it has subsidiaries, also the affairs of the subsidiaries.'*

In line with National Treasury Practice Note 4 of 2009/2010, this corporate plan includes information required in terms of Section 52 of the PFMA and Treasury Regulation 29.

1.2 A CONCEPTUAL FRAMEWORK FOR THE CORPORATE PLAN

A conceptual framework for the corporate plan can be graphically depicted as follows:



To provide the National Treasury with sufficient information as required by the PFMA, the corporate plan presented by TCTA as a public entity contains the following information:

- A brief overview of the Mandate of the public entity.
- The Vision of the public entity.
- The Mission of the public entity.
- The Supporting Values of the public entity.
- Background-legislative and regulatory framework.
- Main Activities

- Business Strategy
- Corporate Strategic Objectives (Key Performance Indicators are in Annexure A)
- The Operating Principles.
- Governance Structures
- Financial Plan
- Capital Expenditure Plan
- Borrowing Plans
- Risk Management and Fraud Prevention Plans
- Materiality and Significant Framework

1.3 A BRIEF OVERVIEW OF TCTA's 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.

1.4 VISION

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

1.5 MISSION

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

1.6 CORPORATE VALUES

TCTA's 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 grow and 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.

1.7 STRATEGIC OVERVIEW

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

As and when directed by the Minister, TCTA continues with its critical role of ensuring the timeous development of infrastructure for the expanded supply of water to deal with the

historical imbalances relating to access to water, and to simultaneously stimulate South Africa's economic growth.

1.8 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,
- procurement,
- financial management,
- risk management, and
- Local economic development.

TCTA as a Special Purpose Vehicle of government continues to deliver within the parameters agreed with the Department of Water and Sanitation.

2. BACKGROUND

2.1 LEGISLATIVE AND REGULATORY FRAMEWORK

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

2.2 ESTABLISHMENT DATE AND REASONS

The Trans-Caledon Tunnel Authority (TCTA) was established in 1986, by Notice 2631 in Government Gazette No 10545, dated 12 December 1986, to finance and build the Delivery Tunnel North of the Lesotho Highlands Water Project (LHWP). In 1994 a directive was

received to fulfil the financial obligations of the Government of South Africa, in terms of the treaty, on the water transfer component in Lesotho.

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

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

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

The Minister must be satisfied that such directives will not prejudice the capacity of TCTA to perform the functions for which it was established.

The National Water Act allows the Minister to direct a body established under section 102, of the Act, to perform additional functions which may include –but are not limited to– providing local and foreign water management institutions with:

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

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

This is further emphasised in the Notice of Establishment for TCTA which states in section S20(1) that TCTA must manage its treaty functions separately from its non-treaty functions and account for them separately as required by section 105(1) of the National Water Act. Section 20(2) furthermore states that the Authority's treaty responsibilities are not applicable to its non-treaty responsibilities. Treaty functions are those functions assigned to TCTA in the Treaty on LHWP, while non-treaty functions include the mandate to perform South

Africa's financial obligations arising from the Treaty and any other functions which the entity has been directed by the Minister to perform.

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 across the country. 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 capabilities render 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 and social management
 - land acquisition
- c) operation and maintenance;
- d) debt management;
- e) knowledge management;
- f) risk management;
- g) socio-economic transformation; and

h) 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 projects shown in Table 1. Currently there are 6 projects under debt management, 1 project under preparation, 3 projects at implementation phase, 1 project at closeout, 2 under operation and maintenance, 2 on hold and 3 advisory projects.

Table 1: Mandate and Current Directed Projects

Project	Date Directive received	Work to be undertaken in 2022/23							
		Planning	Funding & Debt Management	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 Highlands Water Project and any other obligations on the Vaal River System (Acid Mine Drainage). (VRS)	3 August 1994 (and incorporated into amended Notice of 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		✓		✓				

Project	Date Directive received	Work to be undertaken in 2022/23							
		Planning	Funding & Debt Management	Implementation	Close-out	Operation and maintenance	Advisory	Payment agency	On-hold
Komati Water Scheme Augmentation Project (KWSAP)	29 September 2008		✓						
Mokolo–Crocodile Water Augmentation Project – Phase 1 (MCWAP-1)	19 May 2010		✓		✓				
Projects under preparation									
uMkhomazi Water Project Phase 1 (uMWP-1)	25 February 2019	✓	✓						
Projects at Implementation Phase									
Mokolo–Crocodile Water Augmentation Project – Phase 2A (MCWAP-2A)	19 May 2010		✓	✓					
Berg River Voëlvei Augmentation Scheme (BRVAS)	18 May 2017	✓	✓						
Projects Under Close-Out Phase									
Olifants River Water Resources Development Project – Phase 2C (ORWRDP-2C)	17 June 2008 (directive revised 12 March 2012)				✓				
Projects Under Operation and Maintenance									
Lesotho Highlands Water Project: Delivery Tunnel North (Treaty obligations) (LHWP)	12 December 1986		✓			✓			
Acid Mine Drainage- Short-term Solution (AMD-STs)	6 April 2011		✓			✓			
Projects on Hold									
Olifants River Water Resources Development	25 February 2015		✓						✓

Project	Date Directive received	Work to be undertaken in 2022/23							
		Planning	Funding & Debt Management	Implementation	Close-out	Operation and maintenance	Advisory	Payment agency	On-hold
Project – Phase 2B (ORWRDP-2B)	(Directive revised 22 October 2015)								
Acid Mine Drainage (AMD-LTS)	19 May 2016		✓						✓
Advisory Services									
Advisory Services to Water Management Institutions, Water Boards and DWS	17 May 2004						✓		
Strategic Integrated Projects 19 (SIP-19)	6 August 2021*						✓		
Programme Management Services to DWS in relation to Water Infrastructure Projects.	1 April 2019						✓		
Mzimvubu Water Project (MWP)	19 January 2019 (replaced previous directives)			↻			↻		
<ul style="list-style-type: none"> Stage 1- Project Advisory Management Services Assistance with the implementation strategy further Phases 		✓					✓		

*The SIP-18 directive from the Minister of Water and Sanitation has been updated by a SIP-19 mandate letter from the Head: Investment and Infrastructure Office, in the Presidency.

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

- The implementation of Phase 2B of the Olifants River Water Resources Development Project forms part of the remaining phases of the project still to be implemented to

complete the water distribution system. The DWS is currently in a process of engaging with the mines with a view to conclude an alternative institutional arrangement for the funding and implementation of the remaining phases. TCTA is providing advisory support to the DWS in the engagements with the mines and expects the DWS to direct TCTA on its future role on the project.

- Long-term Solution for Acid Mine Drainage on the Witwatersrand. TCTA has requested the Minister to suspend the Directive following DWS' decision to review technical solution options for the project, the response still pending.

2.5.2 POTENTIAL DIRECTIVES

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

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

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

ORWRDP-2D,2E and 2F

DWS previously requested TCTA 's assistance with the implementation of Phases 2D, 2E and 2F to complete the water distribution system to which TCTA submitted a draft directive for consideration by DWS. Any further TCTA responsibilities will however be subject to the DWS decision on the alternative institutional arrangements currently being considered with the mines.

Nwamitwa Dam Project

The feasibility study for the development and management options in the Groot Letaba River proposes the construction of a dam at Nwamitwa and the raising of Tzaneen Dam (which DWS proceeded with) for augmenting water supply from the Groot Letaba River. Following TCTA's response to DWS request for a proposal on the implementation of the project a response from the DWS is pending.

2.5.3 STRATEGIC INTEGRATED PROJECTS: SIP-19

The South African government continues to prioritise infrastructure investment as a lever to catalyse national socio-economic development. In this vein, in 2012, government set up the Presidential Infrastructure Coordinating Commission (PICC) to develop and oversee the implementation and coordination of a single common infrastructure plan for South Africa. The

plan is to be monitored and driven centrally, with clear responsibilities assigned to key stakeholders. The plan would be rolled out through special projects known as Strategic Integrated Projects (SIPs). 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. Synergies would be derived from integrated planning of value chains, management of inter-dependencies, and leveraging of lessons learned across similar project environments.

The PICC tasked specific state-owned entities to co-ordinate and monitor each of the SIPs. At conception, TCTA was appointed as co-ordinator for SIP-3, focusing on the development of the South-Eastern Node and Corridor, and SIP-18, covering national water and sanitation infrastructure. TCTA has coordinated these two programs with distinction.

In 2019, to support the PICC work, government set up Infrastructure South Africa (ISA), to reinvigorate infrastructure investment and coordination in the country. Both PICC and ISA are housed in the Department of Public Works and Infrastructure. In 2021, the PICC and ISA reviewed the SIPs program to improve project coordination and execution efficiencies. During the review, the PICC resolved to close down SIP-3, among others, and migrate SIP-18 into a new repurposed program, SIP-19. Active SIP-3 projects will be distributed to appropriate active SIPs, while qualifying SIP-18 projects will be moved to the repurposed SIP-19. It was decided that closure of SIP-3 and migration of SIP-18 will happen gradually over 2021/22 financial year, with the new SIP-19 program being fully established from the beginning of the 2022/23 financial year. TCTA was appointed as coordinator of SIP-19 in August 2021.

The SIPs coordination program has the strategic benefit of showcasing the convening power of TCTA, as it brings together diverse and key stakeholders in mutual collaborative engagements and platforms. In particular, the coordination of SIP-19 provides TCTA the advantages of accessing its potential long-term project pipeline for timely positioning and business development, and strategic unlocking of complex bottlenecks in the water sector.

The repurposed SIP-19 has a national footprint. It is made up of strategic mega water and sanitation projects located across several sectors of the water value-chain. It includes national water resources projects, regional bulk infrastructure grant-funded projects, Water Boards capital projects, and national irrigation projects. It excludes MIG and metropolitan capital projects which will be migrated to SIP-6 to avoid duplication. SIP-19 is designed to address strategic water and sanitation infrastructure challenges, with a focus on mega-projects pivotal to addressing national or regional challenges. Projects are structured to provide sustainable supply of water in support of economic growth, while simultaneously meeting social needs and agrarian requirements. These projects may provide new infrastructure, the rehabilitation and upgrading of existing infrastructure, as well as improving the management of water and sanitation infrastructure. TCTA will quickly ascertain and reach out to key stakeholders and project partners and establish requisite coordinating structures,

including a Program Technical Committee (PTC) with agreed Terms of References. The PTC will convene quarterly in line with the reporting requirements. TCTA will also, where required, support the PICC with the smooth closure of SIP-3, particularly engagement of program stakeholders.

The water sector remains critical and in the spotlight for the country, particularly in light of the heightened need for hygiene during the Covid-19 pandemic. Thus, SIP-19 projects remain a key focus for the PICC, ISA and national government. In support of this, in the 2022/23 financial year, TCTA's SIPs coordination work will migrate from focusing on SIP-3 and SIP-18 to seamlessly dovetailing into the coordination of the repurposed SIP-19. As SIP-19 is a restructured SIP-18 program, TCTA will continue to give increased attention to facilitating the accelerated delivery of the strategic projects, namely, BRVAS, Clanwilliam Dam, transboundary LHWP-2, MCWAP-2, uMkhomazi Project, uMzimvubu Water Project reconfiguration and implementation, and ORWDP-2. Similar attention will be given to other water infrastructure categories, including Regional Bulk Infrastructure Grant (RBIG), irrigation projects, and Water Boards capital infrastructure. Key efforts will also be directed towards consolidating the program migration including verifying and deepening our understanding of the scope, projects, and critical issues.

The covid-19 pandemic continues to affect infrastructure roll-out. Over the past year, infrastructure development has been significantly affected by the corona virus pandemic and attendant lockdown regulations. The pandemic has led to a decline in construction activities, as is the case for the broader economy. Given the cyclic nature of the pandemic, the situation is expected to remain volatile into the foreseeable future. However, as the situation improves, TCTA will double its efforts on infrastructure coordination, tracking progress on critical projects and enabling the resolution of bottlenecks impacting projects. TCTA will also focus on supporting the fast-tracked implementation of such projects as BRVAS, Olifants, and uMkhomazi. Multi-sector and multi-disciplinary stakeholder engagement remain pivotal to successful and meaningful SIP coordination. 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.

3. INDUSTRY OVERVIEW

Water is the most pivotal natural resource for socio-economic development; where and when its supply may be constrained, all forms of human endeavour suffer. It is therefore a fundamental and existential challenge to water managers and policy makers everywhere, to ensure that water resources remain adequate, secure, and sustainable, and so enable the social and economic development of countries.

Strangely, the vital importance of water is often under-estimated, which leads to a trend of under-investment in the sector, under-valuing of the commodity and sub-economic tariff structures. In this vein, the challenges we face in South Africa resonate with many across the globe. It is therefore an imperative for sector leadership to elevate water security to the national policy dialogue.

Our water story is one of hardship and inequality, but also of ingenuity and pragmatism. South Africa is not blessed with a natural abundance of water, and frequent droughts continue to extract a heavy toll. We have systemic challenges: A below-average precipitation is coupled with above-average evaporation rates, relative to global figures; we inherited a legacy of unequal infrastructure planning, and much of our economic activity is located along a watershed, far away from natural water resources. In response to these challenges, we have built a surface water system that captures two-thirds of all the river flows, and transfers much of it to where it is needed for livelihoods, through inter-basin transfer schemes.

And yet, despite these efforts, water demand is steadily overtaking supply. The National Water and Sanitation Master Plan anticipates that the national water deficit will grow to 17% by 2030 if no remedial action is taken, and that this shortfall will be most severe in the catchments serving the three major economic hubs of Gauteng, eThekweni and Cape Town. The Master Plan proposes that the deficit be addressed through specific sector-wide interventions on both the supply and demand sides, over the next nine years:

- Reduce the national average per-capita domestic consumption, from 237 litres to 175 litres per person per day, to yield a saving of 1,245 million cubic metres (MCM) per annum.
- Increase the reliable yield of the national surface water system by 874 MCM per annum.
- Halve the national average in water reticulation losses, from 35% to 15%, to yield a saving of 859 MCM per annum.
- Increase the desalination of mainly seawater, but also mine-impacted water, for potable and industrial use, by 588 MCM per annum.
- Increase groundwater yield by 405 MCM per annum.
- Increase the re-use of water for potable and industrial use by 110 MCM per annum.

To implement these interventions, actions will need to be taken along the entire water value chain. However, a significant burden rests on the Water Services Authorities in the municipal sphere, from which reticulation loss reduction, demand management, revenue management, water re-use and desalination projects will need to be launched. The limited pre-existing skills base and implementation track record in these areas, and widespread institutional weakness, present a primary challenge.

Institutional capacity within the water sector has eroded over several years, partly due to discontinuity in sector leadership, which has stalled much-needed reform, re-alignment, and development. The net result today is that much of the sector is under-performing yet managing a resource that is vital to the economy and the country's well-being.

Much-needed reform of the sector is at hand. This is evident from various multi-year initiatives involving sector-wide planning, institutional re-alignment, and other actions, aimed at building the required capacity to respond to a changing strategic landscape and broadly, the achievement of the sixth global Sustainable Development Goal. These initiatives are reflected in the National Water and Sanitation Master Plan and include the establishment of new institutional capacity in various nodes, notably Catchment Management Agencies, a National Water Resources Infrastructure Agency (NWRIA) and an independent economic regulator for the sector. Reform is also evident in the recasting of the Raw Water Pricing Strategy, aimed at addressing long-standing funding deficiencies. Some progress has been made with the implementation of the NWRIA, and there is an outlook for it to be legally established during 2023.

Several programs have also been identified for renewed impetus, to deal with non-revenue water, water allocation reform, enforcement of water use licence conditions, water and agrarian reform, and conservation and demand management. Other initiatives include those on metering and subsidisation of agricultural water, adoption of alternative water sources, turn-around of failing wastewater treatment works, Blue/Green/No-Drop certification and research and development innovation.

Economic conditions have a significant impact on the sector. The Covid-19 pandemic caused the greatest global and local economic contraction in several decades, resulting in deep scarring of the social and economic fabric, widespread job losses and reduced ability to pay for utility services. Some economic gains in 2021 have helped, but the employment recovery usually lags. The rapid local emergence of a new strand of the virus in November 2021, and the prospect of a fourth wave of infections, does not bode well for a quick recovery.

Securing adequate investment into the water sector remains to be a challenge. In recent years, investment in water and sanitation infrastructure stood at about R57 billion per annum, compared to a capital investment requirement of R90 billion per annum for new-build projects, upgrades, and rehabilitation. The annual deficit of R33 billion could reasonably be made up with debt funding or private sector investment through PPP structures; however, the caveat is that there should be underlying bankable projects. The on-going pandemic adds an additional layer of uncertainty to this assumption: Beyond the tighter fiscal constraints, the reliability of water revenue has gone into decline on the back of increased unemployment and weaker revenue collections.

The construction sector, being a vital partner in implementing water infrastructure, is cyclical by nature, and tends to do very poorly during an economic downturn, especially when public sector expenditure on infrastructure slows down. The past decade has seen an unprecedented decline in the construction sector, losing some 60% of its market capitalisation due to the weak economy, lower business confidence and empowerment transactions with non-listed entities. In the past five years, Group Five, Esor and Basil Read were placed in business rescue, with the former two delisting from the JSE.

Ultimately, the South African water sector needs to implement sustainable and affordable water and sanitation infrastructure that will build social capital and provide access to the unserved and marginalised. It is incumbent upon water managers, activists, regulators,

financiers, and policy makers to respond to the social and economic demands of various stakeholders, and to adapt to changes in the landscape. In doing so, the integration of sectoral plans, programs, and strategies within the framework of national economic and social policy, are of vital importance.

The role of TCTA in the financing and implementation of water infrastructure is inextricably linked to the state of the economy. As a debt-finance vehicle, TCTA ideally requires an environment where an appetite for responsible debt exists, and where households have the means and confidence to consume utilities and pay for them. The current state of minimal growth, high levels of unemployment and crippling state debt, graded below investment-grade, is far from ideal. As a result, TCTA expects a difficult trading environment to prevail in the medium term.

3.1 EFFECTS OF CLIMATE CHANGE

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, and strategies for addressing the impact of climate change on water resource infrastructure.

3.2 INFRASTRUCTURE INVESTMENT IMPERATIVE

The South African water sector faces a significant challenge in respect of infrastructure funding. Recent estimates emanating from the Master Plan launched by the Minister in November 2019, indicate a first order estimate investment requirement of approximately R900 billion over a ten-year period.

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

3.3 INSTITUTIONAL SETTING

Thirteen institutions report to the Minister of Water and Sanitation, including the Trans-Caledon Tunnel Authority, the Water Research Commission, two catchment management agencies and nine water boards.

In most of the entities, the building of institutional capacity is an ongoing challenge, currently leading to weaknesses in key operational areas.

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

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

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

4. ECONOMIC OUTLOOK

4.1 ECONOMIC OVERVIEW

After nearly a decade of sustained growth of about 4% per annum, the global economy was already slowing when the Covid-19 pandemic hit the world in 2020, resulting in a setback of historic proportions, the worst since the 1930's. The IMF estimates that 2020 saw a 4.4% contraction of the global economy, largely as a result of the pandemic. For 2021, the IMF projects a 5.2% growth off the much lower base of 2020, followed by an average growth of 3.8% per annum during the years 2022 to 2025. The recovery seems to not be equal though, with the expectation that advanced economies will recover much quicker than emerging markets and developing economies.

South Africa was hit hard by the pandemic. Already in a prolonged negative business cycle in March 2020, and quite vulnerable to a cessation in trade, travel and tourism due to our very open economy, the shock led to a sharp decline in Gross Domestic Product (GDP) and surge in unemployment. As the finance minister remarked during the tabling of his interim budget, "The scarring impact of the crisis is evident in increased debt levels and income vulnerabilities; while unemployment, poverty and inequality are deepening". Sadly, employment takes much longer to recover after a setback, than revenue.

The impact of the Covid pandemic on quarterly GDP can be seen in Figure 1 below. After a sharp decline in Q2 of 2020, a recovery is evident in the four subsequent quarters, although only to a level equivalent with the 4th quarter of 2017. Relative to 2019, the SA economy contracted by 6.4% in 2020, a decline not seen since 1946. To give context, the global financial crisis of 2008/09 caused a contraction of only 1.5%.

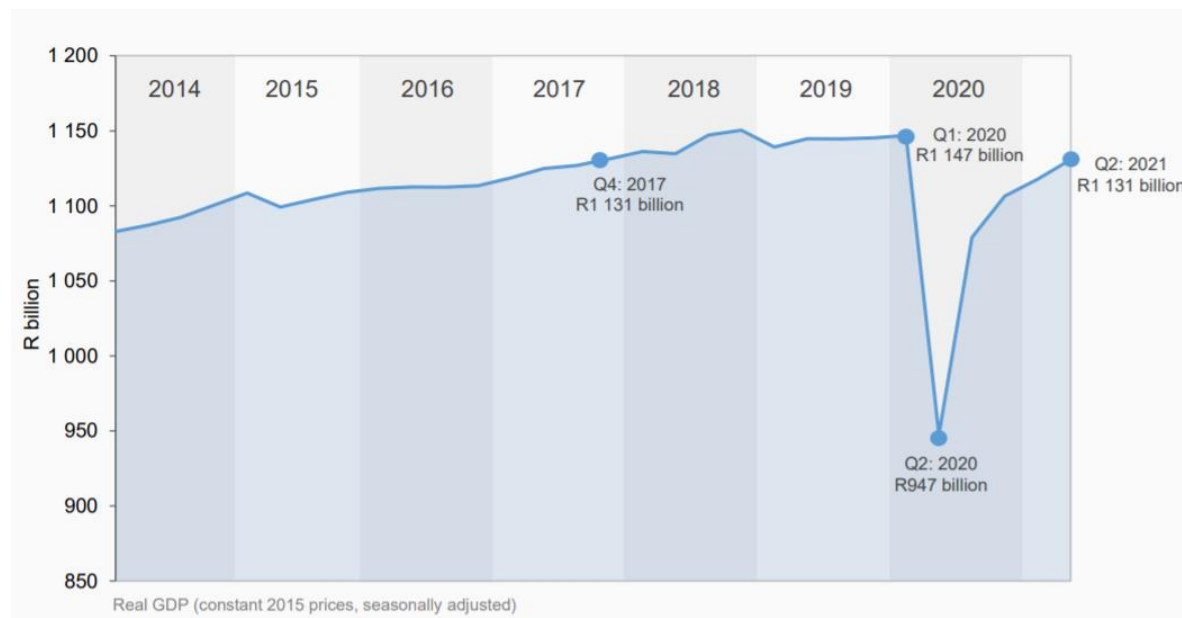


Figure 1: South Africa's GDP in constant 2015 values. (Source: Stats SA)

During the first half of 2021, the recovery was stronger than expected, on the back of more relaxed Covid-19 restrictions, lower interest rates, and strong international demand for commodities. The expectation now is that the SA economy will grow by 5.1% in 2021, settling into an average growth of 1.7% over the next three years, reflecting some structural weaknesses such as our electricity supply problems.

The response to the pandemic and the unrest in July 2021 resulted in sharp increases in public finance expenditure; the vaccination program and several economic relief packages had to be funded from an already constrained fiscus.

As for the Gross Domestic Product of South Africa, Stats SA finalised a rebasing and benchmarking exercise in August 2021, resulting in an 11% upward revision of the size of the economy, from an earlier (US) \$717 billion to \$796 billion¹ (2020 figures based on purchasing power parity). This places the SA economy third on the African continent, behind Egypt (\$1290 billion) and Nigeria (\$1096 billion), according to the World Bank.

Turning to the growth in GDP, it should be noted that real growth (that is, adjusted for inflation) should at least match population growth to sustain per-capita income. In South Africa, this has not been the case since 2015, when real GDP growth dipped below the population growth rate of 1.61%. The cumulative effect is that, at the end of 2020, real per-capita incomes were about 11% less than at the end of 2014, according to the economist JP Landman, and on the same level as 2005, as illustrated in Figure 2 below.

¹ In Rand terms, the SA economy was rebased from approximately R5 trillion to R5.5 trillion.

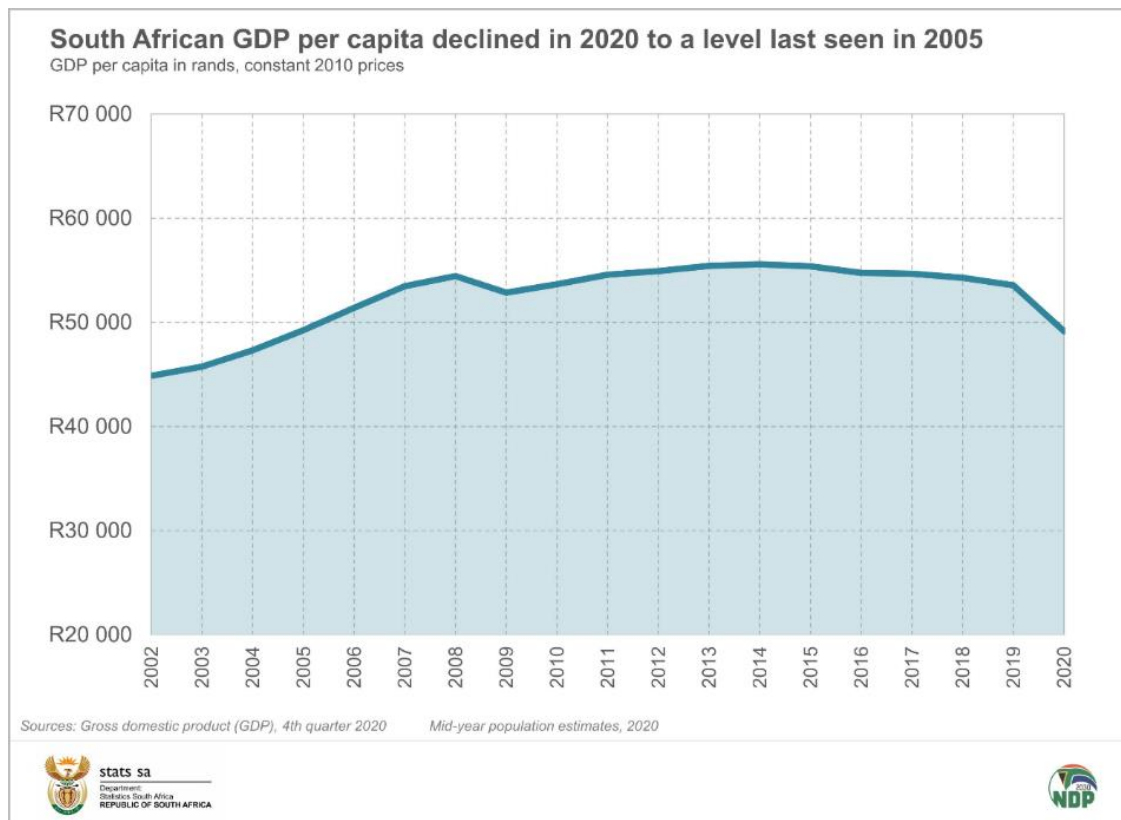


Figure 2: South Africa's GDP per capita, inflation adjusted (Source: Stats SA)

Considerable relief for the economy came in late 2020 with a cycle of strong global demand for commodities, largely in response to the recovering global economy. South Africa is now deriving considerable benefit from higher prices and stronger demand for a range of commodities such as rhodium, palladium and iron ore, in a strong boom cycle expected to last into 2023. This has resulted in a surplus current account for four consecutive quarters, and the largest surplus on record, of R343 billion during the second quarter of 2021. The windfall to the state comes in the form of improved tax revenue, mainly in the form of corporate income tax off the gains made by mining companies, of around R100 billion for the financial year to date.

The Reserve Bank was quick to point out the temporary nature of this relief, warning that it should not form the basis of expenditure commitments, and that it does not diminish the need for structural reforms of the economy, such as resolving our power supply challenges, easing the constraints on small businesses, increasing the supply of skills, and stabilising public debt.

In presenting the Medium-Term Budget Policy Statement (MTBPS) to Parliament in November 2021, Minister Godongwana stayed on course with this guidance, as well as the direction set by his predecessor; this was well-received by the risk rating agencies. The Minister reaffirmed "...government's unflinching commitment to fiscal sustainability, enabling long-term growth by narrowing the budget deficit and stabilizing debt." In this vein, the windfall from the commodity boom is being used largely to consolidate debt.

Minister Godongwana also committed to the acceleration of economic reforms for growth in the long run, focussing on "...improving competitiveness, productivity, investment and

employment.” Economic reform is now firmly entrenched as government policy and is largely embodied in the Economic Reconstruction and Recovery Plan (ERRP). Six priority areas stand out:

- Stabilization of energy supply, reduction of load-shedding and acceleration of the transition to renewable energy. Significant developments here include the recent policy reform around embedded generation, and the strong market response to the REIPPP Bid Window 5, where 25 projects have been selected to generate more than 2500 MW at a weighted average price of R0.473 per kWh.
- Improving the efficiency of our logistics infrastructure. In this area, important developments include the corporatization of Transnet's National Ports Authority, and the policy reform to allow, from the end of 2022, third party access to the infrastructure of Transnet Freight Rail. It is notable that the fiscal windfall of the commodity boom could have been much greater, had it not been for the current constraints in bulk freight logistics.
- Resolution of the issues blocking the release of high demand spectrum and making affordable data available to firms and households. It is worth noting that much of the delay comes from established private sector players, fearing an end to their hegemony.
- Easing of the administrative burden of inbound travel to South Africa with the roll-out of the e-Visa system to 15 countries by March 2022, to the benefit of tourism and skilled migration.
- Prioritization of infrastructure development, the domain of TCTA, as a means of economic stimulation, with the strategic goal of reaching a level of investment in public infrastructure equal to 30% of gross fixed capital formation by 2030, as envisioned in the National Development Plan.
- Establishment of the National Water Resources Infrastructure Agency, which will incorporate TCTA, to unlock efficiencies in the funding, implementation, and operation of national water infrastructure.
- Commitment to the policy position that government cannot drive economic recovery and growth alone, without the private sector. This stands to reason because most areas of economic activity are dominated by the private sector, including investment, employment, and innovation. The commitment signals considerable, renewed interest in Public-Private Partnerships.

The commitment to a fiscal consolidation and economic reform was well-received by the credit risk rating agencies; both Standard & Poor's Global Ratings (S&P) and Moody's Investor Services held their credit risk rating of South African debt unchanged on 20 November 2021. Exactly one year ago, Moody's downgraded the national foreign- and local-currency ratings from Ba1 to Ba2, which is two levels below investment grade. Fitch followed suit at the time, cutting the foreign- and local-currency ratings from BB to BB-, which is three levels below investment grade. The Fitch rating for 2021 is expected to be released soon. On

the upside, South Africa retains certain rating strengths such as a credible central bank, a flexible exchange rate, an actively traded currency and deep capital markets.

Nonetheless, the Debt-to-GDP ratio is still a major concern; up from less than 50% in 2018, it now stands at 85.6% and is projected to peak at 95.3% in 2025/26. Current debt of about R4000 billion will require debt servicing of R296 billion this year. This translates into a constrained environment for debt vehicles like TCTA, seeking state guarantees for critical infrastructure build programs.

Looking ahead, late in 2021, the expectation from the Reserve Bank is that export earnings will remain firm in the near and medium term on the back of robust global demand.

Most sectors of the economy have largely recovered from the sharp contractions caused by the pandemic over the past twenty months, and the expectation is that household spending and recovery in employment levels will continue improving, and so support an overall economic recovery.

With full vaccinations having progressed past the halfway mark of the targeted 60% of the population, there is also a cautious optimism that a gradual return to some form of normality may endure, irrespective of the emergence of a new Covid variant, one of global concern, in November 2021.

4.2 ECONOMIC IMPACT

The state of the economy impacts on the water sector in several ways. A higher level of growth translates into greater business and investor confidence, improved currency stability, and a greater capacity to borrow money for infrastructure development.

Furthermore, consumer confidence tends to improve on the back of greater employment and disposable income, which improves the likelihood that services could be paid for, and hence allows infrastructure loans to be serviced. Unfortunately, the converse also holds true: economic distress raises the cost of borrowing and weakens the ability of consumers to pay for services.

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

TCTA projects like MCWAP2A will provide water security to the power generation industry thus ensuring that South Africa's economic growth will not be constrained during times of drought.

Also, LHWP2, BRVAS and uMkhomazi will ensure water security in the major economic hubs of the country and thus providing an enabling environment for economic growth.

5. TCTA BUSINESS STRATEGY

TCTA occupies a unique upstream position in the sector value-chain, being mandated to raise commercial finance for the development of national water infrastructure, with assurance provided by the fiscus. This role exposes TCTA to a complex strategic landscape that embraces not just the water and construction sectors, but also private sector finance and National Treasury. Hence, TCTA could not escape the economic challenges of recent years, or the impact from the loss of capacity in the domestic construction sector; there are valid concerns over the climate in which to raise new loans, as well as the current width and depth remaining in the construction sector to implement mega-projects.

Implementation supply-side weakness is being anticipated due to the collapse of several JSE-listed construction entities, thereby limiting the capacity and risk appetite in the sector for mega projects. Exacerbating this situation, the prolonged decline of the industry has caused the gradual departure of many skilled and experienced resources. One implication is that much of the specialised technology and equipment would need to be sourced from abroad. This will have a direct impact on at least two current mega-projects, uMkhomazi and LHWP II, as well as the unconventional water resource projects anticipated in the Master Plan.

A further, enduring complication is the disruption caused by the “construction mafia”, local interest groups demanding a share of the projects, under the threat of sabotage and intimidation. A positive element is that adequate capacity still exists in the supply of major steel works and electrical and mechanical equipment.

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 same business model, which relies exclusively upon Ministerial directives and does not allow reserves to be accumulated, have become painfully apparent in recent years. Revenue disruptions and project pipeline uncertainty, emanating from a struggling water and sanitation department, along with the absence of a mandate to pursue other opportunities, have prompted initiatives to improve financial sustainability of the organisation, and to explore options for adopting a new business model.

Notwithstanding, it remains an imperative for TCTA to be understood in its current form as a debt-funded special purpose vehicle, for predominantly mega-scale infrastructure projects, that is, project debt is incurred for capital (not operational) expenditure, unlike some struggling SOE's. This understanding needs to increasingly underpin the positive consideration, by National Treasury, of TCTA requests for appropriate borrowing limits and state guarantees in support of its debt portfolio. Also, there is a need to address current distortions in the National Treasury regulatory framework for large infrastructure projects, as

prescribed in NT Note 3. Prudent debt management requires a rethink of problematic policy interventions, such as the freezing of tariff increases.

The prospect of TCTA merging with selected DWS elements to form the National Water Resources Infrastructure Agency (NWRIA) over the next two to three years tends to dominate the strategic discourse at the moment. This initiative has long been deliberated and documented in national planning frameworks, but now enjoys clear political support, which has not always been so. What is being envisaged is a PFMA Schedule 2 entity, mandated by its own Act, hosting a progressive Agency that will plan, finance, implement, operate and maintain all national water resources infrastructure on behalf of a much smaller DWS, which in turn will be refocussed on regulation and sector leadership roles. It is anticipated that during the coming financial year, significant time and effort will be expended by TCTA in the planning and preparation for migrating into the NWRIA.

The strategic outlook of TCTA is framed against the dynamics of the broader landscape, as it must position in relation to the opportunities and threats presented by the sector, as well as in the wider economy. Far from being in a state of predictable steady flow, the global water landscape has escalated in strategic importance and complexity in recent years. The value of water is increasingly being regarded within the water-energy-food nexus, and it has become essential for water to be managed within that context. Water governance is required to adapt to the challenges of tighter supply-demand imbalances and a less predictable climate, and all water institutions are pressed to raise the bar accordingly.

Thus, the organisation is cognisant of the need for a shift in emphasis within new water infrastructure and supply systems, from the long-established linear use of mainly surface water resources, to circular water management, whilst drawing on a diverse portfolio of water resources, including potable reuse, aquifer recharge and seawater desalination.

Building on the TCTA funding program of 2020 and 2021, future indicators point to an increasing proportion of water infrastructure being funded from development finance institutions and 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. In relation to the foregoing, TCTA is drawing hard lessons from ongoing projects, regarding the significant challenges of concluding multi-user institutional arrangements, as they interface with matters of water pricing and user affordability in a difficult economic environment.

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 adopted a five-year vision in its last term in 2022, to be achieved through portfolio growth, operational excellence, and a deliberate move to upscale its initiatives in socio-economic transformation. The business is being grown by more proactively converting the visible project pipeline into implementation projects, and by expanding the role of TCTA

beyond its traditional domain, to become a leading node in non-conventional water resources, including mine-impacted water.

The organisation will continue to focus on excelling in all aspects of its business, delivering its wider spectrum of projects with greater agility and performance-centred professionalism, supported by efficient core business processes and integrated technology platforms. As TCTA gains traction in financing and implementing its medium-term flagship infrastructure projects – BRVAS, MCWAP-2 and uMkhomazi – these strategic props will underpin business delivery to the required specifications, times and budgets.

TCTA is positioning to become a more resilient organisation, through the implementation of a digital transformation strategy and pursuit of greater maturity in risk management. The procurement landscape will facilitate greater socio-economic transformation amongst historically disadvantaged groups and achieve real positive development impact in communities, while maintaining a high-integrity institution and bid system, with an entrepreneurial leadership team.

As a progressive organisation, TCTA is pursuing a reconfigured, optimal workspace suitable for the post-Covid reality; the aim is to achieve greater flexibility without sacrificing employee productivity or engagement. In alignment with this, is the drive to cultivate and institutionalize more courageous and authentic leadership in the organisation, in part through focussed business coaching programs.

TCTA is firm in its belief 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 for 2022/23:

- a) Raise funding for implementation of infrastructure
- b) Implement capital projects on time, within budget, to the appropriate standards and in a sustainable socio/environmental manner
- c) Operate and maintain designated projects to meet DWS requirements/specifications
- d) Manage debt within the approved borrowing limit
- e) Effective control of corporate expenditure
- f) Ensure organisational positioning for the planned Water Agency
- g) Coordinate and monitor the efficient implementation of the projects within SIP-19.

- h) Enhance the internal control environment, risk management and supply chain management system.
- i) Clear Irregular and Fruitless and Wasteful Expenditure
- j) Implement the ICT Strategic Plan and ERP system.
- k) Position TCTA as a thought leader in critical aspects of water security.
- l) Develop a high-performance organisational culture that contributes to the achievement of the organisational goals

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 and social sustainability.

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

8. CAPITAL UNIT CHARGE

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

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

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

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

9. RISK-AVERSE PHILOSOPHY

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

The operating principle takes the following into account: the specific risks associated with project implementation such as construction, environmental sensitivity, social aspects 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 AND SOCIAL SUSTAINABILITY

The implementation of TCTA's three-year Environmental Strategy, approved by Board in July 2020, prioritises the integration of good practice in environmental and social sustainability management into all areas of TCTA's operations.

Through the growth and implementation of an organisation wide Environmental and Social Management System (ESMS) risks and opportunities for improved responsible corporate citizenship, interdisciplinary integration, and environmental and social aspect management are identified, defined, and addressed.

Priority areas include the establishment of frameworks to guide decision making and practice. Examples of improvement efforts include the development and application of environmental indicators for sustainability linked loans for new projects, the revision of TCTA's environmental risk appetite and the development of an Operational Environmental Management Plan to facilitate improved assurance of compliance and good practice in the management of TCTA's corporate operations.

The ESMS planning tools are being used to proactively identify project specific environmental and social matters that contribute to the reduction of project risks whilst mitigating the impacts of the projects on the receiving natural and social environments.

The ESMS planning tools are being used to proactively identify project specific environmental and social matters that contribute to the reduction of project risks whilst mitigating the impacts of the projects on the receiving natural and social environments.

Improved social sustainability initiatives include the identification and prioritisation of project opportunities for the benefit of communities within the project-affected areas. TCTA collaborates with project partners and through participation in existing community development projects to promote social wellbeing. TCTA supports government departments and non-profit organisations to empower youth and develop skills in rural areas and within project footprints.

Environmental sustainability focus areas include the implementation of biodiversity offsets and partnering with existing local and internationally supported programmes for river and wetland rehabilitation. TCTA will continue its participation in Blue Deal Partnership contribution to the realisation of Sustainable Development Goal 6.

TCTA continues to be represented in Boards of Professional bodies for knowledge sharing, and continual environmental and social management improvement purposes.

12. TRANSFORMATION STRATEGY

TCTA views transformation from internal and external perspectives. The implementation of TCTA projects provides the organisation with opportunities to contribute to the transformation

of emerging enterprises, historically disadvantaged persons and affected communities. Further, it is through the implementation of procurement best practices that transformation is achieved.

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

During 2022/23 financial year the project implementation activities that will be undertaken will include the commencement of the procurement of engineering Professional Service Providers (PSP) for the uMkhomazi project who will undertake design and construction supervision once the contracting strategy has been confirmed, the procurement of a design and build contractor for the BRVAS project and the procurement of the contractors for the construction of the MCWAP-2. The transformation targets in the procurement of these services will be in accordance with the BBBEE Codes of Good Conduct and the Preferential Procurement Regulation, 2017.

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

Within the Professional Services contracts, TCTA facilitates the training of interns by the PSPs such that at the end of the contract, the interns are equipped to continue their professional development and obtain professional registration where applicable. PSP's and Contractors are also required to implement leadership programmes and community projects to facilitate social upliftment and skill development within the project footprint.

13. GOVERNANCE

The board of directors is ultimately accountable for the governance and performance of TCTA, balancing the interests of the organisation as a responsible citizen with the legitimate interests and expectations of stakeholders. The Board provides oversight, strategic direction and leadership, determines the goals and objectives of TCTA and approves strategic policies.

13.1 BOARD RESPONSIBILITIES

The Board is responsible to set direction and approve policy and planning that gives effect to the strategy and oversees and monitors the implementation and execution by management. In doing so, the Board shall:

- a) Set the strategic direction for the implementation and delivering water infrastructure as well as additional services that are directed, from time to time, by the Minister of Water and Sanitation.
- b) Oversee and monitor the implementation of multiple projects, while providing support and ensuring alignment of the strategy to the strategic priorities and objectives of the Department of Water and Sanitation as well as the Government outcomes for the period 2022/23 to 2024/25.
- c) Ensure accountability for organisational performance by means of disclosure and report on corporate governance, compliance, internal controls, risk and financial management; and ensure that reports such as the annual financial statements and sustainability reports comply with statutory requirements and reasonable information needs of material stakeholders.
- d) Maintain full and effective control over the organisation, and notwithstanding the delegation of responsibilities to its Committees and to Executive Management via the Chief Executive Officer, the Board shall remain accountable for the performance of the organisation.
- e) Act in good faith in the best interests of the organisation and its key stakeholders, 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 the Chief Executive Officer. The Board has in place an approved Strategic Delegation of Authority, as required under section 5 of the Board Charter and section 16 (1) (a) (ii) and (b) of the Notice of Establishment. The Board has delegated some of its responsibilities to standing Board Committees to facilitate efficient decision making and to assist the Board in the execution of its duties, powers and authorities.
- b) The Board is guided, amongst others, by directives issued by the Minister of Water and Sanitation, the Notice of Establishment, the National Water Act, the Public Finance Management Act, the Strategic Delegation of Authority, the Code of Business

Conduct and Ethics, the King IV Report on Corporate Governance and other applicable legislations, regulations and policies whenever it executes its responsibilities.

- c) The standing Board Committees rely on the statutory framework as well as its Terms of References to implement the Board's directives and adhere to sound governance principles.
- d) The Board has a charter setting out its responsibilities and meets at least quarterly.
- e) A Board strategy session is convened annually with Executive Management to realign the business strategy and ensuring organisational growth in line with new developments and additional mandates and directives issued by the Minister of Water and Sanitation and with due consideration to achieve the appropriate balance between its key 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 STRUCTURE OF THE COMMITTEES OF THE BOARD



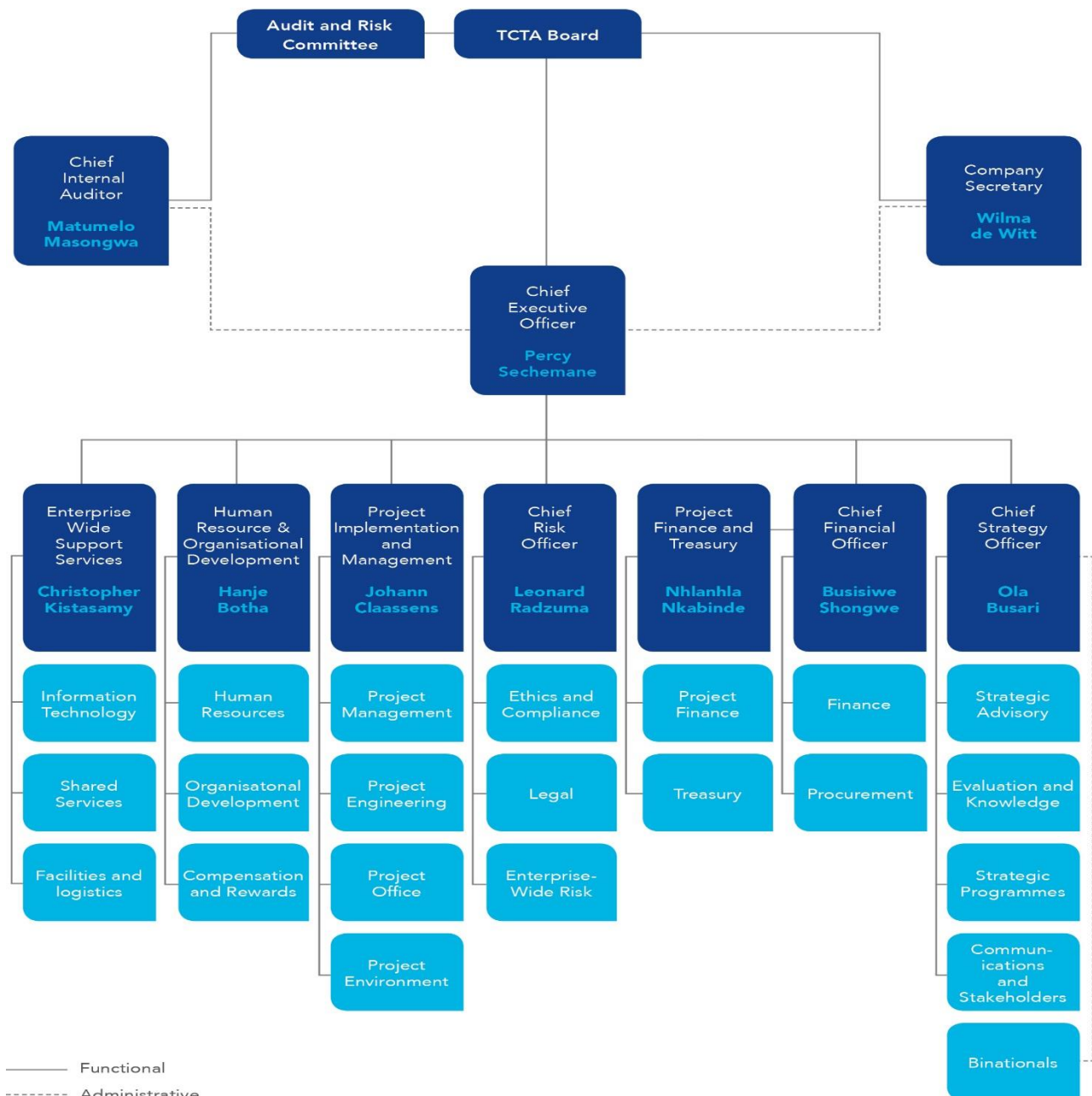
The Board has established five standing committees with specific focus areas and has accordingly delegated roles and responsibilities. As at the date of this plan, these were the Audit and Risk Committee, the Finance Committee, the Nominations and Governance Committee, the Human Capital, Social & Ethics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

The Audit and Risk Committee is a statutory committee as prescribed by section 77 of the PFMA; the other committees support the Board in the fulfilment of its governance and oversight role. All Board Committees are chaired by an independent, non-executive director.

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 leading corporate governance practices.

13.4 TCTA HIGH-LEVEL STRUCTURE (FY 2022/23)

The high-level structure for 2022/23 can be graphically depicted as follows:



14. FUNDING REQUIREMENTS

14.1 OVERVIEW

TCTA structures project financing on a stand-alone basis; the project's cashflows service its debt while DWS undertakes to step in and perform TCTA's obligations to funders if TCTA is unable to do so.

Once the project is operational, the role of TCTA is to manage debt, considering changing market circumstances, until such time that the debt has been fully repaid.

14.2 PREPARATION OF FUNDING REQUIREMENTS

TCTA prepares a rolling three-year budget on an annual basis. This budget is prepared on an accruals basis and identifies financial commitments in terms for the period and this is approved by the TCTA Board. The funding requirements per project have been determined from the budget as shown below:

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

Project	2022/23 R' million	2023/24 R' million	2024/25 R' million	TOTAL R' million	FINAL DEBT REPAYMENT DATE
VRS	1,558	718	681	2,958	2036
BWP	16	13	24	54	2029
VRESAP	38	11	40	89	2028
MMTS-2	-324	-432	-871	-1,627	2031
ORWRDP (fiscus)	18	6	6	31	N/A
KWSAP	-83	-62	16	-128	2033
MCWAP-1	-15	-35	-37	-86	2033
MCWAP-2	1,357	1,685	3,415	6,457	N/A
uMWP	65	408	3,280	3,754	
BRVS	100	327	560	987	N/A
MRWP (fiscus)	8	8	8	23	N/A
Total	2,739	2,648	7,124	12,511	

Notes on the above funding requirements:

- VRS:** The budget for the VRS amounts to R2 958 million for the three financial years from 2022/23 to 2024/25. The funding requirements for LHWP-2 and AMD-STI have been integrated into the funding of VRS under a single borrowing programme and revenue stream. AMD-LTS is on hold (Minister was requested to suspend the

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

Directive pending a review of the project by DWS) and not provided for in the funding requirement.

- b) **BWP:** BWP is expected to require funding of R54 million in the next three financial years from 2022/23 to 2024/25, after taking into account interest and capital payments.
- c) **VRESAP:** For the next three financial years from 2022/23 to 2024/25, VRESAP will require funding of R89 million. The project's revolving credit facility is now fully utilised and a new R400 million liquidity facility is being sourced to improve the liquidity of the project.
- d) **MMTS-2:** The project will generate R1 627 million from 2022/23 to 2024/25. The accumulation of funds is as result of the additional tariff being introduced to accelerate the repayment of debt to 2024 from 2031.
- e) **ORWRDP2C:** The project will require a further R31 million from 2022/23 to 2024/25. This amount will be funded by the Department of Water and Sanitation.
- f) **KWSAP:** The project is expected to generate R128 million cashflow from 2022/23 to 2024/25. This amount will be utilised to service debt on the project.
- g) **MCWAP:** MCWAP-1 will generate R86 million from 2022/23 to 2024/25. MCWAP-2 will initially require an estimated R6 457 million from 2022/23 to 2024/25.
- h) **MRWP:** The funding requirements for MRWP are premised on no implementation activities per the approved budget.
- i) **BRVS:** The project will require a further R987 million from 2022/23 to 2024/25.
- j) **uMWP:** The project will require a further R3 754 million from 2022/23 to 2024/25.

14.3 FUNDING AND DEBT MANAGEMENT STRATEGIES

TCTA's current funding strategy leverages committed facilities and commercial paper programmes for each of its projects, while a new capital markets programme for the Vaal River System (LHWP, AMD-STI) is also being prepared. 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 informs the funding requirements for each project. Funding and debt management strategies are then developed based on these funding requirements and consider all facilities available as well as the economic climate (Refer to the Annexure C on the Borrowing Programme for more details). Funding for recent directives has been sourced

from both the commercial banks and development finance institutions. The potential funding mix is also reflected in detail under Annexure C.

14.4 HEDGING STRATEGIES FOR FOREIGN FUNDING

Currently TCTA has no foreign currency funding. However, it is anticipated that some of the LHWP-2 contracts will be in euros, US dollars or pound sterling. It is envisaged that the funding facilities for the VRS will be drawn in rand and foreign currency will be acquired at the prevailing spot exchange rate at the time contract payments are made. The LHWP-2 long-term cost plan contingency amount as prepared by LHDA includes expected currency movements.

14.5 IMPACT OF FINANCIAL MARKETS ON FUNDING

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

14.6 GOVERNMENT GUARANTEES

Because TCTA funds and implements all its projects on behalf of DWS, all its debt is either explicitly or implicitly guaranteed by the South African Government. An explicit government guarantee is in place for the VRS funding and is included for a portion of the future funding of MCWAP-2A, whilst implicit government guarantees are in place for all the other projects.

These guarantees are enforced via the implementation agreements in which DWS undertakes to honour obligations in cases where TCTA is unable to do so. New guarantees were issued to lenders for the VRS in 2018 for R6.5 billion, while R9.3 billion in guarantees was released due to the repayment of the WS05 bond in August 2018. A further R4.5 billion loan guarantees were requested in February 2020 for DFI funding for LHWP-2 and granted in 2021. Another R15.45 billion was granted in 2021 for other bank loans. Finally, guarantees for a new DMTN programme of R10-16 billion expected to be registered in 2022 will also be requested.

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 be able to 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 in an environmentally sensitive matter,
- 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 2022/23

TCTA CORPORATE BALANCED SCORECARD FOR 2022/23

Strategic Objective	Measure	Annual Target	Means of Verification	Key Performance Indicator			
				Q1	Q2	Q3	Q4
Financial Perspective (52%)							
1. Raise funding for implementation of infrastructure (15%)	Sufficient funding is available to facilitate reaching of critical project milestones (15%)	MCWAP: Funding is available to enable implementation according to the Project Plan (see Objective 2: MCWAP-2A) (4%)	Confirmation by funders that facilities are available for utilisation, DWS has confirmed budget availability or proof of cash balances. Project Plan	Preferred funders appointed	Negotiations in progress	[Financial Close] Funding available to enable implementation according to the Project Plan	-
		VRS: Funding is available to enable construction to commence according to the Project Plan for LHWP-2 – provided government guarantees have been approved (3%)	Confirmation by funders that facilities are available for utilisation or proof of cash balances. LHWP-2 Project Plan	DMTN Investor/NT consultations complete	DMTN Programme Memorandum drafted	DMTN Programme Memorandum Approved by the Board	[DMTN Programme Memorandum Registered with the JSE] Funding is available to enable construction to commence according to the Project Plan for LHWP-2 – provided government guarantees have been approved
		uMkhomazi: Prepare and facilitate the negotiation Project Agreements ² (3%)	Project Agreements (Water User Agreements, Raw Water Supply Agreement and Implementation Agreement). Minutes of negotiation meetings	Funding model submitted to National Treasury for approval.	Preparation and negotiation of project agreements completed	–	–
		BRVAS: Conclusion of Institutional arrangements (3%)	Approval of the project borrowing limit by the Minister and the Minister of Finance	Project agreements signed.	Institutional arrangements concluded [Project borrowing limit approved by the Minister and the Minister of Finance]	–	–
		BRVAS: Funding is available to enable implementation activities according to the Project Implementation Plan (2%)	Confirmation of funding by lenders and/or DWS	Sourcing of Funding in progress	Negotiations in progress	Negotiations in progress	[Financial Close] Funding available to enable implementation activities

² If water users and Umgeni Water reach agreement on their project agreements and the funding model is approved, TCTA will request a borrowing limit and commence raising of funding during the financial year.

Strategic Objective	Measure	Annual Target	Means of Verification	Key Performance Indicator			
				Q1	Q2	Q3	Q4
2. Implement capital projects on time, within budget, to the appropriate standards and in a sustainable socio/environmental manner (9%)	Reaching of project critical milestones as reflected in the Project Plan (9%)	MCWAP – 2A: Award of main construction contract (6%)	BAC approval for award of main construction contract	Bid Advertisement	Bid Evaluation	BAC approval and Bid Award	Commence construction-
		BRVAS: Award of design and build tender (3%)	BSC approval for design and build tender document/Tender advertisement	Bid advertisement	Tender period	Tender period-	Tender period
3. Operate and maintain designated projects to meet DWS requirements/ specifications (16%)	Operate and maintain the plant to meet the minimum operating volumes (6%)	Western Basin: An average daily volume of treated water of between 80% and 90% of the max treatment capacity of 30 MI/d including planned outages, calculated over the full year. (2%) Adjusted for any Force Majeure or other events outside TCTA's control.	Plant operational reports	N/A (Annual Target)	N/A	N/A	An average daily volume of treated water of between 80% and 90% of the max treatment
		Central Basin: An average daily volume of treated water of between 80% and 90% of the max treatment capacity of 60 MI/d including planned outages, calculated over the full year. (2%) Adjusted for any Force Majeure or other events outside TCTA's control.	Plant operational reports	N/A	N/A	N/A	An average daily volume of treated water of between 80% and 90% of the max treatment
		Eastern Basin: An average daily volume of treated water of between 80% and 90% of the max treatment capacity of 100 MI/d including planned outages, calculated over the full year. (2%) Adjusted for any Force Majeure or other events outside TCTA's control.	Plant operational reports	N/A	N/A	N/A	An average daily volume of treated water of between 80% and 90% of the max treatment
	To ensure the water discharged from the Western Basin, Central and Eastern Basins plants, meets parameters as set out in DWS letter of 23 September 2020 (6%)	90% or greater, of the water samples taken in the Western Basin are compliant with the parameters as set out in DWS letter of 23 September 2020(2%)	Report on achievement against DWS specifications as per lab tests.	90% or greater, of the water samples taken in during Q1 are compliant with the defined parameters.	90% or greater, of the water samples taken during Q2 are compliant with the defined parameters.	90% or greater, of the water samples taken during Q3 are compliant with the defined parameters.	90% or greater, of the water samples taken during Q4 are compliant with the defined parameters.
		90% or greater, of the water samples taken in the Central Basin are compliant with the parameters as set	Report on achievement against DWS	90% or greater, of the water samples taken in during Q1 are	90% or greater, of the water samples taken during Q2 are	90% or greater, of the water samples taken during Q3 are compliant with the parameters	90% or greater, of the water samples taken during Q4 are compliant with the parameters

Strategic Objective	Measure	Annual Target	Means of Verification	Key Performance Indicator			
				Q1	Q2	Q3	Q4
		out in DWS letter of 23 September 2020 (2%).	specifications as per lab tests.	compliant with the parameters as set out in DWS letter of 23 September 2020	compliant with the parameters as set out in DWS letter of 23 September 2020	as set out in DWS letter of 23 September 2020	as set out in DWS letter of 23 September 2020
		90% or greater, of the water samples taken in the Eastern Basin are compliant with the parameters as set out in DWS letter of 23 September 2020 (2%).	Report on achievement against DWS specifications as per lab tests.	90% or greater, of the water samples taken in during Q1 are compliant with the defined parameters.	90% or greater, of the water samples taken during Q2 are compliant with the defined parameters	90% or greater, of the water samples taken during Q3 are compliant with the defined parameters	90% or greater, of the water samples taken during Q4 are compliant with the defined parameters
	LHWP Delivery Tunnel North – Ensure infrastructure is operated and maintained to ensure sustainable water deliveries from Lesotho (4%)	Implement scheduled annual operation and maintenance plan and limit unscheduled outages to ensure 100% delivery of annual scheduled volume (2%)	O&M report on completed activities versus scheduled activities and outage schedule.	Implement scheduled Q1 operation and maintenance plan and limit unscheduled outages to ensure 100% delivery of quarterly scheduled volume (2%)	Implement scheduled Q2 operation and maintenance plan and limit unscheduled outages to ensure 100% delivery of quarterly scheduled volume (2%)	Implement scheduled Q3 operation and maintenance plan and limit unscheduled outages to ensure 100% delivery of quarterly scheduled volume (2%)	Implement scheduled Q4 operation and maintenance plan and limit unscheduled outages to ensure 100% delivery of annual scheduled volume (2%)
		Award Tender for the PSP Contract for the 2024 tunnel outage by 30 September 2022 (2%)	Letter of acceptance	-	-	Award Tender for the PSP Contract for the 2024 tunnel outage by 30 September 2022.	-
4. Manage debt within the approved borrowing limit (10%)	Debt is managed within approved borrowing limits (10%)	Debt managed within the borrowing limits and all payment obligations are met. <ul style="list-style-type: none"> • VRS (2%) • BWP (1.5%) • VRESAP (2%) • KWSAP (1.5%) • MMTS-2 (1.5%) • MCWAP (1.5%) 	Borrowing Limit Utilisation Report	Debt managed within the borrowing limits and all payment obligations are met. <ul style="list-style-type: none"> • VRS (2%) • BWP (1.5%) • VRESAP (2%) • KWSAP (1.5%) • MMTS-2 (1.5%) • MCWAP (1.5%) 	Debt managed within the borrowing limits and all payment obligations are met. <ul style="list-style-type: none"> • VRS (2%) • BWP (1.5%) • VRESAP (2%) • KWSAP (1.5%) • MMTS-2 (1.5%) • MCWAP (1.5%) 	Debt managed within the borrowing limits and all payment obligations are met. <ul style="list-style-type: none"> • VRS (2%) • BWP (1.5%) • VRESAP (2%) • KWSAP (1.5%) • MMTS-2 (1.5%) • MCWAP (1.5%) 	Debt managed within the borrowing limits and all payment obligations are met. <ul style="list-style-type: none"> • VRS (2%) • BWP (1.5%) • VRESAP (2%) • KWSAP (1.5%) • MMTS-2 (1.5%) • MCWAP (1.5%)
5. Effective control of corporate expenditure (2%)	% Deviation from approved Operational Expenditure budget (2%)	10% Deviation from the approved budget quarterly, due to operational efficiencies that do not compromise deliverables	General Ledger Management Accounts	10% Deviation from the approved quarterly budget	10% Deviation from the approved quarterly budget	10% Deviation from the approved quarterly budget	10% Deviation from the approved quarterly budget

Strategic Objective	Measure	Annual Target	Means of Verification	Key Performance Indicator			
				Q1	Q2	Q3	Q4
Stakeholder Perspective (12%)							
6. Ensure organisational positioning for the planned Water Agency (10%)	Corporate achievement against Water Agency Plan of TCTA (10%)	90-100% achievement against the TCTA Plan by 31 March 2023	Active inputs to Agency processes, and progress reports and presentations	90-100% achievement against 1 st quarter milestones in the TCTA Plan	90-100% achievement against 2 nd quarter milestones in the TCTA Plan	90-100% achievement against 3 rd quarter milestones in the TCTA Plan	90-100% achievement against 4 th quarter milestones in the TCTA Plan
7. Coordinate and monitor the efficient implementation of the projects within SIP-19 (2%)	Effective annual coordination and monitoring of Strategic Integrated Projects (2%)	Average effectiveness rating of 3, on SIPs coordination and monitoring annually <i>(Satisfactory feedback from key partners on the effectiveness of coordination and monitoring 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)</i>	Completed feedback Ratings from principals and partnership forums on survey	Average effectiveness rating of 3, on SIPs coordination and monitoring	Average effectiveness rating of 3, on SIPs coordination and monitoring	Average effectiveness rating of 3, on SIPs coordination and monitoring	Average effectiveness rating of 3, on SIPs coordination and monitoring
Internal Business Processes (28%)							
8. Enhance the internal control environment, risk management and supply chain management system (20%)	Adequacy and effectiveness of the internal control environment (10%)	Unqualified audit opinion <i>(for the financial year)</i>	External Auditors report and Management Letter	-	-	-	Unqualified audit
	% Resolution of internal and external audit findings (5%)	90-100% of action plans to address reported audit findings implemented by the due date	Audit Tracking Report and Register tabled to Oversight structures	90-100% resolution of audit findings due for the quarter.	90-100% resolution of audit findings due for the quarter.	90-100% resolution of audit findings due for the quarter.	90-100% resolution of audit findings due for the quarter.
	% Resolution of action plans in the strategic risk register (3%)	90-100% implementation of Actions Plans in the strategic risk register by the due date	% Implementation of Strategic risk register action plans	90-100% implementation of Actions Plans in the strategic risk register	90-100% implementation of Actions Plans in the strategic risk register	90-100% implementation of Actions Plans in the strategic risk register	90-100% implementation of Actions Plans in the strategic risk register
	% Achievement of the procurement plan for goods and services (2%)	90-100% achievement against the procurement plan	Achievement against the procurement plan	90-100% achievement against the procurement plan for the quarter	90-100% achievement against the procurement plan for the quarter	90-100% achievement against the procurement plan for the quarter	90-100% achievement against the procurement plan for the quarter
9. Clear Irregular, Fruitless and Wasteful Expenditure (4%)	% Irregular, Fruitless and Wasteful Expenditure cleared (4%)	100% irregular and fruitless and wasteful expenditure cleared (4%)	Quarterly reports to the accounting authority and National Treasury Template.	100% irregular, fruitless and wasteful expenditure cleared	100% irregular, fruitless and wasteful expenditure cleared	100% irregular, fruitless and wasteful expenditure cleared	100% irregular, fruitless and wasteful expenditure cleared

Strategic Objective	Measure	Annual Target	Means of Verification	Key Performance Indicator			
				Q1	Q2	Q3	Q4
10.Implement the ICT Strategic Plan (4%)	Implementation of Digital Initiatives as defined by the Digital Transformation Strategy (2%)	100% implementation of identified initiatives by 31 st March 2023	Implementation Plan	25% of initiatives implemented	50% of initiatives implemented	75% of initiatives implemented	100% of initiatives implemented
	Creating a secure and resilient ICT Environment (2%)	95% availability of critical systems with zero successful cyber-attacks	Availability of systems report	95% availability of critical systems with zero successful cyber-attacks.	95% availability of critical systems with zero successful cyber-attacks.	95% availability of critical systems with zero successful cyber-attacks.	95% availability of critical systems with zero successful cyber-attacks.
Learning and Growth (8%)							
11.Position TCTA as a thought leader in critical aspects of water security (3%)	Contribution of innovative papers to reputable technical publications and conferences (3%)	3 business relevant papers written and submitted per annum	Paper and letter/e-mail of submission	At least one paper in draft preparation	1 paper written and submitted	1 paper written and submitted	1 paper written and submitted
12. Develop a high-performance organisational culture that contributes to the achievement of the organisational goals (5%)	% Delivery against the three-year culture transformation implementation plan (3%)	85% delivery against the three-year approved culture implementation plan, as at each quarter.	Progress report	15% delivery against the three-year approved culture implementation plan, as of 30 June 2022.	35% delivery against the three-year approved culture implementation plan, as of 30 September 2022.	60% delivery against the three-year approved culture implementation plan, as of 31 December 2022.	85% delivery against the three-year approved culture implementation plan, as of 31 March 2023.
	% Increase in employee satisfaction (2%)	5% increase in employee satisfaction (2021 study as baseline), on 31 March 2023.	Annual internal pulse survey to measure employee satisfaction	-	-	-	5% increase in employee satisfaction (2021 study as baseline), on 31 March 2023.

PERFORMANCE RISKS ON THE BALANCED SCORECARD FOR 2022/23

Objective 4. Manage debt within the approved borrowing limit

Target: Debt managed within the borrowing limits and all payment obligations are met.

- VRS
- BWP
- VRESAP
- KWSAP
- MMTS-2
- MCWAP

Performance Risk: The borrowing limits are for shorter terms and lower amounts than those requested by TCTA, which will make it challenging to manage debt within the borrowing limit going forward and increases funding risk.

ANNEXURE B

CAPITAL EXPENDITURE PROGRAMME AND

OPERATIONS & MAINTENANCE

1. INTRODUCTION

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

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

A summary of the key activities that will be undertaken during the financial year ending on 31 March 2023 is provided below.

1.1. PROJECTS AT IMPLEMENTATION PHASE

- Mokolo And Crocodile River Water Augmentation Project - Phase 2A (MCWAP-2A)
- uMkhomazi Water Project Phase 1 (uMWP-1)
- Berg River Voëlvelei Augmentation Scheme (BRVAS)

1.2. PROJECT AT CLOSE-OUT PHASE

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

1.3. COMPLETED PROJECTS

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

1.4. ADVISORY SERVICES

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

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. OPERATION AND MAINTENANCE

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

2. PROJECT AT IMPLEMENTATION PHASE

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

2.1.1. STRATEGIC IMPACT

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

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

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

2.1.2. KEY ACTIVITIES FOR 2022/23

In 2021, tender design was completed, and the Environmental Authorization was upheld (appeals dismissed). Further, Water Supply Agreements have been finalized with Water Users and DWS. The key activities planned to be undertaken in 2022/23 financial year consist of:

- Commence procurement and award of main construction contract.
- Progress land acquisition activities to ensure access for construction
- Procure service providers for the design and implementation of the River Management System.

2.2. UMKHOMAZI WATER PROJECT PHASE1 (uMWP - 1)

2.2.1. STRATEGIC IMPACT

A DWS Feasibility Study identified uMWP as the most viable solution to sustainably meet the long-term water requirements of domestic and industrial water users in the eThekweni and Pietermaritzburg regions of KwaZulu-Natal. The first phase of the project (uMWP-1) will augment the yield of the integrated Mgeni Water Supply System (MWSS) by 220 million m³ per annum to sustainably supply the anticipated water demands of 600 million m³ per annum in 2040, after which the further phase (uMWP-2) should be commissioned.

The MWSS has been in deficit since 2016 and augmentation through uMWP-1 is urgent to prevent a constraint on the development and economy of KZN. A new 81 m high dam at Smithfield on the uMkhomazi River, conveyance infrastructure (32.5 km tunnel and 5.2 km pipeline) to the new Umgeni Water (UW) water treatment works (WTW) in the uMlaza River valley. The raw water component being TCTA's responsibility.

A WTW in the uMlaza River valley, followed by a gravity pipeline connecting to the existing UW bulk potable distribution system in the area of the Umlaas Road reservoir, being Umgeni Water's responsibility.

2.2.2. KEY ACTIVITIES FOR 2022/23

TCTA provided technical support to DWS to resolve the appeals on the environmental authorisation, which entailed further studies and investigations to amend the EIA Report with Comments and Responses that was submitted to DFFE. The Environmental Authorizations (EAs) were obtained in November 2020 and most of the amendments thereto by TCTA and DWS were approved in September 2021 with no appeals lodged. The key activities to be undertaken in 2022/23 financial year include:

- Procure the Professional Service Provider (PSP) for the construction Environmental Management Programme for the Smithfield Dam and Water Transfer Infrastructure including *inter alia* Biodiversity offsets and Compensation Plan; Search, Rescue and Relocation Plan; Geotechnical Investigation, Topographical Survey and others.
- Finalise the institutional arrangements and secure funding.

2.3. BERG RIVER VOËLVLEI AUGMENTATION SCHEME (BRVAS)

2.3.1. 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 2016 and required urgent augmentation, which became evident by the system's inability to cope with the 2017/18 drought situation. BRVAS was identified as the most viable surface water solution to

augment the system the soonest. The subsequent WCWSS reconciliation strategy status report indicates required augmentation from BRVAS in 2023 for the average water demand scenario. BRVAS will then augment the yield of the WCWSS by 23 million m³/a through the abstraction of winter flows in the Berg River and transferring it to Voelvlei Dam.

2.3.2. KEY ACTIVITIES FOR 2022/23

Following the appointment of the Professional Service Provider in January 2021 various specialist studies were undertaken to provide information for the finalisation of the tender documents for the design and build contract for the water infrastructure works.

The key activities to be undertaken in 2022/23 financial year include:

- Commence with acquisition of land required for construction.
- Finalise the institutional arrangements and secure funding.
- Procure a Design-Build contractor.

3. PROJECTS AT CLOSE-OUT PHASE

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

3.1.1. STRATEGIC IMPACT

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

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

3.1.2. KEY ACTIVITIES FOR 2022/23

Construction of ORWRDP-2C has been completed and the project has been handed over to DWS for Operations and Maintenance in December 2018.

Remaining activities relate to the conclusion of commercial matters, through resolving a dispute lodged by the Contractor on the Draft Final Statement as certified by the Engineer. Should the dispute not be amicably settled by the Parties, an arbitration process will have to be initiated to achieve financial closure.

4. COMPLETED PROJECTS

4.1. MOOI MGANI 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 and increases water security in the system. The water benefits eThekweni Metropolitan Municipality, uMgungundlovu District Municipality, Msunduzi Local Municipality, Ugu Municipality and Ilembe Municipality representing the economic hub of KZN.

4.1.2. KEY ACTIVITIES FOR 2022/23

MMTS-2 is complete and operational.

The activity remaining is the implementation of the Biodiversity Offsets. A detailed implementation plan has been approved by the Department of Forestry, Fisheries and Environment and in November 2021 EXCO approved the total estimated budget of R42.4 million, the sole source appointment of UW to implement (subject to approval from National Treasury), and subsequent finalisation of the required agreements. The following activities will be finalised:

- 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.
- Environmental Impact Assessment or an exemption thereof.
- registration of a new nature reserve, i.e., Biodiversity Offset site.

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 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 2022/23

MCWAP-1 is complete and operational.

A possible activity remaining is, implement the refurbishment of the old pipeline, which is subject to a pending DWS decision.

5. CAPITAL PROJECT ADVISORY SERVICES

5.1. MZIMVUBU WATER PROJECT (MWP)

5.1.1. 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 revised directive on 16 January 2019 to provide project management services for Stage 1.

5.1.2. KEY ACTIVITIES FOR 2022/23

In accordance with the current Directive TCTA has continued to provide project management and advisory services for Stage 1 which is mainly related to the access road, utilizing DWS-Construction Unit as the contractor and DWS-Infrastructure Development as the implementer, with the support of DWS-Engineering Services and other directorates.

The access road (Stage 1) is currently under construction. However, the project is delayed due to lack of details on the available construction drawings, excessive rain and procurement

processes. TCTA will continue to provide project management services support to DWS to complete the project.

DWS has requested TCTA to assist with the preparation of Request For Interest (RFI) to solicit interest from competent service providers on their ability to fund and construct bulk raw water infrastructure including dams.

Key activities to be undertaken in 2022/23 include:

- Complete Stage 1 (Access road) construction
- Commence with RFI for Stage 2 – 4 and obtain government's final decision on the project.

5.2. PROGRAMME MANAGEMENT SERVICES TO DWS IN RELATION TO WATER INFRASTRUCTURE PROJECTS

5.2.1. STRATEGIC IMPACT

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

5.2.2. KEY ACTIVITIES FOR 2022/23

Further engagements with DWS to agree on the project management support required and to formalise same through entering into service level agreements. The priority projects identified requiring support to progress are:

- Olifants ORWRDP-2, render support to resolve the institutional arrangements for the implementation of further phases.
- Nwamitwa Dam project, a planning review report was submitted to DWS, and a response is awaited.

6. PROJECTS ON HOLD

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

6.1.1. STRATEGIC IMPACT

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

6.1.2. STATUS

The DWS is in the process of assessing the Vaal River System yield and salinity model, with reference to the impact of the AMD-STI on the system. The outcome of the assessment will determine the need and timing for the implementation of further water treatment requirements. TCTA has issued a letter to the Department of Water & Sanitation to request the Minister to formally instruct TCTA to suspend the Directive until the foretold activities have been completed.

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

6.2.1. 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 and has been completed and handed over to the DWS for operation and maintenance. TCTA has further been directed 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 area by 50 million m³/a. The water will be used by mines and municipalities.

6.2.2. STATUS

The project is on hold due to the commercial users (mines) unwilling to sign offtake agreements with DWS which would have enabled TCTA to raise commercial funding. TCTA had explored an alternative funding arrangement with DBSA, but this has since been put on hold whilst DWS considers an alternative implementation arrangement with LWUA.

7. OPERATIONS AND MAINTENANCE

7.1. LESOTHO HIGHLANDS WATER PROJECT (LHWP) WITHIN RSA

TCTA operates and maintain the Delivery Tunnel North of the Lesotho Highlands Water Projects located within the RSA. A planned outage during October and November 2019 took place to undertake the 5 year inspection of the infrastructure and to conduct necessary maintenance activities.

In the 2022/23 financial year, TCTA will continue to fulfil the obligation to operate and maintain the delivery tunnel to ensure that there are no unplanned outages in the delivery of water to South Africa. The planning and preparation work for the next scheduled outage in 2024 will continue.

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

TCTA is directed to operate and maintain 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 in terms of two 5-year contracts entered with external service providers.

In 2022/23, TCTA will continue to effectively operate and maintain the AMD treatment plants and to achieve the DWS strategic objectives of preventing further environmental degradation.

8. PROJECT COSTS

The status of TCTA projects and activities to be undertaken during 2022/23 financial year are summarised as follows:

Project Summary Table (CAPEX):

Projects	Cumulative Actual to	Forecast	Budget / R Millions								Total Cost to Completion	Contingency	Charter Value
	March'21	21/22	22/23	23/24	24/25	25/26	26/27	28/29	29/30	29/30			
2.1 Projects at Preparation Phase													
uMWP-1		R 34	R 52	R 424	R 3 328	R 4 061	R 4 100	R 2 436	R 1 132		R 19 458	R 3 786	R 23 243
2.2 Projects at Implementation Phase													
BRVAS	R 9	R 32	R 93	R 326	R 598	R 115	R 20				R 1 194	-R 466	R 728
MCWAP 2	R 198	R 214	R 354	R 1 919	R 3 827	R 4 108	R 1 162	R 21			R 12 034	R 328	R 12 362
2.3 Projects at Close-Out Phase													
ORWRDP 2C	R 2 516	R 78	R 101								R 2 534	R 10,9	R 2 545
2.4 Completed Projects													
MMTS-2	R 2 073	R 1	R 18	R 19	R 8	R 8					R 2 128	R 101	R 2 066
BWP	R 1 658	R	R 6	R 2							R 1 666	-R 113	R 1 553
SUB-TOTAL 1	R 6 454	R 358	R 624	R 2 690	R 7 761	R 8 292	R 5 282	R 2 457	R 1 132	R	R 39 013	R 3 647	R 42 497
2.5. MCWAP 2 ADVANCE PAYMENT													
Mokolo Pipeline- Structures			R 401	-R 268	-R 134								
Mokolo Pipeline- Pipeline			R 362	-R 211	-R 151								
Mokolo Pipeline - Ancillary Work				R 78	-R 78								
SUB-TOTAL 2			R 763	-R 401	-R 362								

The table above shows the capital expenditure for all current projects until completion

Project Summary Table (OPEX):

Operations	Cumulative Actual to	Forecast	Budget/ R millions				
	March'21	21/22	22/23	23/24	24/25	25/26	26/27
2.7. Operations & Maintenance							
AMD O&M Central Basin	R 726	R 147	R 176	R 185	R 194	R 204	R 214
AMD O&M Western Basin	R 288	R 70	R 99	R 104	R 109	R 115	R 121
AMD O&M Eastern Basin	R 467	R 122	R 174	R 182	R 192	R 201	R 211
AMD Construction Costs			R 27	R 157			
SUB-TOTAL	R 1 482	R 339	R 476	R 628	R 495	R 520	R 546
LHWP O&M		R 1	R 12	R 6	R 38	R 107	R 6
TOTAL	R 1 482	R 341	R 488	R 634	R 533	R 628	R 552

Table 2 illustrates the planned operational expenditure of the AMD plants and the LHWP Delivery Tunnel.

ANNEXURE C

BORROWING PROGRAMME, BUDGETS AND CASH PROJECTIONS

ANNEXURE C1
BORROWING PROGRAMME

1. EXECUTIVE SUMMARY

This section provides information on the consolidated funding programme for all the projects under the management of TCTA. TCTA is expected to have a funding requirement of R12 511 million in the next three years from 2022/23 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. Raising of funding is dependent on government guarantees being issued to lenders where required (VRS and MCWAP) and approval or renewal of borrowing limits.

1.1. COMBINED FUNDING REQUIREMENTS

The combined funding requirements for all projects for 2022/23 to 2024/25 is shown in the following table.

Project	2022/23 R' million	2023/24 R' million	2024/25 R' million	TOTAL R' million	FINAL DEBT REPAYMENT DATE
VRS	1,558	718	681	2,958	2036
BWP	16	13	24	54	2029
VRESAP	38	11	40	89	2028
MMTS-2	-324	-432	-871	-1,627	2031
ORWRDP (fiscus)	18	6	6	31	N/A
KWSAP	-83	-62	16	-128	2033
MCWAP-1	-15	-35	-37	-86	2033
MCWAP-2	1,357	1,685	3,415	6,457	N/A
uMWP	65	408	3,280	3,754	
BRVS	100	327	560	987	N/A
MRWP (fiscus)	8	8	8	23	N/A
Total	2,739	2,648	7,124	12,511	

The Government of the Republic of South Africa has authorised a maximum of R25 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 following debt facilities have been arranged or are planned to be arranged. Borrowings under the facilities will not exceed the maximum amount of the guarantee:

- Long-term loans: R4 000 million
- Revolving credit facilities: R1 500 million
- Existing Commercial Paper Programme: R4 000 million
- Approved guarantees for DFI loans: R4 500 million
- Approved guarantee for new commercial facilities: R15 450 million

- New DMTN planned for registration in 2022 after redemption of R9 400 million WSP-5 bonds in May 2021: R10-15 billion (depending on the size of the expanded Commercial Paper Programme).

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

R9 433 million WSP5 matured on 28 May 2021. A new DMTN is planned for registration in 2022.

2.1.2. FUNDING REQUIREMENTS

The domestic funding requirements of the VRS are discussed below. The VRS is expected to require funding of R2 958 million during the next three financial years (the medium term) due to accelerating capital expenditure on LHWP-2.

Year	Incremental (R million)	Capital Repayment (R million)	Total Funding Requirement (R million)
2022/23	702	856	1,558
2023/24	-137	854	718
2024/25	-439	1,121	681
TOTAL	126	2,831	2,958

Guarantees / Contingent Liabilities

The VRS is funded with up to R25 billion approved government guarantees. All debt covenants, conditions of the listed bonds, are complied with and covenant breaches which occurred during the year have been waived and/or remedied.

2.1.3. FUNDING TERMS

R6.5 billion loan facilities were sourced from banks in 2018. In 2021, loan agreements were concluded with six local banks for R15.45 billion loan facilities, with maturities from 5 years to about 20 years. A further R1.3 billion has been negotiated with the African Development Bank and R3.2 billion with the New Development. Government guarantees have been approved. A new domestic multi-term note programme will be registered in 2022 to issue bonds with varying maturities up to 2042. The bonds will be used to refinance some of the shorter-dated loan maturities and to fund capital expenditure on LHWP-2.

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 require funding of R54 million from 2022/23 to 2024/25 after debt service and administration payments in the medium term.

Year	Incremental (R million)	Capital Repayment (R million)	Total Funding Requirement (R million)
2022/23	-61	77	16
2023/24	-54	67	13
2024/25	-35	59	24
TOTAL	-150	203	54

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 a Ba3 long-term global / Aa3.za long-term national scale issuer rating from Moody's 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 projected to require funding from 2022/23 to 2024/25. 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)
2022/23	-265	303	38
2023/24	-260	271	11
2024/25	-251	291	40
TOTAL	-776	865	89

The project will require funding of R89 million in the medium term. New liquidity facilities are being arranged.

The size of the commercial paper programme has been increased to R500 million 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 project is rated Ba3/Aa3.za on the long-term global / national scale respectively by Moody's.

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)
2022/23	-631	307	-324
2023/24	-730	298	-432
2024/25	-871	0	-871
TOTAL	-2,232	605	-1,627

The project is expected to generate R1 627 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 project is rated Ba3/Aa3.za on the long-term global / national scale respectively by Moody's.

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)
2022/23	-135	52	-83
2023/24	-117	55	-62
2024/25	-45	61	16
TOTAL	-297	168	-128

The project is expected to generate R128 million in the medium term.

KWSAP complies with all loan covenants. The project is rated Ba3/Aa3.za on the long-term global / national scale respectively by Moody's.

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)
2022/23	-53	39	-15
2023/24	-78	43	-35
2024/25	-85	48	-37
TOTAL	-216	130	-86

It is projected that MCWAP-1 will generate a surplus of R86 million in the medium term.

MCWAP-1 complies with all debt covenants.

The project's rating is combined with MCWAP-2A and rated Ba3/Aa3.za on the long-term global / national scale respectively by Moody's.

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)
2022/23	1,357
2023/24	1,685
2024/25	3,415
TOTAL	6,457

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

The project's rating is combined with MCWAP-1 and rated Ba3/Aa3.za on the long-term global / national scale respectively by Moody's.

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	Total Funding Requirement (R million)
2022/23	18
2023/24	6
2024/25	6
TOTAL	31

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 (R million)	Refinancing (R million)	Total Funding Requirement (R million)
2022/23	100	-	100
2023/24	327	-	327
2024/25	560	-	560
TOTAL	987	0	987

The project will require funding of R987 million in the medium term, which will be funded from new facilities to be arranged after the project agreements have been signed and a borrowing limit approved.

BRVAS is a new project still in the structuring phase. It is a commercial project and will be funded with commercial loans.

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 (R million)	Refinancing (R million)	Total Funding Requirement (R million)
2022/23	8	-	8
2023/24	8	-	8
2024/25	8	-	8
TOTAL	23	0	23

The project will require funding of R23 million in the medium term, which will be funded from the fiscus.

2.11. uMKHOMAZI WATER PROJECT PHASE 1

2.11.1 FUNDING REQUIREMENTS

Year	Incremental (R million)	Refinancing (R million)	Total Funding Requirement (R million)
2022/23	65	0	65
2023/24	408	0	408
2024/25	3,280	0	3,280
TOTAL	3,754	0	3,754

The project will require funding of R3 754 million in the medium term.

ANNEXURE C2
BUDGET FOR 2022/23

1. BACKGROUND

In terms of Section 52 of the Public Finance Management Act, Act No. 1 of 1999 (PFMA), TCTA is required to submit to the Department of Water and Sanitation (DWS) and National Treasury, together with the corporate plan, an approved Budget for a period of three years, before the end of February of each year.

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

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

2. PRINCIPLES EMPLOYED IN THIS BUDGET

The 2022/23 budget is set within the context of renewed government commitment to spend on critical infrastructure, but also the certainty that fiscal resources will fall well short of the intended capital expenditure in the water sector. However, the scope for borrowing to implement bankable projects is significant. Since TCTA may only proceed upon directives, the capital expenditure budget is based upon the specific infrastructure projects which TCTA has been directed to implement. Budget has only been catered for where projects have funding in place. Similarly, the operating budget reflects the planned level of activity associated with the projects being implemented.

The 2021/22 Actual/Forecast figures reflect the actuals from 1 April 2021 to 30 September 2021 and the forecast for the period 1 October 2021 to 31 March 2022. The Budget 2022/23 represents the period 1 April 2022 to 31 March 2023.

The following are the key principles applied in the preparation of the budget for 2022/23:

3.1. CAPITAL EXPENDITURE (CAPEX)

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

conservatively. TCTA is currently implementing projects as per directives received from the Minister of Water and Sanitation. The TCTA projects portfolio consist of the following:

Projects at Preparation Phase

- uMkhomazi Water Project Phase 1 (uMWP-1)

Projects at Implementation Phase

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

Projects at Close-out Phase

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

Completed projects

- Mooi Mgeni Transfer Scheme - Phase 2 (MMTS-2)
- Berg Water Project (BWP)

Programme Management Services to DWS in relation to Water Infrastructure Projects

- Mzimvubu Water Project (MWP)
- Projects On-hold
- Acid Mine Drainage - Long Term Solution (AMD-LTS)
- Olifants River Water Resources Development Project - Phase 2B (ORWRDP-2B)
- Mokolo And Crocodile River Water Augmentation Project - Phase 1A (MCWAP-1)
Refurbishment works

Projects Cancelled

- Off-take to the town of Kriel from the Komati Water Supply Augmentation Project

Operations and Maintenance

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

Where major construction and engineering contracts have been awarded, the cost projections are based on the most recent financial reviews conducted by the contractors and reviewed by the Engineer and TCTA project staff. The financial reviews are contractual obligations conducted on a bi-annual basis and require updated contractor cash flows and forward projections by the Engineer on potential variation orders and claims to the completion of the respective contracts. Escalation assumptions and forward projections are also reviewed as part of the exercise.

Under expenditures normally arises where the award of the major contracts is anticipated in the ensuing financial year. Factors that normally impact on the commencement of project and rate of progress are:

- Procurement of the required environmental authorizations which are subject to the reviews by DEFFE and possible appeals by Interested and Affected Parties - normally these processes are managed by DWS as part of the feasibility study.
- TCTA procurement process where complications arise during the tender evaluation process requiring further clarifications from tenderers or legal opinions.
- Conclusion of project agreements between TCTA, DWS and off-takers. Conclusion of these agreements is a pre-requisite to conclude funding arrangements and award of contracts. Experience has shown that areas of disagreement may take a long-time to resolve especially where government interventions are required to give policy direction.
- Conclusion of committed funding arrangements which is also a pre-requisite for award of contracts - recent experience has shown that meeting the increasing onerous conditions precedent may cause delays.
- Project scope changes - DWS may revise TCTA's directive or funding constraints may require re-scheduling of implementation activities.
- Availability of state funding - huge uncertainty exists on projects where funding is via the fiscus. The quantum and availability of state funding are both uncertainties given that annual allocations follow from a protracted process and does not provide for multiyear committed funding allocations.
- Slow progress by contractors - notwithstanding contractual remedies available to TCTA, contractors may underperform for various reasons - recent events include the delays experienced on MWAP2 due to the COVID 19 restrictions that has delayed the Construction tender process. Also, in the case of uMWP the delays relating to the amended environmental authorizations.

3.2. ADMINISTRATIVE EXPENDITURE:

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

Key budgeting principles include:

- 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.
- Management has adopted a cautious approach when budgeting for administrative related costs with the objective to manage and where possible reduce or maintain costs while ensuring that strategic imperatives are achieved.
- Zero-based budgeting while considering the current status of operational areas.
- Inflation adjustment for MTEF is 4.5% per annum as per National Treasury guidelines issued for the Medium-Term Expenditure Framework 2021/22.
- The salary calculation per division includes an average inflationary increase of 4.3% as directed by National Treasury Compensation of Employees Guideline.
- Vacancies and new positions are budgeted in accordance with the projected date of placement for each vacancy.
- Provision is made in the budget for payment of attraction bonuses and merit increases as it has become increasingly difficult to attract and retain skills
- Office lease costs are based moving to new premises.
- The cost-containment instructions from National Treasury have been adhered to in the preparation of this budget insofar as it relates to the mandatory elements of the instruction.
- In line with the cost-containment instruction, all consultancy fees that have been budgeted for and are supported by business cases for the Accounting Authority's approval.

3.3. LESOTHO RELATED EXPENDITURE:

The Lesotho Highlands Water Project (LHWP) was configured to augment the water supply to South Africa and to generate hydro-electrical power for Lesotho. In terms of the provisions of the Treaty between the Government of the Republic of South Africa (RSA) and the Government of the Kingdom of Lesotho (GOL), the RSA is responsible for all costs relating to the water transfer component of the project and the GOL is responsible for the total cost of the components relating to the generation of hydro-electrical power. TCTA's Notice of Establishment (NOE) of March 2000 places the obligation on TCTA as part of its non-Treaty

functions to fulfil all the RSA's financial obligations in terms of or resulting from the Treaty. The RSA's financial obligations in terms of the Treaty on the water transfer part located within Lesotho includes making cost-related payments to the LHDA in terms of Article 10, Royalty Payments to GOL in terms of Article 12 and contributions to the operating costs of the Lesotho Highlands Water Commission (LHWC) in terms of Article 9. The cost-related payments include all costs wholly and reasonably incurred by the LHDA for the implementation and operation and maintenance of the water transfer component of the project.

3. COST RECOVERIES FROM PROJECTS

- TCTA is a Special Purpose Vehicle (SPV) operating on a cost recovery basis. Administrative costs not directly attributable to a project are recovered from mandated projects based on the level of planned activity on the respective projects during a particular year – see table below.
- Administrative costs directly related to a specific project are paid from the respective project's bank account. Other non-specific overhead costs are paid from the TCTA corporate account and recovered from the respective projects based on the approved recovery percentages for the year.
- The project cost recovery percentages charged to projects is dependent on the number of active projects. Should the pipeline increase, the shared costs allocation to each project will fluctuate based on activity. Should the project pipeline diminish severely, a realignment strategy will be required to reduce overheads. As projects approach completion and enters the debt service phase the recovery percentage reduces.

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

Projects	2021-22	2022-23	2022-23	2023-24	2024-25
LHWP	34%	34%	198 174 695	24%	24%
BWP	2%	2%	11 657 335	2%	2%
VRESAP	3%	3%	17 486 002	3%	3%
ORWRDP	4%	0%	-	0%	0%
MMTS2	4%	3%	17 486 002	3%	3%
KWSAP	2%	2%	11 657 335	2%	2%
MCWAP1	3%	3%	17 486 002	3%	3%
AMD	10%	10%	58 286 675	10%	10%
LHWP2	15%	15%	87 430 012	15%	15%
MRWP	2%	2%	11 657 335	2%	2%
MCWAP2	12%	15%	87 430 012	15%	15%
UMWP	5%	5%	29 143 337	15%	15%
BRVAS	4%	6%	34 972 005	6%	6%
TOTAL	100%	100%	582 866 749	100%	100%

Table 1

4. ANALYSIS 2021/22 BUDGET vs ACTUAL FORECAST 2021/22

		Actual/Forecast 2021/22	Budget 2021/22	Actual/Forecast vs Budget	Budget 2022/23	Actual/Forecast 21/22 vs Budget 22/23	% Variance
Tariff Revenue		(7 933,18)	(7 902,33)	30,85	(7 970,90)	37,72	0%
Operating Costs		2 176,81	2 288,25	111,44	2 432,53	(255,72)	-11%
TCTA Admin Costs		447,80	498,98	51,18	582,87	(135,07)	-27%
Operations and Maintenance		340,93	433,71	92,78	461,49	(120,57)	-28%
Lesotho Operating Costs		1 388,08	1 355,56	(32,52)	1 388,16	(0,09)	0%
Operating Inflows/Outflows		(5 756,37)	(5 614,08)	142,29	(5 538,37)	(217,99)	4%
Total Finance Charges		1 323,15	1 618,13	294,98	1 415,55	(92,39)	-6%
Net Working Capital Cash (in)/outflows		(4 433,21)	(3 995,95)	437,27	(4 122,83)	(310,39)	8%
Capital Repayments		12 890,46	10 196,02	(2 694,44)	1 584,93	11 305,53	111%
Fixed Assets		8,60	18,18	9,58	59,92	(51,31)	-282%
Capital Expenditure		1 890,82	4 745,33	2 854,51	5 311,16	(3 420,35)	-72%
TCTA Projects		202,21	733,71	531,50	1 211,16	(1 008,96)	-138%
LHWP2		1 688,61	4 011,62	2 323,01	4 100,00	(2 411,39)	-60%
Self Insurance Fund		-	-	-	5,00	(5,00)	100%
Non cash flow items and accruals		250,85	(142,78)	(393,63)	87,64	163,21	-114%
TOTAL FUNDING REQUIREMENT		12 149,44	10 970,72	(1 178,72)	2 739,09	9 410,35	86%

Table: 2- values are in R'million

5.1 TARIFF REVENUE

Project	Actual/Forecast 2021/22	Budget 2021/22	Increase/ (Decrease)	Budget 2022/23	Increase/ (Decrease)
LHWP1,LHWP2, AMD- VRS	(6 196,75)	(6 148,27)	48,48	(6 370,46)	173,71
BWP	(129,00)	(128,69)	0,31	(98,42)	(30,58)
VRESAP	(568,01)	(555,78)	12,23	(510,01)	(58,00)
MMTS	(573,07)	(618,89)	(45,82)	(673,35)	100,28
KWSAP	(186,33)	(170,69)	15,64	(218,64)	32,31
MCWAP	(280,01)	(280,01)	(0,00)	(100,03)	(179,98)
Total	(7 933,18)	(7 902,33)	30,85	(7 970,90)	37,72

Table: 3- values are in R'million

- The Actual/Forecast 2021/22 tariff revenue is expected to be marginally higher than budget mainly due to actual volumes being slightly higher than budgeted.
- Tariff revenue for the 2022/23 financial year is expected to be higher than the Actual/Forecast 2021/22 by R37.72m mainly due to higher tariffs. Tariff revenue is expected to increase for LHWP, KWSAP and MMTS. All tariff revenue is budgeted based on income agreements and the tariff models. MCWAP tariff billing decreases for 2022/23 due to the tariff only including MCWAP1 tariff and MCWAP2 tariff will be reintroduced at a later stage.

5.2 TCTA ADMIN COSTS

TCTA Admin costs consist of operating expenses of TCTA. The Actual/Forecast 2021/22 translates to 90% spent. The increase in the budget for the 2022/23 financial year is expected

to be R135.07 million, translating to an increase of 31% from the Actual/Forecast 2021/22. Below provides a summary of the movements between the Budget 2021/22 and the Actual/Forecast 2021/22 as well as the Budget 2022/23.

	Actual/Forecast 2021/22	Budget 2021/22	(Increase)/ Decrease	Budget 2022/23	(Increase)/ Decrease
Staff Costs	282,88	305,45	22,57	349,15	(66,27)
Directors Costs	8,30	11,00	2,70	9,65	(1,35)
Audit Fees	11,00	14,10	3,10	13,00	(2,00)
Consulting fees	55,32	72,64	17,32	84,69	(29,37)
Depreciation and Amortisation	17,00	12,96	(4,04)	27,29	(10,29)
Rent paid-Premises	9,50	9,69	0,20	13,33	(3,83)
Equipment Rentals	17,19	24,32	7,12	19,43	(2,23)
Communications	4,64	6,95	2,31	6,84	(2,20)
Other Operating Expenses	41,97	41,87	(0,10)	59,49	(17,52)
Total	447,80	498,98	51,18	582,87	(135,07)

Table: 4- values are in R'million

■ Staff costs:

Actual/Forecast 2021/22 vs. Budget 2021/22

Staff and Sundry Costs under expenditure is due to resignations, positions not filled and the related salary costs. The main drivers of this variance are:

- For the financial year, there are 40 vacant positions (excluding interns and temp positions that was budgeted for) of the approved 194 headcount, which results in underspend in salaries. TCTA vacancy rate, year-to-date, is 20.62% (40/194) of its total headcount which is mainly due to planned recruitment processes that did not come to fruition.
- Terminations (Resignations and End of contracts) and new appointments sets off against each other.
- Delay in filling some of the positions for various reasons such as line managers not requesting positions to be filled, project funding delays, etc.
- Successful attraction of talent at lower budgeted cost in some cases.
- The Actual Forecast 2021/22 includes an incentive provision of R19m.

Actual/Forecast 2021/22 vs. Budget 2022/23

The increase in expected expenditure in 2022/2023, is mainly due to current vacancies which should be filled by 31 March 2023, which means by implication that staff cost for a full employee workforce will be reflected in the monies, compared to this year where TCTA currently has 154/194 (excl Temps & Interns) employees. Further, it may be noted salary increases are budgeted for at an average increase of 4.3%.

■ Directors Costs:

Actual/Forecast 2021/22 vs. Budget 2021/22

The actual forecast 2021/22 is below budget. The lower spend is due to remote meetings and planned activities which did not occur in the period. The budget includes costs for legal, advisory, ad hoc fees and ministerial activities. The lower spend on board advisory and legal is due to the budget being contingent and there has been no business need for these costs to be incurred.

Actual/Forecast 2021/22 vs. Budget 2022/23

The increase in the 2022/23 budget is, amongst others, due to the scheduling of quarterly continuation meetings for both the Human Capital Social and Ethics Committee and the Audit and Risk Committees including the provision of meeting fees for the additional member on the Audit and Risk Committee. Also, provision has been made for catering, S&T and travel costs for half of all scheduled board and board committee meetings. Directors' Fees are based on the approved NED Remuneration Policy without any cost of living adjustment. The budget for legal cost has been moved to the Legal Department. The Corporate Secretariat strategic objectives for 2022/23 are corporate governance and meeting support services, training and continuous development and induction through site visits.

- **Audit Fees:**

Actual/Forecast 2021/22 vs. Budget 2021/22

Audit fees are expected to be lower than budget. The actual/forecast is based on estimated costs per the audit engagement letter.

Actual/Forecast 2021/22 vs. Budget 2022/23

The 2022/23 budget has been estimated at 2021/2022 actual forecast amount plus 10% as the estimated cost.

- **Consulting Fees:**

Consulting fees for the Actual Forecast 2021/22 is expected to be below budget. Whilst the Budget 2022/23 sees an increase of R29m.

- **Legal Fees:**

Actual/Forecast 2021/22 vs. Budget 2021/22

Lower legal costs are expected mainly due to the effects of the Covid 19 pandemic. Legal costs were budgeted for as a contingency based on the expected outcomes, while the actual expense is based on current proceedings in on-going matters. The appointment of a legal

panel is expected in the Actual/Forecast 2021/22. Legal support has largely been provided from internal resources and through RFQ's or RFT's where required.

Actual/Forecast 2021/22 vs. Budget 2022/23

The 2022/23 budget makes provision for ongoing legal matters and has contingency for legal support in defending contractual claims and assistance with the drafting of financing agreements. The majority of legal expenditure in the 2022/23 budget is expected to be undertaken in the new projects.

▪ **IT Consulting:**

Actual/Forecast 2021/22 vs. Budget 2021/22

The Actual Forecast 2021/22 will see the procurement process for most initiatives such as business processes and Oracle Cloud Fusion being completed. The lower spend on consulting fees is due to the delays in the implementation of scheduled projects, including the ERP and the Business processes. The procurement process for the ERP failed due to non-responsiveness of the bidders and the Business Processes project is at contracting stage. It is envisaged that the implementation process for the Business Processes will not be concluded in the 2021/2022 financial year. Lower spend on software renewals is due to delays in the implementation of scheduled projects, Project Costing as well as the renewal of the Oracle licenses. The procurement processes to appoint a service provider to implement Project costing as well as renew the Oracle licenses failed due to non-responsiveness. It is envisaged that the Oracle licenses will be renewed in the 2021/2022 financial year.

Actual/Forecast 2021/22 vs. Budget 2022/23

While the main thrust of the proposed ICT budget for 2022/2023 is implementation of projects, a fair portion of it is set aside for maintaining business momentum. This budget will continue to fund existing contracts with service providers and suppliers and ensure a smooth and seamless transition from current to new systems. Budget for 2022/23 for consulting fees is expected to be higher than the Actual/Forecast. The following services are budgeted for:

- ERP Support
- Oracle Cloud Implementation (ERP Project)
- Business Process Re-engineering Project
- Other IT Consulting

This budget will continue to fund existing contracts with service providers and suppliers and ensure a smooth and seamless transition from current to new systems. There will also be a

significant amount of focus on the ERP Project to deal with the challenges that have been faced across the organisation in terms of the existing largely manual systems.

▪ **Rentals (Equipment & Premises):**

Actual/Forecast 2021/22 vs. Budget 2021/22

Overall rentals have a positive variance of R6m. The variance is mainly due to lower equipment rentals and rental of services.

Actual/Forecast 2021/22 vs. Budget 2022/23

The budget for 2022/23 includes:

- Rental Premises- Higher rental because of a planned move to larger premises at a higher cost.
- Equipment Rentals & Rental of Services- The higher costs are related to the infrastructure rollout project. The objective of the project is to provide for stable and reliable ICT infrastructure on which all the systems will be built.

▪ **Communications Costs:**

Actual/Forecast 2021/22 vs. Budget 2021/22

Communications costs are lower in this period due to fewer functions taking place due to COVID restrictions. Due to Covid 19 and cost curtailment measures all communication related activities continue to be curtailed.

Actual/Forecast 2021/22 vs. Budget 2022/23

The strategy for 2022/23 includes initiatives such as promoting the TCTA brand and more stakeholder engagement initiatives.

▪ **Other Operating Expenses:**

Actual/Forecast 2021/22 vs. Budget 2021/22

Other Operating Expenses have lower spend mainly due to lower stakeholder related costs, training and travel costs. These costs were impacted by the Covid 19 lockdown that was in place during the period.

Actual/Forecast 2021/22 vs. Budget 2022/23

The budget 2022/23 caters for higher subsistence & travel costs (R3m), Insurances (R6.6m), Project Ratings (R3m), Office operating costs (R4m) and higher stakeholder related costs (R3m).

5.3 OPERATIONS AND MAINTENANCE

	Actual/Forecast 2021/22	Budget 2021/22	(Increase)/ Decrease	Budget 2022/23	(Increase)/ Decrease
Eastern Basin	121,92	151,16	29,24	173,79	(51,87)
Western Basin	70,49	84,39	13,90	99,22	(28,73)
Central Basin	147,02	192,57	45,55	176,31	(29,29)
LHWP1	1,50	5,59	4,10	12,17	(10,67)
Total	340,93	433,71	92,78	461,49	(120,57)

Table: 5- values are in R'million

AMD

AMD operations and maintenance has a positive variance for the Actual Forecast 2021/22. The budget provides for a monthly provision for unforeseen maintenance to effectively run the plants, there has not been much additional maintenance requirements over the last 6 months. In addition, lower than budgeted chemical costs and electricity charges were incurred.

The Budget 2022/23 has an allowance has been made for an increase associated with escalation on the AMD operators cost, rates & taxes and electricity. Allowances have been made for the following increase in operations cost due to escalation as per contract, increase in maintenance costs to do ageing of the plant and allowances have been made for further shaft pump repairs, building of new discharge pipeline, the repair of the faulty shaft motor and building of the shaft pump

LHWP

The Actual Forecast expects a positive variance.

The budget 2022/23 prepares for the 2024 tunnel outage and allowances have been made for POE's, PSP as well as the cost for the replacement of the dewatering shaft pumps and installation of the electrical winches. Provision for security fence at Caledon Adit & dewatering shaft. Also fencing of TCTA property, with gate motors and motorized garage doors.

5.4 LESOTHO OPERATING COSTS

	Actual/Forecast 2021/22	Budget 2021/22	(Increase)/ Decrease	Budget 2022/23	(Increase)/ Decrease
LHDA operations and maintenance	189,28	319,68	130,40	180,00	9,28
RSA Contribution & Delegation Costs	24,64	24,98	0,35	33,60	(8,96)
Royalties	1 174,16	1 010,89	(163,27)	1 174,56	(0,40)
Total	1 388,08	1 355,56	(32,52)	1 388,16	(0,09)

Table: 6- values are in R'million

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

- The Actual/Forecast 2021/22 expects lower spend directly related to project activity. The budget figure for 2022/23 is based on an estimate provided by LHDA.
- The 2022/23 RSA Delegation costs are expected to be higher as the progress on LHWP2 ramps up.
- Budget is as provided by the LHDA - based on the royalty protocol and expected PPI and ESI. Royalties' costs for the first six months are higher than budget due to higher water volumes and the budget had projected a lower PPI. The last six months estimate has been adjusted according to the new estimate provided by LHDA. Marginally higher royalties are expected for 2022/23 because of expected higher electricity price increases and a higher ESI adjustment.

5.5 FINANCE CHARGES

	Actual/Forecast 2021/22	Budget 2021/22	(Increase)/ Decrease	Budget 2022/23	(Increase)/ Decrease
Finance Charges	1 323,15	1 618,13	294,98	1 415,55	(92,39)

Table: 7- values are in R'million

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

Actual/Forecast finance charges are below the 2021/22 budget primarily because of lower funding utilised because of project delays. As a result, once off fees/ arranging fees budgeted for the new projects were not incurred. This results in a positive variance of R200m. Positive variance of R48m relates mainly to forecast interest rates (3.8%) being higher than budget (3.47%), resulting in a higher interest income on call investment balance.

The budget 2022/23 is expected to increase due to additional funding for new projects and once off fees for new projects (R200m). Funding obtained in May 2021 for VRS includes interest for part of the year, whereas interest for a full year is included in 2022.

A new DMTN programme is in the process of being finalised. R3.5bn of the new bond has been budgeted to be issued from September 2022 at budgeted coupon rate of 9% (R157m).

5.6 CAPITAL REPAYMENTS

	Actual/Forecast 2021/22	Budget 2021/22	(Increase)/ Decrease	Budget 2022/23	(Increase)/ Decrease
Capital Market	9 432,58	9 432,58	-	-	9 432,58
Loans	3 457,88	763,44	(2 694,44)	1 584,93	1 872,95
Total	12 890,46	10 196,02	(2 694,44)	1 584,93	11 305,53

Table: 8- values are in R'million

The increase in the 2021/22 actual forecast capital repayments is mainly due to:

- Repayment on revolving facilities of R1.5bn on VRS facilities and capital repayment of R200m on the Standard Bank long term facility. The budget had not included any immediate repayments

- Prepayment of R573m on MMTS facility. The board approved the accelerated prepayment of MMTS-2 debt by March 2024 as per the 2021 funding strategy
- Prepayment of R108m on MCWAP. MCWAP Users (Eskom and Exxaro) and TCTA have agreed as part of the tariff consultations that TCTA will reduce the tariff and accelerate the debt repayment on the MCWAP-1 Project prior to the implementation of MCWAP-2.

The budget for 2022/23 decreases due to the WSP5 bond of R9 432m which matured on 28 May 2021 and the once off repayment on the revolving facilities of R1.5bn.

MMTS capital payments have been accelerated to be repaid by March 2024 in term of the 2021 funding strategy. R307m will be paid in 2022/23 as compared to R667m in 2021/22.

There is a decrease in MCWAP capital payments due to prepayment of R108m in 2021/22.

5.7 CAPITAL EXPENDITURE

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

UMWP and BRVAS are at project preparation phase and full implementation is pending finalization of institutional arrangements. The table below provides a comparison of the 2021/22 budget as approved and the outcomes now expected as included in the Actual/forecast, as well the budget for 2022/23:

	Actual/Forecast 2021/22	Budget 2021/22	(Increase)/ Decrease	Percentage	Budget 2022/23	(Increase)/ Decrease
BWP	0,39	0,15	(0,24)	-160%	5,02	(4,63)
ORWRDP2c	68,73	139,08	70,35	100%	-	68,73
VRESAP	-	0,50	0,50	0%	-	-
MMTS2	0,20	20,60	20,40	99%	15,38	(15,18)
MCWAP	0,05	-	(0,05)		-	0,05
AMD	-	29,40	29,40	100%	26,50	(26,50)
MCWAP2	115,13	229,79	114,66	50%	1 090,72	(975,60)
BRVAS	17,72	20,94	3,22	15%	56,61	(38,89)
MRWP	-	-	-	0%	-	-
UMWP	-	293,25	293,25		16,93	(16,93)
Subtotal	202,21	733,71	531,50	72%	1 211,16	(1 008,95)
LHWP2	1 688,61	4 011,62	2 323,01	58%	4 100,00	(2 411,39)
Total	1 890,82	4 745,34	2 854,51	60%	5 311,16	(3 420,34)

Table: 9- values are in R'million

MCWAP-2A

The PSP costs are planned to increase, with the procurement planning for the appointment of the contractors. Land acquisition is expected to intensify in the 2022/23 year. A large amount of the planned expenditure relates to the advance payment to the construction contractors who are expected to commence in the later months of 2023.

BRVAS

Majority of the cost pertaining to BRVAS relates to a provision of R42.5 million for Eskom's main electricity supply and acquiring land rights R9.5 million before start of construction in 2023/24.

uMWP-1

The final approvals around the Environmental Authorization by DEFFE is expected to be included in the first quarter of 2022, in particular the Environmental Resource Plans. Further project preparation activities will then proceed including the contract appointment of consultancy services to undertake a due diligence review on the feasibility study and assessment of the project implementation strategy. The remainder of the budget will be allocated to TCTA admin cost.

ORWRP-2C

Allowances have been made for further DAB rulings and possible litigation.

BWP

The construction of the interactive display centre at the Skuifraam Ruins, is projected to commence towards the later part of 2022/23.

ANNEXURE C3

MEDIUM TERM EXPENDITURE FORECAST

Purpose

This document reflects expected net income generated from operations (Table 1) and the funding requirement after capital redemption and capital expenditures (Table 2) over the medium term. The main factors giving rise to the movements in the income/expenditure are items are explained.

The Medium-Term Budget for operating income and expenditure shows an increase in nett cash inflow from 2022/23 to 2024/25. This is largely because of the increase in the tariff income and lower interest costs as detailed below:

Medium Term Forecast for Operating Income and Expenditure

	Actual/ Forecast 2021/2022	Budget 2021/2022	TOTAL Budget 2022/2023	(INCREASE)/ DECREASE on 2021/2022	(INCREASE)/ DECREASE " %" 2021/2022	TOTAL Budget 2023/2024	TOTAL Budget 2024/2025
Tariff Billing	(7 933,18)	(7 902,33)	(7 970,90)	37,72	(0%)	(8 563,47)	(9 086,99)
Total Receipts from Tariffs	(7 933,18)	(7 902,33)	(7 970,90)	37,72	(0%)	(8 563,47)	(9 086,99)
Operating Costs	2 176,81	2 288,25	2 432,53	(255,72)	(12%)	2 554,23	2 712,72
TCTA Admin Costs	447,80	498,98	582,87	(135,07)	(30%)	619,04	649,29
Lesotho Operating Costs	1 388,08	1 355,56	1 388,16	(0,09)	(0%)	1 457,57	1 530,45
Operations & Maintenance	340,93	433,71	461,49	(120,57)	(35%)	477,62	532,98
Operating Inflows/Outflows	(5 756,37)	(5 614,08)	(5 533,37)	(222,99)	4%	(6 009,24)	(6 374,26)
Finance Cost	1 323,15	1 618,13	1 415,55	(92,39)	(7%)	1 357,73	1 452,65
Total Finance Charges	1 323,15	1 618,13	1 415,55	(92,39)	(7%)	1 357,73	1 452,65
Net Working Capital Cash (in)/outflows	(4 433,21)	(3 995,95)	(4 117,83)	(315,39)	7%	(4 651,50)	(4 921,61)

Table 1- values in R

Tariff Income

Tariff billing increases from 2022/23 to 2024/25 in line with tariff models. The budgeted volumes and tariffs are based on Department of Water and Sanitation (DWS) estimates. LHWP (VRS) sees an increase which is largely attributable to a higher tariff. The water income for VRS, Berg Water Project (BWP) and Vaal River Eastern Subsystem Augmentation Project (VRESAP) continue to be billed in line with demand expectations as agreed with DWS, as well as the inflation-linked increases as per the water supply agreements/models. The Budget also includes the tariff for Mooi-Mgeni Transfer Scheme (MMTS), Komati Water Scheme Augmentation Project (KWSAP) and Mokolo and Crocodile River (West) Water Augmentation Project (MCWAP). The tariff billing for these projects is based on the water demands as received from DWS.

Operating Costs

Overall, Operating costs increases by an average of 4.77% over the medium term. The main factors driving the increased expenditure are TCTA Admin costs and Lesotho Operating costs. Below are brief notes that provide reasons for the increases:

TCTA Admin Costs

TCTA Admin costs fluctuate in the medium term. The increase in 2024/25 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 4%. Fixed overhead costs, where there are no contracts in place, are based on historic costs adjusted taking in consideration appropriate indexes or contractual escalation provisions.

Operations and maintenance

Operations and Maintenance is budgeted for in terms of agreements in place and expected outcomes over the medium term. The medium-term budget is based on the actual cost of operating all three basins and provision is made for increases, escalation and rates and taxes.

Lesotho Operating Costs

The main cost item relates to Royalty payments to Lesotho. Budgeted costs are based on LHDA cost projections and expected outcomes over the medium term.

Finance Charges

The marginal increase in the finance costs from 2022/23 to 2024/25 is due to the additional financing costs on the funding of new projects.

Funding Requirements after Capital Repayments and Capital Expenditure

	Actual/ Forecast 2021/2022	Budget 2021/2022	TOTAL Budget 2022/2023	(INCREASE)/ DECREASE on 2021/2022	(INCREASE)/ DECREASE " %" 2021/2022	TOTAL Budget 2023/2024	TOTAL Budget 2024/2025
Net Working Capital Cash (in)/outflows	(4 433,21)	(3 995,95)	(4 117,83)	(315,39)	7%	(4 651,50)	(4 921,61)
Capital Repayments	12 890,46	10 196,02	1 584,93	11 305,53	88%	1 588,95	1 579,85
Capital Market	9 432,58	9 432,58	-	9 432,58	100%	-	-
Loans	3 457,88	763,44	1 584,93	1 872,95	54%	1 588,95	1 579,85
Fixed Assets	8,60	18,18	59,92	(51,31)	(596%)	54,40	10,54
Furniture and fittings	-	0,50	2,10	(2,10)	0%	2,20	1,50
Office equipment	0,13	0,53	5,32	(5,20)	100%	5,58	3,00
Computer Hardware/Software	8,48	15,80	13,50	(5,02)	(59%)	5,75	6,04
Building Contingency	-	1,35	39,00	(39,00)	100%	40,87	-
Capital Expenditure	1 890,82	4 745,33	5 311,16	(3 420,35)	(181%)	5 827,72	11 144,22
TCTA Projects	202,21	733,71	1 211,16	(1 008,96)		2 327,72	7 044,22
LHWP2							
LHWP2 Construction	1 688,61	4 011,62	4 100,00	(2 411,39)	(143%)	3 500,00	4 100,00
Self Insurance Fund	-	-	5,00	(5,00)	100%	5,00	5,00
Total funding requirement before adjustment for accruals and non-cash flow items	10 356,66	10 963,58	2 843,18	7 513,49		2 824,57	7 818,00
Recovery from DWS	126,91	155,26	155,26	(28,35)		247,03	267,06
Non cash flow items and accruals	250,85	(142,78)	87,64	163,21		176,54	694,20
TOTAL COMMERCIAL FUNDING REQUIREMENT	12 022,53	10 815,46	2 583,82	9 438,70	79%	2 401,00	6 856,75
TOTAL FUNDING REQUIREMENT	12 149,44	10 970,72	2 739,09	9 410,35	79%	2 648,02	7 123,81

Table 2- values in R

The lower than anticipated funding requirement for 2022/23 is mainly due to the lower capital expenditure on projects. From 2022/23 to 2024/25 a significant increase in the commercial funding requirements is expected due to a sharp increase in the capital expenditure.

Capital Repayments

LHDA and TCTA Capital repayments are in accordance with loan agreements. Included in the medium-term are drawdowns for new projects.

Fixed Assets

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

Capital Expenditure (Capex)

Capex has been budgeted for in accordance with the Capital Expenditure Plans, contracts in place and charters of the projects, considering the revised timelines and the dynamics of each project. Where major construction and engineering contracts have been awarded, the cost projections are based on the most recent financial reviews conducted by the contractors and reviewed by the Engineer and TCTA project staff. The financial reviews are contractual obligations conducted on a bi-annual basis and require updated contractor cash flows and forward projections by the Engineer on potential variation orders and claims to the completion of the respective contracts. Escalation assumptions and forward projections are also reviewed as part of the exercise.

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

	Actual/Forecast 2021/22	Budget 2021/22	Budget 2022/23	Budget 2023/24	Budget 2024/25
TCTA Projects					
BWP	0,39	0,15	5,02	-	-
ORWRDP2c	68,73	139,08	-	93,70	98,39
VRESAP	-	0,50	-		
MMTS2	0,20	20,60	15,38	-	-
MCWAP	0,05	-	-		
AMD	-	29,40	26,50	156,60	
MCWAP2	115,13	229,79	1 090,72	1 440,04	3 166,72
BRVAS	17,72	20,94	56,61	282,42	552,21
UMWP	-	293,25	16,93	354,96	3 226,90
Subtotal	202,21	733,71	1 211,16	2 327,72	7 044,22
LHWP2	1 688,61	4 011,62	4 100,00	3 500,00	4 100,00
Total	1 890,82	4 745,34	5 311,16	5 827,72	11 144,22

Table 3- values in R' million

ANNEXURE D

RISK MANAGEMENT PLAN 2022/23

1. PURPOSE

The Risk Management Plan for the 2022/23 financial year describes how risk management will be structured and performed to ensure that risks are managed and controlled to acceptable levels. This plan provides an annual programme of risk management activities with associated timelines and responsibilities critical to support TCTA in achieving its business objectives.

2. OBJECTIVE

The main objective of the Risk Management Implementation Plan is to facilitate the execution of risk management. The Risk Management Implementation Plan for TCTA is prepared to give effect to the implementation of the Risk Management Policy and Framework and sets out all risk management activities for 2022/23 financial year.

3. APPROACH

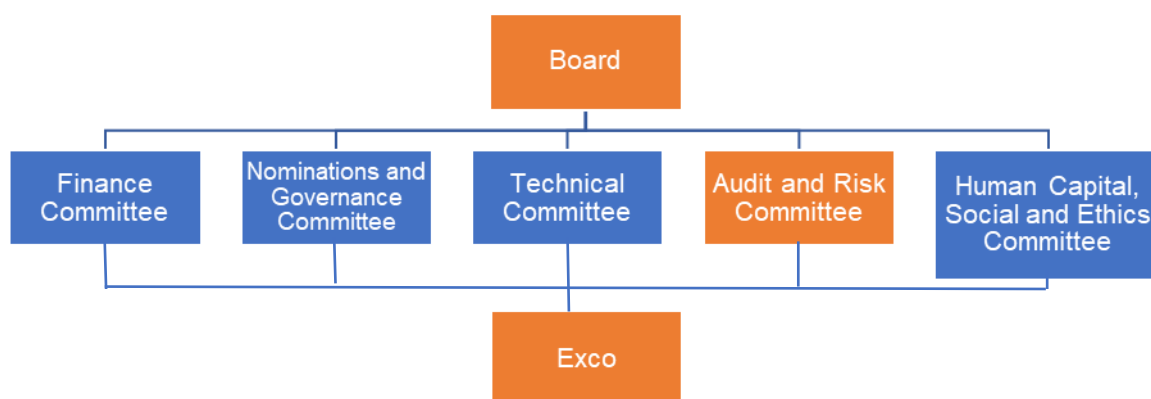
The development of the Risk Management Implementation Plan considers the approved Risk Management Policy, the Risk Management Framework, the objectives of the business and available resources. The Risk Management team will implement a continuous risk management process focusing on risk assessment and mitigation. Risk assessment includes activities to identify, analyse and prioritise risks. Risk mitigation includes developing risk mitigation strategies as well as monitoring the impact of the strategies and residual risks.

4. GOVERNANCE STRUCTURE

TCTA has established management and operating structures in pursuit of strategy and business objectives. The structures describe how the organisation carries its day-to-day operations in the execution of ERM for the achievement of its business objectives.

The ERM Governance and Reporting Structure as depicted in Figure 1 below serves as TCTA's Management and Operating Structure. ERM is dealt with mainly in the structures marked orange.

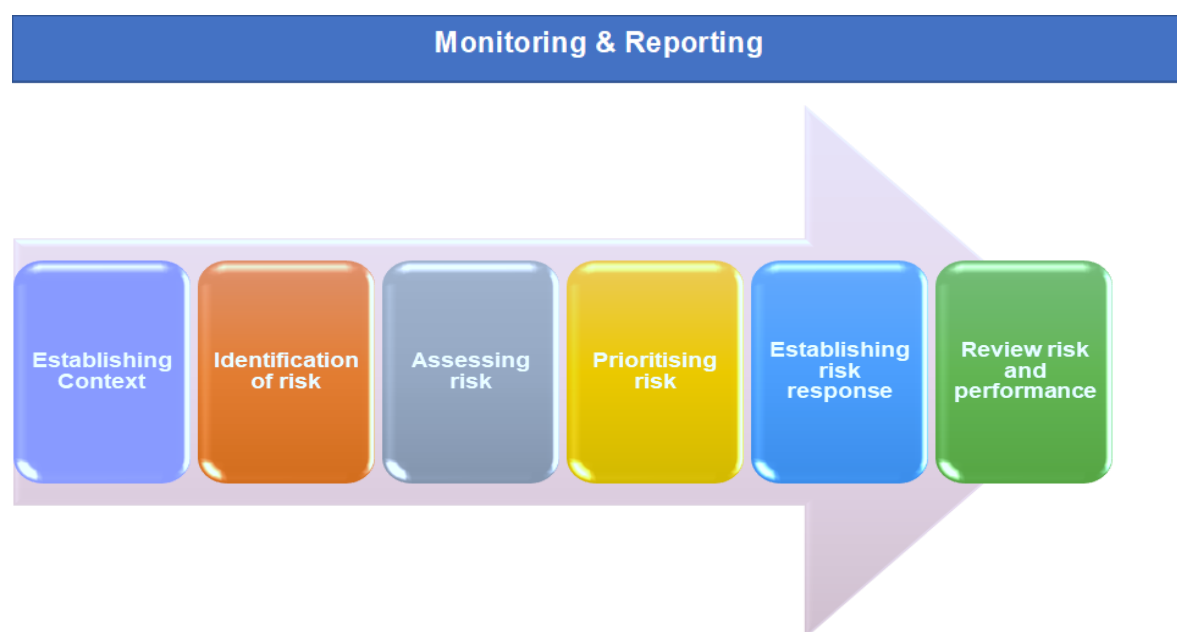
Figure 1. ERM Governance Structure



5. RISK MANAGEMENT PROCESS

The risk management process set out a structured approach which TCTA will follow in managing risks. TCTA has adopted the COSO Enterprise Risk Management Framework and ISO 31000 and COBIT guidelines as part of its risk management process to manage organisational, projects and information technology risks respectively.

The high-level TCTA ERM process that should be followed is illustrated in the diagram below.



6. DETAILED ANNUAL RISK MANAGEMENT PLAN

The detailed risk management implementation plan is outlined in Annexure A and is in the form of a project plan which records tasks, responsible persons and target dates. The plan for 2022/23 outlines the activities to be undertaken as well as the outcomes.

The following areas will be prioritized during the 2022/2023 financial year:

- The embedment of the risk management within TCTA's business operations and activities
- Risk management training and awareness.
- Water Agency risks Identification and management.
- The implementation of the Risk Appetite and Tolerance Framework.

7. KEY RISKS IDENTIFIED BY BOARD AND MANAGEMENT

The Board Risk workshop held in November 2021 identified key risks likely to prevent TCTA from achieving its business objectives. The basis for the risk identification were the 2022/2023 business objectives as outlined in the corporate plan and balanced scorecard. The risks, potential causes, existing controls, and management actions were identified during the workshop.

A detailed risk register is attached as Annexure B.

8. CONCLUSION

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

ANNEXURE D1

RISK MANAGEMENT PLAN ACTIVITIES FOR 2022/23

ANNEXURE A. DETAILED RISK MANAGEMENT IMPLEMENTATION PLAN

Planned Action	No.	Detailed Actions	Outputs	Responsible Person	Due Date
Governance of Risk					
Oversight on the implementation of the Risk Management Policy and Framework/Risk Management Strategy	1	Risk Management - Oversight	Consideration of the Quarterly Risk Management Report	Audit and Risk Committee	Quarterly – Scheduled Audit and Risk Committee Meetings
	2	Board Strategic Risk Assessment	1. Strategic Risk Register 2. Strategic Risk Report	Chief Risk Officer (CRO)/Board/Executive Management (EXCO)	31 November 2022
Risk Awareness and Capacity Building					
To raise organisational risk awareness	1	<ul style="list-style-type: none"> • Develop detailed plan / programme for all employees • Develop awareness programme for new employees • Risk awareness during risk register update sessions • Risk awareness to Risk Forum members • Risk awareness to risk champions Bi-annual organisational risk awareness sessions	<ul style="list-style-type: none"> • Risk Presentations • List of Attendance 	Risk Manager/CRO	<ul style="list-style-type: none"> • 30 April 2022 • 30 April 2022 • Quarterly • Annually • Annually 30 September 2022 and 31 March 2023

Planned Action	No.	Detailed Actions	Outputs	Responsible Person	Due Date
				Risk Management Team	Quarterly
Risk Management Policies					
Review risk management policy	1	Review the Risk Management policy to align with best practice, developments in the industry and changes in TCTA's business	Approved risk management policy	Risk Manager/CRO	Review risk management policy
Review of Treasury risk management policy	2	Review the Treasury Risk policy to align with best practice, developments in the industry and changes in TCTA's business	Approved treasury risk management policy	Risk Manager/CRO	Review of Treasury risk management policy
Review of Investment risk management policy	3	Review the Investment policy to align with best practice, developments in the industry and changes in TCTA's business	Approved investment policy	Risk Manager/CRO	Review of Investment risk management policy
Risk Orientation					
Review of risk management framework	1	Review of the current framework to align with changes in the environment and best practice	Approved risk management framework	Risk Manager/CRO	30 October 2022
Review of Risk Appetite and Tolerance Framework	2	Review risk appetite framework indicators to ensure risks are	Approved Risk Appetite framework	Risk Manager/CRO	30 October 2022

Planned Action	No.	Detailed Actions	Outputs	Responsible Person	Due Date
		reduced to acceptable levels			
Review of Materiality and significance framework	3	Review the strategic and corporate materiality framework in line with National Treasury guidelines and latest audited financial statements	Approved materiality framework	Risk Manager/CRO	31 January 2023
Review of 2023 -2024 Risk management plan	4	Review the current risk management plan to align with changes the business	Approved Risk Management Plan	Risk Manager/CRO	31 January 2023
Review of the fraud prevention plan and strategy	5	Review the current fraud prevention plan and align with best practice	Approved Fraud prevention plan and strategy	Risk Manager/CRO	31 January 2023
Review business continuity management (BCM) Plans	6	Review the following plans: <ul style="list-style-type: none"> • Emergency Response plan • Business Recovery Plan • Crisis Management plan ICT Coordination and Continuity Plan.	Approved business continuity plans	Risk Manager/CRO	31 March 2023
Combined Assurance					
Support Audit & Risk Committee in driving the implementation of Combined Assurance	1	Contribute to the implementation of Control Self-Assessment Process to inform assurance	Control Self-Assessment Results.	CRO/Risk Manager/CIA	As per Combined Assurance Implementation Plan

Planned Action	No.	Detailed Actions	Outputs	Responsible Person	Due Date
		activities (Combined Assurance)			
	2	Review key risks that form the basis of the combined assurance initiative	TCTA risk profile	CRO/Risk Manager	30 April 2022
	3	Review the approved combined assurance map and provide improvements to gaps identified.	Combined Assurance Map	CRO/Risk Manager/CIA	31 May 2022
	4	Assessment of TCTA's risk maturity level	Maturity Assessment Report	CRO/Risk Manager	30 June 2022
Enterprise-wide risk management					
Divisional/Operational Risks					
Divisional risk assessment and reporting	1	Facilitate Divisional Risk Identification and Assessments Workshops	<ul style="list-style-type: none"> Divisional risk registers Divisional risk reports 	Risk Management Team/EXCO	Quarterly
Continuous Monitoring of Emerging Risks	2	Review risk registers and implementation of action plans. Update risk registers with risk information identified in the Internal audit reports.	Updated risk registers, including emerging risks.	Risk Management Team/ EXCO	Monthly and Quarterly
Project Risks					
Projects risk assessment and reporting	1	Facilitate Projects Risk Identification and	<ul style="list-style-type: none"> Project risk registers 	Risk Management Team/Project Teams	Monthly and Quarterly

Planned Action	No.	Detailed Actions	Outputs	Responsible Person	Due Date
		Assessments Workshops.	Risk input to projects progress reports (uMWP, AMD, BRVAS and MCWAP-2)		
Continuous Monitoring of Emerging Projects Risks	2	Continuously review project risks to ensure action plans are implemented.	Updated project risk registers	Risk Management Team/Project Teams	Monthly and Quarterly
Water Agency Risks	3	Assess and manage water Agency risks	Water Agency risk register	Risk Management Team	Quarterly
Treasury Risk Management					
Management of Financial Risks	1	Monitoring interest rate risk, liquidity risk, counterparty risk, and borrowing limits	<ul style="list-style-type: none"> Counterparty limit utilisation reports Interest rate risk reports Liquidity reports Borrowing limit reports 	Risk Management Team	Daily, bi-weekly and monthly
	2	Conduct financial analysis of counterparties and review counterparty limits	Counterparty limits review reports	Risk Management Team	31 January 2023
	3	Monitor credit worthiness of approved counterparties	Counterparty monitoring report	Risk Management Team	Quarterly

Planned Action	No.	Detailed Actions	Outputs	Responsible Person	Due Date
Fraud Risk Management					
Identification of fraud risks emanating from the Business Operations.	1	Facilitate Fraud Risk Identification and Assessments Workshops	Fraud risk register	Risk Management Team/EXCO	Quarterly
Risk Financing					
Management of risk financing (Insurance)	1	Conduct corporate financial risk assessment to identify insurable risk exposures.	<ul style="list-style-type: none"> Insurance Placement/Renewal Report Risk Management Report 	CRO/Risk Manager	30 April 2022
	2	Administration of corporate insurance claim	Insurance Claims Report	Risk Management Team	Monthly
Business Continuity Management					
Rollout of the BCM programme	1	Conduct Business Impact Assessment	BIA report	Risk Manager/CRO	31 March 2023
	2	Monitor implementation of business continuity strategies / plans	BCM report	Risk Manager/CRO	Quarterly
	3	Test effectiveness of the business continuity programme	BCM Test Report with findings and recommendation	Risk Manager/CRO	31 March 2023
Monitoring					
Monitoring of enterprise risk management performance to consider how well the enterprise risk management components are functioning over time and provides	1	Monitoring of implementation of action plans and reporting on status of action plans	Report to the ARC Ratings on divisional performance on risk management	Risk Management Team	Quarterly

Planned Action	No.	Detailed Actions	Outputs	Responsible Person	Due Date
information on any substantial changes.	2	Populating and updating the risk treatment plan	Risk treatment plan Reduction of risks to acceptable levels	CRO/Risk Manager/Exco	Quarterly
	3	Resolution of External and internal audit findings	Audit findings resolution rate	CRO/Risk Manager	Quarterly
	4	Monitoring the Implementation and Execution of the Risk Framework and Policy/ Functioning of the Risk Management Unit.	Quarterly risk management report	Risk Manager/CRO	Quarterly
	5	Monitor organisational risk appetite and tolerance levels against the approved of risk appetite and tolerance thresholds approved in the Framework.	Risk appetite and tolerance report	Risk Manager/CRO	Quarterly
	6	Monitoring progress against implementation of the fraud prevention plan.	Quarterly Fraud prevention plan report	Risk Manager/CRO	Quarterly
Reporting					
Risk reporting	1	Risk reporting to the Risk Forum, Exco, FC, ARC, and the Board	Risk Management Reports	CRO/ Risk Manager	Monthly and Quarterly
Annual Report	2	Provide Assurance on the status of risk management within TCTA	Risk Management section of the annual report	Risk Manager	30 June 2022

ANNEXURE D2
STRATEGIC RISK REGISTER

TCTA STRATEGIC RISK REGISTER – 2022/23

No.	Strategic Perspective	Strategic Objective	Risk	Risk Owner	Causes	Consequences	Inherent Impact	Inherent Likelihood	Inherent Risk	Existing Controls	Control Effectiveness	Residual Impact	Residual Likelihood	Residual Rating	Action / Remedial Plan	Implementation Date	Responsible Person	Status /Progress
1	Financial Perspective	Raise funding for implementation of infrastructure	Funding not raised on time and in the amount required to implement projects.	Nhlanhla Nkabind e	<p>1. Failure in processes to raise funding for implementation of infrastructure.</p> <p>Processes for sourcing funding may be delayed.</p> <p>1. Resource constraints and recruitment issues due to inability to attract and retain suitable personnel.</p> <p>2. Failed bidding processes.</p> <p>3. Poor operational planning and execution.</p> <p>4. Weak control environment.</p> <p>5. Occurrence of a “Key Man Event” (timeous filling of vacancies at Board and senior executive management (CEO and CFO)).</p> <p>2. The market response to the RFP may not be enough for the required funding.</p> <p>1. TCTA seen as having a high credit risk profile.</p> <p>2. Perceived negative environmental or social impacts that cannot be mitigated (e.g., project supports coal mining, power from fossil fuels).</p> <p>3. Potential funders not aware of issuing of RFP.</p> <p>3. Failure to</p>	<p>- Reputation damage or erosion.</p> <p>- Delay in project implementation .</p> <p>- Funding may not be available or sufficient to implement the project.</p> <p>- Government may have to fund the project from the fiscus.</p> <p>- Increase in project costs, which may affect affordability to end-users.</p> <p>- Inability to raise funding and implement Lesotho 2 on time.</p>	5	5	25	<p>1. Approved structure of required positions and SLA with HR.</p> <p>1. Policy, procedures, and guidelines are in place</p> <p>1. Performance management process and contracting</p> <p>2 and 3. Regular interaction with funders to promote understanding of TCTA credit, compliance with covenants.</p> <p>2. Implement provisions of the Procedure for Sourcing Funding.</p> <p>2. Expand pool of potential funders.</p> <p>3. Communicating Agency developments to funders.</p> <p>3. Negotiation with funders, involve NT and DWS in negotiations</p> <p>4. Covenant compliance programme is in place.</p> <p>4. Proactive liaison with DWS and funders</p> <p>4. Structure projects and tariffs for affordability and willingness to pay by water users.</p> <p>4. Updated Issue Management Plan</p>	Partially effective	5	3	15	<p>1. Improve recruitment processes and outcomes</p> <p>- Programme to attract and retain high calibre employees.</p> <p>2. Appointment of legal panel including service providers specialising in banking and finance.</p> <p>2. Assess credit rating of offtakers</p> <p>3. Ensure design of the Agency is aligned with interests of the funders.</p> <p>4. Activate Political Steering Committee (Umkhomazi)</p>			

No.	Strategic Perspective	Strategic Objective	Risk	Risk Owner	Causes	Consequences	Inherent Impact	Inherent Likelihood	Inherent Risk	Existing Controls	Control Effectiveness	Residual Impact	Residual Likelihood	Residual Rating	Action /Remedial Plan	Implementation Date	Responsible Person	Status /Progress	
					<p>conclude negotiations with funders.</p> <p>1. Loan agreement terms are unfavourable to TCTA.</p> <p>2. Failure to fulfil conditions precedent.</p> <p>3. Breach of conditions of the Guarantee Framework Agreement.</p> <p>4. Failure to meet conditions of NT Instruction Note for Borrowing Limits and Guarantees.</p> <p>4. Lack of govt approvals and external financing environment.</p> <p>1. An event of default (EoD) or material adverse effect (MAE) may occur during the funding process.</p> <p>2. Government may not approve guarantees or borrowing limits.</p> <p>3. Funding may not be cost-effective (high cost of funding and/or onerous conditions).</p> <p>5. Specific projects:</p> <p>1. MCWAP: Position of lenders around Coal. Drying up of funding for fossil fuels.</p> <p>2. VRS: Namibia not giving concurrence.</p> <p>3. Umkhomazi:</p>														

No.	Strategic Perspective	Strategic Objective	Risk	Risk Owner	Causes	Consequences	Inherent Impact	Inherent Likelihood	Inherent Risk	Existing Controls	Control Effectiveness	Residual Impact	Residual Likelihood	Residual Rating	Action /Remedial Plan	Implementation Date	Responsible Person	Status /Progress
					<p>Many risks have occurred. Affordability of project is questionable. Lack of payment by municipality. Interrogation of costs and structures to implement project.</p> <p>4. Institutional arrangements for second phase of LHWP not finalised. TCTA not party to agreement between Lesotho and RSA govts.</p>													

No.	Strategic Perspective	Strategic Objective	Risk	Risk Owner	Causes	Consequences	Inherent Impact	Inherent Likelihood	Inherent Risk	Existing Controls	Control Effectiveness	Residual Impact	Residual Likelihood	Residual Rating	Action / Remedial Plan	Implementation Date	Responsible Person	Status / Progress
2	Financial Perspective	Implement capital projects on time, within budget, to the appropriate standards and in a sustainable socio/environmental manner	Failure to implement capital projects on time, within budget, to the appropriate standards and in a sustainable socio/environmental manner.	Johann Classens	1. Time and Budget <ol style="list-style-type: none"> Delay in obtaining funding. Failure to secure funding for the social component Delays or failures in tender processes Governance failure in procurement processes Capacity constraints within RSA build environment Supply chain blockages (goods and services) Restrictive procurement regulations (e.g., National Treasury Note 3) Poor performance of service providers Construction delays due to external factors such as pandemics, strikes, community interruptions, abnormal weather conditions, loadshedding and other service interruptions. Delays in obtaining environmental authorisations. Scope increases due to unexpected geological conditions. Project delays due to pandemics. 2. Standards <ol style="list-style-type: none"> Non-compliance with specifications provided by DWS Non-performance of PSP (poor site supervision) 3. Social and Environmental sustainability <ol style="list-style-type: none"> Environmental and social impacts not mitigated according to 	<ol style="list-style-type: none"> Reputational damage or erosion impacting on TCTA's sustainability. Cost increases impacting on affordability of project therefore increase in tariffs and resistance thereto. Economic curtailment due delay in water delivery. Legal challenges and penalties due to regulatory non-compliances. 	5	5	25	1. Time and Budget <ol style="list-style-type: none"> Regular interaction with funders to promote understanding of TCTA credit, compliance with covenants.1,2. Project Charters, Financing Strategies, Project Implementation Plans, escalation to principals. Procurement plans, policies and procedures, Tender Committees, and procurement strategies. Strategic and operational DOA's, policies and procedures, internal audit. Contract packaging options, open international tender processes for major contracts. Procurement strategies for long-lead items. Preference for local suppliers and service providers. None Contractual remedies9.Contractual risk sharing provisions. Support to DWS, escalation to principals. Investigative studies during planning and contractual risk sharing provisions, competent PSP. Alternative working arrangements and re-prioritise of activities 2. Standards	Partially effective	5	3	15	1. Time and Budget <ol style="list-style-type: none"> Review SCM capacity for procurement of mega project procurement. Reconsider previous independent review recommendations not implemented. (Dependent on OE study?) (Discussions with HR and others4. Implement SLAs to ensure accountability. 4. Review SDOA and ODOA pertaining to roles and responsibilities and levels of delegation from Board.7. Apply for exemption of NT3 	June 2022 April 2022 April 2022	CFO/EXCO CFO/EXCO EXCO CFO	

No.	Strategic Perspective	Strategic Objective	Risk	Risk Owner	Causes	Consequences	Inherent Impact	Inherent Likelihood	Inherent Risk	Existing Controls	Control Effectiveness	Residual Impact	Residual Likelihood	Residual Rating	Action /Remedial Plan	Implementation Date	Responsible Person	Status /Progress	
					the EMP: a) Lack of social licence to implement the project. b) Non-compliance with Environmental Regulations c) Non-compliance with TCTA policies and procedures 2. Not meeting community expectations through BEE initiatives 3. Not meeting project partner/stakeholder expectations 4. Political intervention or political meddling.					1. Due diligence on feasibility study recommendations, panel of experts, competent service providers. 2. Contractual remedies, TCTA site-based staff. 3.Social and Environmental Sustainability 1. Environmental Management Plans, Policy, procedures and strategies, compliance monitoring, audit reviews, Panel of Experts, Environmental Control Officer, Environmental Monitoring Committee. 2. Project and contract targets, procurement strategies, legislative provisions. 3. Implementation and Off-take Agreements with DWS/Project Partners, Participative project governance structures, Directive obligations. 4. Escalation to principals.									

No.	Strategic Perspective	Strategic Objective	Risk	Risk Owner	Causes	Consequences	Inherent Impact	Inherent Likelihood	Inherent Risk	Existing Controls	Control Effectiveness	Residual Impact	Residual Likelihood	Residual Rating	Action /Remedial Plan	Implementation Date	Responsible Person	Status /Progress
3	Financial Perspective	Operate and maintain designated projects to meet DWS requirements/ specifications	Non achievement of treatment volumes and treated water specifications.	Johann Claassens	1.Internal 1. Poor performance of service providers. 2. Unplanned outages: a) Operator error b) Aging equipment c) Health and safety (stoppages due to fatality) 3. Environmental degradation: a) uncontrolled decant of untreated water b) sludge spillages c) failure of the plant because of chemical processes. d) failure to contain rising water levels 4. Delay in conclusion of TCTA DWS agreement 2. External 5. High water ingress due to abnormal rain conditions 6. Community unrest and vandalism of infrastructure 7. Delayed decision making by DWS on long term solution 8. Failure by DWS and DMR to implement ingress control measures 9. Power failures and prolonged outages 10. Supply chain failure or blockages (goods and services) as related to international suppliers (COVID and other restrictions) 11. Unrealistic targets set by DWS	- Failure to achieve water drawdown levels and failure to meet water quality specifications- Reputational damage to TCTA should environmental degradation or ground water contamination occur.- Organisational targets not achieved leading to sub-optimal performance and negative audit findings.- Regulatory non-compliances leading to monetary penalties or legal action against TCTA.	5	5	25	1. Appointment of competent operator with the requisite skill and experience in plant operation and maintenance. 1. Comprehensive contract conditions and application of contractual remedies to ensure satisfactory performance. 2. Preventative maintenance and plant refurbishment plans. 2 and 9. Plant security measures and reaction plans in place. 2. TCTA staff located on site to monitor operator and plant performance. 3. Creation of water level buffers within basins to absorb water level rises due to short-term outages.. 2 and 3. Health and safety policy and procedures including regular audits to ensure compliance. 4,6,7. Stakeholder engagement strategy and plan . 7, 8, 11. Implementation agreement with DWS to determine roles and responsibilities. 7, 8, 11. Regular engagements with DWS to agree on the setting of targets, plant performance and interventions required. 11. Approved operational EMP and regular audits.	Partially effective	5	3	15	1 Finalise DWS/TCTA Implementation Agreement 2. Enter into maintenance SLA with strategic suppliers for equipment. 3. Restore plant capacity in Eastern Basin: Repair of motors. 4. Restore plant capacity to Central Basin: Pipe capacity and procure pump set.	30 April 2022 June 2022 30 April 2022 June 2022	Executive Managers PMID/PF&T Exec Man/SCME xec Man Exec Man	

No.	Strategic Perspective	Strategic Objective	Risk	Risk Owner	Causes	Consequences	Inherent Impact	Inherent Likelihood	Inherent Risk	Existing Controls	Control Effectiveness	Residual Impact	Residual Likelihood	Residual Rating	Action /Remedial Plan	Implementation Date	Responsible Person	Status /Progress
4	Financial Perspective	Manage debt within the approved borrowing limit	Breach of borrowing limit conditions and liquidity failure	Nhlanhla Nkabindle	1. Borrowing limit expiry or insufficient amount of borrowing limit 1. Increase in debt due to late payments by DWS 2. Slow government processes for approving borrowing limit 3. Low water demand, 4. Low payment levels by water users 5. Requested tariff adjustments not approved or implemented 2. Failure to raise liquidity funding 6. Event of default (e.g., qualified audits, late AFS) leading to drawstop on facilities and lockout of commercial paper (CP)market 7. Failure to place CP due to market conditions or lack of interest in TCTA paper	- Reputation damage or erosion - Event of default leading to accelerated repayment of outstanding loans - Delay in implementing projects	5	4	20	1. Proactive engagement with DWS on receivables 2. Early submission of borrowing limit requests 6. Projects have committed bank facilities w/ target > 10% of outstanding debt 6. Proactively engage lenders on potential EoDs 4. Implementation Agreements provide for DWS to ensure that TCTA is adequately funded to meet its obligations to funders.	Partially effective	3	3	9	1. Quantify liquidity requirements if funding was required to avoid a borrowing limit breach or if TCTA could not raise liquidity in the market.			

No.	Strategic Perspective	Strategic Objective	Risk	Risk Owner	Causes	Consequences	Inherent Impact	Inherent Likelihood	Inherent Risk	Existing Controls	Control Effectiveness	Residual Impact	Residual Likelihood	Residual Rating	Action /Remedial Plan	Implementation Date	Responsible Person	Status /Progress
5	Financial Perspective	Effective control of corporate expenditure	Inability to procure in an efficient manner	Busisiwe Shongwe	1. Approved procurement plan not fully implemented. 1. Lack of accountability and inability to enforce plans 2. Poor planning, or plans developed for compliance purposes 3. Poor implementation of procurement plan and/or budgets 2. Poor control environment 4 Lack of automated systems. 5. Bureaucratic procurement processes which have an administrative burden 6. Competing on priorities on resources. 7. Lack of culture to commit and execute plans 8. Inconsistent monitoring - plan is tabled, but uncertainty thereafter 9. Poor response to and use of management accounts to monitor expenditure. 10. Poorly designed specifications and documentation11. Fear of consequence management and penalisation 3. Capacity constraints 12. Not using the best available capacity 13. Workload and prioritisation 14. Inadequate skills and experience	- Reputation damage or erosion- Incurring irregular or wasteful expenditure- <i>Impact on the control environment / Audit findings-</i> Not able to spend budget- Unresponsive tenders received- Delays and additional administration- Difficulties in meeting corporate objectives. Delays in procurement plan will lead to under expenditure on projects.	5	4	20	1,6,7,8. Standing item on monthly strategic Exco agenda1,2,5 Plan submitted to ARC and Board 5,10 Bid committees to check documents	Partially effective	4	4	16	1. Engage more with Exco and implement improvement plans if progress not being made2. Continue with implementation of Control Self Assessments3. How can quality assurance environment be improved?4. Integrated planning across business			

No.	Strategic Perspective	Strategic Objective	Risk	Risk Owner	Causes	Consequences	Inherent Impact	Inherent Likelihood	Inherent Risk	Existing Controls	Control Effectiveness	Residual Impact	Residual Likelihood	Residual Rating	Action /Remedial Plan	Implementation Date	Responsible Person	Status /Progress
6	Financial Perspective	Effective control of corporate expenditure	Possible occurrence of fraud	Busisiwe Shongwe	1. Inadequate controls - Inconsistent monitoring - Collusion with internal or external parties - Delays revert to deviations or variations in processes. - Manual manipulation of processes 2. Absence of appropriate technology. 3. Deliberate criminal activity 4. Socio-economic pressures 5. ICT breaches 6. Unethical behaviour	- Reputation damage or erosion - Incurring irregular or wasteful expenditure - Audit findings - Criminal charges against employees - Financial impacts - Loss of information	5	5	25	1,3,4,6. Fraud prevention policy 1,3,4. Quarterly awareness sessions 1,2,3,4. Quarterly reporting with inputs from Exco on FPP 1,3. Operational level controls 1.,5,6. Policies and procedures in various business areas.	Partially effective	5	3	15	1. Assess effectiveness of Fraud Policy and Implementation Plan 2. Investigate implementation of an automated system 3. Investigate other opportunities for fraud and corrupt activities 4. Enhancement of risk management process and embed in organisation and operational processes 5. Enhance control environment and implement combined assurance.			
7	Stakeholder Perspective	Ensure organisational positioning for the planned Water Agency	Inability to influence the establishment of the new Agency initiative.	Ola Busari	1. Political pressure:- Agency viewed as a political intervention. TCTA may struggle to influence the planning and structure of the Agency. - May not feel confident to challenge political thought.- Political pressure may be overbearing. 2. Capacity: - Not using the best available capacity to undertake the complex change initiative. - Delays in making decisions.- Disconnect between capacity and leadership- Lack of structure for programme management- Stretch between Agency work and existing roles creating capacity issues and competing	- If concluded before 2023, corners will have been cut.- Reputation damage- Lack of sustainability of TCTA- Poor service delivery- Community agitation, service delivery protests. - Water insecurity across county.- Impacts on funding and long-term issues	5	4	20	1. Roadmap that is Cabinet approved. 1. Buy in at highest political level, including NT 2. Established structures for initiative and concept, with active TCTA participation 2. TCTA plan in place 3 and 4. Engagement with strategic stakeholders	Partially effective	5	4	20	1. Project charter to be developed with a detailed plan. 2. Implement TCTA plan			

No.	Strategic Perspective	Strategic Objective	Risk	Risk Owner	Causes	Consequences	Inherent Impact	Inherent Likelihood	Inherent Risk	Existing Controls	Control Effectiveness	Residual Impact	Residual Likelihood	Residual Rating	Action /Remedial Plan	Implementation Date	Responsible Person	Status /Progress
					demands.- Unrealistic timelines.- Resistance to change- Impending merger with Agency instilling uncertainty 3. Institutional turf protection. - Different units being merged but power polarity and tension exists.- Different agendas even though one goal. 4. Stakeholder expectations- Power and influence of labour and funders. - Want the best out of arrangement for own party- Poor stakeholder management. 5. Water Sector outstanding challenges:- Downstream collection of tariff income from users. - Historical problems not dealt with and will be inherited by new agency.													
8	Stakeholder Perspective	Coordinate and monitor the efficient implementation of the projects within SIP-3 and SIP-18/19	Failure to meet expectations of government and project partners.	Ola Busari	Internal: Lack of clarity in the coordinating and monitoring role. 1. Weak internal professional capacity for coordination. 2. Uncertainty of role as TCTA in coordination and monitoring and resolution of problems. 3. Not implementing projects but need to deal with hurdles and bottlenecks to cabinet level. 4. Bringing an independent dimension to project oversight. 5. Can advise changes on project plans and budgets but sometimes can't	Reputation damage. Limitation of what value can be added.	4	4	16	All: Annual SIP coordination planAll: Quarterly SIP sessions and reports.	Partially effective	3	3	9	1. Engagement plan with partners and stakeholders: implement plan and report on progress.			

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					<p>resolve issues which are then escalated.</p> <p>6. Struggles with reliance on other parties.</p> <p>7. Overlapping structures which compromise TCTA role.</p> <p>8. Lack of integration of projects.</p> <p>9. Lack of internal capacity in TCTA to do the role.</p> <p>External:</p> <p>10. Differing and conflicting agendas and interests of various project agents.</p> <p>11. Inconsistency in government direction, programming, and messaging for strategic infrastructure.</p> <p>12. Informal platforms can be even stronger in influence any many different agendas at play.</p> <p>13. Coordination directives from government and project partners.</p> <p>14. Not allowing TCTA to deal with own issues.</p>													
9	Internal Business Processes	Enhance the internal control environment, risk management and supply chain management system	Weak control environment and reduced ability to manage risks	CEO and All executives	<p>1. Risk management not fully embedded</p> <p>1. Difficulties in implementation and embedding of risk framework</p> <p>2. Difficulties in obtaining commitment to risk management</p> <p>3. Lack of participation, progress and action</p> <p>2. Internal Control Issues</p> <p>4. Controls are not incorporated into day to day operations, due to low culture and maturity, and are a perceived burden</p> <p>5. High number of reactive controls.</p>	<p>- Overly focussed on control environment at risk of implementing projects. - Some major projects may not succeed due to internal control environment. Time gets taken away from projects. - AG audits - organisations might get so paralysed by being so control</p>	5	4	20	<p>1,2,3 Policies and procedures in place</p> <p>2. Internal audit plan</p> <p>1. Risk management plan</p> <p>1,2,3 Reporting structures to Board and Exco</p>	Partially effective	5	3	15	<p>1. Implementation of Control Self Assessments (CSAs) which will evaluate and demonstrate value of controls.</p> <p>2. Clear project plan for remedial actions from AG.</p> <p>3. Ongoing engagement with business on effective management of risks</p> <p>4. Build ownership for risks through all levels of the organisation</p>			

No.	Strategic Perspective	Strategic Objective	Risk	Risk Owner	Causes	Consequences	Inherent Impact	Inherent Likelihood	Inherent Risk	Existing Controls	Control Effectiveness	Residual Impact	Residual Likelihood	Residual Rating	Action /Remedial Plan	Implementation Date	Responsible Person	Status /Progress
					6. Imbalance in the implementation of work that needs to be done and control / governance requirements and competing priorities. 7. Combined assurance seen as additional initiative. 8. Compliance related issues begrudged and TCTA is depending on same people all the time. 9. Poor culture in the organisation. 10. AG requirements have deadlines and time required. TCTA not proactive enough with planning for and dealing with AG. 11. Trying to be proactive through CSAs but Control Self Assessments not prioritised. 12. Highly legislated environment. 13. Fast delivery of projects vs Reporting and Compliance requirements leads to a lack of balance. 3. Corporate Governance issues 14. Lack of adherence to corporate governance requirements	driven and people to scared to make any decisions. - Stifle innovation and growth which as an SPV, is a risk to TCTA.												

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10	Internal Business Processes	Clear Irregular and Fruitless and Wasteful Expenditure	Failure to treat irregular and fruitless and wasteful expenditure	Busisiwe Shongwe	1. Historic irregular expenditure and inability to clear the backlog. 2. Lack of implementation of recommendations from LCC (Loss Control Committee) 3. Lack of implementation of consequence management results in non-condonation of irregular expenditure. 4. Legacy issues and fear. 5. Issues with creating an enabling environment to prevent 6. issues with being proactive in putting controls in place. 7. Remaining non compliant. 8. Nature of the organisation culture 9. Unresolved challenges in TCTA that keep contributing. 10. Staff performance and behaviour and lack of consequence management. 11. Some legislation not aligned to construction industry (National Treasury Note 3)	- Reputation with NT - Funding will be affected when there is a big backlog. - Need introspection to determine other challenges. - Audit qualification received - Material irregularity issued by AG against Accounting Authority.	5	5	25	3,5,6,7,10. Policies and procedures for irregular expenditure 1,2,3,4,5,6,9. LCC in place (Loss Control Committee) All: Standing item on Exco agenda	Ineffective and inadequate	5	4	20	- Need to do a deep dive to determine issues and root causes. - Continue working through historic irregular expenditure and implement consequence management. (31 dec)			

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11	Internal Business Processes	Implement the ICT Strategic Plan	Failure to implement ICT plan and failure to support the business.	Christopher Kistasamy	<p>1. Security (Internal and External)- Cybercrime- Inadequate education of employees of their role in security. - Capacity and resource issues. - Remote work adds vulnerability which needs more control and can become onerous to protect information.- Not understanding or managing the relationship between cyber security and data protection. - Lack of ethical and responsible use of information.</p> <p>2. Digital Transformation of Business- Potential issues with digital strategy needing to be approved by the board.- Lack of integration of business and ICT (Business involvement and accountability) - Capacity from lines of business can be lacking- Change fatigue- Outdated business processes- Inadequately enterprise architecture</p> <p>3. People and Culture- Issues with obtaining commitment and capacity for the many initiatives that are included in the plan - Lack of skill and capacity and prioritisation of initiatives (initiative overload) - Issues with creating capacity to create functional specialists to do work in TCTA. - Inadequate skills for digitisation, IT skills becoming</p>	<p>- Failure to provide efficient and responsive services to business- Business is not able to operate in an efficient manner- Reputation damage- Regulatory non-compliance (JSE warnings, fines etc)- Inability to attract appropriate skills- Inability to attract funding- Business Continuity impacts- Inability to future proof our business- Unnecessary time on processes that could be automated.- Impact on morale for manual processes.- Audit findings and risks due to poor governance- Poor customer satisfaction and adoption of technology services- Wasted opportunity to not advance technologically and create competitive advantage.</p>	5	4	20	<p>1. Outsourced service provider for managing security.Education in cyber risks and security.Additional security controls being implemented through dedicated Security Programme.2. Digital Transformation Programme with supplier assisting. 3. Interim resources for short term assistance with backlog of work and knowledge transfer to internal employees.Working groups in TCTA to ensure buy in and support for programmes.4. Formalised SLAs which include RPOs and RTOs. Working with Risk on BCM. Regular reporting at operational level on all incidents.5. ICT Steering Committee mandated by Exco and BoardChange Management Forum. Project Governance ForumICT Strategy, Plan and Gov Fr approved by Board.Regular reporting to ARC and Exco6. SLA for all support services with response and resolution times. 7. SLA for all project delivery with response and resolution times.Strategic projects reported to Board and Exco and assurance from Risk and Audit.All: Standing agenda</p>	Partially effective	4	3	12	<p>Ongoing implementation of existing controls. Continue progress with ICT Quarterly Plans**Capture detail of plans</p>			

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					<p>expensive and increased competition for skills. - Low technology maturity and lack of readiness for technology at scale- Capability to drive change management for system utilisation.</p> <p>4. Resilience and Reliability- Data loss, system collapse, inability to achieve objectives.- Failure of systems and platforms to support the business.</p> <p>5. Governance- Lack of appropriate governance forums- Inadequate processes and change mgt- Dependency on service providers and difficulties in procurement.</p> <p>6. Support Services- Slow response and resolution times- Inadequate SLAs both internal and external- Complex regulatory framework governing procurement processes</p> <p>7. Project Delivery- Lack of integration of support divisions to deliver on projects- Business Improvement projects being left to IT department. Lack of maturity in understanding need for involvement.- Lack of focus on value realisation</p>					items for reporting of ICT Plans and progress.										

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12	Learning and Growth	Position TCTA as a thought leader in critical aspects of water security	Inability to demonstrate thought leadership in sector	Ola Busari	1. Not being seen as a thought leader in the sector. 2. Poor knowledge visibility externally through on various platforms in sector. 3. Unrealistic expectations of what we can and should be delivering and there is a tendency to think TCTA should be all things to all people. 4. Difficulties in driving national desalination and other ideas. 5. Poor learning culture: mistakes, successes and failures and not learning from them. 6. Disgruntled stakeholders and competition for space to influence and lead thought. Tension between institutions.	- Not taken seriously as an organisation. - Perception of TCTA in sector. - Reputation impacts	4	4	16	1,2,3,6. Annual Knowledge Plan 1,2,6,7. External communities of practice and internal forums for sharing knowledge. 4,5,6. Improvement internally with collaboration across divisions which was not there before. 1,2,5,7. Publications and presentations to conferences and key strategic forums.	Partially effective	4	2	8	1. Smooth implementation and reporting of knowledge plan and ensure has the right target stakeholders. 2. Annual / Biennial Water Conference is planned in a more targeted manner.			
13	Learning and Growth	Develop a high-performance organisational culture that contributes to the achievement of the organisational goals	Inability to shift the culture to one of high performance in TCTA.	Hanje Botha - Executive HR	1. Lack of leadership example (individualised approach) 2. Lack of presence of good people management practices, existing belief its an HR function or mere disregard for ownership of managing people 3. Culture Transformation Plan actions not viewed as a priority amongst many competing work priorities 4. Lack of a common shared purpose, agreement and common understanding of the desired culture and lack of a TCTA identity to create a sense of	1. Negative impact on performance of the business 2. Low employee satisfaction 3. Not attracting or retaining the best people for the job and high turnover 4. Unpreparedness for the future (including NWRIA) 5. Negative impact on employee productivity and efficiency 6. Strategic focus is compromised	4	4	16	1. Leadership coaching and team effectiveness program 2. People Management Capacity Program (PMCP) delivered through the People Management Forum (PMF) 3 and 4. Culture Transformation Plan 5. HR and OD strategies, implementation plans, policies, and procedures (set in leading practice and applicable legislation) 6. Manual approach	Partially effective	3	3	9	1. Continue and complete the implementation of the leadership coaching and team effectiveness program 2. Refocus, continue and complete the PMCP through the PMF 3 and 4. Launch and implement the Culture Transformation Plan 5.1. Revise the Total Rewards Strategy and policy and obtain approval 5.2. Board to provide clear direction about government directives and guidelines re remuneration and the board authority	1. 31 March 2023 2. 31 March 2023 3 and 4. 31 March 2023 5.1. April 2022 5.2. Board to confirm 5.3 31 March 2023 6. In alignment with ICT project timelines	EM: HR&OD	

No.	Strategic Perspective	Strategic Objective	Risk	Risk Owner	Causes	Consequences	Inherent Impact	Inherent Likelihood	Inherent Risk	Existing Controls	Control Effectiveness	Residual Impact	Residual Likelihood	Residual Rating	Action /Remedial Plan	Implementation Date	Responsible Person	Status /Progress
					belonging and commitment 5. Incongruency between strategic resourcing requirements and human resource practices to attract, motivate and retain talent with specific reference to total rewards offering and organisational culture6. Lack of appropriate technology7. Inability to move on from reactive approach and putting out fires.8. Climate/environment is not conducive to honest conversations.										and strategic direction 5.3. Improve collaboration towards ownership, empowerment and accountability (honest conversations)6. Participate in ICT organizational wide projects (modernize the ICT capability in HR and OD).			
14	Learning and Growth	Develop a high-performance organisational culture that contributes to the achievement of the organisational goals	Non-compliance with legislation and regulations (JSE, PFMA)	Compliance / Legal Busi Johann	1. Calculations of royalties not updated since 2006/2007 2. Audit issues raised and confusion around findings 3. Participation and engagement by key parties is not sufficient 4. Lack of certain governance instruments (need to defend MOU) 5. No pipeline view into what is happening in Lesotho so can't present to AG. 6. Lack of awareness of roles and responsibilities.	- Potential overpayment of royalties - Financial loss - Interpretation of treaty as inadequate - Audit qualifications and impact on raising funding - Cost of project and delays in water provision - Bi-national and diplomatic tensions between RSA and Lesotho.	5	5	25	1. Payments made of agreed amounts from sign off by LHWC and DWS. (*issue around what informs rates) 1. Committee established to address royalty issues and audit findings. 2. Ongoing engagement with the AG 3. MOU 4. Old agreements in place.	Partially effective	4	4	16	1. Need to follow up with DWS and govt of Lesotho to ensure calculation is revisited and correct royalties are paid. 2. Issues around MOU that need to be resolved. 3. New institutional arrangements to be put in place.			

ANNEXURE E
FRAUD PREVENTION PLAN

1. PURPOSE

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

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

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

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

2. APPROACH TO THE DEVELOPMENT OF THE PLAN

The TCTA business risks were identified as part of the enterprise-wide risk management process. The fraud risk register was developed as attached in **Annexure E1**, and all the identified risks were considered during the development of the Fraud Prevention Plan. The identified risks are not all-encompassing and should not be an exhaustive list of all fraud risks relevant to the TCTA, but rather as an indication of types of fraud risks.

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

3. FRAUD DEFINITION

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

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

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

4. UNDERSTANDING FRAUD

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



Figure 1: The Fraud Triangle

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

Pressures

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

- High Debt Level.

Opportunities

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

Rationalisation

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

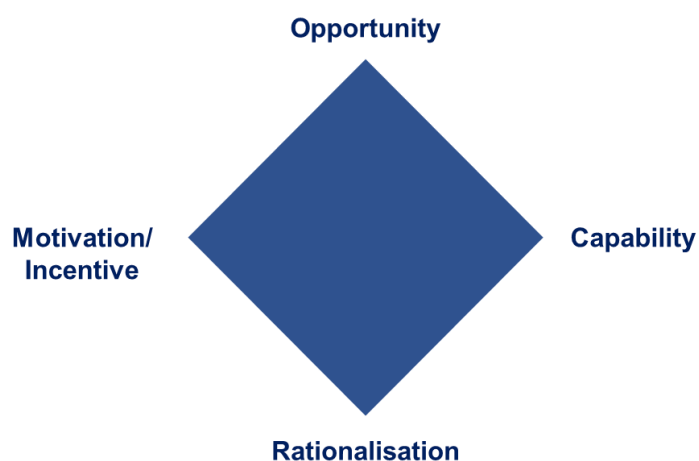


Figure 2: The Fraud Diamond

In addition to the three contributing factors to fraud as indicated in the fraud triangle, the fraud diamond contains a further factor that can contribute to the perpetration of fraud – CAPABILITY.

Capability refers to the perpetrators level of authority, skills, knowledge of the systems and internal controls, as well as the ability to deal with the stress of the committing of the crime and the ability to live with a bad conscience.

5. SCOPE OF THE FRAUD PREVENTION PLAN

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

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

6. STRUCTURAL STRATEGIES

Structural strategies represent the actions to be undertaken in order to address fraud and corruption at the level of organisational governance. The initiatives to be implemented by TCTA are detailed in **Annexure E2**.

6.1 GOOD CORPORATE GOVERNANCE

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

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

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

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

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

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

6.2 RESPONSIBILITY FOR FRAUD RISK MANAGEMENT

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

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

6.3 ETHICAL CULTURE

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

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

The Code of Conduct:

- commits TCTA to the highest standards of behaviour;
- is developed in such a way as to involve all employees so that the ethical culture is infused into TCTA;
- enjoys total commitment from the Board and Chief Executive Officer of TCTA;
- is embraced by all the stakeholders; and
- is sufficiently detailed as to give clear guide to the behaviour of all employees.
- Furthermore, the Code of Conduct:
 - demonstrates corporate intent;
 - codifies unacceptable actions;
 - emphasises consequences of non-compliance;
 - is attested to by employees;
 - removes ignorance as defence;
 - is to be well publicised; and
 - stresses management's commitment and behaviours.

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

6.4 ASSESSMENT OF FRAUD RISK

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

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

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

6.5 EMPLOYEE AWARENESS

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

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

7. OPERATIONS STRATEGIES

7.1 INTERNAL CONTROLS

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

TCTA has an in-house internal audit function to provide reasonable assurance on the adequacy and effectiveness of internal controls, risk management and governance processes, to Management, Audit and Risk Committee and the Board. The Internal Audit's role is outlined in the IA Charter and in the PFMA. Management are responsible for the implementation of an adequate and effective system of internal control, risk management and governance processes to ensure the accuracy and integrity of the financial statements. The controls include written policies and procedures, clearly defined lines of accountability, and the delegation of authority.

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

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

Effective risk management is integral to the helping TCTA achieve its objectives and add value to the organisation. Risk will be mitigated by ensuring that the appropriate infrastructure, controls, systems and people are in place to manage risks. Opportunities that arise will be exploited, for a balanced approach.

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

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

TCTA will design its internal controls to ensure that:

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

7.2 PREVENTION STRATEGIES

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

PRE-EMPLOYMENT VETTING

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

The screening process will typically include a review of:

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

REFERENCES

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

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

CRIMINAL RECORDS

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

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

CIVIL RECORDS

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

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

DISCIPLINARY RECORDS

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

disciplinary cases shall include those that were settled or withdrawn as a result of the candidate's resignation.

INSOLVENCY

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

OTHER BUSINESSES

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

QUALIFICATIONS

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

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

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

Most fraudsters who submit false qualifications will focus on qualifications which are difficult to check, especially those from foreign universities or universities which have since closed. Such qualifications should be considered as high risk.

The qualification check shall be undertaken not only for prospective employees, but also for current employees as part of the fraud prevention initiatives and employee risk assessments.

TECHNICAL COMPETENCE

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

PSYCHOMETRIC TESTING

There are several psychometric tests available on the market. Such tests may reveal characteristics of the applicant which could place him or her in a high-risk category. It is

recommended that people earmarked for critical positions be subjected to appropriate psychometric testing that is compliant with the requirements of the Employment Equity Act.

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

7.3 DETECTION STRATEGIES

INTERNAL ASSURANCE

A risk-based approach is applied in executing adequacy and effectiveness reviews. Professional due care is exercised by the auditors; however, it does not guarantee that all cases of fraud will be detected through audit procedures. Continuous efforts are applied to strengthen the control environment so not to create an opportunity for fraud to occur.

Management should design preventative, detective and corrective controls, to ensure that detective controls are activated when the preventative ones fail.

EXTERNAL AUDITORS

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

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

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

7.4 RESPONSE STRATEGIES

WHISTLE BLOWING

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

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

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

The Chief Internal Auditor reports the outcome of the investigation to the Audit and Risk Committee and HCSE Committee, on fraud and ethics related cases respectively.

Awareness of the Anti-Fraud Hotline is crucial to its success and to restore confidence to staff and third parties. As a result, the promotion of awareness thereof forms part of the implementation of the Fraud Prevention Plan.

Reports are forwarded to the Chief Internal Auditor for fraud related allegations, and to the Chief Risk Officer for Ethics related matters. Where the ethics related matter requires investigation, the Internal Audit conducts same. The Audit and Risk Committee Chair and Human Capital, Social and Ethics Chairpersons have access to the system generated reports.

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

Intimidation by any employee, or any witnesses involved in the investigation, could result in charges of misconduct.

Extortion of stakeholders by employees must be reported by stakeholders, failure of which could be considered as complicity and may result in cessation of any or all business dealings or restriction from further tendering. The reporting mechanism is independently managed, anonymous, confidential, secure, and internally promoted

8. MAINTENANCE STRATEGIES

8.1 REVIEW OF THE EFFECTIVENESS OF THE FRAUD PREVENTION PLAN

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

8.2 REVIEW AND UPDATING THE FRAUD PREVENTION PLAN

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

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

ANNEXURE E1
FRAUD RISK REGISTER

Ref	Risk	Category	Root causes	Consequences	Like'd	Impact	Rating	Controls	Like'd	Impact	Rating	Responsible
HUMAN RESOURCES AND ORGANISATIONAL DEVELOPMENT												
HR-1	Unauthorised payroll adjustments on employee benefits.	Internal	1.1 Inadequate segregation of duties in Payroll. 1.2 Possible management oversight.	Financial losses. Reputational damage.	3	3	9	1.1 Changes in employee benefits are approved are approved through a collective bargaining process and management prerogative. Mandate for changes in benefits are obtain from Board and signed off by the Executive: Human Resources. 1.2 Checks are done on reports generated from information captured into the system. In addition, two signatories are required on payroll releases.	1	2	2	HR
HR-2	Payments to fictitious employees and accounts.	Internal	2.1 Possible weaknesses in controls regarding the creation of payroll records. 2.2 Payment of salaries to unverified bank accounts.	Financial losses. Reputational damage.	3	2	6	2.1 Payroll section keeps track of staff levels monthly and any new employees on the payroll are verified. 2.2 Payroll variance review. 2.3 Checks are done on reports generated from information captured into the system. In addition, two signatories are required on payroll releases.	1	2	2	HR
HR-3	Inflated/fictitious reimbursement claims.	Internal	3.1 Double claiming. 3.2 Forging of receipts. 3.3 Collusion of payroll personnel with other employees.	Financial losses.	3	3	9	3.1 Approval and review of claims by line managers. 3.2 Verification of claims by finance department.	2	1	2	Line Managers
HR-4	Salary advances not deducted from end-of-month payroll.	Internal	4.1 Inadequate segregation of duties in Payroll. 4.2 Management oversight.	Financial losses. Reputational damage.	3	1	3	4.1 & 4.2 Strict policy on salary advances. 4.2 Monthly variance report signed off before payroll is released.	1	1	1	HR

Ref	Risk	Category	Root causes	Consequences	Like'd	Impact	Rating	Controls	Like'd	Impact	Rating	Responsible
HR-5	Abuse of sick leave.	Internal	5. False medical certificates.	Loss of productivity Financial losses	3	4	12	5. Adherence to leave policy.	2	1	2	Line Manager s/HR
PROCUREMENT												
SCM-1	Conflict of interest.	Internal	1.1 Lack of openness by staff. 1.2 Lack of supplier vetting. Dishonesty with intent to commit fraud.	Financial losses (investigation costs, increased insurance premiums. Improper awarding of contracts and tenders. Delays in TCTA achieving its objectives. Legal costs from losing bidders. Reputational damage.	3	4	12	1.1.1 Transparent tender approval system. The supplier selection process is handled by a multidisciplinary team within a three-bid committee system. The influence of a single individual in the supplier selection process is therefore minimised. 1.1.2 The code of business conduct requires all employees to disclose interest. 1.2 Declaration of interest also completed by DWS and Engineering Consultants (everyone who sits in the evaluation committee) and service providers. Process for detection of failure to declare COI and consequence management	2	2	4	Supply Chain
SCM-2	Bribery and Kickbacks.	Internal	2.1 Collusion and collaboration between TCTA representative and service providers. 2.2 Weak internal procurement controls. Acceptance of gifts, money and favours that may compromise independence.	Overpaying for goods and services. Low quality goods/services. Financial losses (investigation costs, increased insurance premiums. Awarding contracts to unqualified/undeserving suppliers or service	5	4	20	2.1 & 2.2 Transparent tender approval system. The supplier selection process is handled by a multidisciplinary team within a three-bid committee system. The influence of a single individual in the supplier selection process is therefore significantly minimised. 2.3 Gift policy and register.	2	3	6	Supply Chain

Ref	Risk	Category	Root causes	Consequences	Like'd	Impact	Rating	Controls	Like'd	Impact	Rating	Responsible
				providers. Legal costs from losing bidders. Reputational damage.								
SCM-3	Misrepresentation of goods and services/Counterfeit goods.	Internal	3.1 Goods procured not inspected by Supply Chain on delivery. 3.2 Poor contract management. 3.3 No independent verification of work completed by service providers. Deliberate hiding of facts by service providers/suppliers.	Financial losses (investigation costs, increased insurance premiums. Failure to achieve organisational objectives.	4	3	12	3.1 All goods and services received are inspected by the Client Business unit which has intimate knowledge of its requirements as well as the quality. 3.2 All invoices are signed off by line management on satisfaction of the quality of the service / goods received. & 3.4 Monitoring of supplier performance by client departments.	2	3	6	Procuring Divisions
SCM-4	Rigged specifications to favour certain service providers.	Internal	4.1 Bid specifications for capital projects are prepared by Consulting engineers who may have links with certain contractors. 4.2 Bid specifications prepared by procuring divisions. Lack of technical knowledge in approving committees.	Financial losses (investigation costs, increased insurance premiums. Failure to achieve organisational objectives. Reputational damage. Legal cases against TCTA.	5	4	20	4.1 & 4.3 Tender specification and evaluation documents for capital projects prepared by professional engineering service providers are compiled on an advisory basis for approval by a TCTA multidisciplinary Bid Specification Committee. 4.1.1 Confidentiality agreements signed with service providers and project partners. 4.1.2 Declaration of interests 4.2 & 4.3 Evaluation of bids are approved by a TCTA multidisciplinary Bid Specification Committee. 4.2.1 Anti-corruption and fraud policies Probity audits by independent	2	4	8	Supply Chain/Bid Committees

Ref	Risk	Category	Root causes	Consequences	Like'd	Impact	Rating	Controls	Like'd	Impact	Rating	Responsible
SCM-5	Inflated billing/False invoices	External/Internal	5.1 Inadequate review and checking of invoices against services performed. 5.2 Collusion and collaboration between TCTA representative and service providers Management override.	Financial losses.	4	4	16	5.1 Invoices are signed off by Executive or Senior Management of the procuring department I line with ODOA. 5.2 The code of business conduct requires all employees to disclose interest. Market analysis of prices by SCM before finalisation of procurement process.	2	3	6	All Division/Supply Chain
SCM-6	Collusive bidding.	External	6.1 Inadequate checking of pricing of tenders. 6.2 Limited supplier base. 6.3 Lack of market research by Trans Caledon Tunnel Authority. 6.4 Price fixing. 6.5 Withdrawal of previously submitted bid. Cover bidding (submitting bids that are too high or with special terms to lose and give the chosen bidder a chance).	Limits competition and exposes TCTA to higher prices. Financial losses (investigation costs, increased insurance premiums. Contracts awarded to undeserving suppliers/contractors who may produce poor quality work and delays in TCTA achieving its objectives. Legal costs from losing bidder. Reputational damage.	3	4	12	6.1 & 6.3 TCTA obtains Engineer's estimate of prices and compares this to bid prices. 6.2 No controls. 6.4 Bids awarded based on the highest total number of points and not necessarily to the lowest bidder. No controls.	3	4	12	Supply Chain
SCM-7	Split purchases by TCTA departments to avoid SCM limits.	Internal	7.1 Inadequate reviews and monitoring of purchases.	Financial losses. Reputational damage.	4	4	16	7.1.1 Monitoring of smaller tenders by SCM monthly. Review of RFQ's by SCM.	2	2	4	Supply Chain

Ref	Risk	Category	Root causes	Consequences	Like'd	Impact	Rating	Controls	Like'd	Impact	Rating	Responsible
SCM-8	Manipulation of closed-tender bidding process	Internal	8.1 Exclusion of qualifying bidders 8.2 Multiple contracts awarded to the same companies	Limits competition and exposes TCTA to higher prices. Reputational damage.	5	4	20	8.1 & 8.2 Divisional procurement plan and procurement strategy are reviewed and approved by Exco before sourcing of any goods and services.	3	2	6	All Divisions/ Supply Chain
SCM-9	Rigged procurement strategies for a desired outcome.	Internal	9.1 Manipulation of procurement process. Management override of internal controls.	Limits competition and exposes TCTA to higher prices. Financial losses	5	5	25	9.1 Exco and Board approve the procurement strategies	3	3	9	Supply Chain/ Exco
FINANCE												
FIN-1	Misappropriation of petty cash.	Internal	1.1 Theft of petty cash. Fraudulent invoices.	Financial losses.	4	2	8	1.1 Cash (R500 per project except for LHWP - R1 000 and none for BWP) kept in a safe place and restricted to named personnel. 1.2 Authorisation required to release cash after documents of requests are approved. 1.3 Independent reconciliation of petty cash. 1.4 Keep cash balances to a minimum. Access to the keys restricted to two people.	1	2	2	Finance
FIN-2	Adjusting financial records to perpetrate or conceal fraudulent activities.	Internal	2.1 Inadequate system access controls or user profiles which may render weak access control to creditors balances. Collusion with external parties.	Financial losses.	3	3	9	2.1 All adjustments of records in the system require prior management approval and documentation. 2.2 Segregation of duties and dual approvals with system user profiles aligned to level of authority. Password controlled access.	1	2	2	Finance
FIN-3	Creating false records to support fraudulent claims.	Internal	3.1 Specimen for authorising signatures not being updated. 3.2 Non-adherence to policy such as payment of claims with no	Financial losses.	4	3	12	3.1 All claims should be approved by claimant's manager and supported by appropriate documentation. 3.2 No member of staff can authorise payments to himself/herself. Ensure correct rates for claims are used.	1	2	2	Finance

Ref	Risk	Category	Root causes	Consequences	Like'd	Impact	Rating	Controls	Like'd	Impact	Rating	Responsible
			documents or wrong rates									
FIN-4	Inflated billing/False invoices.	External/Internal	<p>4.1 Inadequate review and checking of invoices against services performed.</p> <p>4.2 Weak controls on payment for unbudgeted items.</p> <p>4.3 Management override.</p> <p>Collusion and collaboration between TCTA representative and service provider.</p>	Financial losses.	3	4	12	4.1 & 4.2 Invoices are signed off by Executive of the procuring department.	2	3	6	Finance
FIN-5	Recording fictitious vendors into the vendor database.	Internal	<p>5.1 Lack of segregation of duties between approval and entry of vendor information into the database.</p> <p>Lack of review and validation of supplier information.</p>	Financial losses.	3	4	12	& 5.2 Verification of banking details through Standard Bank database.	2	3	6	Finance
FIN-6	False payment instruction (external) with forged signatures and bank details.	Internal	<p>6.1 Collusion of employees and external parties.</p> <p>6.2 Not checking/confirming bank details for our service providers.</p> <p>Unexplained change of client bank details.</p>	Financial losses.	3	4	12	<p>6.2 Ensure changes and additions to payee and banking details are in written form and properly authorised and accompanied by a blank cheque.</p> <p>6.3 Verify banking details with service provider and the banking institution concerned.</p> <p>6.4 Restrict and log system access for any changes to banking details.</p> <p>6.5 Proof of payment is sent to Departments and service provider for early detection</p>	2	2	4	Finance

Ref	Risk	Category	Root causes	Consequences	Like'd	Impact	Rating	Controls	Like'd	Impact	Rating	Responsible
								of fraudulent bank details. Banking details are only changed if there is a provision for this in the contract.				
INFORMATION TECHNOLOGY												
IT-1	Override of system controls: Personnel maybe able to access restricted data or adjust records fraudulently e.g. personnel with inappropriate access to the general ledger, subsystems, or the financial reporting tool can post fraudulent entries.	Internal	1.1 Weak system access controls (passwords). 1.2 User profiles not aligned to job requirements. Inadequate segregation of duties.	Financial losses. Reputational damage.	4	3	12	1.1 Authorisation required prior to any changes in records. General computer controls include restricted system access, restricted application access, and program change control policy and procedure.	3	2	6	IT/All
IT-2	Theft of assets: Individuals who have access to fixed assets and to the accounting systems that track, and record activity related to those assets can use IT to conceal their theft of assets, e.g. someone may steal an asset and record the assets as disposed of, thus removing the asset from the balance sheet.	Internal	2.1 Lack of security controls 2.2 Inappropriate location of assets 2.3 Lack of reporting of security violations Lack of procedures for the movement of IT assets	Financial losses (high insurance premiums). Reputational damage. Loss of information.	4	3	12	2.1 Assets verifications. 2.2 Reconciliation of the assets 2.3 register and accounting records. 2.4 Awareness to staff on safe 2.5 custody of assets (i.e. Laptops). Insurance cover.	3	2	6	IT/All

Ref	Risk	Category	Root causes	Consequences	Like'd	Impact	Rating	Controls	Like'd	Impact	Rating	Responsible
IT-3	Theft/Loss of sensitive information or Intellectual property e.g. Intruders can bypass TCTA IT security on their own or through the help of TCTA employees.	External/Internal	3.1 Hacking by intruders. 3.2 Confidentiality breaches by TCTA employees. Manipulation of data by internal staff.	Financial losses. Reputational damage. Loss of information.	5	5	25	3.1 Firewalls and vulnerability tests. 3.2 Access to sensitive information restricted to specific staff. 3.3 Strict approval and access to financial transactions. Review of user access rights.	3	2	6	IT/All
IT-4	Cyber Security threats – ransomware – phishing. etc	External	4.1 Hacking by intruders. 4.2 Lack of user awareness 4.3 Negligence. Lack of security testing	Loss of data. Financial loss Disruptions of business. Reputational damage.	5	3	15	4.1 Advanced security controls. 4.2 Constant user awareness training. & 4.4 IT security policies.	3	2	6	IT/All
IT-5	Data Leakage – people forwarding sensitive information to Gmail – use of USB ports, use of personal devices without encryption etc, sharing of recordings, photographing of sensitive information etc.	Internal	5.1 Breaches of IT policies by internal staff. 5.2 Lack of monitoring and review of the configuration items. Lack of awareness about the danger of malicious software.	Loss of data. Financial loss Disruptions of business. Reputational damage.	5	4	20	5.1 Constant user awareness training. 5.2 IP guard monitors all the machines connected to the network. Virus protection software.	3	2	6	IT-5
TREASURY												
TR-1	Fictitious trades in Treasury: Dealing staff may enter fictitious trades that will result in TCTA losing funds.	Internal	1.1 Lack of confirmation of deals.	Loss of money to TCTA and reputational impact.	3	4	12	1.1 Confirmations (incoming and outgoing) are done for each deal. 1.2 Release of payments authorised by at least two signatories. Bank account of beneficiary must be registered, and this also requires management approval.	1	4	4	Treasury

Ref	Risk	Category	Root causes	Consequences	Like'd	Impact	Rating	Controls	Like'd	Impact	Rating	Responsible
TR-2	Collusion: Incorrect rates may be used when entering trading deals into the system thereby defrauding the company of interest on investments.	Internal	2.1 Lack of confirmation of deals. Unauthorised amendments of deals.	Loss of money to TCTA and reputational impact.	2	3	6	2.1 Rates are independently confirmed with counterparties and treasury transactions are recorded (i.e. emails and electronic systems). 2.2 Bank account of beneficiary must be registered, and this also requires management approval. All transactions conducted are recorded on deal books and emails.	1	3	3	Treasury
TR-3	Settlement fraud: Funds fraudulently transferred to wrong accounts.	Internal	3.1 Inadequate segregation of duties and lack of dual signings on release of funds. 3.2 Compromised passwords for release of funds.	Loss of money to TCTA and reputational impact.	3	3	9	3.1 Release of payments authorised by at least two signatories. Bank account of beneficiary must be registered in the system and any changes approved by management after confirmation. All transactions conducted are recorded on deal books and emails.	3	2	6	Treasury
TR-4	Missing treasury scrip	Internal	4.1 Lack of adequate controls and reconciliation of scrip	Loss of money to TCTA and reputational impact	3	2	6	4.1 Treasury pays only to the settlement agent hence the risk lies with the agent i.e. Standard bank.	1	1	1	Treasury
TR-5	Changing bank details of counterparties	Internal	5.1 Infrequent updating of signing instructions from counterparties. Stolen passwords.	Loss of money to TCTA and reputational impact.	2	3	6	5.1 Constant updating of counterparty specimen signatures. When signatories for counterparties change, TCTA receives the updated signatory list. Also, TCTA sends its signatory list on a quarterly basis to clients. 5.2 Request for change of bank details must be in writing and confirmed by counterparties.	1	2	2	Treasury
TR-6	Collusion: Offering high yields to colleagues when borrowing and accepting low yields when investing in return for kickbacks (e.g. TCTA invest at a lower yield and the counterparty in turn		6.1 Inadequate monitoring of treasury trades. Deliberate failure to reset rates when interest rates change.	Loss of money to TCTA and reputational impact.	3	3	9	6.1 Limit on investment concentration or trades with a single counterparty. 6.2 Checking of deals and market rates by Treasury Manager prior to authorisation of deals. 6.3 Checking of investment rates and issuing rates on the maturity ladder daily by Treasury Manager.	2	2	4	Treasury

Ref	Risk	Category	Root causes	Consequences	Like'd	Impact	Rating	Controls	Like'd	Impact	Rating	Responsible
	invest the funds at a higher rate with another financial institution).											
TR-7	Investing in fake securities e.g. commercial paper.		7.1 Inadequate checking of security issues resulting in the organisation buying fake securities such as treasury bills or commercial paper from brokers.	Loss of money to TCTA and reputational impact.	3	3	9	7.1 All counterparties are vetted by the compliance Department.	1	2	2	Treasury
TR-8	Overpayment of term borrowings on maturity/duplicate payments.		8.1 Inadequate checking of maturity ladders and deal tickets on payment.	Loss of money to TCTA and reputational impact.	4	3	12	8.1 Release of payments authorised by at least two signatories who checks the settlement amount.	1	3	4	Treasury
TR-9	Channelling trades to a counterparty in return for some benefits.		9.1 Excessive number of gifts accepted from counterparties.	Loss of money to TCTA in the event of default risk.	3	3	9	9.1 Counterparty limits in place and monitored daily. 9.2 Concentration limits in place. Adherence to gift policy.	1	3	3	Treasury

ANNEXURE E2

FRAUD PREVENTION PLAN IMPEMETATION

ANNEXURE E2

FRAUD AND CORRUPTION PREVENTION PLAN IMPEMETATION

NO	INITIATIVE	OBJECTIVE	ACTIVITY	OUTCOMES	RESPONSIBLE PERSON	DUE DATE
1	Good corporate governance <ul style="list-style-type: none"> The CEO and the executive team actively set the culture of zero tolerance for fraud. 	Setting the right tone at the top on fraud prevention.	<ul style="list-style-type: none"> Review the Fraud and Corruption Policy, Plan and Strategy. 	<ul style="list-style-type: none"> Approved Fraud and Corruption policy, prevention plan and strategy. 	CRO	31 Dec 2022
			<ul style="list-style-type: none"> Develop or review the whistle blowing policy. 	<ul style="list-style-type: none"> Approved Whistle Blowing policy. 	CIA	31 Dec 2022
2	Implementation of the Code of Conduct	Ensure understanding and adherence to the Code of conduct. .	Create awareness session on the code on conduct.	Understanding and implementation of the code of conduct by employees in their daily operations.	CRO/ Compliance	30 Nov 2022 31 Jun 2022
3	Fraud awareness and training, of employees.	Provide comprehensive and formalised training to assist in highlighting the fraud risks and assisting employees. risks of fraud; thereby empowering employees to recognise fraud in its infancy and act.	<ul style="list-style-type: none"> Conduct Fraud and Corruption Awareness and Training. 	Employees understanding their responsibility towards fraud.	Risk Manager /CRO /CIA	30 Nov 2022 31 Jun 2022
			<ul style="list-style-type: none"> Participate in the International Fraud Awareness Week. 	Employees proactively takes steps to minimise the impact of fraud and	Risk Manager /CRO /CIA	13-19 Nov 2022

NO	INITIATIVE	OBJECTIVE	ACTIVITY	OUTCOMES	RESPONSIBLE PERSON	DUE DATE
				corruption		
4	Performance of fraud risk assessment.	<p>To ensure all fraud risks are considered and adequately managed.</p> <p>All Executives have a duty to ensure that the risk of fraud is adequately managed within their area of responsibility.</p>	<ul style="list-style-type: none"> Review of divisional fraud and corruption risk registers. fraud risk registers 	Reviewed and updated divisional Fraud and Corruption risk registers.	Exco/CRO	Quarterly

NO	INITIATIVE	OBJECTIVE	ACTIVITY	OUTCOMES	RESPONSIBLE PERSON	DUE DATE
5	Enhancement of internal controls and systems.	Ensure adequacy and effectiveness of internal controls. Management is responsible for ensuring that internal controls are adequate and effective.	<ul style="list-style-type: none"> Develop risk registers and identify organisational risks and controls in place to manage such risks. Review of organizational and divisional risk registers and implementation of action plans to mitigate such risks. Implementation of audit recommendations. Roll out the Combined assurance process (CSA) 	Improved control environment.	CRO/EXCO CIA/Exco	Quarterly Monthly
6	Effective compliance with primary and secondary legislation, regulations and instruction notes.	Ensure existence of an effective compliance	<ul style="list-style-type: none"> Implementation of the compliance programme 	Enhanced compliance culture.	CRO	Quarterly
7	Implementation of anti-money laundering policy.	Adequate and effective anti-money laundering policy.	<ul style="list-style-type: none"> Monitor adherence and compliance to the policy. 	Anti-money laundering report.	CRO	Quarterly
8	Pre-employment vetting. <ul style="list-style-type: none"> The HR Executive Manager ensures that: 	Ensure that staff vetting processes, which limit exposure to hiring potential fraudsters, are in place	<ul style="list-style-type: none"> Screening and Vetting of all employees. 	Screening and vetting reports.	Executive HR&OD	Ongoing.

NO	INITIATIVE	OBJECTIVE	ACTIVITY	OUTCOMES	RESPONSIBLE PERSON	DUE DATE
	<ul style="list-style-type: none"> An adequate process is in place for the vetting of prospective employees and staff. <p>Staff vetting procedure is continuously assessed to determine its effectiveness.</p>					

ANNEXURE F

MATERIALITY AND SIGNIFICANCE FRAMEWORK

1. INTRODUCTION

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

2. BACKGROUND

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

- Guidelines issued by National Treasury.
- The nature of TCTA's business.
- The control and risk environment in which TCTA operates.
- TCTA materiality levels determined by External Auditors (if available).
- Further, in order to comply with Section 54 (2) of the Public Finance Management Act (PFMA), the Board is expected to report on:
 - The acquisition and disposal of a significant asset and /or
 - The beginning of a significant business activity

3. DETERMINATION OF TCTA MATERIALITY LEVELS

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

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

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

4. TCTA MATERIALITY LEVELS

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

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

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

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

The National Treasury Practice Note provides parameters for calculating materiality using the latest audited financial statements, considering 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 2020/21 audited figures as provided by the Auditor General.

The proposed 2022/23 materiality levels are shown in the table below:

6. 2022/23 STRATEGIC PROJECT MATERIALITY

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

Element	Percentage	VRESAP	BWP	VRS(LHWP, AMD)	MMTS-2	KWSAP	ORWRDP	MCWAP-1	UMGENI	KRIEL	MRWP	MCWAP-2	TCTA-C	BRVAS	UMWP	Consolidated
Total Assets		3,614,000,000	460,000,000	15,847,000,000	1,371,000,000	1,172,000,000	47,000,000	1,852,000,000	5,000,000	6,000,000	8,000,000	356,000,000	3,000,000	74,000,000	28,000,000	24,842,000,000
	1.0%	36,140,000	4,600,000	158,470,000	13,710,000	11,720,000	470,000	18,520,000	50,000	60,000	80,000	3,560,000	30,000	740,000	280,000	248,420,000
	2.0%	72,280,000	9,200,000	316,940,000	27,420,000	23,440,000	940,000	37,040,000	100,000	120,000	160,000	7,120,000	60,000	1 480,000	560,000	496,840,000
Total Revenue		(43,000,000)	(5,000,000)	831,000,000	140,000,000	(13,000,000)	0	20,000,000	0	0	0	0	0	0	0	930,000,000
	0,5%	(215,000)	(25,000)	4,155,000	700,000	(65,000)	0	100,000	0	0	0	0	0	0	0	4 650 000
	1.0%	(430,000)	(50,000)	8,310,000	1,400,000	(130,000)	0	200,000	0	0	0	0	0	0	0	9 300 000
Profit After Tax (n/a)		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		n/a
	2.0%	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	5.0%	0	0	0	0	0	0	0	0	0		0	0	0		0
2020/21 External Audit Materiality		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		n/a
Total Assets	0.5%	18,070,000	2,300,000	79,235,000	6,855,000	5,860,000	235,000	9,260,000	25,000	30,000	40,000	1,780,000	15,000	370,000	140,000	124,210,000
Total Revenue	0.25%	(107,500)	(12,500)	2 077,500	350,000	(32,500)		50,000	0	0	0		0	0	0	2 325,000
Profit After Tax (n/a)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

7. PRIOR YEAR 2021/22 FOR INFORMATION PURPOSES

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

Element	Percentage	VRESAP	BWP	VRS(LHWP, AMD)	MMTS-2	KWSAP	ORWRDP	MCWAP-1	UMGENI	KRIEL	MRWP	MCWAP-2	TCTA-C	BRVAS	UMWP	Consolidated
Total Assets		3,875,000,000	576,000,000	16,391,000,000	1,467,000,000	1,218,000,000	78,000,000	1,354,000,000	17,000,000	6,000,000	12,000,000	78,000,000	6,000,000	15,000,000	4,000,000	25,097,000,000
	1.0%	38,750,000	5,760,000	163,910,000	14,670,000	12,180,000	780,000	13,540,000	170,000	60,000	120,000	780,000	60,000	150,000	40,000	250,970,000
	2.0%	77,500,000	11,520,000	327,820,000	29,340,000	24,360,000	1,560,000	27,080,000	340,000	120,000	240,000	1,560,000	120,000	300,000	80,000	501,940,000
Total Revenue		(12,000,000)	0	1,404,000,000	2,000,000	0	72,000,000	0	0	0	0	73,000,000	0	8,000,000	4,000,000	1,552,000,000
	0.5%	(60,000)	0	7,020,000	10,000	0	360,000	0	0	0	0	365,000	0	40,000	20,000	7,760,000
	1.0%	(120,000)	0	14,040,000	20,000	0	720,000	0	0	0	0	730,000	0	80,000	40,000	15,520,000
Profit After Tax (n/a)		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		n/a
	2.0%	0	0	0	0	0	0	0	0	0	0	0	0	0		0
	5.0%	0	0	0	0	0	0	0	0	0		0	0	0		0
2019/20 External Audit Materiality		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		n/a
Total Assets	0.5%	19,375,000	2,880,000	81,955,000	7,335,000	6,090,000	390,000	6,770,000	85,000	30,000	60,000	390,000	30,000	75,000	20,000	125,485,000
Total Revenue	0.25%	30,000	0	3,510,000	5,000	0	180,000	0	0	0	0	182,500	0	20,000	10,000	3,927,500
Profit After Tax (n/a)	0	0	0	0	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, corporate expenditure has been used as a basis for calculating corporate materiality. The table below shows a comparison between the 2021/22 and 2022/23 corporate materiality calculated at 0.5%, 1% and 2% of total expenditure. The 2022/23 corporate materiality figure is based on total expenses as per the 2020/2021 annual financial statements.

	2021/22	2022/23
Total Expenses (Previous financial year)	R 1 584 000 000	R 243 000 000
Materiality Level (2%)	R 31 680 000	R4 860 000
Materiality Level (1%)	R 15 840,000	R2 430 000
Materiality Level (0.5%)	R 7 920 000	R1 216 000

Materiality is calculated at half (0.5) percent of total expenses. The table below shows the comparison between corporate materiality for 2022/23 and that of the previous year 2021/22.

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:

- Participation in a significant partnership, trust or unincorporated joint venture;
- Acquisition or disposal of a significant shareholding in a company;
- Acquisition or disposal of a significant asset;
- Commencement or cessation of a significant business activity; and
- Significant change in its interest in a significant partnership, trust or unincorporated joint venture.

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

particulars of the transaction submitted to the executive authority for the approval of such transactions.

10. CONCLUSION

The materiality level based on the National Treasury practice note, at 1% of total assets is R 248 420 000.

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 2021/22 based on 50% of the lower figure of 1% recommended by National Treasury. The External Auditors have not disclosed their materiality figure for the past year.

Hence:

- The recommended strategic materiality level for 2022/23 is R 124 210 000.00
- The recommended corporate materiality level for 2022/23 is R 1 216 000.00
- The approved materiality figures are effective from 01 April 2022 to 31 March 2023.

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:	<p>1. Quantitative factors</p> <p>1.1 Sections 54(2)(a) -(e): Any transaction will be regarded as significant if its rand value exceeds R124.2 million as determined under 3 above.</p> <p>1.2 Section 54(2)(f): Any change in interest will be regarded as significant if the rand value exceeds R 2.325 million as determined paragraph 3 above.</p>
	(a) establishment or participation in the establishment of a company.	<p>2. Qualitative factors.</p> <p>The following qualitative factors will be taken into account when determining the significance of transactions:</p> <p>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.</p> <p>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.</p>
		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;	<p>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.</p> <p>2.5 For transactions not entailing incorporation, any transaction will be considered as significant -</p> <p>2.5.1 If participation is in any partnership, trust, unincorporated joint venture or similar arrangement that is located outside the Republic.</p>
	(c) acquisition or disposal of a significant shareholding in a company;	<p>2.6 Transactions are to be regarded as significant where -</p> <p>2.6.1 ownership control is affected; or</p> <p>2.6.2 TCTA's right to pass or block a special resolution is affected; or</p> <p>2.6.3 there is a change in shareholding; or</p> <p>2.6.4 for an acquisition, any transaction results in a shareholding.</p>
	(d) acquisition or disposal of a significant asset;	<p>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.</p> <p>2.8 Regarding the acquisition of assets through a finance lease, and current assets are not regarded as falling under this subsection.</p>
	(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)	<p>The annual report and financial statements referred to in subsection 55(1)(d) must –</p> <p>(b) include particulars of –</p> <p>(i) any material losses through criminal conduct and any irregular expenditure and fruitless and wasteful expenditure that occurred during the financial year;</p>	<p>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.</p> <p>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.</p>

ANNEXURE F2

PRACTICE NOTE ON APPLICATIONS UNDER SECTION 54 OF THE PFMA

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

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

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

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

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

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

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

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

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

ANNEXURE G
EXECUTIVE MANAGEMENT PROFILES

Surname	First Name	Gender	Race (African, Asian, Coloured and White)	Age	Qualifications	Current position and active membership on other organisations/companies/entities/ boards
Sechemane	Percy	Male	African	54	<ul style="list-style-type: none"> • Masters in Business Administration – University of the North West (2002) • BCom – University of the North West (1993) 	<p>Current Position Chief Executive Officer (CEO)</p> <p>Other Directorships (Leadership Role)</p> <ul style="list-style-type: none"> • Nation Planning Commissioner <p>Other Board Committee Memberships:</p> <ul style="list-style-type: none"> • Member of EXCO on the South African Association of Water Utilities (SAAWU) • Chairperson of the HR and Labour Desk for the South African Association of Water Utilities (SAAWU) • Member of the Acid Mine Drainage Chapter on the Human Rights Commission • Institutional Realignment Oversight Task Team • Member of the Pricing, Economic Regulation Reforms (PERR) Project • Member of the Water Investment Framework Task Team

Surname	First Name	Gender	Race (African, Asian, Coloured and White)	Age	Qualifications	Current position and active membership on other organisations/companies/entities/ boards
Radzuma	Leonard	Male	African	47	<ul style="list-style-type: none"> Fundamentals of Treasury (University of Johannesburg-2015) MBL (UNISA SBL -2006) B. Comm (Accounting) (Univ. Venda-1996) 	Current Position Chief Risk Officer Other Directorships: None Other Board Committee Memberships: None
Busisiwe	Shongwe	Female	African	46	<ul style="list-style-type: none"> Municipal Executive Financial Management (WITS Business School-2016) Master of Business Admin (Milpark Business School-2013) Chartered Acc -CA (SAICA) Bachelor of Commerce Accounting - Honours (University of Natal- 2000) University of the Witwatersrand (Bachelor of Commerce-1998) 	Current position: Chief Financial Officer Other directorships: None Other board committee memberships: <ul style="list-style-type: none"> South African Institute of Chartered Accountants (SAICA)
Busari	Ola	Male	African	59	<ul style="list-style-type: none"> Senior Executive Programme (Harvard Business School – 2016) MBA (Henley Business School, UK – 2011) Advanced (Env) Isotopes Program (Univ. Chicago, USA – 2001) 	Current position: Chief Strategy Officer Other directorships: None Other board committee memberships: None

Surname	First Name	Gender	Race (African, Asian, Coloured and White)	Age	Qualifications	Current position and active membership on other organisations/companies/entities/ boards
					<ul style="list-style-type: none"> PhD Water Resource Optimisation (Univ. Ibadan, Nigeria - 1990) MSc Eng. Hydro-Geology (Univ. Ibadan. Nigeria – 1986) BSc (Hons) Civil Eng. (Univ. Lagos. Nigeria - 1984) 	
Claassens	Johann	Male	White	60	<ul style="list-style-type: none"> EDP (USB - 2009) CA (SA) (1988) B.Compt (Hons) (UNISA - 1986) B.Compt (UOFS - 1984) 	Current Position: Executive Manager: Project Management and Implementation Other Directorships: None Other Board Committee Memberships: None
Nkabinde	Nhlanhla	Male	African	57	<ul style="list-style-type: none"> Master of Applied Science, Engineering 1992 University of Waterloo Ontario, Canada BSc Electrical & Electronic Engineering 1986, UCT Post Graduate course in Mathematics of Finance, University of Witwatersrand 	Current Positon: Executive Manager: Project Finance & Treasury Other Directorships: <ul style="list-style-type: none"> Khalazome Investments (in deregistration) Ungoye Investments Gasela Engineering Projects (Pty) (deregistered)

Surname	First Name	Gender	Race (African, Asian, Coloured and White)	Age	Qualifications	Current position and active membership on other organisations/companies/entities/ boards
						<ul style="list-style-type: none"> • Zeranza 275 (Pty) Ltd (deregistered) • Trustee: Nkabinde Family Trust • Trustee: Belle-Thintane Family Trust Other Board Committee memberships: None
Kistasamy	Christopher	Male	Indian	40	<ul style="list-style-type: none"> • Master of Technology qualification - Cape Peninsula University of Technology - 2011 • Bachelor of Technology Honors - Universiti Teknologi Petronas (Malaysian University) - 2003 	Current positon: Executive Manager: EWSS Other Directorships: Director: Digital Skills Africa – Non-Profit Organisation Other Board Committee memberships: None
Botha	Hanje	Female	White	47	<ul style="list-style-type: none"> • 2019 -Candidate: Master's in Business Administration (Henley Business School, United Kingdom) • MPhil (Professional and Leadership Coaching), 2010, Middlesex University, UK • Leadership Development Program, 2006, GIBS • BA HONS (GIS), 1997, University Stellenbosch 	Current Positon Executive Manager: HR & OD Other Directorships: None Other Board Committee memberships: None

Surname	First Name	Gender	Race (African, Asian, Coloured and White)	Age	Qualifications	Current position and active membership on other organisations/companies/entities/ boards
					<ul style="list-style-type: none"> BA (Economics and Geography), 1996, University of Stellenbosch 	

ANNEXURE H
BOARD MEMBERS' PROFILES

Surname & Initials	Gender	Race	Age	Skills, Knowledge and Experience		Term of Office		Other Active Memberships
				Qualifications	Field of Expertise	Date of first appointment	Expiry of Term	
Dumas, G	Male	African	70	<ul style="list-style-type: none"> • MBA • BSc • Municipal Executives Fin Prog 	<ul style="list-style-type: none"> • Business Management • Finance • Operations Strategy 	2019/05/01	2022/04/30	<ul style="list-style-type: none"> • Market Theater Foundation • Nethezeka Business Solution
Ramataboe, M	Female	African	66	<ul style="list-style-type: none"> • CA • MBA • Accredited Associate of the Institute for Independent Business 	<ul style="list-style-type: none"> • Finance & Auditing • Project Management • Risk Management & Compliance • Strategy & Ethics • Corporate Governance • Corporate Treasury 	2019/05/01	2022/04/30	<ul style="list-style-type: none"> • CSOS • UBank • MAE Risk Management • H.V Utilities
White, G	Male	White	61	<ul style="list-style-type: none"> • BA Admin (Hons) Development Studies • BA (Economics) 	<ul style="list-style-type: none"> • HR • Finance • Economics • Governance 	2019/05/01	2022/04/30	None
Roopa, S	Male	Indian	64	<ul style="list-style-type: none"> • B Iuris • LLB • MPhil • Certificate: Transformation of Institutes of Higher Education • Certificate: Executive programme for Leaders in Government 	<ul style="list-style-type: none"> • Legal • HR • Philosophy • Risk 	2015/12/01	2022/04/30	<ul style="list-style-type: none"> • Roopa Ruysenaar and Associates • S Roopa Consultants • Afriforte • Mphete Ventures • Independent Commission for the Remuneration of Public Office Bearers

Surname & Initials	Gender	Race	Age	Skills, Knowledge and Experience		Term of Office		Other Active Memberships
				Qualifications	Field of Expertise	Date of first appointment	Expiry of Term	
				<ul style="list-style-type: none"> • Certificate: Negotiating International Contracts & Development Finance • Certificate: Global Housing Trends 				<ul style="list-style-type: none"> • Da Vinci Institute: School of Business Leadership • Investigation and Recommendations Committees of North-West Legal Practice Council • Legal Services Committee of Legal Aid South Africa • Roopa Potgieter Incorporated Attorneys
Dlamini, L	Female	African	35	<ul style="list-style-type: none"> • B.Sc Hons - Env and Water Science • BSc - Env Sc 	<ul style="list-style-type: none"> • Environmental Management 	2019/05/01	2022/04/30	None
Khondlo, SN	Male	African	54	<ul style="list-style-type: none"> • Dip: Civil Engineering • BSc Agric. Engineering • MSC Eng. Management • Dip: Project Management • Certificate: Property Practitioner Practice 	<ul style="list-style-type: none"> • Engineering • Project Management • Audit 	2006/07/01	2022/04/30	None
Baloyi, N	Male	African	47	<ul style="list-style-type: none"> • Advanced Diploma in Accounting Sciences • BSc Mathematics and Applied Mathematics 	<ul style="list-style-type: none"> • Financial Management • Risk Management • Strategic Leadership • Project Management 	2019/05/01	2022/04/30	<ul style="list-style-type: none"> • SASRIA • SAHPRA

Surname & Initials	Gender	Race	Age	Skills, Knowledge and Experience		Term of Office		Other Active Memberships
				Qualifications	Field of Expertise	Date of first appointment	Expiry of Term	
				<ul style="list-style-type: none"> • BSc Computer Science and Information Systems • Bcom Financial Management • Bcom Human Resource Management • BSc (Hons) Computational and Applied Mathematics • BCom (Hons) • PGDip Business Management • HDip Computer Auditing • MSc Applied Science in Electrical Engineering • MSc Electronics • MBA • MPhil Development Finance 	<ul style="list-style-type: none"> • Infrastructure Development • HR 			
Maponya, M	Female	African	58	<ul style="list-style-type: none"> • LLB, Univ. of North • B Iuris, Univ. of North • Admitted Attorney 2016 	<ul style="list-style-type: none"> • HR • Audit • Planning and Strategy • Corporate Governance 	2019/05/01	2022/04/30	None