DEPARTMENT OF WATER AND SANITATION

STRATEGIC PLAN

(VOTE 41)

FOR THE FISCAL YEARS : 2025/26 to 2029/30

water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

Water if Life
Sanitation is Dignity

2030 NDP

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Executive Authority Statement

The 1994 democratic breakthrough represented a watershed moment in our collective quest to create a better life for all. We proceeded from the premise that access to water and sanitation is a fundamental human right and was accordingly enshrined in our Constitution. This was a decisive and fundamental departure from our ugly past.

Our democratic government believes that access to safe water and dignified sanitation is the most basic human need for health and well-being. The Department of Water and Sanitation is enjoined by Section 27 of the Constitution of the Republic of South Africa to ensure that everyone has access to sufficient water. This constitutional obligation places a huge responsibility on the department as water is a basic need. As a department we are on track towards ensuring the progressive realization of this right. Through appropriate legislation, namely, the National Water Act, the Water Services Act and the Water Research Act, the department will continue to discharge its mandate of supplying clean, running water and manage the available water resources.

While more work still needs to be, I can state without any fear of contradiction that, as a country, we have made remarkable progress since 1994 to expand access to clean water and sanitation. Statistics South Africa (Stats SA), in its General Household Survey of 2022, states that 89% of households in the country have access to piped water, including inside their dwelling or outside the yard. Stats SA records that when looking only at piped water access inside households' dwelling or yard, the number is at 75.8% as per General Household Survey.

South Africa has also made significant progress in the eradication of sanitation backlogs. Households with access to improved sanitation increased from 49% in 1996 to 84,1% in 2021 (Stats SA 2022). While this progress is worthy of celebration, as government we believe more work and challenges still lie ahead to address the current backlogs. We remain committed to expanding access to dignified sanitation and safe drinking water for all. It is a noble goal we will continue to pursue with every fibre of our being and every energy at our disposal. We cannot consider our freedom fully achieved and democracy attained until all South Africans are able to access adequate water and sanitation services. This is the solemn covenant we entered with our people.

Sadly, water scarcity is projected to increase with the rise of global temperatures as a result of climate change. Across the globe, demand for water is rising exponentially, owing to rapid population growth, urbanization and increasing water needs from agriculture, industry and energy sectors. South Africa is no exception. 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 and the impact of climate change. It is encouraging to note that delays in the implementation of surface water resource development projects in the past have now been addressed, and projects have been accelerated.

The water and sanitation sector in our country is confronted with numerous challenges. South Africa is one of the thirty most water-scarce countries in the world, and the demand for water is increasing as a result of economic and population growth. Yet, our average consumption of water is 218 litres per capita per day, compared to the international average of 173 litres per capita per day. Already, 75% of the available surface water has been captured in dams, and the remaining opportunities for capturing surface water are very expensive.

Given that South Africa is a water-scarce country, we all carry a duty to ensure sustainable management of water resources. This requires a good balancing act – that of meeting current water needs without compromising future water needs. Put simply, this means we must ensure that every citizen has access to clean water today but not at the expense of future generations.

As national government we continue to call on municipalities to impose water restrictions, upgrade water infrastructure, reduce water losses, attend urgently to stop leaks, stop illegal connections, enforce by-laws, improve billing and revenue collection. All of us carry a responsibility to use water sparingly and to pay for the water we consume.

The Constitution, National Water Act and the Water Services Act clearly define roles and responsibilities for the management of water resources and for providing water services in our country. The Department of Water and Sanitation is responsible for water resource management and taking regulatory action to protect our water resources, setting national minimum norms and standards for water services provided by municipalities, providing support to municipalities and intervening where these norms and standards are not being met. The provision of local water and sanitation services is the Constitutional and legal responsibility of municipalities.

For 2024/2025, our focus is on ensuring that all stakeholders in the value chain of water supply and wastewater management systems, are effective in line with their respective responsibilities. 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.

The recent Blue, Green and No Drop assessment by the department indicates that our quality of drinking water, management of water supply and wastewater systems is deteriorating. This assessment requires that the department as well as the relevant role players, put more effort to ensure that necessary interventions are undertaken to ensure that the quality of water supply systems comply and meet the acceptable standards.

We are in the process of reviewing two pieces of legislation, the National Water Act and Water Services Act to further empower the Minister of Water and Sanitation to take appropriate and necessary steps to hold municipalities accountable for complying with norms and standards, as they are at the coalface of providing clean drinking water and dignified sanitation to the citizens.

The department remains committed to its constitutional mandate of ensuring that everyone has access to quality, clean, drinking water and safe sanitation, and that our water resources are protected.

P MAJODINA (MP)

MINISTER OF WATER AND SANITATION

Accounting Officer Statement

The Department of Water and Sanitation, through its various programmes, will continue to manage the country's water resources effectively, ensuring equitable and sustainable socio-economic development and universal access to water and dignified sanitation. The planned activities for the 2025/26 medium term development plan are as follows:

Within the administration programme, the Department aims to comply with corporate governance prescripts. This includes fighting corruption in the water and sanitation sector at all government levels through collaboration with law enforcement agencies to recover funds from previous years' irregularities. Significant progress has been made to address historical improper expenditure challenges that affected the Department in previous years. For the 2025/26 financial year, plans are in place to continue implementing the financial and recovery plan. Additionally, the Department plans to improve its procurement by implementing an infrastructure procurement strategy. Another priority is to enhance billing and revenue collection across the water value chain. The Department has incorporated the digitisation commitments as per the Department of Public Service and Administration (DPSA) requirements.

Plans for water resource management include planning and implementing several water resources infrastructure projects to ensure the security of water supply for the country. The Department also plans to diversify the water mix by guiding and developing other water sources (e.g., groundwater) to reduce the significant reliance on surface water.

For the 2025/26 financial year, the Department plans to strengthen regulatory interventions to address pollution of the environment and communities from wastewater. The regulatory interventions also include improving the efficiency of water use license turnaround times while promoting the transformation of water use. Another priority for the Department is to establish and/or transform water resource institutions (e.g., transformation of irrigation boards to water user associations).

Within the water services management programme, the Department plans to strengthen its role in regulating, supporting, and intervening in municipalities where water and sanitation services are deteriorating. Poor service delivery and the published 2023 Green Drop progress report, Blue Drop Report, and No Drop report emphasised the need to prioritise support to failing municipalities. Additionally, water use efficiency, demand, and conservation management are other priorities for the Department to address non-revenue water at the municipal level. Reconfiguring the water boards' operating areas to support the Department in implementing its mandate is another important priority for the upcoming financial year.

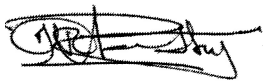
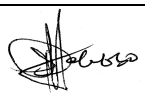
DR SD PHILLIPS

Department of Water and Sanitation

Official sign-off

It is hereby certified that this Strategic Plan:

- It was developed by the management of the Department of Water and Sanitation under the guidance of P Majodina (MP).
- Considers all the relevant policies, legislation, and other mandates for which the Department of Water and Sanitation is responsible.
- Accurately reflects the impact and outcomes which the Department of Water and Sanitation will endeavor to achieve over the period 2025/26 – 2029/30.

Ms O N V Fundakubi DDG: Corporate Support Services	
Ms F L. N W Lusenga DDG: Provincial and Entity Governance and International Co-operation	
Ms D Mochotlhi DDG: Water Resource Management	
Mr L Mabuda Acting DDG: Infrastructure Management	
Mr CX Zwane DDG: Regulation, Compliance and Enforcement	
Dr RP Mathye DDG: Water and Sanitation Services Management	
Mr F Moatshe Chief Financial Officer	
Ms B. Manyakanyaka Head official responsible for planning	
Dr SD Phillips Director-General	
M D Mahlobo (MP) Deputy Minister of Water and Sanitation	
I Seitlholo (MP) Deputy Minister of Water and Sanitation	
P Majodina (MP) Minister of Water and Sanitation	

PART A

MANDATE

1. Constitutional Mandate

1.1 Chapter 2 on the ***Bill of Rights*** makes the following provisions:

- Section 10 - "everyone has inherent dignity and the right to have their dignity respected and protected." The same provision also applies to sanitation.
- Section 24(a) - "everyone has a right to an environment that is not harmful to their health or well-being"
- Section 27(1)(b) - "everyone has the right to have access to sufficient water"
- Section 27(2) - obliges the state to "take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation" of everyone's right of access to sufficient water.

1.2 Chapter 6 on ***Provinces*** makes the following provisions

- S139 Provincial intervention in local government-

(1) When a municipality cannot or does not fulfil an executive obligation in terms of the Constitution or legislation, the relevant provincial executive may intervene by taking any appropriate steps to ensure fulfilment of that obligation.

1.3 Chapter 7 on ***Local Government*** makes the following provisions

- S154 Municipalities in co-operative government-

(1) The national government and provincial governments, by legislative and other measures, must support and strengthen the capacity of municipalities to manage their own affairs, to exercise their powers and to perform their functions.

1.4 Schedule 4 on ***Functional Areas of Concurrent National and Provincial Legislative Competence*** makes the following provisions:

- Water and sanitation services limited to potable water supply systems and domestic wastewater and sewage disposal systems

2. Legislative & Policy Mandates

The legislative mandate of the water and sanitation sector seeks to ensure that the country's water resources are protected, used, developed, conserved, managed and controlled through regulating and supporting the delivery of effective water supply and sanitation.

2.1 Legislative mandate

The Department and the sector draw their primary mandate from the following legislation:

2.1.1 The National Water Act, 1998 (Act No 36 of 1998) as amended.

The National Water Act seeks to ensure that the country's water resources are protected, used, developed, conserved, managed and controlled in a sustainable and equitable manner for the benefit of all people.

The Act assigns the national government as the public trustee of the water resources. Acting through the Minister, it has the power to regulate the allocation, use, flow and control of all water in the Republic. It also identifies the need to establish suitable institutions in order to achieve its purpose. In addition, it provides for the development of the National Water Resources Strategy (NWRS) which must be regularly reviewed and the requirement of each Catchment Management Agency (CMA) to develop a catchment management strategy for the water resources within its jurisdiction.

2.1.2 The Water Services Act, 1997 (Act No 108 of 1997)

The Water Services Act prescribes the legislative duty of municipalities as water service authorities to supply water and sanitation according to national norms and standards. In addition, it regulates Water Boards as important water service providers.

The Act compels the Minister to maintain a National Water Services Information System and to monitor the performance of all water services institutions, as well as providing for the monitoring of water services and intervention by the Minister or the relevant Province when necessitated.

With reference to a "right to basic sanitation", this is the primary legislation relating to sanitation in South Africa. It further defines basic sanitation as: 'The prescribed minimum standard of services necessary for the safe, hygienic and adequate collection, removal, disposal or purification of human excreta, domestic wastewater and sewerage from households, including informal households'. Further regulations, norms and standards pertaining to sanitation can be found in the Housing Act (No.107 of 1997).

It acknowledges that although municipalities have authority to administer water supply services and sanitation services, all government spheres are required to works towards this object, within the limits of physical and financial feasibility.

2.1.3 The Water Research Act, 1971 (Act No 34 of 1971)

The Water Research Act establishes the Water Research Commission and the Water Research Fund, and thus promotes water related research and the use of water for agricultural purposes, industrial purposes or urban purposes. The Minister appoints members of the Water Research Commission (the Commission) and thus exercises executive oversight over the Commission.

2.1.4 South African National Water Resources Infrastructure Agency SOC LTD Act

The South African National Water Resources Infrastructure Agency SOC Ltd Act establishes the National Water Resources Infrastructure Agency SOC Limited as a vehicle to achieve the strategic objectives of government to eradicate poverty and to ensure sustainable and equitable development, including promoting the State's socio-economic and transformation objectives. The law seeks to address the current fragmentation in water resource management between the Department of Water and Sanitation, the Trans-Caledon Tunnel Authority (TCTA) and the Water Trading Entity, and to establish an agency that can raise funds on its own balance sheet to increase investment in water infrastructure.

2.2 Policy framework

2.2.1 National Water Policy Review (2013): the policy review determined unintended oversight and gaps in the existing water policies to provide amendment to address the following:

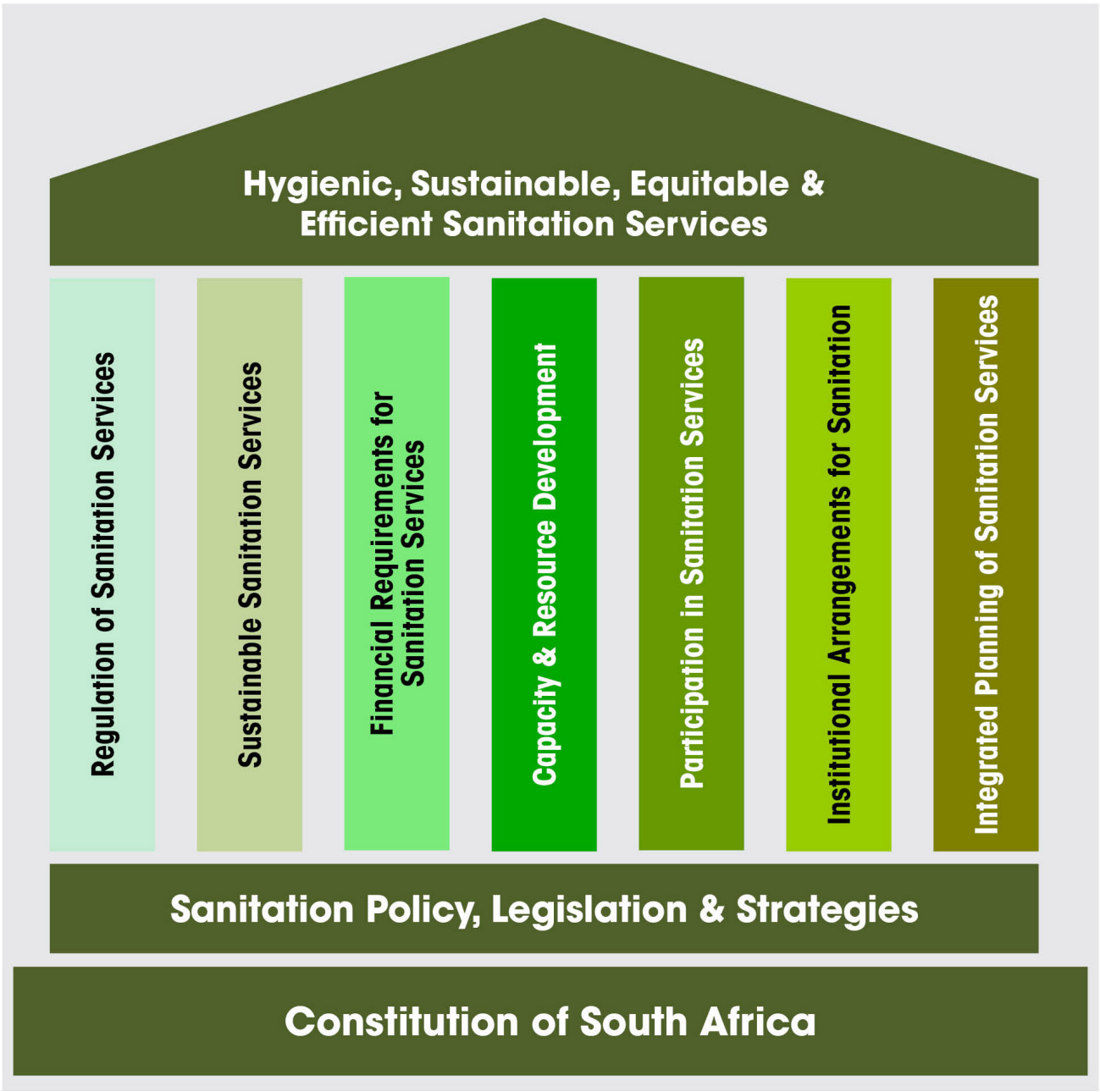
(a) ***Use-it or Lose-it:*** *Any authorised water use (including existing lawful use) unutilised for a specified period should be reallocated to the public trust. This water will be reallocated to address social and economic equity.*
(b) ***No water trading***: No form of temporary or permanent trading between authorised water users. The obligation for any holder of an entitlement to use water; if it is no longer utilised, is to surrender such use to the public trust.
(c) ***Prioritising social and economic equity*****:** The decision making will have equity as the primary consideration. Priority will be accorded to water use authorisation applications that meet the equity requirement, as provided in the regulatory instruments.

(d) ***Multiple water use approach in planning*:** A multiple water use approach incorporating all water uses in an area including water supply, must be adopted in planning of bulk water infrastructure. This approach will also have equity and transformation as a priority.

(e) ***Access to basic water supply*:** A water service authority (WSA) should work progressively or incrementally towards providing higher levels of a sustainable water supply to all households and public institutions, including rural areas. When planning, a WSA must consider a basic water supply which addresses current domestic and productive use requirements, as well as future growth in these requirements.

(f) **Free basic water supply to indigent households:** Free basic water supply will be provided to indigent households only.

2.2.2. National Sanitation Policy (2016): the policy review addresses the entire sanitation value chain (namely the collection, removal, disposal or treatment of human excreta and domestic wastewater, and the collection, treatment and disposal wastewater). The figure below indicates the categories under the seven (7) pillars of the policy.



2.2.3. Other water and sanitation policies and strategies include the following:

(a) White Paper on Water Supply and Sanitation (1994)

(b) White Paper on National Water Policy for South Africa (1997)

(c) White Paper on Basic Household Sanitation (2001)

(d) Strategic Framework for Water Services (2003)

(e) National Water Resources Strategy, Second Edition (2013)

(f) Water and Sanitation Climate Change Policy (2017)

2.3 Legislative and policy mandates for cross cutting priorities

2.3.1 Employment Equity Act 55 of 1998: section 20(1) requires the development of an employment equity plan that will achieve reasonable progress towards employment equity in the workforce

2.3.2 Preferential Procurement Policy Framework Act 5 of 2000: the 2017 regulations indicate the requirements for local production and content; subcontracting conditions

2.3.3 The Broad-Based Black Economic Empowerment Act 53 of 2003:

2.3.4 National Youth Policy 2015-2019

2.3.5 Youth Accord Pillars: (Youth Employment Accord April 2013)

2.3.6 South African National Policy Framework for Women Empowerment and Gender Equality (NPFWEGE), 2000

2.3.7 Job Access Strategic framework for recruitment, employment and retention of people with disabilities (2006 – 2010)

2.3.8 White Paper on the Rights of People with Disabilities in South Africa 2016

3. Institutional policies & strategies governing the five-year planning period

The National Development Plan (NDP) predicts that before 2030, all South Africans will have affordable, reliable access to sufficient safe water and hygienic sanitation[1]. The Industrial Policy Action Plan (IPAP) also sets out the intentions of South Africa in terms of expanding the manufacturing sector, which will increase water demand. To balance requirements and supply, South Africa will therefore need to reduce water demand, as well as increase supply for a growing population and economy to ensure water security.

In support of the NDP, the Medium-Term Development (MTDP) for 2024 to 2029 seeks to address unemployment, inequality and poverty. The MTDP indicates that significant work still needs to occur to transform the status quo onto a new development trajectory. To achieve this, it identifies seven priorities namely economic transformation and job creation; education, skills and health; consolidating the social wage through reliable and quality basic services; spatial integration, human settlements and local government; social cohesion and safe communities; a capable, ethical and developmental state; and a better Africa and world. In addition, it requires government to put a concerted effort in prioritising initiatives that support women, youth and people with disabilities.

3.1 **National Water Act Amendment Bill**: the amendments seek to provide for the equitable and sustainable use and protection of water for current and future generation in support of the guiding principles of National Water Act (NWA).

[1] Source: National Development Plan 2030, National Planning Commission (2012: 178)

3.2 Furthermore, the Act is amended to prohibit undesirable consequences of private water trading; and to ensure redress of the past discrimination by regulating the acknowledgement of the existing lawful water use. The amendment also seeks to transform water user associations to ensure equitable water allocation.

3.3 **Water Services Amendment Bill**: the amendments seek to ensure sustainable water supply; and to regulate the provision of water and sanitation services by Water Services Authorities. The Bill is further amended to provide for the introduction of legal requirements for water services to be provided by an entity that has an operating license. It also seeks to strengthen enforcement by amending certain sections of the existing Act. Also, it seeks to define functions that water service providers are accountable for.

3.4 **Joint National Wetland Management Policy:** The policy recognised that wetlands are a critical source of water and for natural biodiversity. For a semi-arid country like South Africa that receives below average rainfall of approximately 497mm, far below the world average of 860mm), wetlands become critical water factories, and their protection is therefore priceless. Between 2016 and 2018 the DWS developed the Draft Wetland Policy from the 2016 Position Paper. After consultations, it was recommended that a Joint National Wetland Policy between the DWS and the Department of Forestry, Fisheries & Environment and the Department of Agriculture, Land Reform and Rural Development. The sustainable management of wetlands has also been recognised as a key activity that contributes towards achieving various national and international commitments, goals and priorities, including the National Development Plan (NDP)'s goal for an environmentally sustainable and resilient country, the 2030 Sustainable Development Goals (SDGs), the African Agenda 2063, international and national Climate Change mitigation and adaptation goals and the post 2020 Agenda set by the Convention on Biological Diversity, amongst others.

3.5 **Integrated Water Quality Management policy**: the policy seeks to develop an intergovernmental water quality management approach which would facilitate an integrated response to address water quality management challenges in the country. The policy would strengthen the existing integrated water quality management strategy that identified priority programmes to be implemented country wide.

3.6 **Revised water pricing strategy**: The strategy review seeks to improve the financial viability of government's bulk raw water business to ensure that this scarce resource is valued by all citizens. One of the major changes of the review is to replace the Return on Asset to Future Infrastructure Built Charge over 10-year rolling period.

3.7 **National Water and Sanitation Master Plan second edition:** the plan operationalises the National Water Resource Strategy (NWRS) and focuses on mobilising the commitment and efforts of all role players and stakeholders in the water and sanitation sector towards achieving the desired future state of the sector, as defined by the Government's vision, goals and targets until 2030 (NDP, SDGs, MTDP and other key drivers). It provides a critical overview of the present state in the sector and outlines the key challenges the sector is currently facing, together with a consolidated plan of actions required to enable the achievement of the set targets. The plan of actions includes a detailed schedule of consolidated and prioritised interventions, actions, investments, projects, and initiatives.

4. Relevant Court Rulings

Constitutional Court Case: Mazibuko and others v City of Johannesburg and Others (CCT 39/09) (2009) ZACC. In this case the Constitutional Court recognised that water is life and that everyone has the right to sufficient water.

PART B

STRATEGIC FOCUS

5. Vision

Equitable and sustainable water and sanitation that support socio-economic growth and development of the well-being of current and future generations.

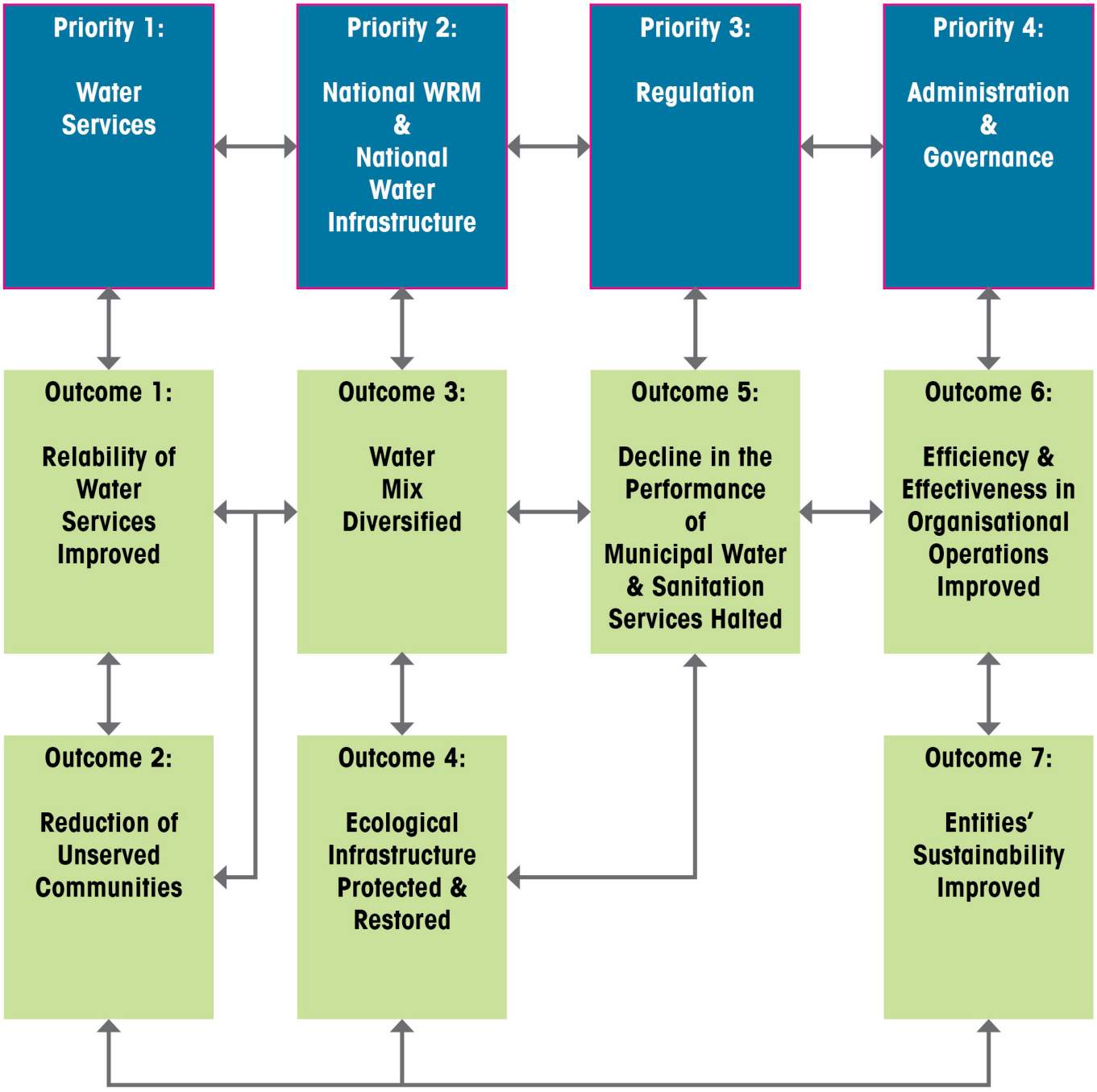
6. Mission

- To ensure the universal access of all South Africans to equitable water resources and sustainable water and sanitation services, by:
- Protecting, developing, conserving, managing, and regulating water resources.
- Managing, regulating, and providing efficient and effective water and sanitation services.
- Providing strategic leadership and evidence-based policy direction to a coordinated water and sanitation sector for improved sector performance and service delivery.
- Building the skills and capabilities of the sector and enhancing information management to inform decision making.
- Enhancing communication and stakeholder partnerships with communities and sector constituencies to advance the national development agenda.

7. Values

- Providing services impartially, fairly, equitably and without bias.
- Utilising resources efficiently and effectively.
- Promoting and maintaining high standards of professional ethics.
- Responding to people's needs; citizens are encouraged to participate in policymaking.
- Rendering an accountable, transparent, and development -oriented public administration.

8. Strategy Map of the Department



9. Situational analysis

The external and internal environment issues impacting on the Department's performance are summarised below:

9.1 External environment

South African river systems and catchments are characterised by a high spatial variation in rainfall and variations in catchment sizes and physical properties. These result in different river flow patterns and dynamics within catchments and across water management areas (WMAs), which affect water resource availability.

Aquifer (groundwater) storage is another expression of water availability in the country. It is noteworthy to report that in the past decades, groundwater utilisation has increased in the country's water mix in support of the National Groundwater Strategy, the National Water Resource Strategy 3 (NWRS-3), and National Water and Sanitation Master Plan (NWSMP). Groundwater is important because of its potential in adaptation to climatic-related pressures and the growing need to augment the conventional surface water supply systems.

South Africa is naturally inclined to drought conditions because of its semi-arid climate. The other persistent challenges posing a risk to water security are growing water demands, significantly high non-revenue water, water pollution, ageing infrastructure, and insufficient investment in water-related infrastructure.

Implications of climatic trends on water resources

South Africa experiences varying weather conditions with different seasons due to its unique geographical location and long coastline spanning 2,800 kilometres. The cold Atlantic Ocean on the west coast and the warmer Indian Ocean on the south and east coasts significantly influence both the climatic and weather conditions. In 2024, South Africa recorded its warmest year on record, with very hot conditions predominantly in the central and northern interior and this had ramifications on the water management environment.

The annual mean temperature anomaly for 2024, based on the data of 26 climate stations monitored by the South African Weather Services (SAWS), was about 0.9 ºC above the average of the reference period (1991-2020), making it the hottest year since 1951 (Figure 1). A warming trend of approximately 0.17 ºC per decade is indicated for the country from 1951 through to 2024, with a statistically significant level of five percent.

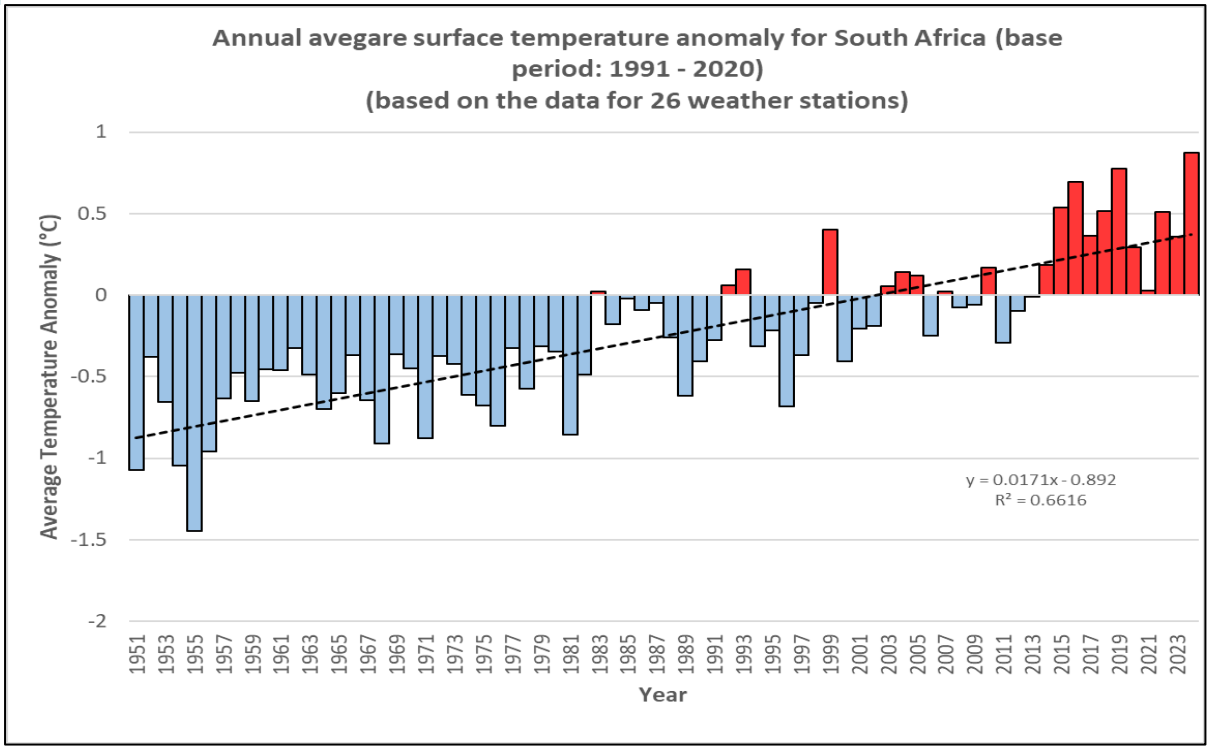


Figure 1: Average surface temperature deviation over South Africa based on 26 climate stations: 1951 - 2024 (base period: 1991 - 2020). The linear trend is indicated (Source: South African Weather Service).

For the past 11 years (since 2013), it is notable that the annual average surface temperatures have been above the long-term average. Higher temperatures exacerbate the evaporation of surface waters (i.e., dams, lakes, pans and rivers) and even soil water, reducing the quantity of available water that can be used for domestic, irrigation, and industrial use. In times of drought or when there has been limited rainfall, higher temperatures resulting from extreme temperature events can exacerbate already dry conditions by increasing evaporation, and associated high-pressure systems (often the systems causing heatwaves) can also block rain-bearing weather systems, leading to even drier conditions.

These extremely hot events typically increase domestic, agricultural, and industrial water demand. The heightened water demands and increased evaporation can easily strain water resources and water supply systems. Elevated temperatures can also impact water quality by promoting the growth of harmful algal blooms, increasing the concentration of pollutants in water bodies. In some instances, it has also been reported that extremely hot temperatures can even stress water infrastructure, leading to increased wear and tear on infrastructure components and, in extreme cases, may cause failures or disruptions in water supply systems.

Rainfall

A comparison of the rainfall anomalies (deviation from normal) for the hydrological year (October 2023 – September 2024) to the past three hydrological years across water management areas is presented in Figure 2 below.

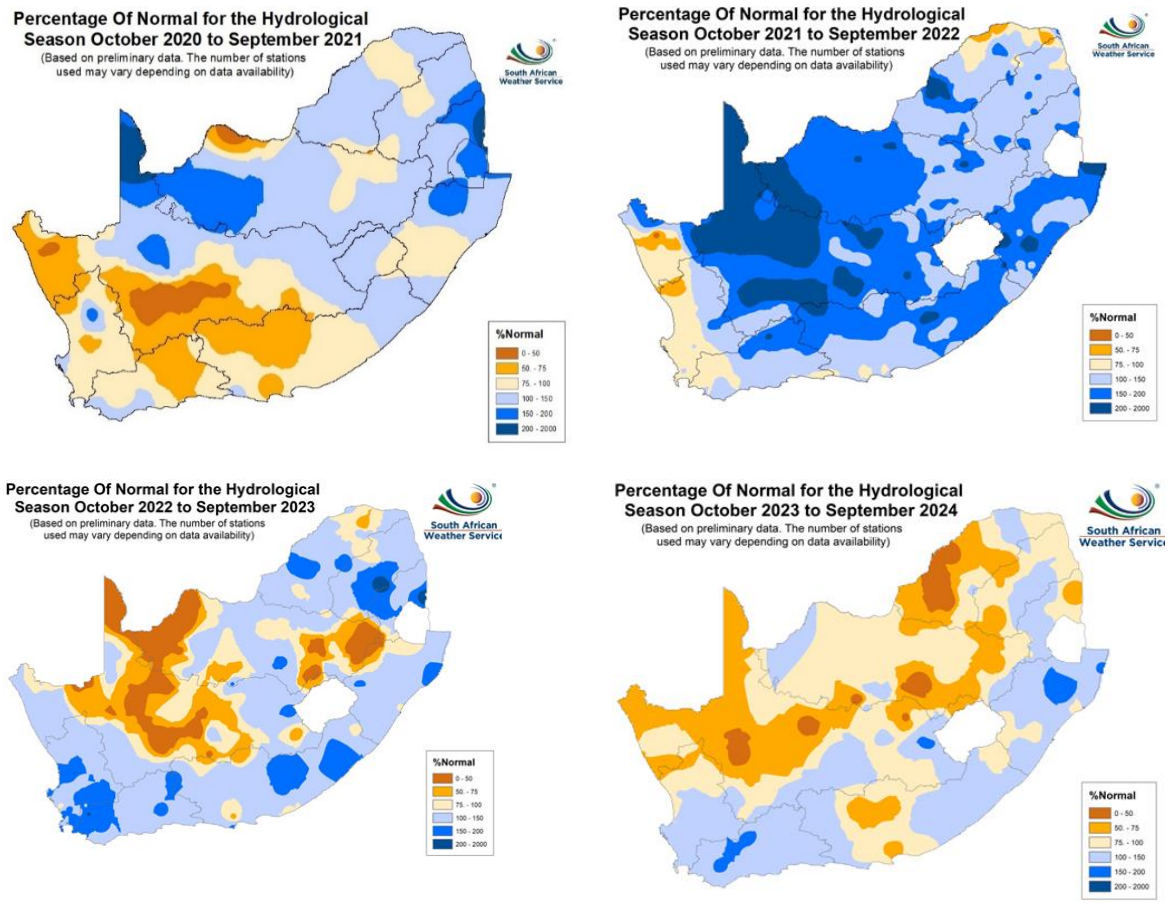


Figure 2 Percentage of normal rainfall for 2020/21, 2021/22, 2022/23 and 2023/24 Hydrological period. Blue shades are indicative of above-normal rain, and the darker yellow shades of below-normal rainfall (Source: South African Weather Services) https://www.weathersa.co.za/home/historicalrain)

The hydrological year (October 2023 – September 2024) is preceded by the three consecutive hydrological years which have fallen within the protracted 2020-2023 La Niña event. These preceding years have been characterised by wetter and cooler conditions that occurred for extended periods, mainly in the summers, as is typical during La Niña events. This three-year period also included above-normal rainfall over large parts of the winter rainfall region, which has now experienced several winters with near-normal to above-normal rainfall since the multi-year drought of the 2015–2018 period.

A significant feature of rainfall received during the hydrological year 2023/24 is near-normal or above-normal rainfall in the eastern and southern parts of the country. The winter rainfall regions covering the Western Cape Province (Breede-Gourits and Berg-Olifants Water Management Areas) have experienced wetter winters for the past three years. In contrast, some isolated central parts in the country have received below-normal rainfall for the past two hydrological years, namely the western parts in the Orange River catchment area and the upper parts of the Vaal River catchment area, which included areas falling within the Mpumalanga Province. At the end of the hydrological year – September 2024, the South African climate was in a neutral El Niño-Southern Oscillation (ENSO), with predictions of it further weakening.

Surface water storage

The total volume of surface water stored in dams nationally is expressed as a percentage of full supply capacity (FSC) based on weekly monitoring data from 221 dams nationwide, Figure 3 presents the national storage trends for the past five hydrological years.

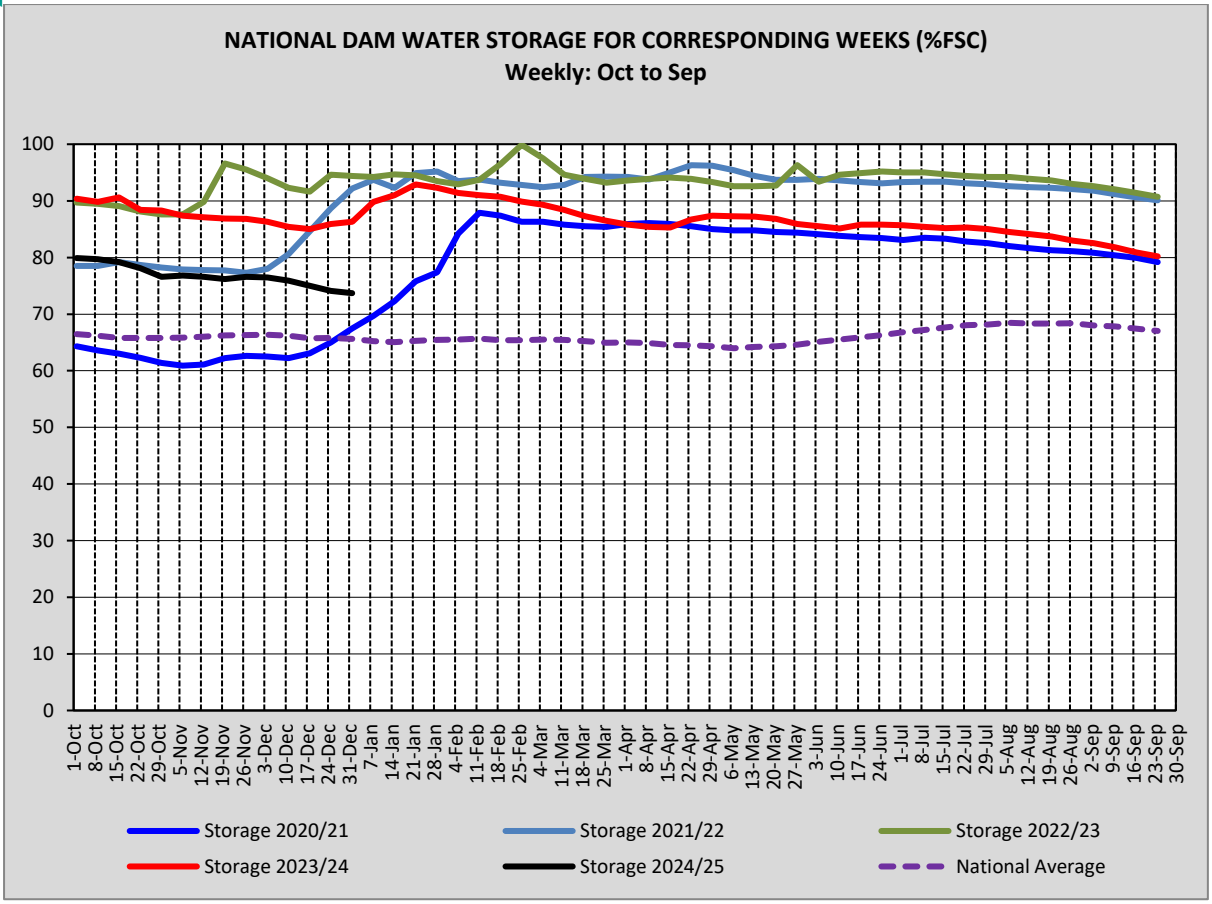


Figure 3 National dam storage levels for the past five years compared to the national average.

At the end of September 2024, the national dam levels were at 79.7% of FSC. This level was lower than the last three hydrological years, when national storage levels were greater than 90% of FSC. In September 2024, 16% of the national dams were above 100% of FSC (either full or spilling), 70% were between 50 and 100% of FSC, 11.72% were between 10 and 50% of FSC, while 1.4% were below 10% of FSC (critically low). The Middle-Letaba Dam and Glen Alpine Dam in Limpopo Province were the only dams at critically low levels at the end of the hydrological year. The national dam levels continued a declining trend to end-off the year at 73.6 % of FSC during end of December 2024.

The national dam storage levels for the 2021/22 and 2022/23 hydrological years remain the highest for most of the months in the past five hydrological years. This was due to the protracted 2020-2023 La Niña event which has resulted in above-normal rainfall in the past three consecutive hydrological years preceding the current hydrological year 2023/24.

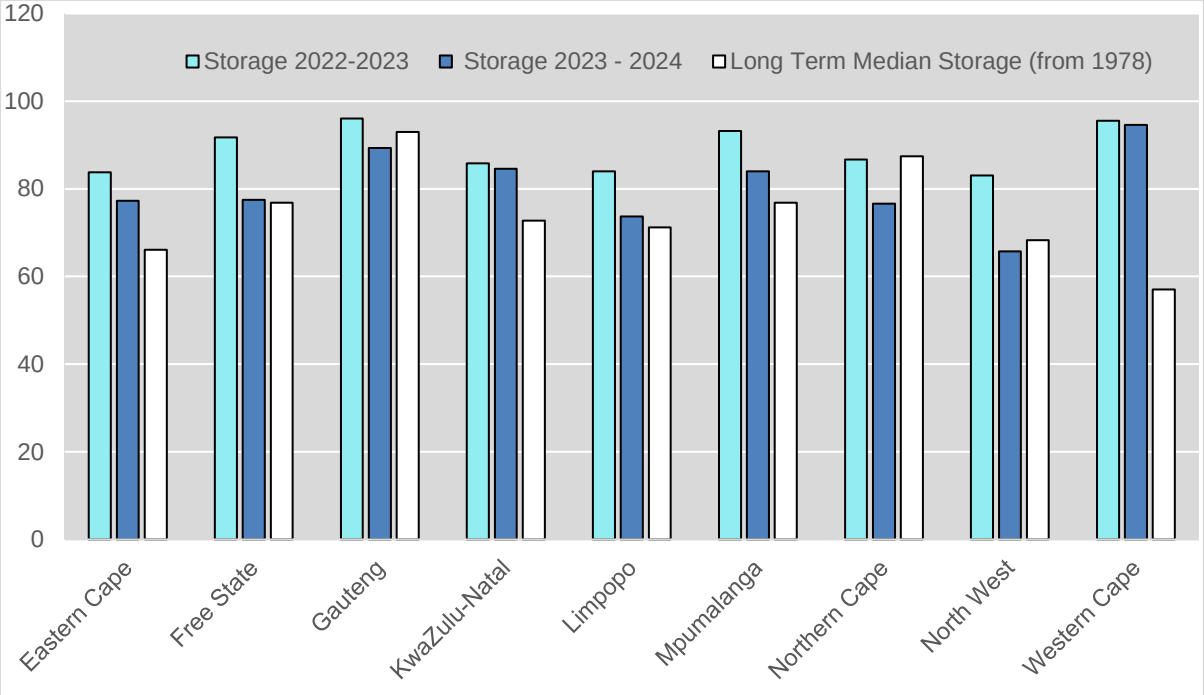


Figure 4 indicates the long-term median storage for each province during the 2023/24 hydrological year, compared with the previous hydrological year.

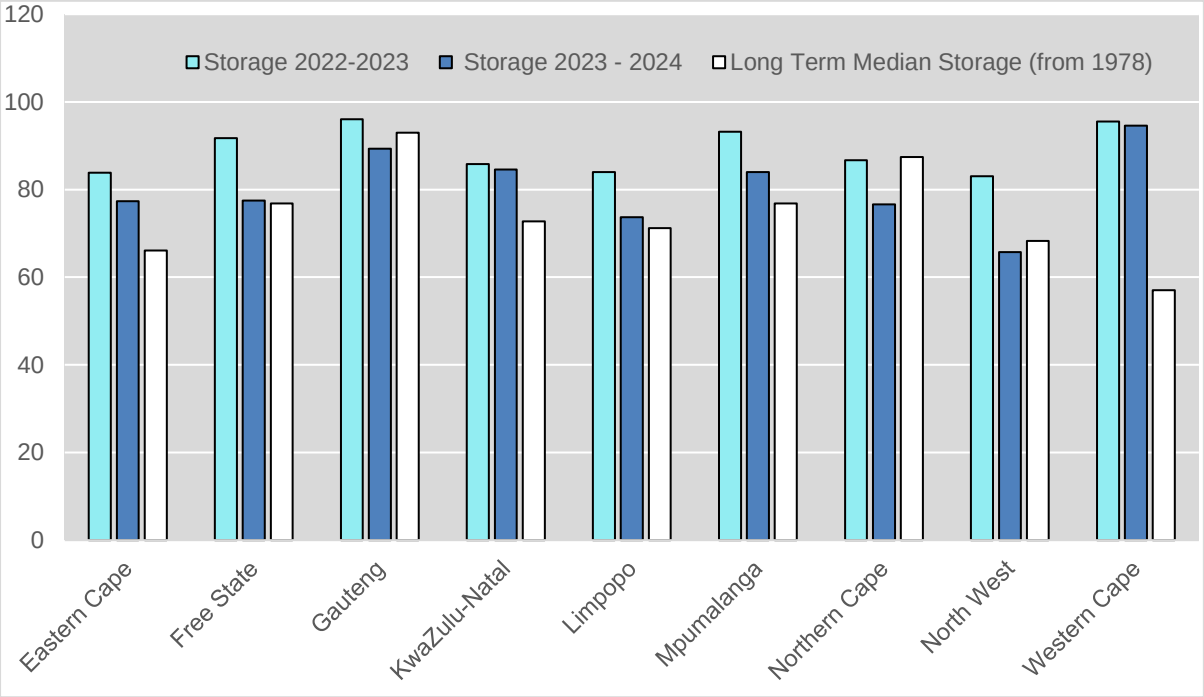


Figure 4 The provincial storage situation 2023/2024, compared with the previous hydrological year and the median.

For the hydrological year 2023/24, only Gauteng, Northern Cape and North West have dam levels below the long-term median storage levels. Moreover, the data show that all median storages for the 2023/24 hydrological year are lower than the previous reporting period. It can be noted that the past two conservative hydrological years of storage for the Western Cape have been significantly above the median. This results from normal to above-normal rainfall received in the Western Cape after the major 2015-2018 drought.

The comparison of the long-term historical median storage levels of water management areas and the past two hydrological years' median storages is presented below.

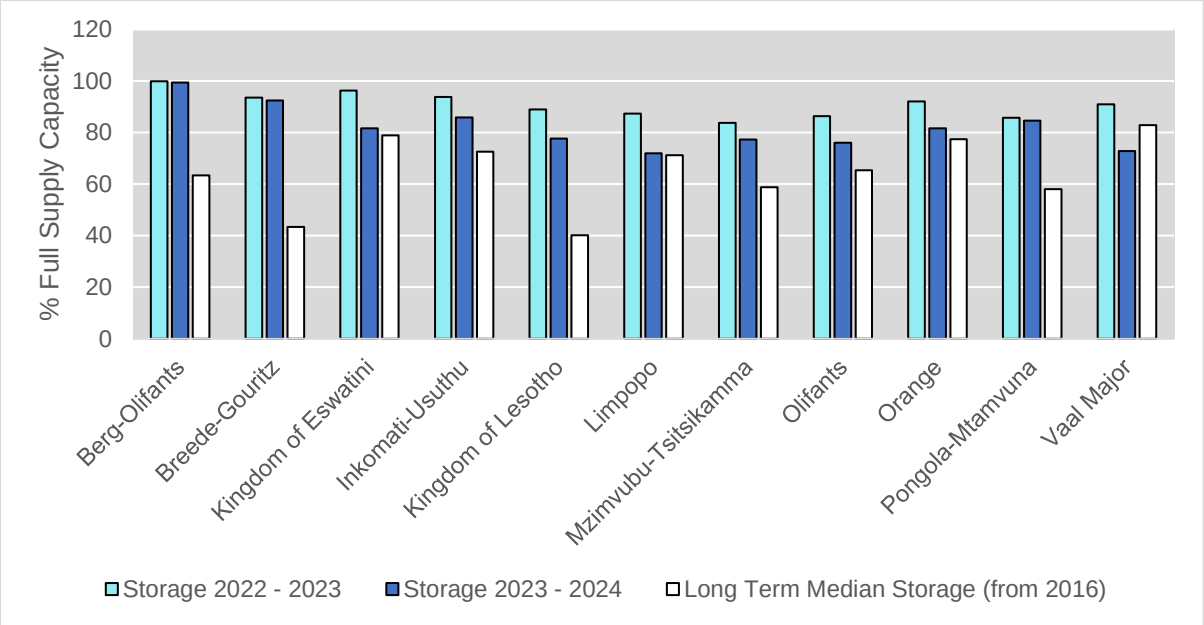


Figure 5: The storage situation in each WMA during 2023/24, compared with the previous hydrological year and the long-term median.

The 2023/24 storages across water management areas have been above the historical median for almost all water management areas, barring the Limpopo and Vaal Water Management areas, which have fallen below the long-term median storage for the hydrological year 2023/24. For instance, the Vaal WMA fell from 90.9% of FSC in 2022/23 to 72.8 of FSC in 2023/24.

Groundwater

The National groundwater level value is indicated as a percentage of the groundwater level status. The historical groundwater level monitoring record is assessed per borehole to ensure a detailed understanding of local conditions. The groundwater level status of the stations is averaged within the topo-cadastral map sheet grid (1:50 000).

Error! Reference source not found. below indicates the national average groundwater level status against the alert percentiles of the historical average groundwater levels. This graph provides a visual presentation to alert citizens about drought conditions and to implement restrictions on groundwater abstractions timeously before any negative impacts occur. The national average groundwater level status is classified into seven alert percentile ranges.

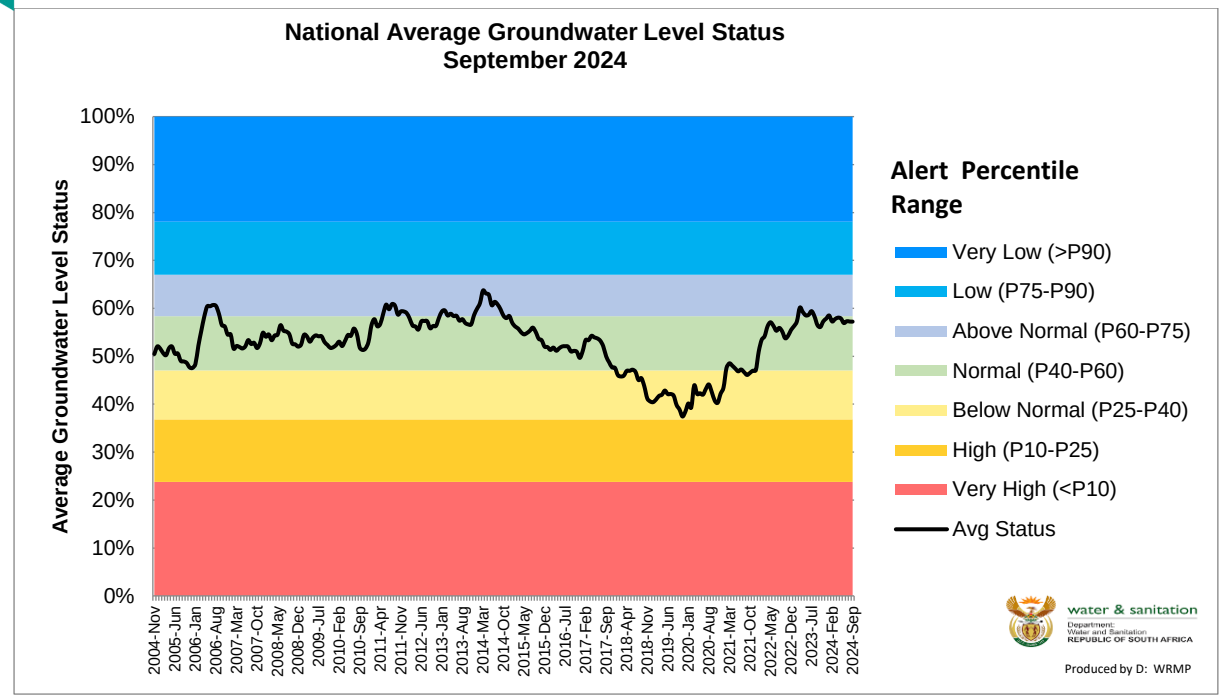


Figure 6: National average groundwater level status severity graph.

The national average groundwater level is at a normal alert percentile as at the end of September 2024. This indicates stability and recovery from the below-normal groundwater levels experienced between 2018 and 2020.

The observed normal national average groundwater level status can be attributed to the normal and above-normal rainfalls received since 2020, primarily due to the 2020-2023 La Niña event resulting in wetter and cooler conditions.

The current normal levels are significant as groundwater levels below normal may trigger the implementation of restrictions on groundwater abstraction to stabilise groundwater levels and mitigate risks of groundwater depletion. However, it should be noted that the groundwater level status depicts the groundwater level fluctuation over time and does not necessarily represent groundwater storage or availability.

Noteworthy Climate and Weather Events

In January 2024 relatively wetter conditions in the central and eastern parts of South Africa were experienced. Several significant adverse weather events in the east caused flooding, with the displacement of many people and extensive damage to infrastructure. The rainfall distribution was reflected in the surface temperatures, which were normal to below-normal temperatures in the central and eastern parts and 2-3°C above normal in the west.

On 13 March 2024, heavy rain affected parts of the Zululand region in KwaZulu-Natal with reports of flooded and damaged low-lying bridges and roads as well as fatal accidents after tropical storm Filipo made landfall in Mozambique. In April 2024, the rainfall situation changed considerably, with the central and southern parts receiving more than double the usual amounts for the month. These conditions were also accompanied by flooding and damage to infrastructure, e.g., a storm in Margate on the East Coast recorded 250 mm of rain in 24 hours on 14 April 2024. In June 2024, the southern and central parts received more than 200% of normal rainfall. These heavy rains resulted in high water levels and severe flooding in parts of Gqeberha and Kariega in the Eastern Cape. More than 1100 residents had to be evacuated to places of safety. In July 2024, the region of heavy rainfall shifted to the west causing infrastructure damage to homes, roads, power supply and schools. In contrast, the northern parts of the country experienced extremely hot conditions for winter. All these changes in weather patterns experienced during the hydrological year calls for more rigour to be factored into mitigation plans required to deal with future hydrological extremes.

In conclusion, water resources are key to continued socio-economic development and environmental sustainability of South Africa's livelihood. Despite remaining uncertainties regarding the exact nature, magnitude, and pattern of future rainfall changes in South Africa, it appears that water resources, already under pressure because of growing water demand in relation to a finite and limited supply, will be under even greater pressure in the future as a result of climate change. This is a result of the projected decrease in rainfall over much of the country, and increased evapotranspiration resulting from higher temperatures. Observation from DWS Climate Change Risk and Vulnerability Assessment studies highlight that climate change will magnify and exacerbate the challenges that are already in existence in the water sector. Some of these challenges are non-climatic, such as increase in population, poor land use, its planning and management, among others.

Higher temperatures and changes in extreme weather conditions (drought and floods) are projected to affect availability and distribution of rainfall, river flows and groundwater, and further deteriorate water quality. It is in this regard that the National Climate Change Response Strategy for the Water and Sanitation sector has come with response actions to ensure sustainable water availability in the changing climate era. The Climate Change Response Strategy aims to address increasing climate change related challenges to achieve the Sustainable Development Goals by being proactive in identifying the increasing risks associated with climate change. Some of those measures are in place and other need to be considered. Those measures include innovative technologies to reduce water demand and water supply, climate proofing critical infrastructure, consideration of climate change in planning, design and operation of infrastructure and integrated Water Resource Management.

Through the pillars of Climate Change Response Strategy for the Water and Sanitation sector; (i) improved collaborative governance, (ii) investment in climate resilient infrastructure, (iii) research, knowledge, and information management, (iv) water resource and sanitation management, and (v) net zero carbon for water and sanitation, we aim to ensure sustainable water availability for the country's socio-economic development.

Performance of water resource systems operation

The Department of Water and Sanitation developed guidelines for managing water supply systems during normal, drought, and flood conditions. These guidelines help ensure that the country's water resources are protected and used sustainably. As per the guidelines, formal operating rules have also been developed for the main water supply systems (WSS) in the country - such as the Algoa, Amathole, Greater Bloemfontein, Crocodile West, Integrated Vaal River (IVRS), Orange River System (ORS), Olifants, Polokwane, Umgeni, Umhlathuze and Western Cape.

An operating rule is a procedural guide for governing the regulation of water resources for a particular system/ dam to reconcile expected water requirements with availability. The purpose of operating rules is to manage abstractions, transfers, releases, and restrictions to enhance sustainable and equitable water supply and mitigation against risk of failure to supply water during drought periods. The department conducts system and dam performance monitoring against the operating rules to serve as an early warning against failure to supply water from the systems.

Results of the monitoring of the water supply systems' performance during 2024-2025 can be summarised as follows:

Algoa system comprises of five (5) dams namely Kouga, Churchill, Impofu, Groendal and the Orange-Fish-Sundays Transfer, serving the Nelson Mandela Bay Metro and surrounding areas. There was significant improvement in system total storage in the year of 2024 which saw all 4 out of 5 dams in the system full and spilling, the exception being the Impofu Dam in the Kromme subsystem. The Algoa water supply system is not fully integrated and as a result, some restrictions remained in place in the Kromme subsystem. Restrictions of 23% for domestic and industrial use and 43% on irrigation use were recommended for the 2024/2025 water operating year within the Kromme system. No water restrictions are imposed on the Groendal, Old Dams, Kouga, OrangeFish-Sundays and Groundwater systems.

Amathole system comprises of six (6) dams serving the Buffalo City, and some parts of Amathole District Municipality. On the decision date of 1 May 2024 all dams were at almost full capacity. No water restrictions required for the system from a water resource point of view in the 2024/2025 period due to sufficiently high storage at the decision date. The system remained in a good state in 2024.

Crocodile East system: comprises of Kwena Dam in Mpumalanga, serving mainly Mbombela Municipality and the Crocodile Irrigation Board. The Dam was full at the decision date of 1 May 2024. There are currently no water use restrictions imposed on the system for the current water operating year of 2024/2025. The dam was drawn down from May to November 2024 and has since recovered to its full supply capacity. Previously imposed water use restrictions have been lifted.

Crocodile West system: Major dams in the Crocodile West system are Hartbeespoort, Roodeplaat, Vaalkop, Roodekopjes and Klipvoor. This system supplies water to Tshwane, Madibeng, and Rustenburg areas. The system storage volume on 1st May 2024 decision date was on an average storage level of 91.56%. No restrictions were imposed on major dams in the system.

Greater Bloemfontein system: Comprises of four (4) dams namely Rustfontein, Knellpoort, Welbedacht and Mockes dams. The Annual Operating Analysis (AOA) was clear that the Greater Bloemfontein Water Supply System (GBWSS) is in deficit. As the water requirements continue to exceed the yield of the system, water restrictions are required when the total system storage at the start of the operating year is below 95%. The system storage was below 91% on 1 May 2024 decision date indicating restrictions needed to be imposed. 25% restrictions are required as recommended by the Annual Operating Analysis and adopted at the Stakeholders Operating Forum (SOF). Preparations for the lifting of the restrictions for the operating year can start when the total system storage starts to exceed 95% and the Rustfontein dam starts to spill. The combined system storage was recorded at 69.08% as of 6 January 2025. Hence, restrictions of 25% will continue until the system recovers to above 95%.

Integrated Vaal River system: the system comprises of fourteen (14) dams that serve mainly Gauteng Rand Water, Sasol and Eskom. The system storage was at a good state on the decision date of 1 May 2024. There were no restrictions recommended for the system during 2024/2025 period from the water resource perspective. An analysis was undertaken in May 2024 to assess the risk to the IVRS' performance because of the Lesotho Highlands Water Project tunnel outage, and to determine the impact of the shutdown on water availability to users in South Africa.

The analysis indicated the impact of the outage on the overall IVRS will be insignificant considering that dams in the IVRS such as the Sterkfontein Dam and others were relatively full. This meant that the closure of the tunnel for maintenance would not result in any disruption of water supply to Rand Water, and to the municipalities in Gauteng and other provinces which are customers of Rand Water. The standard operating rule is that Sterkfontein Dam releases water to the Vaal Dam when the Vaal Dam reaches its minimum operating level of 18%. The analysis indicated a 5% risk of this to occur in the 2024-2025 operating year (1 May 2024 – 30 April 2025). Hence, releases from Sterkfontein Dam to support the Vaal Dam were not envisaged during the 2024-2025 operating year and Sterkfontein Dam remains full to date. The Vaal Dam has also experienced a recovery, reaching 50% because of the recent rainfall in January.

Levuvhu / Letaba system: the system consists of three sub-systems which are Middle Letaba sub-system, Groot Letaba sub-system and Luvuvhu sub-system. The system has 14 dams. The system supplies water to both domestic and irrigation water use. Ebenezer and Dap Naude dams in Letaba

system supplies water to Polokwane system. Luvuvhu Letaba system has a combined average storage of 80% on the decision date of May 2024. Letaba system had 20% domestic restriction and 60% irrigation restriction on major dams which were Tzaneen and Ebenezer Dam. Luvuvhu dams had high storage and therefore did not require restrictions. Middle Letaba Dam on Middle Letaba sub-system had a low storage of 1.6% FSC level while Nsami Dam was at 28.12% FSC level. The operating rule for Middle Letaba sub-system allows for augmentation transfer of 5 million m³/a when Nsami Dam is below 70% FSC level.

Olifants system: the system consists of ten (10) dams supplying water to Sekhukhune District Municipality (DM) in Limpopo and Nkangala DM. The major dams in the system are Bronkhorstspruit, Middelburg, Witbank, Flag Boshielo, Loskop, Mkhombo and Blyderivierspoort. These dams are operated as 5 subsystems instead of one system because the model is not fully integrated yet. The combined storage volume for the dams in the May 2024 decision date was 93.7%. Based on the annual operating analysis conducted, no water restrictions were required during the 2024/2025 period.

Orange River System: the system consists of the Katse and Mohale Dams of the Lesotho Highlands Water Project as well as Gariep and Vanderkloof Dams of the Orange River Project supplying water for irrigation and Eskom's hydropower generation. The Orange River System storage was at 90.6% at the decision date of 1 May 2024. Restrictions were thus not required for the 2024-25 period as confirmed through the Annual Operating Analysis (AOA) and adopted at the Stakeholders Operating Forum (SOF).

Mossel Bay: the system comprises Klipheuwel Dam and Wolwedans dams, supplying Mossel Bay Town, Petro SA, irrigation and the ecological water requirements up to the Groot Brak estuary. The town of Mossel Bay is located on the coast in the Western Cape Province, in the Mossel Bay Local Municipality (MBLM) which lies in the Eden District Municipality. The system was at a combined storage level of 90% at the decision date of 1 May 2024. There are no restrictions imposed on the system for the current water operating year of 2024/2025. The operating strategy is as follows: Petro SA to be supplied fully from Wolwedans Dam. The Desalination plants to be utilized at full capacity only when the storage in Wolwedans dam drops to below 40% of its full supply capacity.

Polokwane system: the system comprises of nine (9) dams supplying Polokwane and surrounding areas. The combined storage of the dams was above 83.4% with the major dams namely, Flag Boshielo and Ebenezer at 100% of their full supply capacity at the decision date of 1 May 2024. Allocable resources based on the AOA 2024/2025 were 44.32 million m³/a compared to the target requirement of 61.34 million m³/a. Due to the deficit in supply versus demand, an overall water restriction of 17.02 million m³/a (~ 30%) was recommended on the system to bring the system into balance.

Umgeni system: The Umgeni system consists of six (6) dams namely: Spring Grove Dam, Mearns Weir, Midmar Dam, Albert Falls Dam, Nagle Dam, and Inanda Dam. The Umgeni WS system is augmented from the Mooi River System using the Mooi-Mgeni Transfer Scheme (MMTS). An annual operating analysis for the system for the 2024/25 period was conducted in May 2024. The analysis showed no restrictions for the 2024/25 operating year. However, the risks associated with the current over-abstraction of the resource above the licensed water allocation to supply the ever-growing demand is a concern to sustainable water supply from the system in the short to medium term. The analysis recommended a gradual reduction in water usage through water conservation strategies and water demand management measures, to mitigate risks and prevent exceeding the licensed water allocation.

Umhlathuze system: The Umhlathuze system comprises of Goedertrouw Dam and several lakes within the KwaZulu-Natal (KZN) northern coastline. The Umhlathuze system supplies water for irrigation, domestic, and industrial use within King Cetshwayo District Municipality. Goedertrouw Dam storage was at 97 % at the decision date on 1 May 2024. All lakes were full, and farm dams were also assumed to be full. In the presentation of the results of the AOA to the SOF in May, it was agreed there would be no water restriction for the 2024/25 operating year, considering the good storage level in the system.

Western Cape Water Supply system (WCWSS): comprises of the six (6) dams namely: Wemmershoek, Upper and Lower Steenbras, Theewaterskloof, Bergriver and Voelvlei dams serving mainly the City of Cape Town and some irrigation users/Water Users Associations. The system was at

a combined storage level of 100% at the decision date of 1 November 2024. There are no restrictions imposed on the system for the current water operating year of 2024/2025.
In summary, the main water supply systems have been gradually recovering due to favourable rainfall in December 2024 and January 2025. It is anticipated that these water supply systems will be fully restored by the end of the rainy season in time for the annual operating analysis, typically conducted in May for most water supply systems. The annual operating analysis for the period of 2024-2025 was conducted for all the main water supply systems, with no restrictions necessary for the majority. The following systems however, required restrictions:

- **Greater Bloemfontein Water Supply System** – Restrictions of 25% for domestic and industrial water use.
- **Algoa Water Supply System (Kromme Sub-system)** - Restrictions of 23% for domestic and industrial water use and 43% for irrigation.
- **Polokwane Water Supply System** – Restrictions of 30% for domestic and industrial use.
- **Letaba system -** restriction of 20% for domestic use and 60% on irrigation water use.

Infrastructure in terms of water resources and water services

There is a well-developed infrastructure, with more than 5 700 registered dams in South Africa. This number is only for those dams that are classified as having a potential for dam safety risk (i.e., dams with a minimum wall height of five (5) metres and can store more than fifty (50) Megalitres (i.e., 50 000 m^3) water. The dams which do not fall within the above-mentioned category are not registered with the Department's specialist unit responsible for dam safety *(i.e., the Dam Safety Office)*.

The table below indicates the current registered ownership as of 01 December 2024 for the 2024/25 financial year:

Table 1: Number of registered dams and associated ownership

Size class	Number of dams per ownership						Total	Percent per class
	DWS	Municipalities	Other state depts	Water Boards	Mines, Industry, Business	Agriculture		
Small	79	193	54	39	246	3764	**4375**	***76.7%***
Medium	137	130	28	14	65	775	**1149**	***20.1%***
Large	107	29	2	1	23	21	**183**	***3.2%***
Total	**323**	**352**	**84**	**54**	**334**	**4560**	**5707**	***100%***

For the Department to manage the safety of registered dams, an owner of a dam is required to submit a dam safety evaluation report at his / her cost at least once every five years which is compiled by an Approved Professional Person (APP). The APP should be a registered professional engineer approved by the Minister of Water and Sanitation after consulting the Engineering Council of South Africa (ECSA).

A total of 2443 of the registered are classified as category II or III and subjected to compulsory dam safety by an approved professional person every five years. The disaggregation per category is as follows:

- There are 3257 category I dams and no dam safety evaluations are required.
- There are 2134 category II dams of which agriculture accounts for 67% of these dams.
- There are 308 category III dams and DWS accounts for 54% of these dams.

The figure below depicts the percentage of registrations per water management area/catchment management area.

Table 2: Number of registered dams in each water management area

No.	Water Management Area	Total no. of dams	% Registration per WMA	Cat II & III per WMA
1	Limpopo-Olifants	883	15 %	429
2	Inkomati-Usuthu	281	5 %	99
3	Pongola- Mtamvuna	1079	19 %	283
4	Vaal-Orange	925	16 %	361
5	Mzimvubu-Tsitsikamma	885	16 %	269
6	Breede-Olifants	1652	29 %	1002
TOTAL		**5705**		**2443**

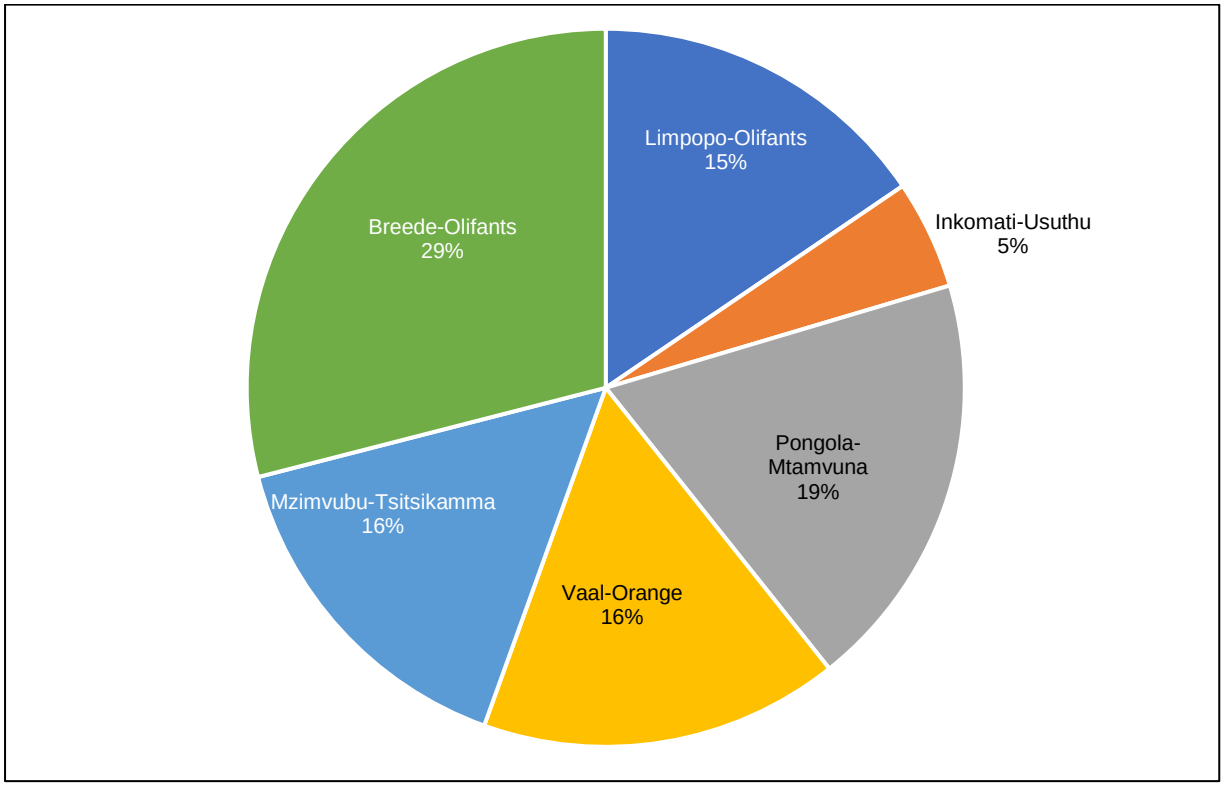


Figure 7: Dam safety evaluation reports.

The challenges been faced by the Department of Water and Sanitation (DWS) with regard to compliance with the regulations regarding the safety of dams is mainly with dams owned by state entities. Out of the 5705 registered dams, 884 are owned by the various government entities (i.e., DWS, various water boards, local government, Department of Agriculture, Land Reform and Rural Development and Department of Correctional Services). There may be more dams owned by the above-mentioned departments, which are still not registered with DWS. The three dams that failed in August 2024, which negatively affected the community of Riverlands in the Swartland Local Municipality, were located within the property owned by Department of Agriculture, Land Reform and Rural Development (DALRRD). The DWS established that the dams were not constructed by DALRRD, however DALRRD and the other previous owners did not register the dams as required by Section 120 of National Water Act (Act 36 of 1998).

The associated risks that come with non-compliance to provision of Chapter 12 on National Water Act (NWA), is that the Department of Water and Sanitation is unable to regulate the dams that poses a threat to nearby communities and infrastructure. Besides the unregistered dams, the regulatory requirement for dams that are classified as category 2 and category 3 for a compulsory dam safety evaluation reports to be conducted and submitted at least once every five years, is aimed at ensuring that any defects identified by the appointed dam engineering expert (i.e., the APP) is addressed timeously before a catastrophic failure of the dam could be triggered. Therefore, without this necessary tool, the DWS is unable to compel the owner of such a dam to implement the recommendations of the APP.

The DWS has sent letters of non-compliance to the various organs and the main responses were as follows:

Water Boards

Most water boards have greatly improved, and compliance levels have improved.

Table.3: Analysis of compliance by Water Boards

Name of Water Board	No of Cat II & III dams / Reservoir	Compliant	Non-Compliant
1. Vaal Central Water Board	3	3	0
2. Umgeni-uThukela Water	17	15	2
3. Rand Water	31	24	7

Eskom

The DWS has noticed that most coal powered fire stations owned by Eskom were not in compliance with the dam safety regulations, particularly when it comes to their Ash Deposit Facilities (ADF) and Return Water Dams (RWD).

- The ADFs are to be regulated as tailings storage facilities (TSF). A desktop study was conducted by DWS to map out the dams that were identified at the 14 power stations by way of remote sensing technology. The next step will be for DWS to conduct in-loco inspections.

Table.4: Analysis of compliance by Eskom

Name of Power Station	Compliance Status
Arnot Power Station	Non-compliant
Duvha Power Station	Partially compliant – Potential dam to be classified
Hendrina Power Station	Non-compliant
Kendal Power Station	Non-compliant
Matla & Kriel Power Station	Non-compliant
Lethabo Power Station	Non-compliant
Majuba Power Station	Partially compliant – Potential dam to be classified
Tutuka power station	Non-compliant
Camden Power Station	Non-compliant
Grootvlei Power Station	Partially compliant – Potential dam to be classified
Komati Power Station	Partially compliant – Potential dam to be classified
Kusile Power Station	Partially compliant – Potential dam to be classified
Matimba Power Station	Non-compliant
Medupi Power Station	Non-compliant

Local government –

Most dams owned by municipalities are non-compliant. Responses received for these non-compliances are attributed to lack of financial capacity to adhere to the regulatory requirements.

- This then puts the communities in these municipalities to threats of potential loss of lives and also threatens the guarantee of supply of potable water in those areas.
- An in-depth analysis of non-compliant dams were presented to the Municipal Infrastructure Support Agency (MISA), with the hope of getting MISA to intervene by engaging COGTA and National Treasury for a special program to be developed in helping municipalities.

Table 5 below summarizes dams owned by various municipalities in each province. Out of the 286 dams that must be subjected to compulsory dam safety evaluations by an APP, 62 dams were complying which represents 22% only. It is then evident that DWS is not aware of how safe or unsafe are 224 dams that are owned by local government sector. This fact was reiterated by AGSA in a report titled Dam Safety Analysis Report (dated 29 October 2024), where it was mentioned that government is not playing a leading role in showing compliance, yet the private sector is expected to strictly adhere to the regulations.

Table 5: Analysis of compliance by Municipalities owning dams

Provinces	**Total No. of dams**	**N/A**	**Compliant dams**	**Non-compliant dams**	**Total of Cat II/III**	**Provinces**	**Total No. of dams**
		Cat I	**Cat II**	**Cat III**	**Cat II**		
Limpopo	11	4	0	0	4	3	**7**
Mpumalanga	27	3	4	0	15	5	**20**
Gauteng	40	4	11	0	23	2	**25**
Kwazulu-Natal	32	9	0	1	19	3	**22**
Free State	67	22	1	1	38	5	**43**
North-West	7	2	0	0	5	0	**5**
Northern Cape	11	1	0	0	9	1	**10**
Eastern Cape	63	12	4	2	37	9	**46**
Western Cape	64	8	24	14	32	14	**46**
	352	**65**	**44**	**18**	**182**	**42**	**286**
				62		**224**	

This situational analysis report shows that the Department of Water and Sanitation is not only strengthening compliance against the private sector. The DWS is also regulating other state-owned entities without bias. The department's is also working on enhancing human resource capacity within the Specialist Unit: Dam Safety Regulation to be able to adequately serve the water sector and ensure compliance with the relevant provisions of the National Water Act.

The Department has an operations and maintenance (O & M) unit responsible for the management of 255 Government Water Schemes (GWSs). The operations thereof are funded by revenue obtained through the tariff charges to users. The pricing strategy dictates that the O & M charges should comprise of:

- Direct costs (pumping, O & M, distribution, administration);
- Indirect costs (overall cluster and area office costs);
- Depreciation (capital requirements for refurbishment); and
- Return on Assets (capital to be set aside of betterment and development of new infrastructure).

The existing infrastructure needs maintenance, and the country is already experiencing challenges with lack of focus on sustainable asset management. The funding pressures, however, prevent the O & M unit to receive the required allocation as per the charges posed on the users.

There is a significant and growing backlog in maintenance and refurbishment of national water resources infrastructure. The inadequate ring-fencing of budgets poses a significant challenge to infrastructure management and has contributed to a refurbishment, renewal, and maintenance backlog of R38bn comprising of:

- A refurbishment backlog of R13.4bn caused primarily by inadequate maintenance; and
- renewal backlog of aged infrastructure of about R24.6bn, mostly related to the relining of canals, the renewal of mechanical equipment in dams and pump stations and the relining or replacement of selected pipelines.

A financially downscaled O & M function will have a detrimental impact on the national economy. The strategic users such as Eskom and Sasol are heavily dependent on the services of this unit (as per signed user agreements), and any failure in this regard could lead to *inter alia* energy and fuel shortages. In addition, if the operating rules are note adhered to there is a long-term impact on water resource management.

Regulating the water and sanitation services

The Water Services Act, 1997 provides the legislative framework for provision of water services, establishment of a regulatory framework, monitoring of water services, interventions and gathering of information in a national information system in terms of section 2 (a), (d), (f) and (h). It also provides for prescription of compulsory national standards relating to provision of water services and the quality of water taking into consideration guidelines as recommended by official standard-setting institutions to which water services institutions must comply with. It further requires the establishment and maintenance of a national information system to monitor the performance of water services institutions and hence the development of the Integrated Regulatory Information System (IRIS).

Incentive based regulation is an innovative and uniquely South African response to challenges in the water sector. It encourages progressive improvement, and excellent performance is recognised and rewarded. The Blue Drop, Green Drop and No Drop programmes seek to induce changes in behaviour of individuals and institutions to:

- Facilitate continuous improvement and adoption of best practices in the management of water delivery, and associated distribution networks from abstraction to the water treatment works to the points of use.
- Facilitate continuous improvement and adoption of best practice management of wastewater network and treatment systems.
- Encourage progress and improvement in water use efficiency and water loss/ Non -Revenue Water (NRW) management in the South African municipal sector.

The Green Drop, Blue Drop and No Drop reports objectives are to:

- Keep the public and stakeholders informed and updated with credible data and information about the state of water and sanitation services in the country.
- 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.
- Identify what needs to be done to address each of the shortcomings identified in the reports.

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.

Following the release in December 2023 for BD, GD and ND. The Department of Water and Sanitation arranged a Water and Sanitation Summit where the political leadership at WSA level and senior management were called by the Honourable Minister of Water and Sanitation to specifically address the poor performance. The reports were released with the expectation that the systems that were categorised in critical and poor performance, must submit corrective action plans on how the shortcomings will be addressed for improved performance and provision of better services to the public.

The objectives of the summit were the following:

- All WSAs are familiar with the 2023 No Drop, Blue Drop, and Green Drop results, and their implications.
- WSAs know the causes of good performance and poor performance.
- WSAs identify the most important issues to be included in action plans to be developed by WSAs.
- WSAs with water supply and wastewater in a critical state of performance agree to implement fundamental changes to address the situation.
- Municipalities exchange best practices, share lessons learned and identify areas of collaboration.
- Various support mechanisms to assist the poor and critical performing entities are identified.
- The profile of the issue of the quality of water and sanitation services is raised.

Support to municipalities

- DWS and Water Boards are supporting many of the municipalities to implement improvement plans agreed to by Ministry and municipal leadership.
- DWS, COGTA, Municipal Infrastructure Support Agency, Department of Human Settlements, National Treasury also provide substantial support to municipalities, including technical and engineering support and assistance, capacity building and training, and financial management advice and support.
- While this support must continue and be strengthened, there are limitations to which support alone can address the problems:
  - If municipal leadership does not respond to directives, does not listen to advice, or does not accept support, performance can only be improved by addressing the leadership challenges.
  - Routine maintenance and operation must be funded by revenue from the sale of water by municipalities to customers. The department and COGTA are not allowed to provide funding to municipalities for this.
  - National government cannot make decisions to prioritise maintenance and funding of operations on behalf of municipalities; these decisions must be made by municipal councils.
  - The national government cannot hire staff on behalf of municipalities; municipal leadership must prioritise the filling of positions with appropriately qualified staff and budget for this from revenue.

Cooperation by Department of Cooperative Government.

The department of Cooperative Governance (DCOG) has in its 2025/26 Budget Proposal to National Treasury highlighted the intention to support the criminally charged Municipal Infrastructure Grant (MIG) receiving municipalities, especially those that have failed to put in place a Corrective Action Plan (CAP) that addresses the challenges as a priority, through a MIG schedule 6B. DCoG will convert 2025/26 MIG allocations of the affected municipalities to a schedule 6B which implies that implementation will be done on their behalf by DCoG through various implementing agents that includes the Municipal Infrastructure Support Agent, Water Boards, other municipalities, infrastructure Implementing Agents and the Development Bank of Southern Africa.

Green Drop, Blue Drop and No Drop Certification Programme for FY 25/26

The department has appointed a specialist support for three (3) years for the implementation of the BD, GD and ND programmes. To kickstart the project a full or comprehensive Green Drop report will be assessed for FY25/26 with BD and ND PAT prioritised for this period to assess the risks. A symposium was held in December 2024 for a sector wide consultation for the priority areas of focus, in the main to discuss the assessment criteria and type of evidence required in preparation of the 2025/2026FY assessments.

The Department of Water and Sanitation as Regulator of the water sector will use the comprehensive Green Drop 2025 report as the performance baseline for the municipal wastewater sector, to inform appropriate regulatory intervention with the objective to facilitate improvement and measure progress in performance in comparison to the GD2022 report.

Policy and Regulatory Frameworks

The department continues to develop and update policies and regulations to ensure the sustainable management of water resources and water and sanitation provision in the country. This includes the National Water Act, Water Services Act, and compulsory national water and sanitation services norms and standards in terms of section 9 (1) of the water services act (act no. 108 of 1997) and other relevant legislation. These interventions are part of the department's broader strategy to ensure water security, improved sanitation, and promote sustainable water resource management in South Africa.

Compliance monitoring and enforcement

In the past, department did not generally take strong regulatory actions against municipalities for sewage pollution the departmental policy position was that it was against sound intergovernmental relations to take regulatory, civil or criminal action against a municipality However, in recent years, the department has been strengthening its regulatory function and making its regulatory actions more consistent, and this has resulted in an increase in the number of civil actions and criminal charges against municipalities for sewage pollution.
The number of criminal charges is expected to increase further

- Since 2017, the department has opened 88 criminal cases for sewage pollution involving 52 municipalities across all 9 provinces; this follows non-responsiveness of the municipalities to notices and directives
- In 78 of these cases, an investigation is currently underway
- For five cases, investigations are complete, and the National Prosecuting Authority has decided to prosecute (preparing to go to trial or in court)
- All the five mentioned cases have been ruled upon, and the department is monitoring the implementation of the court decisions, all the five mentioned cases were plea and sentence agreements.

The cases that have been ruled upon by the courts have resulted in fines being imposed on the municipality, e.g., Govan Mbeki LM was fined R200m, and Thaba Chweu and Rand West LM were each fined R10m. The courts ordered the municipalities to allocate the fines to address the sewage pollution.

On average, it takes 2-3 years for a criminal case to be finalised (from the date of laying the charge at the police station to the date of a court ruling) – in the meantime the pollution continues Because of the widespread, critical, and worsening sewage pollution by municipalities, civil societies have started to lay charges against municipalities, and against the department for not enforcing the National Water Act to prevent this sewage pollution. The department foresees that before long, civil societies will lay criminal charges against the Minister and the DG in their individual capacity. Therefore; the department and civil societies have also opened civil cases against municipalities for sewage pollution.

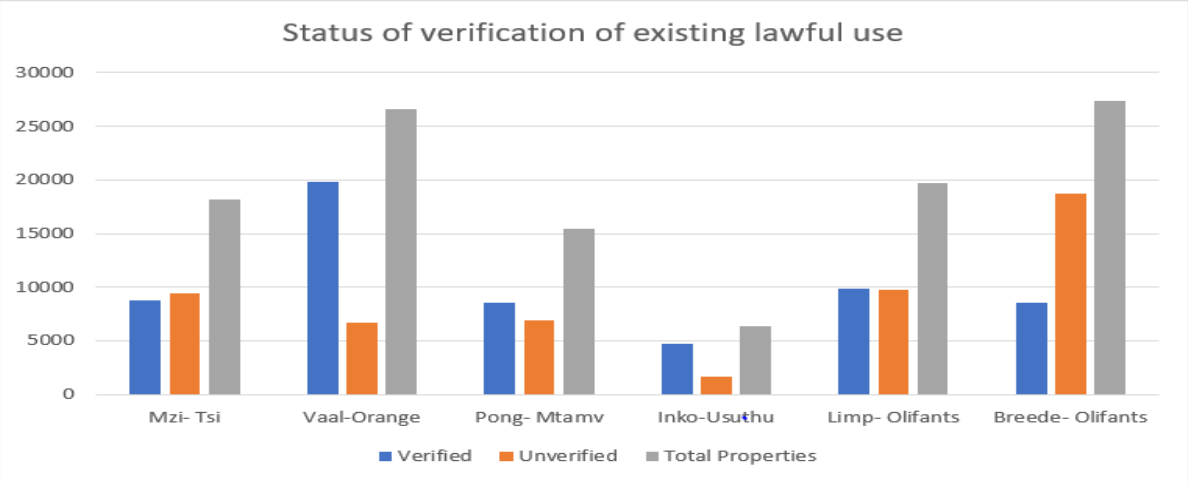
With civil litigation, the courts are approached on an urgent basis to address serious infringements of peoples' rights. Over the past few years, the department has initiated 18 civil cases against municipalities. Two of these 18 cases have been finalised, resulting in two court orders to address the sewage pollution. In one instance the municipality Modimolle-Mookgopong Local Municipality (LM) implemented the court order fully, in the other instance Naledi LM did not; and the department subsequently brought a contempt of court application, which is still in process. For one of its 18 civil cases, a case had been opened against the Municipal Manager of Sol Plaatjie LM. Depending on the outcomes of this case, the department may open more cases against Municipal Managers and/or Mayors in future.

Inequitable water allocation

Validation and verification

The process of validation and verification (V&V) of existing lawful water uses (ELU) seeks to provide scientific and legal information on the extent and the lawfulness of water use that was exercised two (2) years prior the promulgation of the National Water Act as provided for in Section 32-35 of the Act. This water is mainly within the agricultural sector and is mainly used by white commercial farmers. The information generated from V&V assists the department to better manage the country's water resources through updating of the WARMS database, identification of unlawful water uses and providing basis for planning for compulsory licensing, and water allocation.

To date, out of 113 664 properties that needed to be verified, 53 % (60385) have been verified see the table and figure below.



WMA	Mzi- Tsi	Vaal-Orange	Pong-Mtam	Inko-Usuthu	Limp-Olifants	Breede-Olifants	Total
Verified	8818	19859	8528	4706	9872	8602	60385
Unverified	9393	6718	6946	1695	9781	18746	53279
Total Properties	18211	26577	15474	6401	19653	27348	113664
% Completed	48%	75%	55%	74%	50%	31%	53%

Figure 8: Status of verification for the 2024/25 financial year

From 2023/24 to third quarter of 2024/25, a total of 6366 properties were verified with 5104 properties verified within the Limpopo Olifants WMA The remainder of the verification process will be finalized through the new CMAs as delegated.

Water Use Authorisation

A total of 16 723 decisions on water use authorisation applications were made since the promulgation of the Act until December 2024. A significant achievement in terms of regulating water use by means water use authorization in terms Section 22 of the National Water Act, no 36 of 1998; of the decisions that were made 10 337 are water use licenses and 3 124 confirmations of General Authorizations. The remaining total of 3 319 (20 %) applications were either withdrawn by applicants, closed / rejected by the applicant, or declined.

The department introduced the water use licensing processing timeframes in March 2017 when the Regulations Regarding the Procedural Requirements for Water Use Licence Applications were published. The 300 days turnaround time for processing water use licence applications implemented in 2017 was reduced to 90 days in April 2021 to contribute to accelerated economic development. Currently the department can finalise 68% of the applications within 90 days. Several interventions have been implemented to improve performance to at least more than 80 % in the 2025/26 financial year. Key amongst the interventions to improve performance is filling the vacant technical positions which was completed in March 2024. The newly recruited officials are undergoing the necessary training to ensure that acquire the requisite skills.

Registration Information Databases of Catchment Management Agencies

The National Water Act (36 of 1998) provides for the progressive establishment of Catchment Management Agencies (CMAs) in the 6 water management areas (WMA) throughout South Africa. CMAs will take over responsibility for managing water resources at catchment management level. The CMAs will manage water resources and coordinate functions of other water management institutions within WMA's. CMA's will be delegated responsibility for setting charges, billing, and collection, probably quite soon after their establishment, as water use charges for water resources management represents the main source of funding for CMA operations. The billing and collection system is based on the national register of water use database (WARMS), which contain all the necessary water use information according to the category of use. The Accounts Receivable system is being installed to take the WARMS information and generate integrated and itemized invoices (including user charges for water resources management and for water resource infrastructure) for each user, based on the registration number.

9.2 Internal environment

The assessment of the Department's resources and capabilities is essential in the realisation of the Department's plan. The assessment is summarised below:

Organisational alignment

Since 2007, the Department has adopted an integrated approach to managing water resources and water services functions. This approach was formalised in 2022 with an organizational structure approved by the Department of Public Service and Administration (DPSA) and the National Treasury (NT). During the review and implementation of the 2022 structure, several challenges emerged, driven by the Water Pricing Strategy and the approval of four Catchment Management Agencies (CMAs):

In 2023 the Berg-Olifants (increased operational boundaries of Breede-Gouritz), Mzimvubu-Tsitsikamma, Pongola-Umzimkulu, Vaal-Orange and Limpopo Olifants catchment management agencies were listed as schedule 3A entities of the PFMA. Consequently, certain water resources functions were removed from the National and Provincial Offices. The remaining provincial structure was then reviewed to reflect the residual functions. To finalize and comply with Public Services Regulations, the Directorate: Organisation Development developed and implemented a program to evaluate all departmental posts in line with the revised 2022 structure, ensuring alignment with the budget structure.

Managing data and information

The department generates and collects vast amounts of data for successful management and regulation of water resources and water services. This data has been historically generated and stored on desperate and silo legacy ICT systems with potential for duplications and data integrity challenges.

These weaknesses hamper effective information management, monitoring and evaluation which is crucial for creating insights that inform interventions / actions, appropriate management plans to respond effectively to an environment facing significant change. Furthermore, lack of data and information resulting from silo and legacy monitoring and information systems that are outdated pose a high risk. This is also affected by budget constraints whilst the costs for running the programmes are increasing.

Digital transformation offers the Department an opportunity to adopt new approaches to developing and using platform technology for service delivery and effective water resource and water service management. To this end, the Department will ramp up its efforts of implementing its digital strategy to modernize the legacy technologies to eliminate risks and build common data platforms that seek to integrates all the data in the Department to enable the Department to be agile in its response to the ever-changing environment in the sector. The successful implementation of the strategy will require sufficient budget allocation and insourcing of internal capacity to fill the vacant posts for the successful implementation of this change program.

PART C

MEASURING PERFORMANCE

10. Performance Information

10.1 Measuring the impact

Impact statement	Water resources that are protected, used, developed, conserved, managed and controlled in a manner that supports ecologically sustainable economic and social development that transforms access to water to redress racial imbalances.

10.2 Alignment of departmental outcomes with the Medium-Term Development Plan (MTDP)

Medium-Term Development Plan				**Department of Water and Sanitation**			
Priority		**Outcome**		**Priority**		**Outcome**	
1	Drive inclusive growth and job creation	A	Enabling environment for investment and improved structural reforms	4	Administration and governance	7	Entities' sustainability improved.
		B	Increased infrastructure investment, access and efficiency	5	Regulation	5	Decline in the performance of municipal water and sanitation services halted.
3	Build a capable, ethical, and developmental state	A	Improved service delivery in the local government sphere	1	Water services	1	Reliability of water services improved.

10.3 Measuring departmental outcomes

10.3.1 Water services priority

DWS priority 1		**Water services**			
Outcomes		**Outcomes indicator**		**Baseline**	**2029/30 five-year target**
1	Reliability of water services improved	1.1	Percentage of water services reliability improved	68[2]	80%
2	Reduction of ***unserved communities***[3]	2.1	Percentage of unserved communities for water reduced	3[3]%	0%
		2.2	Percentage of household access to sanitation increased	83.3%[4]	90%

[2] Sourced from 2022 Census
[3] Unserved community means the whole community does not have access to formal municipal infrastructure due to not being served historically or where the existing infrastructure is dilapidated that it is unserviceable.
[4] Sourced from 2023 Census

10.3.2 National water resource management and national water infrastructure priority

DWS priority 2		**National water resource management and national water infrastructure**			
Outcomes		**Outcomes indicator**		**Baseline**	**2029/30 five-year target**
3	Water mix diversified	3.1	Surface water proportion in the water mix reduced.	69.95%[5]	68.36%
		3.2	Ground water proportion in the water mix increased.	23.03%[6]	21.35%
		3.3	Re-use of effluent proportion in the water mix increased	6.61%[7]	9.22%
		3.4	Desalination proportion in the water mix increased.	0.41%[8]	1.07%
4	Ecological infrastructure protected and restored	4.1	Decline in ecological condition of rivers reduced	6%	5%

10.3.3 Regulation priority

DWS priority 3		**Regulation**			
Outcomes		**Outcomes indicator**		**Baseline**	**2029/30 five-year target**
5	Decline in the performance of municipal water and sanitation services halted	5.1	Percentage of water systems in critical condition reduced	47%[9]	32%
		5.2	Percentage of wastewater systems in critical condition reduced	40%[10]	25%
		5.3	Percentage reduction of national average for non-revenue water	47%[11]	32%

10.3.4 Administration and governance priority

DWS priority 4		**Administration and governance**			
Outcomes		**Outcomes indicator**		**Baseline**	**2029/30 five-year target**
6	Efficiency and effectiveness in organisational operations improved	6.1	Number of additional digitalisation initiatives implemented	21[12]	5
7	Entities' sustainability improved	7.1	Percentage of unsustainable entities reduced.	33%	0%

[5] The baseline is based on the available yield based on the 14 large water supply systems (WSS) that are proxies for the national surface water picture. These WSS contribute 73% of the national water storage capacity.
[6] The baseline is based on the WARMS registration data after the 2024 validation and verification process.
[7] The baseline is based on the effluent re-use mainly from the Crocodile West and the IVRS for irrigation.
[8] The baseline is based on the installed capacity on a national scale after the verification of the operational schemes.
[9] Sourced from 2023 Blue Drop Report
[10] Sourced from 2022 Green Drop Report
[11] Sourced from 2023 No Drop Report
[12] This is the number of administration and technical digitilised initiatives operational in the Department.

10.4 Explanation of planned performance over the five-year planning period

10.4.1 Priority 1: Water services

The 2022 Census data indicated the South African population to be at 62 million (17.8 million households), of which 50% resides in the largest 17 metros and local municipalities. However, the 2024 census found that on average nationally only 68% of households had a reliable water service (i.e. often communities have access to a tap, but no water comes out of the tap of the water does not meet drinking water standards). To increase access and reliability to water and sanitation services, over the five-year period, the Department plans to implement several interventions that will support household access and improve reliability of services.

10.4.2 Priority 2: National water resource management and national water infrastructure

Broadening of South Africa's water resource mix is critical for water security as the potential to further develop its surface water resources is limited. The need to diversify the water resource mix is essential as based on the 14 large water supply systems, the country is harnessing approximately 70% of usable surface water resource. Although surface water projects will be implemented, the Department plans to gradually reduce the proportion of surface water use in the water mix and increase the proportion of alternative water sources such as groundwater, re-use of effluent and desalination to reduce the over-reliance on surface water.

South Africa's aquatic ecosystems include seven of the world's freshwater eco-regions, and are characterised by a wide range of river, wetlands, and estuarine ecosystem types. Many of these aquatic ecosystems make up the country's ecological infrastructure (i.e. nature's equivalent of built infrastructure) that generates and delivers benefits in the water value chain. Ecological infrastructure is currently an under-realised asset that can play a significant role in enhancing returns-on-investment in built infrastructure (e.g. dams), especially if its maintenance is explicitly incorporated into the planning and construction of built infrastructure. Many of the high value aquatic ecological infrastructure assets are poorly protected, and in some areas of the country are under severe pressure, from intensive agriculture, mining and urban sprawl that results in loss or degradation of ecosystems. Like built infrastructure, ecological infrastructure needs to be maintained, and in some cases restored, for its socio-economic benefits to be realised. Over the five-year period, the Department plans to implement and / or support initiatives that protect and restore ecological infrastructure.

10.4.3 Priority 3: Regulation

The Blue, Green and No Drop reports illustrate the gradual decline in the performance of municipal water and sanitation services. The Blue and Green Drop reports indicate several water supply and wastewater collector systems that are in critical condition. The No Drop report also indicates the poor water use efficiency levels in the municipal environment. The Department will therefore implement and / or support initiatives that will halt the declining performance and / or improve the performance.

10.4.4 Priority 4: Administration and governance

To comply with the DPSA directive of identifying digitalisation interventions that are required to enable the achievement of building a capable, ethical and developmental state, the Department plans to implement the digitalisation of its operations. This will assist in assessing how technology can be leveraged to standardise and improve efficiency in departmental operations.

The Department has several water resource and water services institutions with some experiencing sustainability challenges owing to some financing models of water in the country. The importance of these entities in supporting the water security and water access to the country cannot be overemphasised. Therefore, the Department will implement and / or support initiatives that will improve and maintain the sustainability of these entities for them to implement their respective mandates.

10.5 Key risks and mitigations

DWS priority		DWS outcome		Risk description	Mitigation strategies	Responsible entities
1	Water services	1	Reliability of water services improved	**Aging and failing infrastructure:** Many water treatment plants, pipelines, and sewer systems are outdated, leading to frequent breakdowns, water losses, and contamination risks	• Implement a national water infrastructure rehabilitation programme. • Prioritise funding for critical maintenance projects. • Develop public-private partnerships for infrastructure investment. • Secure increased budget allocations for maintenance. • Establish an infrastructure maintenance fund. • Improve asset management planning and execution.	• DWS, • Water Boards • Municipalities. • National Treasury
				Water scarcity and the effects of climate change: Prolonged droughts, changing rainfall patterns, and extreme weather events are reducing water availability and increasing stress on water resources.	• Strengthen climate resilience measures in water infrastructure planning. • Invest in alternative water supply solutions (e.g., desalination, groundwater recharge) • Implement water conservation and demand management programmes.	• DWS, • WRC, • Municipalities
		2	Percentage of unserved communities reduced	Delays in water and sanitation infrastructure rollout to unserved/ underserved communities	• Fast-track procurement and project approval processes. • Strengthen project management capabilities. • Enhance oversight and monitoring of infrastructure projects	• DWS, • COGTA, • Municipalities
				Inadequate funding for service expansion due to underfunding, non-payment, and inefficient revenue collection systems leading to insufficient investment in maintenance and upgrades	• Secure increased budget allocations for maintenance. • Establish an infrastructure maintenance fund. • Improve asset management planning and execution.	• National Treasury • DWS • Municipalities

DWS priority		DWS outcome		Risk description	Mitigation strategies	Responsible entities
					• Introduce cost-reflective tariffs with social safety nets for vulnerable groups. • Improve billing efficiency and revenue collection through digital platforms. • Leverage government grants, donor funding, and PPPs.	
2	National water resource management and national infrastructure	3	Water mix diversified	Over-reliance on surface water sources and Slow implementation of alternative water sources	• Expand groundwater extraction and management programs - Develop policies to encourage reuse and recycling of water - Diversify water supply sources through integrated planning. • Provide financial incentives for non-conventional water projects. • Strengthen research and development on innovative water technologies. • Improve interdepartmental coordination to fast-track alternative water source projects.	• DWS, • Water Boards • CMAs • WRC • Private Sector
				High costs and regulatory challenges for sea water desalination	• Develop clear desalination policies and guidelines. • Explore cost-sharing models for desalination projects. • Conduct feasibility studies to identify viable coastal desalination sites.	• DWS, • National Treasury, • Water Boards
		4	Ecological infrastructure protected and restored	Failure to effectively manage and invest in ecological infrastructure, leading to the degradation of water resources and national water infrastructure.	• **Increased Investment and Funding Mobilisation** – Advocate for dedicated funding streams for ecological infrastructure projects. • **Public-Private Partnerships (PPPs)** – Foster collaboration between government, industries, and communities for sustainable ecological infrastructure management. • **Pollution Control and Water Quality Monitoring** – Implement stricter pollution controls and establish early warning systems for water pollution.	• DWS, • Water Boards • CMAs • Private Sector • Municipalities • DFFE

DWS priority		DWS outcome		Risk description	Mitigation strategies	Responsible entities
					• **Integrated Land Use Planning** – develop and enforce sustainable development policies that protect key catchment areas and buffer zones. • **Climate Adaptation Strategies** – Implement nature-based solutions such as wetland restoration, afforestation, and sustainable land management.	
3	Regulation	5	Decline in the performance of municipal water and sanitation services halted	Poor municipal financial and technical capacity **Skills Shortage and Capacity Constraints:** inadequate technical expertise, skilled workers, and proper training limits effective infrastructure maintenance and service improvements at the local government level	• Implement municipal capacity-building programmes. • Strengthen enforcement of municipal accountability measures. • Enhance financial oversight and support for struggling municipalities.	• DWS, • COGTA, • Municipalities
				Non-Revenue Water (NRW) and System Losses – High levels of water loss due to leaks, illegal connections, and poor billing systems reduce financial viability and service reliability from municipalities.	• Enforce NRW reduction strategies, including leak detection and repair programmes. • Enforce penalties for water theft and illegal connections. • Improve municipal metering and billing systems.	• DWS, • Municipalities, • Water Boards
				Regulatory non-compliance by municipalities: Stricter environmental and water safety regulations (e.g. Pollution prevention) require compliance measures that many municipalities struggle to implement.	• Strengthen regulatory enforcement and compliance monitoring. • Link funding allocation to compliance with water regulations. • Conduct regular municipal audits and performance reviews	• DWS, • Auditor-General, • National Treasury. • Municipalities
4	Administration and governance	6	Efficiency and effectiveness in organisational operations improved	**Cyber security and data protection:** Cybersecurity threats such as hacking, data breaches, and ransomware attacks pose risks to the integrity and security of critical water and sanitation data.	• Implement strong cybersecurity policies and frameworks. • Conduct regular IT security audits. • Train staff on data protection best practices • Strengthen access control and encryption measures for sensitive data	• DWS, • State Information Technology Agency (SITA)

DWS priority		DWS outcome		Risk description	Mitigation strategies	Responsible entities
				Insufficient funding for IT infrastructure upgrades can delay the implementation of new digital systems, leading to inefficiencies and continued reliance on outdated manual processes. - create technical difficulties in adopting new technologies.	• Conduct training and change management initiatives for staff. • Establish incentives for digital adoption. • Develop clear policies and frameworks for digital transformation.	• DWS, • DPSA, • CMAs
		7	Entities' sustainability improved	**Financial instability of water boards and Water resource agencies**: Financial Sustainability and Funding Shortfalls many water services and resource institutions struggle with financial deficits due to underfunding, non-payment, and inefficient revenue collection.	• Develop financial sustainability plans for water entities. • Strengthen revenue collection and financial management. • Explore alternative funding sources, including private sector investments.	• DWS, • Water Boards, • National Treasury
				Governance and Corruption: Poor governance, mismanagement, and corruption in procurement, infrastructure projects, and water distribution undermine service delivery.	• Strengthen institutional governance through accountability frameworks. • Implement anti-corruption policies and independent audits. • Promote stakeholder engagement and public participation	• DWS, • Water Boards, • CMAs

11. Public Entities

Name of public entity		Mandate	Outcomes
Schedule 2			
1	Trans Caledon Tunnel Authority	Established in 1986 as a state-owned entity specialising in project financing, implementation, and liability management.	Outcome 3: Water mix diversified.
Schedule 3A			
2	Breede-Olifants Catchment Management Agency	Established in terms of section 78 of the National Water Act, Act No 36 of 1998. The mandate is set out in the Pricing Strategy for Raw Water Use Charges.	Outcome 4: Decline in ecological condition of rivers reduced.
3	Inkomati-Usuthu Catchment Management Agency	Established in terms of section 78 of the National Water Act, Act No 36 of 1998. The mandate is set out in the Pricing Strategy for Raw Water Use Charges.	Outcome 4: Decline in ecological condition of rivers reduced.
4	Limpopo-Olifants Catchment Management Agency	Established in terms of section 78 of the National Water Act, Act No 36 of 1998. The mandate is set out in the Pricing Strategy for Raw Water Use Charges.	Outcome 4: Decline in ecological condition of rivers reduced.
5	Mzimvubu-Tsitsikamma Catchment Management Agency	Established in terms of section 78 of the National Water Act, Act No 36 of 1998. The mandate is set out in the Pricing Strategy for Raw Water Use Charges.	Outcome 4: Decline in ecological condition of rivers reduced.
6	Pongola-Umzimkulu Catchment Management Agency	Established in terms of section 78 of the National Water Act, Act No 36 of 1998. The mandate is set out in the Pricing Strategy for Raw Water Use Charges.	Outcome 4: Decline in ecological condition of rivers reduced.
7	Vaal-Orange Catchment Management Agency	Established in terms of section 78 of the National Water Act, Act No 36 of 1998. The mandate is set out in the Pricing Strategy for Raw Water Use Charges.	Outcome 4: Decline in ecological condition of rivers reduced.
8	Water Research Commission	Established in terms of the Water Research Act, Act No 34 of 1971. The mandate is set out in the Water Research Act.	Outcome 4: Decline in ecological condition of rivers reduced.
Schedule 3B			
9	Amatola Water Board	Established in terms of section 28 of the Water Services Act, Act No 108 of 1997. The mandate is set out in sections 29 and 30 of the Water Services Act.	Outcome 5: Decline in the performance of municipal water and sanitation services halted
10	Lepelle Northern Water Board	Established in terms of section 28 of the Water Services Act, Act No 108 of 1997. The mandate is set out in sections 29 and 30 of the Water Services Act.	Outcome 5: Decline in the performance of municipal water and sanitation services halted
11	Magalies Water Board	Established in terms of section 28 of the Water Services Act, Act No 108 of 1997. The mandate is set out in sections 29 and 30 of the Water Services Act.	Outcome 5: Decline in the performance of municipal water and sanitation services halted
12	Overberg Water Board	Established in terms of section 28 of the Water Services Act, Act No 108 of 1997. The mandate is set out in sections 29 and 30 of the Water Services Act.	Outcome 5: Decline in the performance of municipal water and sanitation services halted

Name of public entity		Mandate	Outcomes
13	uMngeni- uThukela Water Board	Established in terms of section 28 of the Water Services Act, Act No 108 of 1997. The mandate is set out in sections 29 and 30 of the Water Services Act.	Outcome 5: Decline in the performance of municipal water and sanitation services halted
14	Vaal Central Water Board	Established in terms of section 28 of the Water Services Act, Act No 108 of 1997. The mandate is set out in sections 29 and 30 of the Water Services Act.	Outcome 5: Decline in the performance of municipal water and sanitation services halted
15	Rand Water Board	Established in terms of section 28 of the Water Services Act, Act No 108 of 1997. The mandate is set out in sections 29 and 30 of the Water Services Act.	Outcome 5: Decline in the performance of municipal water and sanitation services halted

PART D

TECHNICAL INDICATOR DESCRIPTIONS

1. Priority 1: Water services

1.1. Outcome 1: Reliability of water services improved.

Outcome indicator 1.1: Percentage of water services reliability improved.

Indicator title	Percentage of water services reliability improved
Definition	This indicator monitors the reliability of water services in the country. A reliable service is defined as an uninterrupted supply of water for 95% of the time (measured over a year) through functional infrastructure operated and maintained to set standards supported by a governance institution that provides acceptable quality of water that is based on sustainable water security principles.
Source of data	• Census • Water services information system derived from the developed 5-year reliability implementation plans
Method of calculation / assessment	The Department annually issues a report on the "***Status of water services provision in South Africa***".
Assumptions	The municipalities will implement the respective 5-year reliability plans developed by the Department.
Disaggregation of beneficiaries (where applicable)	N/A
Spatial transformation (where applicable)	N/A
Desire performance	80%
Indicator responsibility	Water and Sanitation Services Management

1.2. Outcome 2: Reduction of unserved communities.

Outcome indicator 2.1: Percentage of unserved communities for water reduced.

Indicator title	Percentage of unserved communities for water reduced
Definition	This indicator monitors reduction of unserved communities for access to water. An unserved community means the whole community does not have access to formal municipal infrastructure due to not being served historically or where the existing infrastructure is dilapidated that it is unserviceable.
Source of data	Census and / or General Household Survey
Method of calculation / assessment	Statistics South Africa publishes Census and / or General Household Reports
Assumptions	Municipalities will be implementing the water infrastructure projects as planned.
Disaggregation of beneficiaries (where applicable)	N/A
Spatial transformation (where applicable)	N/A
Desire performance	0%
Indicator responsibility	Water and Sanitation Services Management

Outcome indicator 2.2: Percentage of household to sanitation increased.

Indicator title	Percentage of household to sanitation increased
Definition	This indicator monitors the access of households for access to sanitation.
Source of data	Census and / or General Household Survey
Method of calculation / assessment	Statistics South Africa publishes Census and / or General Household Reports
Assumptions	Municipalities will be implementing the sanitation infrastructure projects as planned.
Disaggregation of beneficiaries (where applicable)	N/A
Spatial transformation (where applicable)	N/A
Desire performance	90%
Indicator responsibility	Water and Sanitation Services Management

2. Priority 2: National water resource management and national water infrastructure.

2.1. Outcome 3: Water mix diversified.

Outcome indicator 3.1: Surface water proportion in the water mix reduced.

Indicator title	Surface water proportion in the water mix reduced
Definition	This indicator monitors the proportion of surface water as a source to supply water to the country. Water mix is defined as a combination of different sources used to supply water for the country. This might include surface water, ground water, re-use of effluent and desalination.
Source of data	This is the yield for the 14 WSS that are proxies for the national surface water picture as they contribute 73% of national storage.
Method of calculation / assessment	This will be the total yield for all the water resource development projects in the 14 WSS.
Assumptions	There will be no delays in the implementation of water resource development projects.
Disaggregation of beneficiaries (where applicable)	N/A
Spatial transformation (where applicable)	N/A
Desire performance	68.36%
Indicator responsibility	Infrastructure Management

Outcome indicator 3.2: Ground water proportion in the water mix increased.

Indicator title	Ground water proportion in the water mix increased
Definition	This indicator monitors the proportion of ground water as a source to supply water to the country. Water mix is defined as a combination of different sources used to supply water for the country. This might include surface water, ground water, re-use of effluent and desalination.
Source of data	WARMS registration data
Method of calculation / assessment	This will be the actual percentage of registered ground water in the WARMs database.
Assumptions	The groundwater regulations will be published to ensure registration of all users.
Disaggregation of beneficiaries (where applicable)	N/A
Spatial transformation (where applicable)	N/A
Desire performance	21.35%
Indicator responsibility	Infrastructure Management

Outcome indicator 3.3: Re-use of effluent proportion in the water mix increased.

Indicator title	Re-use of effluent proportion in the water mix increased
Definition	This indicator monitors the proportion of effluent re-use as a source to supply water to the country. Water mix is defined as a combination of different sources used to supply water for the country. This might include surface water, ground water, re-use of effluent and desalination.
Source of data	Return flows for irrigation mainly in the Crocodile West and the IVRS water supply systems.
Method of calculation / assessment	This will be the recorded return flows for irrigation in the 2 WSS
Assumptions	The municipalities will implement the Green Drop report recommendations to allow for the return flow use from the wastewater treatment works.
Disaggregation of beneficiaries (where applicable)	N/A
Spatial transformation (where applicable)	N/A
Desire performance	9.22%
Indicator responsibility	Infrastructure Management

Outcome indicator 3.4: Desalination proportion in the water mix increased.

Indicator title	Desalination proportion in the water mix increased
Definition	This indicator monitors the proportion of desalination water as a source to supply water to the country. Water mix is defined as a combination of different sources used to supply water for the country. This might include surface water, ground water, re-use of effluent and desalination.
Source of data	This is the recorded national scale capacity.
Method of calculation / assessment	This will be the recorded desalination capacity.
Assumptions	The installed capacity will be operational (i.e. the desalination schemes are not decommissioned).
Disaggregation of beneficiaries (where applicable)	N/A
Spatial transformation (where applicable)	N/A
Desire performance	1.07%
Indicator responsibility	Infrastructure Management

2.2. Outcome 4: Ecological infrastructure protected and restored.

Outcome indicator 4.1: Decline in ecological condition of rivers reduced.

Indicator title	Decline in ecological condition of rivers reduced
Definition	This indicator monitors the preservation of health and restoration of ecological infrastructure in the country. Ecological infrastructure refers to the naturally functioning water ecosystem that delivers benefits to the people.
Source of data	Ecological infrastructure for water security
Method of calculation / assessment	This will be the actual number of rivers whose ecological decline has been halted and / or improved.
Assumptions	The CMAs will implement the river restoration programmes to halt and / or reduce the decline in the ecological condition.
Disaggregation of beneficiaries (where applicable)	N/A
Spatial transformation (where applicable)	N/A
Desire performance	5%
Indicator responsibility	Water Resource Management

3. Priority 3: Regulation

3.1. Outcome 5: Decline in the performance of municipal water and sanitation services halted.

Outcome indicator 5.1: Percentage of water systems in critical condition reduced.

Indicator title	Percentage of water systems in critical condition reduced
Definition	This indicator monitors the reduction in the percentage of water systems that are found to be in a critical condition in the Blue Drop report. A critical water system is a system that obtains 0 to ≤ 31% in the Blue Drop results.
Source of data	Blue Drop assessments
Method of calculation / assessment	The Department issues a "***Blue Drop Report***" on the state of water supply systems in the country.
Assumptions	The municipalities will implement the recommendations from the published report
Disaggregation of beneficiaries (where applicable)	N/A
Spatial transformation (where applicable)	N/A
Desire performance	32%
Indicator responsibility	Regulation Compliance and Enforcement

Outcome indicator 5.2: Percentage of wastewater systems in critical condition reduced.

Indicator title	Percentage of wastewater systems in critical condition reduced
Definition	This indicator monitors the reduction in the percentage of wastewater collector systems that are found to be in a critical condition in the Green Drop report. A critical water system is a system that obtains 0 to ≤ 31% in the Green Drop results.
Source of data	Green Drop assessments
Method of calculation / assessment	The Department issues a "***Green Drop Report***" on the state of wastewater collector systems in the country.
Assumptions	The municipalities will implement the recommendations from the published report
Disaggregation of beneficiaries (where applicable)	N/A
Spatial transformation (where applicable)	N/A
Desire performance	25%
Indicator responsibility	Regulation Compliance and Enforcement

Outcome indicator 5.3: Percentage reduction of national average for non-revenue water.

Indicator title	Percentage reduction of national average for non-revenue water
Definition	This indicator monitors the reduction in the national average for non-revenue water. Non-revenue water is defined as water losses due to leaks, theft and inefficient usage.
Source of data	No Drop assessments
Method of calculation / assessment	The Department issues a "***No Drop Report***" on the state of water use efficiency across all municipalities in the country.
Assumptions	The municipalities will implement the recommendations from the published report
Disaggregation of beneficiaries (where applicable)	N/A
Spatial transformation (where applicable)	N/A
Desire performance	32%
Indicator responsibility	Water and Sanitation Services Management

4. Priority 4: Administration & Governance

4.1. Outcome 6: Efficiency and effectiveness in organisational operations improved.

Outcome indicator 6.1: Number of additional digitalisation initiatives implemented.

Indicator title	Number of additional digitalisation initiatives implemented
Definition	This indicator monitors the extent to which the Department enhances, and leverages data driven insights to ensure continuous improvement of operations as well increased efficiency and productivity.
Source of data	• ICT policies and infrastructure • ICT systems and processes
Method of calculation / assessment	This will be the number of digitalisation initiatives implemented for the period.
Assumptions	The Department will set out human and financial resource requirements for each identified initiative in the plan.
Disaggregation of beneficiaries (where applicable)	N/A
Spatial transformation (where applicable)	N/A
Desire performance	5
Indicator responsibility	Corporate Support Services

4.2. Outcome 7: Entities' sustainability improved.

Outcome indicator 7.1: Percentage of unsustainable entities reduced.

Indicator title	Percentage of unsustainable entities reduced
Definition	This indicator monitors the extent to which the water sector institutions are financially viable and sustainable to implement their respective mandates.
Source of data	• Departmental governance oversight report • Entities' plans and annual reports
Method of calculation / assessment	The number of unsustainable entities is given the value "x" and the total number of water sector entities is given the value "y"; the formula is as follows: $$\gamma\% = {}^{x}/_{y} \times 100$$
Assumptions	The water and sanitation sector reforms supporting the institutions will be implemented.
Disaggregation of beneficiaries (where applicable)	N/A
Spatial transformation (where applicable)	N/A
Desire performance	0%
Indicator responsibility	Provincial and Entity Governance & International Cooperation

PART E

ANNEXURE A: DISTRICT DEVELOPMENT MODEL

This only indicates the bulk raw water projects and water services (i.e. bulk water and sanitation) infrastructure projects that will be under construction from the 2025/26 financial year.

Eastern Cape municipalities

Name of district / metropolitan	Bulk raw water	Regional bulk infrastructure	Water services infrastructure	Budget for facility infrastructure	Ministerial intervention	Bulk sewer projects for bucket eradication	Total of projects per municipality
Alfred Nzo district	1[13]	2	17	-	-	-	**20**
Amathole district		3	17	-	-	-	**20**
Chris Hani district		4	15	-	-	-	**19**
Joe Gqabi district	-[13]	2	8	-	-	-	**10**
OR Tambo district	-[13]	4	16	-	-	-	**20**
Sarah Baartman district	-	3	20	-	-	-	**23**
Buffalo City metro	-	-	-	-	-	-	**0**
Nelson Mandela metro	-	-	-	2	-	-	**2**
Total	**1**	**18**	**93**	**2**	**0**	**0**	**114**

Free State municipalities

Name of district / metropolitan	Bulk raw water	Regional bulk infrastructure	Water services infrastructure	Budget for facility infrastructure	Ministerial intervention	Bulk sewer projects for bucket eradication	Total of projects per municipality
Fezile Dabi district	-	4	9	-	-	-	**13**
Lejweleputswa district	-	4	11	-	2	1	**18**
Thabo Mofutsanyana district	-	6	18	-	1	6	**31**
Xhariep district	-	1	7	-	-	-	**8**
Mangaung metro	-	-	-	-	-	-	**0**
Total	0	**15**	**45**	**0**	**3**	**7**	**70**

[13] This project cuts across several district municipalities (i.e. Alfred Nzo, Joe Gqabi and OR Tambo)

Gauteng municipalities

Name of district / metropolitan	Bulk raw water	Regional bulk infrastructure	Water services infrastructure	Budget for facility infrastructure	Ministerial intervention	Bulk sewer projects for bucket eradication	Total of projects per municipality
Sedibeng district	-	5	7	-	1	-	**13**
West Rand district	-	-	17	-	-	-	**17**
	-	-		-	-	-	
City of Ekurhuleni metro	-	-	-	-	-	-	**0**
City of Johannesburg	-	-	-	-	-	-	**0**
City of Tshwane metro	-	-	-	-	1	-	**1**
Total	**0**	**5**	**24**	**0**	**2**	**0**	**31**

KwaZulu-Natal municipalities

Name of district / metropolitan	Bulk raw water	Regional bulk infrastructure	Water services infrastructure	Budget for facility infrastructure	Ministerial intervention	Bulk sewer projects for bucket eradication	Total of projects per municipality
Amajuba district	-	-	4	-	-	-	**4**
Harry Gwala district	-	-	4	-	-	-	**4**
iLembe district	-	2	3	-	-	-	**5**
King Cetshwayo district	-	1	8	-	-	-	**9**
Ugu district	-	-	3	[14]	-	-	**3**
uMgungundlovu district	-	2	9	-	-	-	**11**
uMkhanyakude district	-	-	-	-	1	-	**1**
uMzinyathi district	-	1	3	-	-	-	**4**
uThukela district	-	-	10	-	-	-	**10**
Zululand district	-	1	5	-	-	-	**6**

Name of district / metropolitan	Bulk raw water	Regional bulk infrastructure	Water services infrastructure	Budget for facility infrastructure	Ministerial intervention	Bulk sewer projects for bucket eradication	Total of projects per municipality
Ethekwini metro	-	-	-	2[14]	-	-	**2**
Total	**0**	**7**	**49**	**2**	**1**	**0**	**59**

Limpopo municipalities

Name of district / metropolitan	Bulk raw water	Regional bulk infrastructure	Water services infrastructure	Budget for facility infrastructure	Ministerial intervention	Bulk sewer projects for bucket eradication	Total of projects per municipality
Capricorn district	-	2	9	1[15]	-	-	**12**
Mopani district	1	5	14	-[15]	1	-	**21**
Sekhukhune district	-	1	8	-[15]	-	-	**9**
Vhembe district	-	2	2	-	-	-	**4**
Waterberg district	-	1	15	-	-	-	**16**
Total	**1**	**11**	**48**	**1**	**1**	**0**	**62**

Mpumalanga municipalities

Name of district / metropolitan	Bulk raw water	Regional bulk infrastructure	Water services infrastructure	Budget for facility infrastructure	Ministerial intervention	Bulk sewer projects for bucket eradication	Total of projects per municipality
Ehlanzeni district	-	1	5	-	-	-	**6**
Gert Sibande district	-	5	13	-	1	-	**19**
Nkangala district	-	7	9	-	-	-	**16**
Total	**0**	**13**	**27**	**0**	**1**	**0**	**41**

[14] This project cuts across several municipalities (i.e. eThekwini Metro and Ugu district)
[15] This project cuts across several district municipalities (i.e. Capricorn, Mopani and Sekhukhune)

North West municipalities

Name of district / metropolitan	Bulk raw water	Regional bulk infrastructure	Water services infrastructure	Budget for facility infrastructure	Ministerial intervention	Bulk sewer projects for bucket eradication	Total of projects per municipality
Bojanala district	-	2	21	-	-	-	**23**
Dr Kenneth Kaunda district	-	2	16	-	-	-	**18**
Dr Ruth Segomotsi Mompati district	-	5	5	-	-	-	**10**
Ngaka Modiri Molema district	-	4	3	-	-	-	**7**
Total	**0**	**13**	**45**	**0**	**0**	**0**	**58**

Northern Cape municipalities

Name of district / metropolitan	Bulk raw water	Regional bulk infrastructure	Water services infrastructure	Budget for facility infrastructure	Ministerial intervention	Bulk sewer projects for bucket eradication	Total of projects per municipality
Frances Baard district	-	1	5	1	-	-	**7**
John Taolo Gaetsewe district	-	1[16]	10	-	-	-	**11**
Namakwadistrict	-	1	4	-	-	-	**5**
Pixley ka Seme district	-	-	6	-	-	1	**7**
ZF Mgcawu district	-	1	5	-	-	-	**6**
Total	**0**	**4**	**30**	**1**	**0**	**1**	**36**

[16] This project cuts across several district municipalities (i.e. John Taolo Gaetsewe, Frances Baard and ZF Mgcawu)

Western Cape municipalities

Name of district / metropolitan	Bulk raw water	Regional bulk infrastructure	Water services infrastructure	Budget for facility infrastructure	Ministerial intervention	Bulk sewer projects for bucket eradication	Total of projects per municipality
Cape Winelands district	-	-	3	3	-	-	**6**
Central Karoo district	-	-	6	-	-	-	**6**
Garden Route district	-	-	7	6	-	-	**13**
Overberg district	-	-	7	-	-	-	**7**
West Coast district	1	-	7	-	-	-	**8**
City of Cape Town metro	-	-	-	-	-	-	**0**
Total	**1**	**0**	**30**	**9**	**0**	**0**	**40**