

#### water & sanitation

Department: Water and Sanitation **REPUBLIC OF SOUTH AFRICA** 



### NATIONAL COUNCIL OF PROVINCES THREE SPHERE PLANNING SESSION

09 June 2023



# CONTENTS

The Department of Water and Sanitation requested to address the National Council of Provinces for Three Sphere Planning Session, focusing on the following sub-themes:

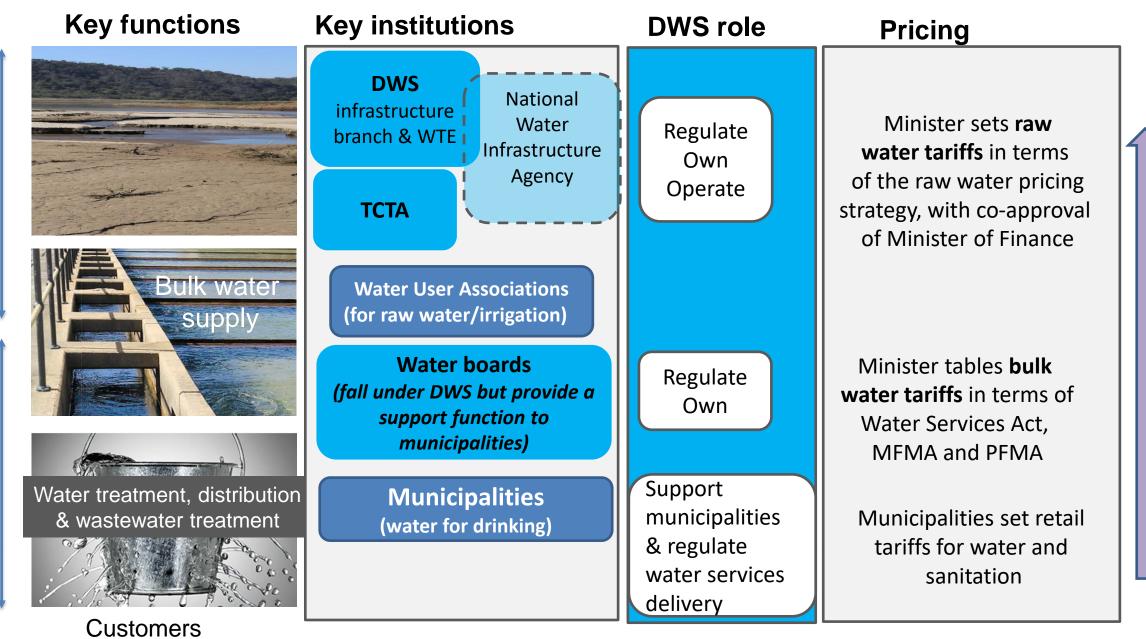
- The national state of water in South Africa (detailed report);
- Quality of Water provided
- Plans in place to address issues relating to water scarcity
- Consistency of water provision, particularly to the poor and vulnerable



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Responsibilities of national government and local government relating to water and sanitation (defined in the Constitution and subsidiary legislation)



National

-ocal government

3

### WATER RESOURCE SUSTAINABILITY

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### Supply and demand for raw water

- South Africa is a water scarce country
- Raw water supply is currently approximately in balance with existing demands on a national scale, but there are localized deficits
- Water availability in South Africa could deteriorate rapidly as supply contracts and demand escalates due to economic growth, population growth, urbanization, inefficient use (including increasing physical losses in municipal distribution systems), degradation of wetlands, impacts of climate change
- Delays in the implementation of surface water resource development projects in the past have now been addressed and projects have been accelerated – see examples overleaf
- But broadening of South Africa's water resource mix is critical for water security as potential to further develop its surface water resources is limited already harnessing approximately 75% of utilizable surface water resources
- Need to increase sustainable use of groundwater; desalination of sea water; return flows from treated wastewater systems (water re-use); reuse of other poor-quality water such as acid mine drainage – many of these are municipal functions
- Supply-side measures necessary but not sufficient to avoid future water deficits water conservation and water demand management (WCWDM) must also be implemented, particularly in domestic and general industrial use, by reducing physical losses in municipal distribution systems





### Examples of surface water resource projects in implementation

- R40 bn Phase 2 of the Lesotho Highlands Water Project (LHWP 2) for Gauteng and surrounds in progress
- o R26 bn uMkhomazi Water Project in KwaZulu Natal affordability deadlock has been resolved
- R4 bn Phase 2A of Mokolo Crocodile (West) Water Augmentation Project (MCWAP 2A) in the North West & Limpopo – Phase 1 has been completed, funding is being raised for Phase 2
- R24 bn Olifants River Water Resource Development in Limpopo partnership with mines, construction underway
- R10 bn Vaal Gamagara in the Northern Cape partnership with mines, construction will start this year
- R8 bn Mzimvubu Water Project in the Eastern Cape funding deadlock has been resolved, construction under way
- 0.5 bn Groot Letaba Water Augmentation Project (raising of Tzaneen Dam) in Limpopo construction starting June 2023
- o R1.2 bn Berg River Voelvlei Augmentation Scheme in the Western Cape, construction starting 2024
- $\circ~$  R4 bn raising of Clanwilliam Dam in the Western Cape contracts for construction awarded
- Approximately 60% of national water resource infrastructure projects are funded by private sector finance
- The Bill for the NWRIA is currently in public consultation
- Establishment of the NWRIA will enable more private finance to be raised, without necessarily requiring Treasury guarantees







### FINANCIAL AND SERVICE DELIVERY SUSTAINABILITY

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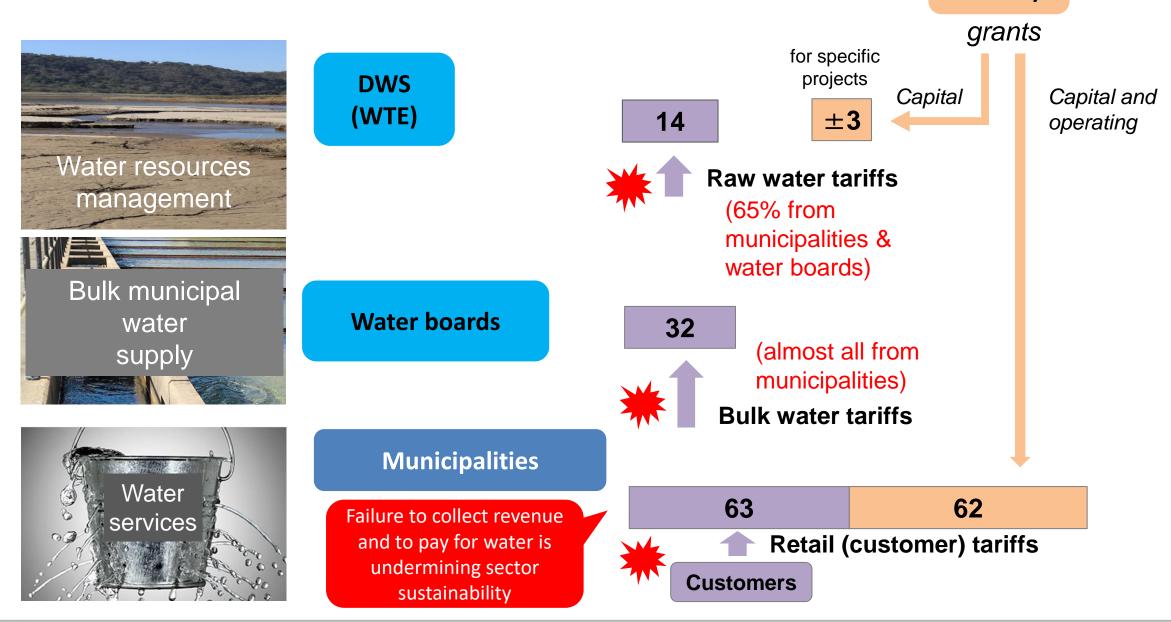


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### The key financial challenge in the sector

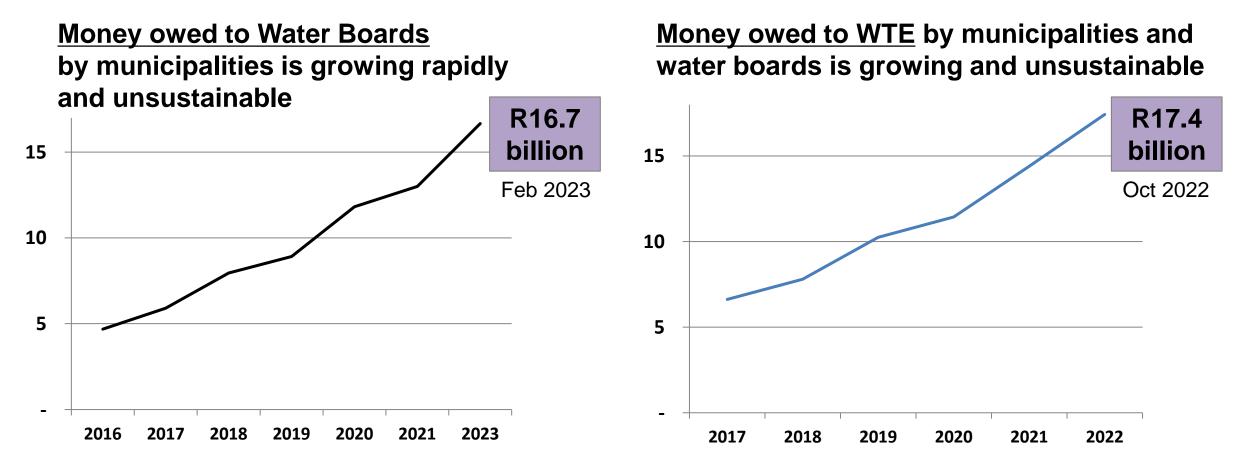
(Numbers are in billions of Rands and are for 2023/4)



National

Treasury

## SECTOR DEBT IS GROWING AND UNSUSTAINABLE



One water board has already had to be shut down because it was bankrupt due to municipal debt. If water boards collapse there will be no treated water provided to municipalities.

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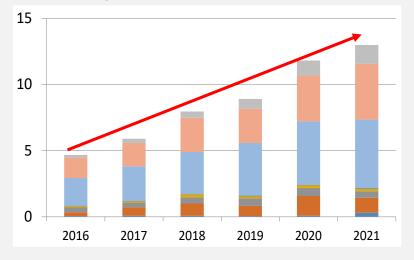


### **Sector debt solutions**

**The challenge**: A rapid and unsustainable build of sector debt at three levels:

- Money owed to water trading entity by water boards, municipalities and customers
- Money owed to water boards by municipalities
- Money owed to municipalities by customers

#### Money owed to water boards



#### **Solutions (in consultation)**:

- DWS will collaborate with National Treasury to ensure that equitable share allocations are withheld from non-paying municipalities.
- 2. DWS will ensure that standardised credit control and debt recovery processes are put in place across all the water boards. This will include consistent enforcement of water restrictions on non-paying municipalities and legal processes to attach municipal bank accounts where necessary.
- 3. Bulk prepaid meters will be installed by water boards in municipalities with a poor payment record

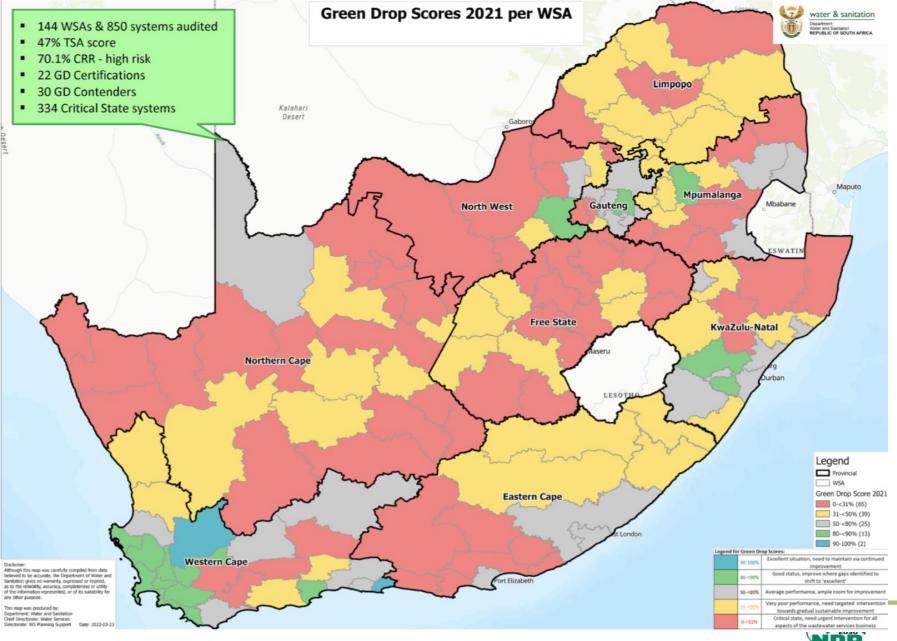
Figure 3: Green Drop Scores in 2021 by water services authority

2022 Green Drop Report: poor and declining wastewater treatment performance

334 systems (40%) in a critical state

64% of systems in poor or critical state

Blue Drop 2023 indicates similar deterioration in water services, in terms of quality and reliability of supply





### **DWS** support to municipalities

- DWS has a Constitutional obligation to support municipalities, as well a legal mandate to regulate them
- Minster has crisscrossed the country visiting those municipalities with severe challenges with water and sanitation services
- In many of the worst performing municipalities, Minister and municipal leadership have agreed on improvement plans
- DWS contribution is in form of grants (R12 billion per annum from RBIG and WSIG), and technical advice and management support from DWS and water boards
- Samples of DWS support to municipalities per province are provided in annexure
- Examples include: Nooitgedacht water transfer treatment scheme in Nelson Mandela Bay, Greater Mbizana Regional Bulk Water Scheme in the Alfred Nzo District Municipality, a number of projects in Maluti-a-Phofung in the Free State and Emfuleni and Midvaal Local Municipalities; support by DWS and Umgeni Water to eThekwini Metropolitan Municipality to improve the management of its waste water treatment systems; assistance to Drakenstein municipality in the Western Cape and the Lekwa municipality in Mpumalanga to address waste water treatment system challenges







### Limits to support and intervention

- But there are limits to which support and intervention by the national government can address the decline in the reliability and quality of water and sanitation services
- The cause of the decline is poor maintenance and operation by municipalities which must be funded by revenue from the sale of water by municipalities to customers
- DWS is repeatedly providing municipalities with grants to repair infrastructure, which is not maintained by the municipalities, deteriorates again rapidly, and then funding needs to be provided again
- The high levels of support and intervention by the department are slowing the decline in water and sanitation services, not arresting or reversing it
- To arrest and turn around the decline in municipal water and sanitation services, the municipal water and sanitation function must be fixed, which may require legislative reform
- DWS is developing amendments to the Water Services Act to strengthen the role of municipalities as Water Service Authorities and to enable the Minister to intervene more effectively



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## **BLUE, GREEN AND NO DROP FINDINGS**

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### **Introduction to the Drop Reports**

- In terms of the National Water Act and Water Services Act, DWS is the regulator of the water sector
- The Green, Blue and No Drop Certification programmes are tools to provide regulatory information regarding water services, which are largely the Constitutional responsibility of municipalities
- DWS introduced these incentive-based regulation programmes in 2008
- In 2014 DWS stopped the programmes
- Minister Mchunu reintroduced the programmes after being appointed in late 2021











### What each Drop Report focuses on

- Green Drop report is a comprehensive assessment of the state of all wastewater treatment systems in South Africa, including municipal, Department of Public Works and private wastewater treatment systems
- Blue Drop report is a similar assessment of the state of all drinking water systems (including water treatment works and municipal water distribution systems) in the country
- Both reports include assessments of the condition of the infrastructure; whether the capacity of the infrastructure is sufficient to deal with the demand; whether the required maintenance is being done on the infrastructure, whether the infrastructure is operated correctly; whether the proper treatment processes are followed; whether proper monitoring and controls are in place; and whether the staff have the necessary skills and qualifications
- No Drop report is an assessment of the degree to which the drinking water distribution systems of municipalities supply water efficiently, without wasting water
- No Drop assessment includes the levels of physical water losses in the system (for example through leaks in pipes); levels of non-revenue water; the amount of water used per customer per day; whether infrastructure is being maintained properly to minimise wastage; the existence of plans and strategies to reduce water losses; the effectiveness of metering, billing and revenue collection systems



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### **Purpose of the Drop Reports**

- The aim of this uniquely South African regulatory tool is to improve municipal drinking water quality, wastewater management as well as water conservation and demand management
- The reports keep the public and stakeholders informed and updated with credible data and information about the state of water and sanitation services in the country
- The reports also recognise water services institutions that achieve compliance and excellence in providing such services. This serves as an incentive for water services institutions to improve their performance
- The reports identify what needs to be done to address each of the identified shortcomings
  - In this regard, the reports are a support mechanism, in addition to being a regulatory mechanism, because they provide the owners of the infrastructure with advice and guidance as to how to improve their water and sanitation services







### **Release of the Green, Blue and No Drop Watch Reports**

- Each comprehensive drop report is released every two years, with interim report in alternate year
- Full Green Drop was released in 2022, along with interim Blue Drop report
- Interim Green Drop and full Blue Drop reports will be released in July 2023 respectively
- Full No Drop report will be released in September
- Department has just released the Green, Blue and No-drop Watch reports, as a precursor to the releases
  of the reports in July
  - The three watch reports are now available on the DWS website



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## The Green, Blue and No Drop Watch Reports

- Blue Drop Watch Report:
  - 2023 Blue Drop Watch Report provides an assessment of the condition of water distribution infrastructure and drinking water quality of a sample of the drinking water supply systems in the country
  - Full Blue Drop report will cover all drinking water supply systems in the country and will also include nontechnical aspects such as skills and qualifications of municipal staff
- No Drop Watch Report:
  - 2023 No Drop Watch Report is based on water conservation and demand management reports received from a sample of municipalities
  - Information was used to extrapolate projections regarding the extent of water losses and non-revenue water in the country
  - Full No Drop report will provide audited assessment of water losses and non-revenue water in all municipalities in the country
- Green Drop Watch Report:
  - Provides information on what has been done to address wastewater systems of Water Services Authorities that scored less than 30% in the 2022 Green Drop Report





## **1. GREEN DROP WATCH REPORT: SUMMARY OF FINDINGS**

- 2022 full Green Drop report released in April 2022 found 334 out of 850 (39%) municipal wastewater systems in 90 municipalities which are water services authorities (63% of the 144 water services authorities) to be in critical condition, receiving Green Drop scores of 30% and below
- In 2013, when the last Green Drop assessment report was done, 248 out of 824 (30%) municipal wastewater systems were in a critical condition, indicating a decline between 2103 and 2022
- Following the release of the 2022 Green Drop report, the Department issued non-compliance notices to these 90 municipalities, requesting the municipalities to submit corrective action plans to address the shortcomings identified in the Green Drop report
- By March 2023, Department had received corrective action plans from municipalities for 168 of the 334 wastewater systems (i.e. a 50% response rate). 43 of the 90 municipalities requested support from the Department to develop corrective action plans
- By March 2023, only 34 of the 168 plans submitted to the department were being implemented, with the balance being in planning phase or no progress reported
- For those municipalities which did not submit corrective action plans, DWS has issued directives in terms of the National Water Act compelling them to submit such plans
- Criminal charges have been laid against some of the municipalities which have not submitted corrective action plans







## 2. BLUE DROP WATCH REPORT SUMMARY OF FINDINGS

151 out of 1035 water treatment systems in the country were sampled. All water service authorities were covered by the sample.

#### Infrastructure condition:

- 3% of the sampled systems were found to be in a critical infrastructural condition, 12% of the sampled systems were found to be in an poor infrastructural condition, 49% of the sampled systems were found to be in an average infrastructural condition, 31% in good condition, and 5% in an excellent condition
- These findings were supported in the 2022 South African Institute of Civil Engineers Infrastructure Report Card

#### Water quality testing requirements in South Africa

 In terms of SANS 241, municipalities are required to monitor the microbiological and chemical quality of the water provided to residents at specified intervals, including hourly, daily, weekly, fortnightly and monthly tests of various types



21

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#### Microbiological and chemical water quality compliance:

- Water quality tests carried out by the municipalities themselves during the 2021/2022 municipal financial year were assessed
- 39% of systems achieved excellent, 11% of systems achieved good, 9% achieved poor, and 41% achieved bad microbiological water quality compliance
- 17% of systems achieved excellent, 13% of systems achieved good, 15% achieved poor, and 55% achieved bad chemical water quality compliance

Status	Definition
Bad	< 95% of water quality tests meet SANS 241 standards
Poor	95-97% of water quality tests meet SANS 241 standards
Good	97-99% of water quality tests meet SANS 241 standards
Excellent	> 99% of water quality tests meet SANS 241 standards

- Microbiological compliance measures how well the treatment process is removing harmful bacteria and other micro-organisms from the water
- Chemical compliance measures the chemical suitability of the water for human consumption, as well as for protection of infrastructure and household equipment
- SANS 241 is informed by World Health Organisation Guidelines, in terms of which at least 97% (i.e. good or excellent compliance) of tests for microbiological contaminants and chemical compliance conducted over a year should comply with water quality standards, for the water to be considered safe to drink
- The number of samples to be tested in a specific water supply system is informed by the Water Safety Planning Requirements
  of the SANS 241



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22

#### Non-provision of information on testing to DWS

- During the audit period 11 municipalities did not report water quality data to the Department or provide any other evidence that they have been testing their water quality
- The Department has issued non-compliance notices to those municipalities instructing them to issue advisory notices to their residents that their water might not be safe to drink if it has not been properly tested





## **IMPLICATIONS OF THE BLUE DROP WATCH REPORT FINDINGS**

- In the 2012 Blue Drop report, only 10% of municipalities had bad or poor microbiological water quality (as opposed to 50% in this sample)
- This indicates that there has been a deterioration in drinking water quality since the last blue drop report was done
- The 2023 blue drop watch report indicates that the drinking water produced from some municipal water treatment systems during the 2021/2022 municipal financial year did not meet the SANS 241 standard and could on occasion have posed a potential health risk
- The report does not provide an indication of the current status of water quality in municipalities
- In terms of SANS241 and the norms and standards issued by DWS under the Water Services Act, when the tests carried out by a municipality indicate that the water supplied poses a health risk, the municipality must inform its consumers that the quality of the water that it supplies poses a health risk
- DWS has sent directives to the municipalities identified in the Watch Report as having systems with poor or bad compliance. The directives require the municipalities to inform their residents should they still have poor or bad compliance
- The public can safely consume water from their taps if their municipalities indicate that the water being provided is being tested and meets the requirements of SANS 241. WSAs are responsible by law to inform affected constituencies as soon as there is any change in quality





## **3. NO DROP WATCH REPORT SUMMARY OF FINDINGS**

#### Introduction

- The No Drop Watch Report assesses the status of water losses and non-revenue water (NRW) in South Africa against regulatory compliance requirements and best management practices
- The report is based on analysis of the water balance data submitted by municipalities for their financial year ending June 2022
- The report is based on a sample of 42 datasets which were received from WSAs in 2022 (29% of 144 WSAs submitted data sets)
- The national water balance presented in the Watch Report is extrapolated from the sample of datasets received from municipalities to provide an estimate of the water balance and non-revenue water for all 144 municipalities





#### **Findings**

- The System Input Volume (meaning the total volume of water treated for municipal use) is estimated to be approximately 4.3 million m<sup>3</sup>/annum
- Of this, 2 million m<sup>3</sup>/annum (46%) is estimated to be non-revenue water (NRW). This is the volume of water that
  municipalities are unable to collect revenue for
- In 2015 when the last No Drop report was published, the national NRW figure was estimated to be 35%
- Non-revenue water is made up of water losses and the unbilled component of authorised consumption
- The international average for non-revenue water is below 30%
- The national trends suggest that per capita consumption is approximately 216 litres/capita/day compared to the international average of 173 l/c/d
- This is an anomaly given that South Africa is a water scarce county
- The high levels of physical losses in municipal distribution systems is one of the main reasons for the relatively high level of per capita water consumption in South Africa
- This indicates poor operation and maintenance of infrastructure leading to unacceptably high physical losses
- Some municipalities have been able to reduce their non-revenue water. In order to reduce non-revenue water, municipalities need to improve operation and maintenance of their infrastructure; repair leaks; improve metering, billing, revenue collection, and debtor management; improve pressure management; and engage in community education and awareness; amongst other measures.
- The final water balance will be obtained and confirmed through the full No Drop report that will be published in September 2023



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## **DWS** actions to address the findings

Regulatory actions

- In role of Regulator, Department issues non-compliance notices and directives in terms of the National Water Act to the relevant municipalities instructing them to correct the situation
- Where the notices and directives are not acted upon, the Department institutes legal action against the municipality
- The Department is in the process of strengthening its role as the regulator of water services. This includes developing more comprehensive and more stringent norms and standards for water services and standardising its regulatory processes so that it is more consistent with its regulatory actions

#### Support actions

- National government is providing more than R60 billion per annum in grants and transfers to municipalities for water and sanitation services
- Minster has crisscrossed the country visiting those municipalities with severe challenges with water and sanitation services. In many of the worst performing municipalities, Minister and municipal leadership have agreed on improvement plans
- DWS contribution is in form of grants (R12 billion per annum from Regional Bulk Infrastructure Grant and Water Services Infrastructure Grant), and technical advice and management support from DWS and water boards



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#### Legislative reform

- There are limits to which support and intervention by the national government can address the decline in the reliability and quality of water and sanitation services
- The cause of the decline is poor maintenance and operation by municipalities which must be funded by revenue from the sale of water by municipalities to customers
- DWS is repeatedly providing municipalities with grants to repair infrastructure, which is not maintained by the municipalities, deteriorates again rapidly, and then funding needs to be provided again
- The high levels of support and intervention by the national government are slowing the decline in water and sanitation services, not arresting or reversing it
- Legislative reforms may also be required to ensure that water service providers are professionally managed, capable, efficient and financially viable institutions that deliver water services to the required standards
- Water Services Act differentiates between Water Services Authorities and Water Services Providers
- Role of WSA is to ensure that water services are provided to required standard
- Role of WSP is to provide the services
- DWS is consulting with water sector stakeholders regarding reforms to Water Services Act to strengthen role of municipalities as Water Services Authorities to ensure that competent Water Services Providers are in place and to enable Minister to intervene more effectively as the Regulator





#### ANNEXURE: DWS SUPPORT TO MUNICIPALITIES PER PROVINCE

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#### EASTERN CAPE

No.	WSA	Project Name	Implementing Agent	Area	Budget	Milestones
1.	NMMB	<b>NOOITGEDAGT COEGA LOW LEVEL SUPPLY SCHEME (NCLLS) phase three</b> entails the construction of a flash mixer, two flocculation channels and settling tanks, six new filters (increasing the capacity of the WTW's with 70MI/day to 210MI/day)	NMBM	NMB	R534mil	June 2023
2.	NMMB	<b>Lower Sundays River GWS:</b> The works are inclusive of earthworks, canal realignment, servitude rehabilitation, etc. This project is of major importance to the water security of Nelson Mandela Bay. (Orange River water supply). – Phase 1	DWS	NMBM	Estimated R800mil	Sep 2023
3.	Mbizana	<b>GREATER MBIZANA REGIONAL BULK WATER SCHEME (GMRBWS) &amp; Repair of Ludeke Dam</b> Upgrade Nomlacu Water Treatment Plant from 10 M&/day to 20 M&/day, Upgrade Nomlacu Water Treatment Plant from 10 M&/day to 20 M&/day. Project includes bulkines pumpstations and reservoirs for areas (at KuSiwisa and Ndindini, Entsimbini to Mbongweni and Luthuli )	uMgeni WB	Mbizana	R250mil	June 2024
4.	Mnquma Municipality	<b>NQAMAKHWE REGIONAL BULK WATER SCHEME;</b> To provide bulk water infrastructure to supply approx 78,000 people in 120 rural villages (wards 13-20 of Mnquma Municipality) with domestic water	Amatola WB	Ngamakhwe, Butterworth, Centane and villages.	R370mil	April 2024
5.	Ndlambe LM	<b>NDLAMBE BWS PROJECT PROGRESS:</b> The construction and commissioning of the 5 M&/day Port Alfred RO-plant and 16 M& reservoir, including the brine sea outfall pipeline, the construction of 2M& reservoirs in Cannon Rocks and Alexandria and construction and commissioning of two pump stations in Cannon Rocks and Fishkraal, and. The construction of new pipelines between Cannon Rocks and Fishkraal and between Fishkraal and Alexandria	Ndlambe LM		R393mil	Dec 2024
6.	Makana LM	The augmentation of the existing 10 Mℓ/day James Kleynhans WTW by the construction of an additional 10 Mℓ/day WTW to 20MI/day, along with associated works required to meet the bulk potable water needs for the Bulk Water Supply	Amatola WB	Grahamstown + Makhanda	R15.2mil	March 2024
7.	Makana LM	Emergency Repair & refurbish pumpstation @ Howlsons Poort Dam and commission water to Waainek WTW. Provision of O + M for Makana LM for Waainek WTW	Amatola WB	Grahamstown + Makhanda	R534mil	Jun 2023- Dec 2023



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#### FREE STATE

No.	WSA	Project Name	Implementi ng Agent	Area	Budget	Milestones
1.	Maluti- A- Phofung	<b>MALUTI –A- PHOFUNG WATER AND SANITATION INTERVENTION PROJECTS</b> : The Upgrading of Sterkfontein Water Treatment Works (WTW), Refurbishment and Upgrading of the Fika Patso Water Purification Plant, Upgrading of the Intabazwe Rising Main, Bulk water supply to Tshiamo & Makgolokweng, Upgrading of the supply to Phuthaditjhaba & CBD area, Refurbishment of the Elands WWTW, Upgrading of the Kestell WWTW, Refurbishment of the Makwane WWTW, Refurbishment of the Moeding WWTW, Upgrading of the Phuthaditjhaba WWTW, Upgrading of the Tshiame WWTW, Upgrading of the Wilge WWTW, Drilling of boreholes in Intabazwe, Improving water revenue and reducing non-revenue water	~	Sterkfontein, Fika Patso, Tshiamo, Makgolokweng Phuthaditjhaba, Qwaqwa, Kestell, Harrismith - Wilge, Intabazwe, Schoonplaatz, and Wilgepark	R1.1bil	June 2024 to April 2027
2.	Matjhabeng LM	<b>MATJHABENG WATER AND SANITATION INTERVENTION PROJECTS:</b> Unblocking of Sewer Network in Welkom, Bronville, Virginia and Thabong, Unblocking of Sewer in Odendaalsrus CBD, Kutlwanonong and Nyakallong , Unblocking of Sewer in Thabong Wards 13;14;15;16;17;25;26;28 and 31, Welkom, Bronville, Virginia and Thabong, Thabong WWTW Phase 1b: Refurbishment of existing 12Ml/d, Refurbishment of 6Ml Kutlwanong, WWTW & Sewer Network unblocking, Refurbishment of Oderdaalsrus WWTW & Sewer Network unblocking, Refurbishment of Henneman WWTW, Refurbishment of Allanridge WWTW, Refurbishment of Virginia WWTW, Construction of Outfall Sewer Line from Theronia WWTW to Sand river, Upgrading of Phomolong WWTW, Upgrading Thabong WWTW, Upgrading Ventersburg WWTW	Bloem Water	Welkom, Bronville, Virginia and Thabong, Odendaalsrus CBD, Kutlwanonong and Nyakallong, Thabong Wards (13;14;15;16;17;25;26;28 and 31), Thabong ext 1, 2, 3, 4, Welkom Kutlwanong, Welkom, Bronville, Virginia and Thabong	R1.5bil	August 2023 To April 2027





#### GAUTENG

No.	WSA	Project Name	Implemen ting Agent	Area	Budget	Milestone s
1.	Emfuleni LM	VAAL RIVER SYSTEMS INTERVENTIONS: Rietspruit WWTW Upgrade, Sebokeng WWTW Upgrade, Meyerton WWTW Upgrade, Leeukuil WWTW Upgrade, Mechanical services for the water & wastewater treatment plants and electrical services for 44 pump stations and mechanical services for 44 p/s, Refurbish PS 34, Upgrade PS 34, Refurbish Inlet Works at Rietspruit, Refurbish Inlet Works at Leeuwkuil and Rising Main from PS2 to Leeuwkuil, Vaal River System Intervention (Supervision and Monitoring), 1.3km Gravity main to pump station 2, Critical Collapsed Pipes Replacement, Refurbishment of Critical Pump Stations, Rand Water (O&M), Human Resources (Operations and Maintenance), chemicals, training and skills transfer, maintenance work, Personal Protective Equipment Unblocking of Boisolids.	Rand Water	Sebokeng Meyerton Leeukuil Rietspruit	R4.7bil	July 2023 to June 2027
2.	Mogale City LM	MOGALE CITY LM INTERVENTION (MCLMI)PROJECT: Aged pipeline replacement project Flip Human WWTW refurbishment Phase 1 Dr. Sefularo Housing Development Dr. Motlana Housing Development	Mogale City	Mogale City	R285 mil	August 2023 Dec 2024





#### **KWAZULU NATAL**

No.	WSA	Project Name	Implementing Agent	Area	Budget	Milestones
1.	Zululand DM uMkhanyakude DM	ACCELERATION OF MANDLAKAZI BULK WATER SCHEME to benefit communities under Zululand DM as well as uMkhanyakude DM (Jozini LM, Big 5 Hlabisa, uMhlabuyalingana and Mtubatuba LM). Pipeline includes abstraction of raw water from Jozini Dam, laying of 28km bulk line, pumpstation and upgrading of Mandlakazi WTW, Mkhuze WTW and others	Zululand DM and Mlhathuze Water for UKDM	Zululand Area and UKDM	R2.7bil	Started 2008 and completion in 2026
2.	uMkhanyakude DM	Scope includes bulk-pipelines, upgrade of WTW, extending the services from RDP to yard connections.	Mhlathuze Water	Big 5 Hlabisa, Jozini Mtubatuba, Umhlabuyalingana	650 mil	June 2023 to June 2024
3.	Ugu DM	Non-Revenue Reduction Programme, Refurbishment and Replacement of Infrastructure, Revenue Management Plan, Pipeline Replacement of Infrastructure. Emergency Borehole Programme, Refurbishment of Bulk Meters and chamber valves Across the district, Borehole Management System, Refurbishment of Mechanical & Electrical (Area South Central, South, North)	UGU DM	UGU DM are of supply	R150mil	June 2023
4.	uThukela DM	Driefontein Bulk Water Supply for development of infrastructure to ensure the provision of potable bulk water supply from the Observation Hill reservoir in Ladysmith to the Driefontein Complex, consisting of 5 MI reservoir at a strategic and etc.	uThukela DM	Driefontein, Hobsland, Indaka	ТВС	Project 99% complete
5	Umgugundlovu and Msunduzi	VULINDLELA: The Vulindlela project also known as Mandela Scheme: Pipe Supply (Tender 1), Phase 1: Reservoir 2 to Reservoir 5 Upgrade (Tender 2), Phase 2: Howick West to Reservoir 2 (Tender 3)	uMgeni Water	Msundizi DM and uMgugundlovu DM	ТВС	June 2024
6.	uMzinyathi DM	Intervention to various projects including, Tayside WTW upgrade, Biggarsberg WTW Upgrade, Upgrade of the Wasbank Town Water and Sewer, Nquthu, Msinga and Mvoti LM's projects	uMgeni Water	Mvoti, Msinga, Nquthu LMs	ТВС	Nov 2024
7.	Amajuba DM	<ul> <li>Ministerial intervention for various projects at ADM including Dannhauser, eMadlangeni LM</li> <li>Replacement of raw water pipe Projects</li> <li>Replacement of AC Pipes</li> <li>Repairs &amp; Refurbishment of Reservoir and WTP</li> <li>Zaaihoek &amp; Groenvlei Water &amp; Sanitation Projects</li> </ul>	uMgeni Water	Dannhauser, Hattings Newcastle etc.	ТВС	Nov 2024
8.	New Castle LM	Upgrading / Refurbishment Of Sewer System In Newcastle West	uMgeni Water	Groenvlei Agri Village Newcastle West	ТВС	June 2024





#### LIMPOPO

N o.	WSA	Project Name	Implementing Agent	Area	Budget	Milestones
1.	Vhembe DM & Mopani DM	NANDONI TO NSAMI REGIONAL BULK WATER SCHEME: Provision of Raw water pipeline from Nandoni to Nsami WTW, Provision of Clean Water Pipeline, Giyani Water Services, Upgrading on Nandoni WTW from 60MI/day to 120MI/day		Vhembe DM, Collins Chabane LM, Malamulele East (incl. Muswane & Mphambo). Mopani DM e.g. Giyani, Xikukwani and etc (55 villages_	R1.8 bil Actual	June 2023
2.	Mopani DM	Giyani WTW Refurbishment (Phase 1) Giyani - Reticulation of 24 Villages (Phase 1)	Lepelle North Water	Giyani, benefiting of 55 villages while Giyani (P1_ 24 Villages)	R1.3bil	Jan 2023 to April 2024
3.	Polokwane City & Capricon	<b>OLIFANTSPOORT /EBENEZER WATER SUPPLY SCHEME</b> Ebenezer/Olifants Bulk Water Scheme		Polokwane, Capricorn,	Phase 1 – R4,5 Bil	Aug 2026
4.	Masodi LM	MASODI WWTW - MLM IN PARTNERSHIP WITH IVANPLATS PROPRIETARY LIMITED MINE -Masodi WWTW	Masodi LM		R166 Mil	Dec 2023
5.	Polokwane LM	Polokwane interventions	Polokwane LM	Polokwane, Seshego, Bloodriver and Perskebult	R861 Mil	August 2023 to April 2025
6.	Vhembe DM	<ul> <li>MUSINA WATER SERVICES AUGMENTATION INTERVENTIONS:</li> <li>Transfer of water from Zimbabwe (medium term) Beitbridge-Musina Integrated Water Supply Scheme (BMIWSS).</li> </ul>	DBSA/ DWS/LNW	Musina	R1.8bil	Jan 2024-Jul 2026
7.	Sekhukhune DM and Mogalakwena LM	<ul> <li>DWS and Lebalelo Partnership Projects: The purpose of the Olifants River Water Resources Development Project Phase 2 (ORWRDP-2) is to develop the infrastructure required in the Middle Olifants River (in the areas of Sekhukhune and Mogalakwena Districts of Limpopo) to meet the water demands in the area.</li> <li>This Includes the building of 2 dams (De Hoop and Flag Bashilo dams), and the construction of bulk pipelines and pump stations as part of the conveyance system.</li> <li>De Hoop Dam Scheme to Polokwane _(Phase 1)_38</li> <li>Flag Boshielo Phase 2 (96)</li> </ul>	Libalelo Association	Sekhukhune DM and Mogalakwena LM	R1.8bil Actual	2030
8.	Sekhukhune DM	Mouste East Water Scheme_ A sub-scheme to receive water from Loskop Bulk water scheme_through construction of storage and pumpstation	Sekhukhune DM	Moutse East Community	See budget for Loskop	2025
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#### MPUMALANGA

No.	WSA	Project Name	Implementing Agent	Area	Budget	Milestones
1.	Chris Hani LM, Sekhukhune DM	<b>LOSKOP REGIONAL BULK WATER SUPPLY:</b> Construction of Bulk water pipeline, reservoirs, pumpstations and secondary mains	Nkangala DM		R1,67 Bil	July2023 to June 2025
2.	Lekwa LM	<b>LEKWA WATER AND SANITATION SERVICES INTERVENTION</b> : - Standerton Extension 8 Internal Sewer Reticulation, Repairs / Refurbishment and Unblocking of Rooikoppen 1 and booster pump station3, Upgrading of Rooikoppen internal sewer reticulation Phase 1 & 4 sewer, Unblocking of Sewer Network in Sakhile Ext 6 & 7, Unblocking of Sewer Network in Sakhile Concur Drainage, Unblocking of Sewer Network Standerton CBD Drainage, Water Conservation & Demand Management in Rooikoppen,, Water Conservation & Demand Management in Concur, Water Conservation & Demand Management in Old Standertson, Rectification of Standerton Ext 8 Water, Refurbishment of Standerton Abstraction, Refurbishment / Repairs of Standerton WTW's, Upgrading of Standerton Sewer Pump Stations (Vaal & Muller), Upgrading of Standerton Sewer Pump Stations (Taljaard), Upgrading of Pump Stations and Bulk Sewer for Morgenzon, Operation and Maintenance of sewer pump station in Standerton & Morgenzon	Gert Sebande DM	Standerton, Morgenzon	R350 mil	April 2023 June 2024







#### NORTH WEST

ID	Activity	Timelines	Progress
1.	<ul> <li>Ministerial Intervention was set-up by Minister and Premier of NW to intervene in all water and sanitation projects under the theme "Operation Bulela Metsi". The Work will be done across the 4 DMs</li> <li>Dr Kenneth Kaunda</li> <li>Dr Segomotso Mompati</li> <li>Bojanala District</li> <li>Ngaka Modiri Molema</li> </ul>	Dec 2022 to June 2024	Underway
2.	1 <sup>st</sup> Phase of Project Implementation of Short Term to be implemented. (Technical Team in each WSA to lead the process)	July 2023 – June 2024	On going
	SLA Drafted and submitted to WSA	April 2023	Achieved
	Internal engagement with DWS-CU	April 2023	Achieved
	Appointment of PSP by WSA	April 2023	On going
	Some WSA developed Technical Reports	April 2023	On-Going
	Council Approval for adoption of SLA and appoint DWS-CU	June 2023	Not Achieved





#### NORTH WEST ACCELERATED PROJECTS

Nr	PROJECT NAME	WSA	Budget	PROGRESS TO DATE
1.	Brits Water Treatment Works	Madibeng LM	R134,8mil	The upgrade is 94% complete for the overall civil works at the Water Treatment Works (WTW). The civil works portion of DWS-CU was planned to be completed by end of January 2023.
2.	Moretele South Bulk Water Supply Project	MoretelE LM	R30mil	Construction of a new reservoir and 32Km pipeline in Moretele Far North, connected to the klipdrift WTW and pipeline .Contractor handed site in March 2023 .10% progress registered.
3.	Setlagole Bulk Water Supply	Ngaka Modiri Molema DM	R8 mil	Construction of low voltage reticulation supply, installation and commissioning of transformers, generators, mcc, telemetry, building electrical & associated works,_85 % Physical progress
4.	Mafikeng South Bulk Water Supply	Ngaka Modiri Molema DM	R30mil	The Project involves upgrading of the Mmabatho Water Treatment Works 20MI/d refurbished plant to 30 MI/d by the construction of new additional flocculant mixing channels, settling tanks, dissolved air flotation tanks and rapid gravity sand filters 95% physical progress
5.	Potchefstroom Bulk Water Supply	JB Mark LM	R43,9mil	Construction of the new 25MI reservoir in Ikageng, Progress on civil work is 20%,
6.	Taung/Naledi BWS Project		R95,mil	Progress : Project is 77% complete (Distribution). Progress erratic with sub-contractor and local labour payments not being made on time causing stoppages. Pipeline to Makwating underway, sub-contractors on site. A further 3km pipeline to be installed by DWS-CU to connect WTW and command reservoir
7.	Bloemhof BWS Project		R80,mil	Construction of Rising Main 2 – Rising pipeline from the New Olievenfontein Pump Station to the New Vaalpoort Storage Tank. Water will be pumped through a 350 mm ND pipeline over a distance of approximately 25 km. The project is 90% complete and progressing well.
8.	Kagisano Molopo BWS Project Bona Bona Cluster 1	Dr Ruth DM	R80,mil	<ul> <li>Approval was received on 14 February 2023. Contractor to be on site beginning of Apr 2023</li> <li>Municipality had to implement Section 116 (3) of the MFMA to amend the existing contract and it took about 2 months to complete.</li> <li>Finalising community engagements to introduce the project to the community</li> </ul>
9.	Tlapeng BWS Project Cluster 2		R85mil	A follow up meeting was held on 10 May 2023 and we will submitted the additional required information by 19 May 2023
	TOTAL		R600 mil	





#### NORTHERN CAPE

No.	WSA	Project Name	Implementing Agent	Area	Budget	Milestones	
1.	Kgatelopele LM	Phase1 - Outfall Sewer Line (Rising main) Construction of Kuilsville - , Danielskuil – and Tlhakalatlou rising mains. Construction of fencing of Danielskuil existing WWTW	Construction of Kuilsville - , Danielskuil – and Tlhakalatlou rising mains.	- ·	Danieskuil	R61,5 Mil	Jun 2023 – Mar 2024
2.		<b>Phase 2 - Upgrade of the Danielskuil WWTW</b> Construction of anaerobic ponds, facultative and maturation ponds, dry beds, sewer pump stations, 250mmØ rising main and replacing existing rising mains.			R185,5 Mil	Jun 2025 – Jun 2027	
3.	Siyancuma	Bucket Eradication Programme Construction of 596 pour flush toilets	DWS	Campbell	R136 Mil	May 2023 – July 2024	
4.	Sol Plaatje	Kimberley bulk water supply Phase 1 - Emergency Interventions Phase 2 - Emergency Intervention Medium term interventions Scope entails: WCDM, installation of zonal bulk meters, replacement of old AC pipelines, upgrading of WTW's, upgrading of pumpstations, construction of additional storage	Sol Plaatje LM	Kimberley Ritchie	R1,9 bil	April 2023 – Mar 2027	





#### WESTERN CAPE

No.	WSA	Project Name	Implementing Agent	Area	Budget	Milestones
1	Breede Valley	Increase of the Brandvlei Dam canal Ministerial intervention took place during his visit in November 2022. The project was fast tracked and was been completed. Minster launched the Project on 10 February 2023	DWS Construction	Worcester	R21mil	Commissioned in Feb 2023
2	Drakenstein	Sewer Spillages Ministerial intervention on sewer spillages in the Drakenstein Municipality to resolved the sewer spillages and the municipality in the area of Mbekweni and other surrounded towns. This project will unlock the low cost housing that has been awaiting for some years and it will improve the blue and green drop status within the entire municipality.	DWS Construction	Paarl	R1.4bil	Three phases 2025 /2026
3	George Municipality	Water security to unblock low cost housing, improve water quality thereof though the upgrades of pumpstations, upgrades of WTW	George Municipality	George Municipal area	R 1.1 bil	June 2022 to July 2025
4.	Other Municipalities	13 Municipalities for refurbishment of water and sanitation infrastructure. The Provincial Office has implemented the anti- vandalism awareness campaigns in Municipalities in the following municipalities Matzikama, Cederberg, Bitou and Beaufort West,	Matzikama, Cederberg, Bitou and Beaufort West	Matzikama, Cederberg, Bitou and Beaufort West	R148 mil	April 2023 to July 2024
5.	City of Cape Town	The department issued directives and compliance on sewer spillages in cape town areas. The metro has since developed an accelerated plan to refurbish, clear blockages and replace some of the damaged infrastructure. The department is monitoring progress on a monthly basis	СоТ	CoT residential areas. E.g. Kayelitsha	TBC	April 2023 to July 2025 (on-going)





#### **METROPOLITAN MUNICIPALITIES**

No.	WSA	Project Name	Implementing Agent	Area	Budget	Milestones
1.	Gauteng Metros, DMs and LMs	<ul> <li>The Ministerial Intervention in Gauteng Municipalities to address the water crisis that affected Ekurhuleni, City of Johannesburg, Tshwane Metro as well as DMs and LM.</li> <li>The Technical Tsk Team Lead by DWS has been put in place and strategic water and sanitation projects and timelines has been set with respective budgets.</li> <li>Vlakfontein resevors of 210ML/Day completed</li> <li>Zuikerbotch punp station to add 150MI/day completed</li> </ul>	Rand Water and DWS	Gauteng Province	R35 bil	June 2023- July 2028
2.	eThekwini Metro	Ministerial Intervention to implement projects for purposes of alleviation of sewer spillages in eThekwini Metro. The Initiative entails refurbishment, upgrades, operations and maintenance of 10x WWTW that contribute 90% of the overall effluent treatment in eThekwini Metro. The intervention will improve water and sanitation services, reduce blockages, and water leaks while improving revenue collection. The intervention support will be running for initial 3 years and is further proposed for 20 yr lease agreement.	uMgeni Water	Ethekwini	R650mil/year	July 2023 to June 2026
3.	City of Tshwane	Ministerial Intervention Support to address the state of emergency on water and sanitation services in Tswane in Hammanskral. The intervention aims to alleviate the effluent discharge from Rooiwal WWTW into the Apies River and subsequent poor portable water quality from Temba WTW. The intervention seeks to refurbish, upgrades and maintain Rooiwal WWTW and Temba WTW.	Rand Water and DBSA	Hammanskraal	R3- R6.0bil	July 2023 to June 2027
4.	Mangaung Metro	Ministerial Intervention for the implementation and acceleration of the Weldbedacht Bulk Water Scheme Phase 2 to augment and reduce water losses from the bulk water system	Bloem Water	Mangaung Metro	ТВС	Estimated July 2025



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41