**3. REPORT OF THE PORTFOLIO COMMITTEE ON WATER AND SANITATION ON BUDGET VOTE 41 ANNUAL PERFORMANCE PLAN OF THE DEPARTMENT OF WATER AND SANITATION AND ENTITIES FOR THE 2022/23 FINANCIAL YEAR, DATED 10 MAY 2022**

The Portfolio Committee on Water and Sanitation (hereinafter the Portfolio Committee) met with the Department of Water and Sanitation (the Department) and Entities (Water Research Commission, Trans-Caledon Tunnel Authority, Breede-Gouritz and Inkomati-Usuthu Catchment Management Agencies) undertaking work on its behalf on 3 and 4 May 2022, to receive briefings on Budget Vote 41, Strategic Plan and Annual Performance Plans, and reports as follows:

**1. Introduction**

The importance of water as a catalyst for economic growth, alleviating poverty, creating jobs and addressing inequities to fulfil the developmental agenda for South Africa has found meaning in many initiatives of respective departments and entities. The work of the Department of Water and Sanitation is underpinned by the prescripts of the Constitution and Bill of Rights[[1]](#footnote-1), the transformation agenda directed by the National Development Plan South African Vision 2030: and the Outcomes-based Approach found in the Medium-Term Strategic Framework (MTSF), National Water and Sanitation Master Plan, the African Union’s Vision 2063, as well as the United Nations Sustainable Development Goals – Goal Number 6 (SDG-6) impacting on the delivery of water and sanitation.

As depicted in the National Water and Sanitation Master Plan, the national priorities for the water and sanitation sector focus on two streams of work –water and sanitation management and the other creating an enabling environment. Water and sanitation management relate to reducing water demand and increasing supply, protecting and restoring ecological infrastructure, improving raw water quality, regulating water and sanitation, redistributing water for transformation, and managing effective water and sanitation services. Creating an enabling environment relate to creating effective and efficient institutions, enhancing strategic water partnerships, amending legislation, ensuring financial sustainability, building human capacity for action, and managing data and information[[2]](#footnote-2).

To ensure that it fulfils its obligations, the Department of Water and Sanitation has, through Budget Vote 41, appropriated funds to attain its purpose and mandate. Vote 41 ensures the availability of water resources to facilitate equitable and sustainable socio-economic development and provide universal access to water and sanitation services. Over the MTEF period, the Department has been allocated a total of R59.6 billion over the medium-term, translating to R18.5 billion in 2022/23, R20.1 billion in 2023/24 and R20.9 billion in 2024/25. The allocation includes amounts for:

* Compensation of Employees: An amount of R5.4 billion over the MTEF, that is, R1.836 billion in 2022/23, R1.741 billion in 2023/24 and R1.819 billion in 2024/25.
* Goods and Services: An amount of R5.5 billion over the MTEF, that is, R1.770 billion in 2022/23, R1.819 billion in 2023/24 and R1.908 billion in 2024/25.
* Transfers and Subsidies: An amount of R34.9 billion over the MTEF, that is, R10.528 billion, R12.002 billion in 2023/24 and R12.393 billion in 2024/25.
* Payments for capital assets: An amount of R13.788 billion, that is, R4.404 billion in 2022/23, R4.593 billion in 2023/24 and R4.792 in 2024/25.

Aligned to its general purpose, the legislative mandate of the Department is set out in the National Water Act, 1998, Water Services Act, 1997 and the Water Research Act, 1971. The Department delineates its work through three (3) programmes – Administration, Water Resources Management and Water Services Management.

The Annual Performance Plan: 2022/23 to 2024/25 acknowledges the persistent challenges related to water security in South Africa. These relate to external and internal impacts, which necessitate the formulation of reliable and reasonable indicators, targets and outputs to ensure the delivery of its mandate for the financial year under review and over the medium term. The external factors highlighted in the Annual Performance Plan relate to increasing water demand and declining supply, deteriorating water ecosystems, unreliable water and sanitation services, inequitable water allocation, and weak water and sanitation sector regulation. The internal factors relate to organisational alignment, managing data and information, and financial resources.

**2. Strategic priorities over a five-year planning period and for the 2022/23 financial year**

**2.1 Strategic priorities over a five-year planning period**

With its focus on future supply and demand, water security is central to the developmental agenda articulated in the National Development Plan and the Industrial Policy Action Plan (IPAP). The former predicts that before 2030, all South Africans will have affordable, reliable access to sufficient, safe water and hygiene sanitation. The latter also sets out the intentions of South Africa in terms of expanding the manufacturing sector, which will increase water demand. The balancing of increased water supply for a growing population and economy has found meaning in several policies developed by the Department, which encompass the following policies, strategies and amendments to the pieces of legislation: the Mine Water Management Policy, Sustainable Hydropower Generation Policy, Integrated Water Quality Management Policy, Amendments to the National Water Act and Water Services Act, Review of the Pricing Strategy, the National Water and Sanitation Master Plan and the National Water Resource Strategy, Third Edition.

**2.2 Key Departmental Strategic Priorities for the 2022/23 Financial Year**

The introductory section of the departmental presentation on engaging the Portfolio Committee on Budget and Vote 41 and the 2022/23 Annual Performance Plan, on 2 May 2022, provide the key priorities identified for the year under review. These are:

* Ensuring water security through increased water use efficiency and demand and conservation management,
* Implementing major projects to augment national bulk water resource infrastructure.
* Developing other water resources such as groundwater and desalination.
* Finalisation of the National Water Resources Infrastructure Agency Bill.
* Strengthening regulatory interventions to address pollution of the environment and protect communities from wastewater.
* Supporting municipalities, improving water use licence turnaround time.
* Promoting transformation in water use.
* Improving revenue collection across the water value chain, and ensuring consequence management for financial misconduct, are central to the work of the Department in the 2022/23 financial year.

The commentary by the Director-General of the Department at the meeting on 2 May 2022 provided further insights on the rationale for the specific determined priorities for the year under review. The ripple effect of insufficient revenue collection to adequately operate and maintain water and sanitation infrastructure was highlighted. Municipalities are in debt with water boards that do not have enough money to use their infrastructure or borrow money to increase infrastructure. The water boards owe money to the Water Trading Entity, which impedes the Department’s work in infrastructure development. The root cause is that billing and revenue collection is a significant challenge. However, the Department is working closely with the Department of Cooperative Governance and the National Treasury to strengthen support in municipalities.

**3. Overview of the 2019/20 and 2020/21 Financial Status of the Department**

The Portfolio Committee on Water and Sanitation in 2019/20 and 2021/22 raised several issues on the financial status of the Department of Water and Sanitation in terms of accruals and payables, underspending, and fruitless and wasteful expenditure. The Department acknowledged these challenges in strengthening its financial capabilities. But maintained, as it does in the Annual Performance Plan, that this component of their work has improved since the implementation of the financial recovery plan in 2019 and has since achieved the following – maintained a positive bank balance with the accruals and payables being continuous managed every month to ensure that it does not over-commit available budget.

Explanations for the underspending of 14.7 per cent in the 2020/21 financial year were mainly due to underspending on Compensation of Employees due to funded vacant posts across all programmes. Underspending on capital payment resulted from the government-enforced Covid-19 lockdown restrictions, which impacted the implementation of the projects and some disputed invoices.

The Department noted that senior management posts had been filled since the 2021/22 financial year on filling key positions. This includes the post of Director-General and Chief Financial Officer. The post of Deputy Director-General: Water Services and Regulation: Compliance and Enforcement are awaiting confirmation by Cabinet. All regional heads positions are filled, while interviews for the filling of the Chief Director: Internal Audit have taken place, and potential candidates are undergoing assessments.

At the Portfolio Committee briefing and in the Annual Performance Plan, the Department committed to continuing implementing the recommendation of the In-Year Monitoring and the financial recovery plan to continue delivering services to the communities.

**4. Overview of the 2022/23 Budget and Medium-Term Estimates**

The following sections will provide an overview of the 2022/23 budget and medium-term estimates with concomitant outputs, output information and annual targets for the three (3) programmes.

**4.1 Expenditure overview – Main Account and Water Trading Entity[[3]](#footnote-3)**

The Department of Water and Sanitation operates two financial accounts: The Main Account and the Water Trading Entity. The Main Account is funded by the fiscus (Vote 41). The Water Trading Entity account mainly receives voted amounts from the Main Account toward implementing infrastructure and generating revenue through bulk water sales. The Department of Water and Sanitation delineates its expenditure into three programmes in the financial year under review - Administration, Water Resources Management and Water Services Management.

**4.1.1 Main Account**

Over the Medium-Term Expenditure Framework (MTEF) and depicted in the table below, the Department has allocated R18.540 billion for 2022/23, R20.155 billion for 2023/24 R20.913 billion for 2024/25. Transfers and subsidies to departmental agencies, public corporations and municipalities comprise the most significant budget share, amounting to R34.9 billion over the MTEF period.

Total expenditure is expected to increase at an average annual rate of 5.6 per cent, from R17.7 billion over the medium term for capital projects involving water resources and regional bulk infrastructure.

|  |  |  |  |
| --- | --- | --- | --- |
| **Programme** | **Medium-Term Expenditure Estimates** | | |
| **Rand (thousand)** | **2022/23** | **2023/24** | **2024/25** |
| Administration | 2 012 509 | 2 006 729 | 2 097 971 |
| Water Resource Management | 3 782 924 | 4 355 030 | 4 902 887 |
| Water Services Management | 12 744 236 | 13 793 478 | 13 912 429 |
| **Total programmes** | **18 539 669** | **20 155 237** | **20 913 287** |
| **Economic Classification** | **Medium-Term Expenditure Estimates** | | |
| **Rand (thousand)** | **2022/23** | **2023/24** | **2024/25** |
| Compensation of employees | 1 836 433 | 1 741 701 | 1 819 924 |
| Goods and services | 1 770 868 | 1 818 827 | 1 908 189 |
| Transfers and subsidies | 10 528 115 | 12 002 201 | 12 393 475 |
| Payments for capital assets | 4 402 253 | 4 592 508 | 4 791 699 |
| **Total economic classification** | **18 539 669** | **20 155 237** | **20 913 287** |

**Source: Presentation by the Department of Water and Sanitation, 2 May 2022**

The economic classification explanation, noted in the 2022/34 to 2023/24 Annual Performance Plan, maintains the following:

* **Compensation of Employees**: The budget for compensation of employees over the medium term is R5.398 billion. The baseline decreased by R64 000 compared to 2022. The MTEF baseline of R5 334 billion. The decrease in baseline allocation is mainly due to the National Treasury implementing budget cuts and natural attrition on the compensation of employees across all Government Departments.[[4]](#footnote-4)
* **Goods and Services**: The Department received an allocation baseline of R5 332 billion for goods and services over the MTEF, of which R1 943 is allocated for office accommodation in Programme 1. The major spending items on goods and services over the MTEF are audit fees of R139 037 million, communication services of R135.158 million, computer services of R596.088 million, and business and advisory services of R506.644 and infrastructure and planning services of R726.813 million.[[5]](#footnote-5)
* **Transfers and Subsidies**: The Department will be implementing transfers to the Water Trading Entity for augmentation projects for the design, construction, commissioning and rehabilitation of raw water infrastructure, including dams and bulk distribution systems, operations and maintenance, Komati Basin Water Authority for the repayment of outstanding loans to various financial institutions and operational overheads. There will be transfers to infrastructure projects – the Regional Bulk Infrastructure Grant of R12.894 billion over the MTEF and the Water Services Infrastructure Grant of R11.603 billion over the MTEF. The grants are based and dependent on implementation plans, cash flow projection and schedules for conditional grants.[[6]](#footnote-6)

**4.1.2 Water Trading Entity**

The Water Trading Entity was established in 1983 and was converted into a trading entity in 2008 in terms of the Public Finance Management Act, 1999. The entity’s primary role is to manage water infrastructure and resources and sell raw water. Over the medium term, the entity will continue to maintain existing water resource infrastructure and supply bulk water to strategic users, such as large industrial companies, to stimulate and support economic developments.

In supporting the long-term sustainability of water resources, the entity will implement 16 dam safety rehabilitation projects over the MTEF period. Expenditure is expected to increase at an average annual rate of 4.9 per cent, from R15.6 billion in 2021/22 to R18 billion in 2024/25. An additional R2.1 billion is allocated over the period ahead to finalise the Olifants-Doorn River water resources project. The entity expects to generate 82.8 per cent (R50.8 billion) of its revenue through the sale of raw water. Total revenue is expected to be R60.8 billion over the MTEF period.

**4.2 Overview of expenditure trend aligned to performance indicators over the MTEF[[7]](#footnote-7)**

The Department, over the MTEF, intends to ensure the delivery of safe water and the effective management of wastewater through enforcing various regulatory measures and strengthening its oversight functions. The Blue, Green and No Drop regulatory standards are in place to improve asset management practices in municipalities. Other initiatives with defined performance indicators over the MTEF relate to:

* Supporting 32 district municipalities with developing water and sanitation reliability plans and monitoring the compliance of all water services authorities with regulatory standards.
* Ensuring that 80 per cent of applications to authorise water use are finalised within 90 days.
* Allocating R270.7 million for regulatory compliance in the Water Resources Regulation sub-programme in the Water Resources Management Programme.
* Allocating R220.9 million for oversight in the Water Resources Institutional sub-programme in the Water Resources Management programme.
* For activities related to water services, R323.9 million for regulatory compliance and R71 million were allocated for oversight in the Water Services Regulation sub-programme in the Water Services Management programme.

Further initiatives over the MTEF include the following:

* Investing in water resources and implementing projects such as Phase 2D of the Olifants River water resource development project, the Mokolo-Crocodile water augmentation project, the raising of the Tzaneen and Hazelmere dams, and the Umdloti River development project.
* Spending in the Water Resources Management programme is expected to increase at an average annual rate of 10.7 per cent, from R3.6 billion in 2021/22 to R4.9 billion in 2024/25. This includes spending R2.1 billion to raise the Clanwilliam Dam wall over the medium term.
* Implementation and finalisation of 2 mega, 24 large and 28 small regional bulk infrastructure projects. These projects and related activities are carried out in the Water Services Management programme; spending is expected to increase at an average annual rate of 4.6 per cent from R12.2 billion in 2021/22 to R13.9 billion in 2024/25. An additional allocation of R3.6 billion over the medium term for the Olifants-Ebenezer water supply scheme, the lower Umkhomazi bulk water scheme, and the bulk water potable water and remedial works programme in George Local Municipality.

**5. Budget allocation and targeted outcomes for programmes over the 2022/23 financial year**

**5.1 Programme 1: Administration**

This programme aims to provide strategic leadership, management, and support services to the Department. The programme also develops and promotes international relations on water resources management with neighbouring countries. This Programme, which consumes 11 per cent of the overall departmental budget, is allocated R2 billion in the 2022/23 financial year, up from R1.95 billion in 2021/22. This reflects a nominal rand increase of R52.5 million and an R34.2 million decrease between 2021/22 and 2022/23. For the 2022/23 financial year, the Department identified the following outcomes, with associated outputs, output indicators and percentage achievable:

* An efficient, effective, and development orientated department: compliance with corporate governance regulatory prescripts, which entails 100% compliance with approved audit plan, 100% compliance with the implementation of risk management plan, 10% vacancy rate for engineers and scientists, 50% of training interventions implemented, 64% safety and security assessment for facilities and installations conducted, and 90% information technology systems available.
* An efficient, effective and development-oriented department with targeted procurement supporting Small Medium and Micro Enterprises (SMMEs) – 15% of targeted procurement is spent on Qualifying Small Enterprises (QSEs), which constitute 40% on women, 30% on youth and 7% on people with disabilities. The percentage of targeted procurement spent on Exempt Micro Enterprise is 15%, which constitutes 40% on women, 30% on youth and 7% on people with disabilities.
* Implementation of financial and turnaround plan at 90%, % expenditure on annual budget at 100% and reduction of debtor days at 150 days.
* Annual international relations programme implemented at 75%.

This section has provided detailed information on targeted percentages for each outcome for the year under review (highlighted above). The Department of Planning, Monitoring and Evaluation in the Presidency regulates outcomes with associated indicators depicted in the Department’s Annual Performance Plan. The Department and Entities have complied with the regulatory component and requirements in using standardised indicators by the DPME.

In summary, the key outcomes, output indicators and targets related to Programme 1: Administration listed above, and further elaborated on by the Department, speak mainly on ensuring an efficient audit plan with a well-thought-out risk management plan, reducing the vacancy rate for engineers and scientists, implementing training interventions for staff, as some of the percentages in the past for training could not be met as some staff were too busy to attend.

Standardised targets set by the DPME for procurement supporting SMMEs and QSEs were used. The target set for achieving 100% expenditure spend in the year under review is an ambitious one. With the implementation of the financial recovery plan, the Department intends to work toward achieving this target, as money returned to National Treasury, as in the past, hampered the work of the Department in the delivery of infrastructure services, where the needs for water and sanitation are so great.

**5.2 Programme 2: Water Resources Management**

This programme aims to ensure that the country’s water resources are protected, used, developed, conserved, managed, and controlled sustainably for the benefit of all people and the environment. This is done by creating a knowledge base and implementing effective policies, procedures and integrated planning strategies for water resources.

This Programme, which constitutes 20 per cent of the overall departmental budget, is allocated R3.7 billion in the 2022/23 financial year, up from R3.5 billion in 2021/22. This reflects a nominal rand increase of R166 million, which translates into a real rand increase of R3.4 million between 2021/22 and 2022/23.

For the 2022/23 financial year, the Department identified the following outcomes, with associated outputs, output indicators and numbers achievable:

* Ecological infrastructure protected and restored, which constitutes the number of river systems with resource classes and determined resource quality objectives – 1 – Thukela. The number of river systems monitored to implement resource-directed measures includes 4 – Inkomathi-Usuthu, Olifants-Doorn, Vaal and Letaba, and the number of rivers in which the river eco-status monitoring programme is implemented is 70. The catchment strategies and plans developed for mine water and wastewater treatment work – 2 – Upper Olifants and Limpopo. The number of catchment plans implemented for mine water and wastewater management – 2 in Orange and Mzimvubu-Tsitsikamma. The final waste discharge charge system (WDCS) will be piloted countrywide.
* On reducing water demand and increasing water supply, there are integrated water resources plans/measures developed, which comprise the annual status on implementing the master plans with nine operating mines and specialist strategy studies to be completed. Seven water resources monitoring programmes and six information systems will be viewed and maintained, with one gauging station refurbished to improve management decisions. There will be four bulk raw water projects in preparation for implementation and four bulk raw water projects under construction, with one bulk raw water to be completed.
* On enhanced regulation of the water and sanitation sector, the Department intends to develop the National Water Act Amendment Bill and the National Water Resources Strategy-3. Other initiatives relate to the output of water resource regulatory prescripts developed and implemented – with the Water Research Commission levy approved. The number of wastewater systems to be monitored against regulatory requirements is 408. Draft regulation for water allocation reform will be published for public comment.
* On water distributed for transformation, the performance of water resources institutions to be evaluated against their performance plans are 4, gazetting of one catchment management agency, the Mzimvubu-Tsitsikamma, the National Water Resources Infrastructure Agency Bill to be finalised, with the transformation of 5 irrigation boards into water user associations. A business case will be compiled to establish a Water Regulator Version 111.

Summary explanatory notes presented by the Department on the above outcomes, outputs and targets in Programme 2: Water Resource Management (highlighted above) in the Annual Performance Plan are further concretised by the following initiatives:

Water resources monitoring and reviewing information systems related to water sources are essential, with well-resourced gauging stations to monitor and update information as levels of water sources are the “bedrock” to determine water needs in the country. An ongoing priority in this programme is to implement and plan major resource infrastructure projects. The centrality of the need to maintain existing water resources infrastructure, including dams, is fundamental to ensure that dams are kept safe and rehabilitated.

The Department is currently working on amendments to the National Water Act to ensure a regulatory environment for national water and water resource management is adequate and implemented. It has finalised and submitted to Cabinet the National Water Resource Strategy-3.

Water charges are developed and implemented on an annual basis. The issuing of water use licences for economic growth must not be an obstacle for investments. The targets for water use applications will also include the monitoring of water users in accordance with water use licences and compliance.

The Department revived systems, such as the Blue, Green and No Drop reports. In March 2022, the Department published the Green Drop report with a need to undertake an assessment every two years, with the following Green Drop report to be published in 2023/24. These Blue and Green Drop reports are not just assessments of the state of wastewater or water quality but play an essential role in supporting municipalities to address the challenges with the quality of water supply and issues with water spillages from wastewater treatment works not meeting the quality standards. The Department will engage all municipalities that don’t meet the Blue and Green Drop standards requirements and workshop them with the assessment results. This process will include developing plans to address the causes of the problems and implementing recommendations identified in the report.

The Department is currently working on transforming irrigation boards into water user associations. Not all catchment management agencies will be established as independent agencies, with some being run by the Department with committees set up and participation by community and stakeholder associations to oversee the work of the Department. The work on the establishment of the National Water Resource Agency is advanced. Currently, the Department is undertaking detailed research on the feasibility of establishing a water economic regulator. Several options and recommendations will be presented to the Minister.

On the one hand, the study focuses on the need for a fully independent regulator such as NERSA (for electricity regulation) and ICASA (for telecommunications). On the other hand, another option is to retain the regulation within the Department as is currently the case but to have a degree of independent oversight by establishing an independent committee to oversee the department's work. These options will be presented for decisions to be made.

## 5.3 Programme 3: Water Services Management

This programme aims to develop, rehabilitate, and refurbish the raw water resources and water services infrastructure to meet the socio-economic and environmental needs of South Africa. This appears to be the priority Programme of the Department, as it receives the highest allocation of the entire departmental budget. This programme receives R12.7 billion in the 2022/23 financial year, constituting 69 per cent of the overall departmental budget. This Programme reflects a nominal rand increase of R586 million compared to the 2021/22 financial year, which translates into a real rand increase of R37.2 million between 2021/22 and 2022/23. For the 2022/23 financial year, the Department identified the following outcomes with associated outputs, output indicators and targets:

* On reducing water demand and increasing water supply, four updated draft water conservation and water demand strategies, eight large water supply systems assessed for water losses, and 144 water services authorities to be evaluated for compliance with the No Drop Regulatory programme requirements. Eight feasibility studies for water and wastewater services projects will be completed, with five implementation readiness studies for water and wastewater projects. Other initiatives include: I93 regional bulk infrastructure project phases are under construction, 22 regional infrastructure projects to be completed, 294 water services infrastructure projects under construction and 115 water services infrastructure projects to be completed, with two intervention projects under implementation. Ten thousand seven hundred ninety-eight (10 898) existing bucket sanitation backlog systems (in Free State and Northern Cape) will be replaced in formal settlements.
* To effectively manage water and sanitation services, 10 district municipalities will be assessed for 5-year water and sanitation reliability plans.
* To enhance regulation of the water and sanitation sector, the Water Services Amendment Bill is to be developed and submitted for Cabinet approval, nine provincial action plans aligned to the National Sanitation Integrated Plan and the final national faecal sludge management strategy completed.
* On water redistributed for transformation, the performance of 9 water boards was evaluated against their plans.

In Programme 3: Water Services Management, the objective of the major grants to municipalities is to assist them in developing water and sanitation distribution infrastructure systems. The grants are not disbursed without any oversight by the Department. The Department’s regional offices work closely with municipalities to carry out feasibility and implementation readiness studies to ensure the effective use of grant transfers, such as the Regional and Water Services Infrastructure Grants. The Department provided Annexures in the presentation, which provides a breakdown of projects funded by the grants in different provinces. Self-assessment plans with the Municipal Services Strategic Services Assessment (MuSSA) system are one of the tools assisting municipalities in proving the reliability of their services and targets.

The following will be undertaken to ensure that the water services side is adequately regulated: Minor amendments to the Water Services Act will be submitted to Cabinet this financial year. Submitting to Cabinet a Norms and Standards for water and sanitation services, including a standard sanitation framework to ensure greater equity in standards in the country.

As with the Green Drop Report, the Blue Drop Report will be renewed under the Water Services Management programme to assess water treatment works and related infrastructure. A progress report on Blue Drop Assessment has been issued, with the completed Blue Drop Report to be published in this current financial year and thereafter every two years. One of the priorities to streamline water services institutional arrangements is the dissolution of the Sedibeng Water Board and the rationalisation of water boards and amendments to the geographical boundaries of water boards. The Department will make an announcement on this matter.

**6. Overview of Infrastructure Allocations for Regional Bulk Infrastructure Grant and Water Services Infrastructure Grant projects, water boards, Water Trading Entity and**

**KOBWA**

Under Programme 3: Water Services Management, the total Regional Bulk Infrastructure Grant (conditional allocations to local government and allocations in kind to municipalities for the designated special programme) allocations over the Medium-Term Expenditure Framework (MTEF) are R5.9 billion, R6.4 billion and R6.5 billion, respectively. The total Water Services Infrastructure Grant (conditional and in-kind) allocations over the MTEF are R4.4 billion, R4.6 billion and R4.8 billion, respectively.

Total allocations of R4.4 billion over the Medium-Term to water boards for specific infrastructure projects include the following: Magalies Water for the Pilanesberg bulk water supply scheme, Umgeni Water for the Umshwathi Regional Bulk Water Scheme, Maphumulo Regional Bulk Schemes, Greater Mpofana Phase 1 -3 and uMkhomazi Bulk Water Supply Scheme, Sedibeng Water for the replacement of Namakwa Bulk Water Supply and Lepelle Water for the upgrade of the Olifants and Ebenezer water supply schemes.

The Water Trading Entity receives allocations for the following projects – acid mine drainage and other capital projects, raising the Clanwilliam Dam and Olifants-Doorn River water resource project, operations and maintenance of infrastructure, and establishment of catchment management agencies. KOBWA, over the medium-term, receives an amount of R768 million.

**7. Overview of the plans and budgets of entities supporting the work of the Department**

As a sector leader, regulator and oversight body of institutions undertaking work on its behalf, the Department has had interactions with Breede-Gouritz Catchment Management Agency, Water Research Commission and Trans-Caledon Tunnel Authority to discuss and understand annual performance plans and will oversee the implementation thereof. The interactions with the Inkomathi-Usuthu will be undertaken in this financial year.

**7.1 Catchment Management Agencies**

South Africa’s Catchment Management Agencies were established in terms of section 78(1) of the National Water Act, 1998. One of the main principles of the National Water Act is its focus on decentralisation. Decentralisation emphasises public participation in water management and related decision-making processes. Currently, two (2) Catchment Management Agencies have been established, the Breede-Gouritz and the Inkomati-Usutu CMAs. Currently and apart from the Breede-Gouritz and Inkomati-Usutu CMAs, the remaining seven CMAs are considered the so-called proto-CMAs since they are in the process of being established. Those proto-CMAs are managed by the respective regional offices of the Department.

Water resource management of the CMAs is aligned to the water management area’s internal strategic perspective. The functions of CMAs are to cooperate and seek agreement on water-related matters amongst various stakeholders and interested parties. CMAs are service delivery agencies listed in the Public Finance Management Act, 1999. The CMAs are also linked to Treasury Regulations to ensure financial viability and good governance. Catchment Management Agencies are Schedule 3A Public Entities and must comply with the Public Finance Management Act. A critical mandate of CMAs is the development of a catchment management strategy. The strategy is a plan to realise the protection, use, development, conservation, management and control of water resources, processing water use applications, recommending to the Department approval or non-approval of respective applications, and setting principles for water allocation in respective water management areas. These measures must be in line with the National Water Resource Strategy.[[8]](#footnote-8)

**7.1.1 Breede-Gouritz Catchment Management Agency**

The Breede-Gouritz Catchment Management Agency, in aligning its mandate to fulfil its obligations as highlighted in the section above, delineated six (6) strategic focus areas in its 2022/23 Annual Performance Plan. These are to:

* Ensure legal water use is maintained by ensuring 90% comments of land use planning and rezoning applications are achieved, finalisation of 85% water registrations, 200 signed and finalised validation and verification confirmation letters, and 100% capturing of water use authorisation audit. Within this strategic focus area, the agency also commits to an 85% recommendation of licences as per the regulation, 100% of general authorisations to be confirmed, and 80% completion of audit reports for water use compliance. The agency intends to complete four (4) water quality compliance reports of Municipal Wastewater Treatment Works that discharge effluent to water sources.
* Capacitate 5000 learners and stakeholders on water resource management awareness and attain four (4) intergovernmental cooperation initiatives to facilitate and enhance water resource management.
* The Integrated Water Resource Management and Empowerment of Stakeholders component of its work is projected at 100%, with 40 forums being undertaken to support water resource management.
* Capacitating Historically Disadvantaged Individuals (HDIs) and resource-poor farmers with water supply, the intention is to attain a 100%, with two workshops to capacitate and empower resource-poor farmers and 400 rainwater harvesting tanks to be installed.
* Ensuring water quality and legal water use, the agency will monitor 80 water resource points in its catchment area, three river rehabilitation projects to be funded and technically supported, and investigate 100% of non-compliance cases, to resolve 80% of investigated cases.
* Ensuring compliance with listed financial reporting prescripts, the agency will work toward 100% of reports and submit one proposed tariff report to the Department to comply with the pricing strategy.

For the financial year under review, the agency has a proposed budget of R82 million, which shows an increase of R7 million compared to the prior year. The funding comprises an augmentation budget from the Department and water use charges. The main factor for this increase relates to employer relation costs, which increased from R51 million to R55 million, with amounts budgeted for the appointment of a Chief Executive Officer (CEO), and other water-related vacancy positions to capacitate the agency to improve service delivery. Goods and Services receive an amount of R24 million, repairs and maintenance of R259 million, and capital outlay of R1.2 million with board-related costs of R947.8 thousand.

Expenditure is expected to increase at an average annual rate of 7.8 per cent from R75.1 million in 2021/22 to R94.2 million in 2024/25. The agency’s main cost driver is the compensation of employees, which accounts for an estimated 64.1 per cent (R168.9 million) of its total expenditure over the period ahead.

**7.1.2 Inkomati-Usuthu Catchment Management Agency**

The Inkomati-Usuthu Catchment Management Agency's water use activities in Mpumalanga are strategic use to ESKOM and Sasol Secunda Complex, supporting irrigation and forestry sector transboundary international obligations to Mozambique and Swaziland. Funding is received appropriated funds and water resources charges. The agency’s water management area is part of the Inco Maputo River Basin, covering Mozambique and Swaziland under the interim Inco Maputo Agreement.

For the financial year under review, and further elaborated in its Annual Performance Plan, the agency identified four outcomes – increased stakeholder satisfaction, enhanced human resources capabilities, maintained financial sustainability, and protected water resources. The output indicators aligned to targets are: Implementation of a stakeholder engagement plan, inclusive of technical, governance, support and finance issues, at 80%. Attainment of a ratio in terms of working (80%), current (1.1%), debt collection of historical debt owed to the Department (4%) and current debt collection of 60%. Monitoring compliance to water resource quality objectives and international obligations at 90% and 90%, respectively. Processing water use authorisations within the regulated timeframe at 80%, with 90% issuance of water use authorisations registered on WARMS. Monitoring activities for compliance at 90 per cent and 100% of enforcement action taken against the non-compliant facilities/users.

The agency's current ratio figure of 1.1% is an essential consideration, as it factors the agency’s ability to manage its debt. However, the agency’s current ratio is lower than a good current ratio of 1.2 to 2. The lower ratio figure is due to challenges associated with payment of a historical debt which impact the going concern of the agency. The agency is working toward a change in the outer years to increase revenue from other streams by working on two specific targets. One is its ability to increase its debt collection ratio by ensuring that a 4% target of retrieval of past debt is achieved and ensuring that current data information capturing of invoices is aligned to the validation and verification programme to increase the percentage around the collection.

The overall budget component allocation to the agency to undertake work in the financial year under review amounts to R147.879.141 million. Funding sources for the current year are derived from augmentation from the Department through the Main Account and Water Trading Entity for water use charges paid into the Water Trading Entity and interest received. The economic classification indicates that salaries and wages amount to R96.890 million, R26.038.723 for Goods and Services, R21.902.096 for bad debt, and repair and maintenance at R348 000, capital outlay at R200 000 and board related costs at R2.5 million.

The agency proposed an initial budget for the current year, an amount of R174 million but received R147 million. This translates to a shortfall of R50.7 million, a 23% decrease in the augmentation grant, translating to a 40% reduction in service charges due to historical bad debt inherited from the Department.  The impact of the budget cuts was that the budget was not sufficient to cover all personnel and critical contractual obligations. Critical earmarked activities which would remain unfunded were valued at R50.7m, which would result in a reduction of the Agency's ability to fully execute its mandate and overall public value, cessation and/or downsizing of key strategic projects, and immediate suspension of any further appointments to critical positions.

In the short term, the proposed action plan was to engage urgently with the Department to revise allocations for 2022/23 to ensure effective delivery of the IUCMA mandates and approved strategic outcomes and the implementation of debt management and cost containment strategy. In the long term, the plan was to identify other revenue streams to augment already strained sources and to engage the Department to review and redevelop a sustainable funding model.

The challenges the IUCMA faced included the increased international obligations to Mozambique, hence the need for the construction of the Mbombela Dam; the slow pace of transformation; the bulk water allocated to irrigation boards; costly maintenance of integrated decision support systems; and the expansion of the water management area to include the Pongola Catchment.

The agency is continuously engaged with the Department for assistance and advice on addressing the shortfall as it impacts critical contractual obligations. However, the agency has developed a debt management strategy and engages the Department in revising the current water pricing strategy. The current water pricing strategy places curbs on some of the tariffs for water use that the agency can charge, particularly for domestic use and the forestry sector.

Expenditure is expected to increase at an average annual rate of 11.8 per cent, from R139.7 million in 2021/22 to R195.4 million in 2024/25. Transfers from the Department account for an estimated 66.5 per cent (R373.4 million) of the agency’s revenue over the period ahead, with the remainder generated through licence fees for water use.

**7.1.3 Trans-Caledon Tunnel Authority**

The Trans-Caledon Tunnel Authority (TCTA) is a specialised liability management entity that derives its mandate from the National Water Act, 1998. It is responsible for financing and implementing bulk raw water infrastructure development and providing treasury management services to the Department. TCTA’s mandate is set out in terms of the Notice of Establishment and directives issued from time to time by the Executive Authority.

The strategic goals for 2022/23 of the authority are to raise funding for implementation of infrastructure, implement capital projects on time, within budget, to the appropriate standards and in a sustainable socio/environmental manner, manage debt within the approved borrowing limit, effective control of corporate expenditure, ensure organisational positioning for the planned water agency, enhance the internal control environment, risk management and supply chain management system, coordinate and monitor the efficient implementation of the projects within Strategic Integrated Project-19[[9]](#footnote-9), clear irregular and fruitless and wasteful expenditure and develop a high-performance culture that contributes to the achievement of the organisational goals.

The rollout of infrastructure projects in the preparation phase is the uMkhomazi Water Project – Phase 1, at the implementation phase of the Mokolo Crocodile Water Project and the Berg River Voȅlvlei Augmentation Scheme. Operations and maintenance will focus on Acid Mine Drainage and the Lesotho Highlands Water Project Phase 1.

Expenditure is expected to increase at an average annual rate of 24.1 per cent, from R7.9 billion to R15.1 billion in 2024/25. The authority projects a surplus of R5.6 billion over the period, mainly due to delays in the delivery tunnel for the Lesotho Highlands Water Project, while revenue is expected to increase at an annual average rate of 27.3 per cent from R8.4 billion in 2021/22 to R17.4 billion in 2024/25, mainly due to funding for construction received from the Water Trading Entity.

The TCTA presentation highlighted the risks it faces as a public entity due to the following challenges:

* Project implementation: Challenges in agreeing on funding models with project beneficiaries and obtaining their commitment to sign offtake agreements contribute to raising funding.
* Raise funding: Reduced funders’ appetite for lending to SOEs and generally tight lending conditions.
* Debt management: Municipalities’ ability to pay water tariffs, ensuring that tariffs are affordable and sustainable to assure the viability of water sector institutions, tighter conditions of regulatory approval for borrowings reduce flexibility to deal with unforeseen liquidity challenges.

**7.1.4 Water Research Commission**

The Water Research Commission was established in terms of the Water Research Act 1971. It is mandated to research the water sector by determining needs and priorities for research, promoting coordination, cooperation and communication in the area of water research development, stimulating and funding water research, promoting the effective transfer of information and technology, and enhancing knowledge and building capacity in the water sector.

Over the medium term, the commission plans to bridge knowledge gaps in the sector by prioritising research informed by government policies, needs and international trends. The commission’s research will focus on the desalination of seawater, climate change modelling and water availability.

Expenditure is expected to increase at an average annual rate of 5 per cent, from R337 million in 2021/23 to R390.7 million in 2024/25. Spending on Research and Development and Innovation and Impact Programmes account for an estimated 5.1 per cent (R557.9 million) of the commission’s total expenditure. Compensation of employees is the commission’s main cost driver, increasing at an average annual rate of 8.6 per cent, from R113.6 million in 2021/23 to R145.5 million in 2024/25. The commission expects to derive 80.6 per cent (R889 million) of its revenue over the MTEF period through the water research levy.

**8. Observations and Recommendations**

**8.1 Department of Water and Sanitation**

**8.1.1 Eradication of the Bucket Sanitation Systems in Formal Settlements and Pit Latrines in Public Schools**

Members of the Portfolio Committee noted that the Department of Water and Sanitation intends to eradicate 10 798 existing bucket sanitation systems in formal settlements in the year under review, as highlighted in their 2022/23 Annual Performance Plan. The argument made by Members of the Portfolio Committee related to the transfer of elimination of the bucket system in the Free State to an Entity (Housing Development Agency) of the Department of Human Settlement in the 2019/20 financial year. The HDA, as the implementing agent for the Department of Water and Sanitation, was to provide programme management services to seven projects in the Free State to eradicate the bucket toilet system. The scope of work included construction, refurbishment, and upgrading of wastewater infrastructure in identified towns to eliminate bucket toilets.

Issues were raised on whether HDA had undertaken any work in the two years the function was transferred to the agency. In response, the Department provided statistics on the number of households that received toilets in the last financial year. Regarding bucket eradication in the Northern Cape and Free State, out of 12 221 houses, only 1 409 had received toilets in the previous fiscal year. This meant that 10 798 houses in the formal areas were still on the bucket system, mainly in the Free State.

***The Portfolio Committee recommended that the Department provide clarity on this programme and indicate how it intends to address budget shortfalls, quarterly briefings and action plans on bucket toilets eradication by the proposed date of March 2023 in the Free State and Northern Cape. Furthermore, the Department should provide a progress report on its National Sanitation Framework to ensure that the country's bucket system is eliminated in terms of Norms and Standards.***

***Of further importance is the collaboration between the Department of Water and Sanitation and Basic Education to eradicate pit toilets in public schools, as well as collaboration between the Department of Water and Sanitation and Human Settlements on regulating the ‘mushrooming’ of informal settlements by allocating suitable land and ensuring suitable social amenities, such as water and sanitation.***

**8.1.2 Shortage of funding for mega infrastructure development**

Members of the Portfolio Committee noted the shortage for mega infrastructure development as the estimated cost of the mega infrastructure projects is in access of R100 billion. The available budget is less than one per cent of this estimated cost. This means that it will take decades to fully achieve the country’s infrastructure needs. Members requested the Department to consider accessing financial resources, with the assistance of National Treasury, for mega infrastructure projects from unspent funds within departmental and Entities’ programmes.

***The Portfolio Committee recommended that the Department provide plans/interventions to address this issue and provide details on whether it is considering Public-Private Partnerships to develop mega infrastructure projects.***

**8.1.3 Amendments to the National Water Act and the Water Services Act**

The amendment of both the National Water Act and the Water Services Act is long overdue. The Annual Performance Plan indicates that the National Water Act will be amended under Programme 2, while the Water Services Act will be amended under Programme 3. However, the speed at which the amendment process is going is concerning, as it may not reach Parliament during the year under review.

***The Portfolio Committee recommended that the Department clarify the slow progress and how these delays will affect the long-overdue water allocation transformation.***

**8.1.4 Deferment of 2021/22 targets to the 2022/23 financial year**

Some of the 2021/22 targets appear to have been transferred to the 2022/23 financial year. These include targets such as eradicating the bucket toilet system, establishing an economic regulator, and amendment of legislation.

***The Portfolio Committee recommended that the Department provide an overview of the 2021/22 performance concerning achievements of targets and indicate targets that were transferred to 2022/23, with reasons for the postponement.***

**8.1.5 Department’s partnership with the private sector in developing bulk infrastructure projects**

Members of the Portfolio Committee requested more information on the Department’s engagement with the Development Bank of Southern Africa (DBSA), with allocations from National Treasury, to develop bulk infrastructure projects.

***The Portfolio Committee recommended that a progress report be provided on specific projects and implementation amounts allocated.***

**8.1.6 Mechanisms in place to mitigate the challenges of trade debtors and non-payment to the Water Trading Entity**

Members of the Portfolio Committee noted that the Department must devise control measures and plans to address long-standing challenges of trade debtors and non-payment.

***The Portfolio Committee recommended that the Department present its action plans and control measures to recover monies owed to the Department and Entities, as well as provide more details on the progress made by the Multidisciplinary Revenue Committee comprising the National Treasury, the South African Local Government Association, Department of Cooperative Governance and Traditional Affairs and municipalities, as part of an intergovernmental relations initiatives to address debt collection.***

**8.1.7 Meeting the deadline of less than 90-day processing of water use licencing**

Members of the Portfolio Committee enquired whether the Department would meet its 90-day processing time for water use licencing, as the Annual Performance Plan talks of an improvement plan to process in a more programmatic way to ensure the subsequent attainment of backlogs.

***The Portfolio Committee recommended that the Department provide regular quarterly briefings on achieving the 90-day processing of water use licences.***

**8.1.8 Joint planning with the Southern African Development Community partners on Climate Change for water security in the region**

Members of the Portfolio Committee stressed the importance of the Climate Change Strategy and the Regional Strategic Action Plan for the SADC region. Clear awareness programmes on climate change and environmental risks should form part of the Department of Water and Sanitation and other Departments' work.

***The Portfolio Committee recommended that the Department provide a briefing on the Climate Change Strategy (adaptation and mitigation plans), the Regional Strategic Action Plan and the SADC Industrialisation Strategy, which anchors water as a catalyst for industrialisation.***

**8.1.9 Departmental contribution to job creation**

Members of the Portfolio Committee maintained that the high unemployment rate in the country necessitated the need for the Department to contribute to creating jobs within the water and sanitation sector.

***The Portfolio Committee recommended that the comprehensive outlook framework on job creation within the sector, once finalised, must be presented in a briefing within six (6) months.***

**8.2 Water Research Commission**

**8.2.1 Limited use of WRC research products and technology**

Members of the Portfolio Committee expressed concerns about the limited or non-use of the extensive knowledge base on water and sanitation issues, the technology produced and the amount of funding invested but under-utilisation by government departments.

***The Portfolio Committee recommended collaboration with government departments such as the Department of Trade and Industry and Competition, and the Department of Cooperative Governance and Traditional Affairs, to ensure the uptake and develop the industry for the mass production of these technologies.***

**8.2.2 Groundwater use programme**

Members of the Portfolio Committee required more information on the project that the WRC, in partnership with the Department, is currently working on, reviewing and updating maps to detect groundwater supply. The significance of the work of the Water Research Commission to utilise technologies and mechanisms to maximise the use of groundwater should be optimally incorporated into the work of the Department.

***The Portfolio Committee recommended that the Department and the WRC present their findings on work to detect groundwater supply, with focused action and implementation plans in this quarter.***

**8.2.3 Use of the Aquatrip technology to detect water leaks e**

Members of the Portfolio Committee sought more information on the use of the Aquatrip technology fitted to water pipes to monitor water flow over a period of time. If leaks are detected, the technology switches off and alerts the user of water leaks. Members queried whether these were produced locally.

***The Portfolio Committee recommended visiting the Water Research Commission to receive a briefing and see how the technology is utilised.***

**8.3 Catchment Management Agencies**

**8.3.1 Breede-Gourtiz**

**8.3.1.1 Drilling of boreholes**

Members of the Portfolio Committee raised a question on whether farmers drilled their boreholes with the necessary general authorisation or a water use licence dependent on the water of abstracted water.

***The Portfolio Committee recommended that a briefing be scheduled with the Department and Catchment Management Agency to obtain substantive information on general authorisation and water use licences for abstracted water through the drilling of boreholes.***

**8.3.1.2 Rollover of unspent funds**

Members of the Portfolio Committee raised a question on the rollover of unspent funds due to the late receiving of funds from the Department and committed funds for validation and verification of water users.

***The Portfolio Committee recommended that a briefing be scheduled with the Department and Breede-Gouritz on late payment by the Department, which results in rollovers, a progress report from the Agency to confirm registered volumes of water use, as well as programmes such as the removal of alien invasive species and distribution of rainwater harvesting tanks due to the lockdown.***

**8.3.2 Inkomati-Usuthu**

**8.3.2.1 Job creation**

Members of the Portfolio Committee raised concerns about the ability of the agency to create jobs in the agency’s area of operations in the short and long term.

***The Portfolio Committee recommended that a written response be provided on job creation opportunities regarding installing water tanks and clearance of invasive alien species and other future agency projects.***

**8.3.2.2 Role of the agency in the transformation of irrigation boards to water use associations**

Members of the Portfolio Committee requested more information on the agency’s role in transforming irrigation boards into water use associations within the catchment management area.

***The Portfolio Committee recommended a written response on the progress of setting up an internal task team to facilitate and fast-track the transformation of irrigation boards into water user associations. The intention is to transform the 26 irrigation boards into two water user associations.***

**8.3.2.3 Allocation to Broad-Based Black Empowerment (BBBEE) entities**

Members of the Portfolio Committee requested more information on the Board’s commitment to allocate R30 million in the current financial year to support BBBEE entities.

***The Portfolio Committee recommended that the agency provide a substantive written response on the R30 million commitment to the BBBEE programme.***

**8.3.2.4 Assistance to resource-poor farmers in the catchment management area**

Members of the Portfolio Committee requested further information on the agency’s assistance to the resource-poor farmers’ programme.

***The Portfolio Committee recommended that the agency provide a written response on supporting resource-poor farmers in its catchment management area.***

**8.3.2.5 Budget shortfall of R50.7 million, which limits the work of the IUCMA for the financial year under review**

Members of the Portfolio Committee noted that the agency reported a shortfall of R50.7 million, which would negatively impact their programmes in the current financial year. While the agency has developed a debt management policy and a revenue advancement plan, it was also crucial for the Department of Water and Sanitation to assist the agency.

***The Portfolio Committee recommended that the Department fully support the agency in recovering historical debt and further assist in funding solutions for the budget shortfall of R50.7 million. The Portfolio Committee expects a progress report within six months of publication of this report. The Portfolio Committee also recommended that the Department revise its pricing strategy on water use charges for domestic and forestry use to allow CMAs to recuperate more revenue to meet their obligations.***

**8.4 Trans-Caledon Tunnel Authority**

**8.4.1 Role of the Trans-Caledon Tunnel Authority transformation agenda of the country and risk management strategies in place to control coercion tactics of contractors to procure tenders**

Members of the Portfolio Committee raised several issues on the involvement of women in the construction industry, as highlighted in a report by the Water Research Commission. Other matters of concern within the construction industry related to increasing the involvement of black-owned companies and control of the construction industry by coercion tactics of contractors to obtain tenders on construction sites.

***The Portfolio Committee recommended that a more detailed briefing be provided by the Department and TCTA on issues related to the transformation agenda within the construction industry. The Portfolio Committee further recommended that the Department deal decisively with cases of criminality and coercion of the set-aside procurement for local communities in the construction industry.***

**8.4.2 Role of TCTA in the establishment of the National Water Resources Infrastructure Agency**

Members queried the role of TCTA in the establishment of the National Water Resources Infrastructure Agency.

***The Portfolio Committee recommended that the Department provide a detailed response on the modalities, including a roadmap with timeframes to establish the National Water Resources Infrastructure Agency.***

**8.4.3 TCTA implementation of AGSA resolution on the accounting systems used in the Lesotho Highlands Water Project Treaty**

The issue of reconciling accounting systems regarding the Lesotho Highlands Water Project, detailed in the Treaty, has been resolved between National Treasury, the Accountant-General and AGSA.

**8.4.4 Acid Mine Drainage**

Members requested more information on TCTA’s short and long-term strategies to mitigate challenges related to acid mine drainage.

***The Portfolio Committee recommended a detailed briefing by the TCTA on mitigating challenges related to acid mine drainage.***

**Report to be considered.**

1. Section 24 of the Bill of Rights proclaims that all citizens have a right to an environment that is not harmful. [↑](#footnote-ref-1)
2. Department of Water and Sanitation, Annual Performance Plan 2022/23 to 2024/25. [↑](#footnote-ref-2)
3. The information that follows was sourced from the National Treasury Estimates of National Expenditure, Budget Vote 41: Water and Sanitation, 2022/23. [↑](#footnote-ref-3)
4. Department of Water and Sanitation, Annual Performance Plan, 2022/23 to 2024/25. [↑](#footnote-ref-4)
5. Department of Water and Sanitation, Annual Performance Plan, 2022/23 to 2024/25. [↑](#footnote-ref-5)
6. Department of Water and Sanitation, Annual Performance Plan, 2022/23 to 2024/25. [↑](#footnote-ref-6)
7. The information was sourced from the National Treasury Estimates of National Expenditure, Budget Vote 41: Water and Sanitation 2022/23. [↑](#footnote-ref-7)
8. Information was sourced from Freshwater Governance in the 21st century, edited by Eiman Karar. [↑](#footnote-ref-8)
9. SIP 19: Ecological Infrastructure for Water Security, which provides an overview of a proposed Strategic Integrated Project (SIP) aimed at improving South Africa's water resources and other environmental goods and services through the conservation, protection, restoration, rehabilitation and/or maintenance of key ecological infrastructure [↑](#footnote-ref-9)