

WATER RIGHTS TRACKER

PROVINCIAL REPORT FOR

GAUTENG



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WITS UNIVERSITY
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human rights commission
30 YEARS OF COURAGE
DEFENDING HUMAN RIGHTS, DIGNITY AND DEMOCRACY FOR ALL

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Abbreviations

AGSA	Auditor-General of South Africa
DWS	Department of Water and Sanitation
IDP	Integrated Development Plan
MFMA	Municipal Finance Management Act
NRW	Non-Revenue Water
SAHRC	South African Human Rights Commission
WSA	Water Services Authority
WSDP	Water Services Development Plan
WTW	Water Treatment Works

Introduction

Water Services in South Africa: A Sector in Crisis

Access to sufficient water is a basic human right guaranteed by the Constitution of South Africa.[1] But even though this right is written in law, this is still not a lived reality for millions of South Africans.

A constitutional promise

At the dawn of democracy in 1994, race and class determined who had access to clean drinking water in South Africa. While the white, Indian and coloured communities all enjoyed almost universal access (>95%) to piped water distribution, only 43% of black South Africans had access to sufficient water.[2]

The 1994 *Reconstruction and Development Programme* (RDP) promised distributive and restorative justice: W*ater should be made available in a sustainable manner to all South Africans*, it declared. It recognised that *Being unable to access services like water and sanitation deepens poverty, while poverty itself is a barrier to access when people cannot afford to pay for these services.*[3] The RDP did not promise that all water should be free, but in line with its redistributive ethos, stated that cross-subsidies should be used to ensure affordability for the poor in urban and rural areas.

In 1994, the challenge was therefore to distribute potable water services more equitably, restore dignity to the millions of black South Africans who had not enjoyed access to piped services, and recognise the right to clean drinking water irrespective of a person's race or class.

The right of access to sufficient water in the 1996 Constitution therefore set the scene for a progressive and human-rights based approach to ensuring access to safe and affordable drinking water for all.

Thirty years later, the water services sector is in a crisis.

But thirty years on, and despite water services reform and significant investment, in many communities, taps run dry for days or even weeks.[4] Some families are forced to rely on rivers, unsafe wells, or water tankers that arrive late or not at all.[5] In several places, unsafe water has led to outbreaks of cholera and other diarrheal disease.[6] Many people cannot afford to pay for water and are forced to rely on unsafe sources when their services are disconnected or prepaid meter credits are depleted.[7] Many also resort to illegal water connections.[8] While the State provides free basic water to those who cannot afford it, the services often don't reach those most in need.[9] At the other extreme, some households, businesses and industries use excessive amounts of water, with impunity.[10] In other places, there is no water to provide: A changing climate has already resulted in looming

'day zero' scenarios in several locations.[11] Over much of the country, groundwater is also being used unsustainably.[12]

But behind the scenes, the government is also struggling.

Providing potable water is a local government responsibility, but it depends on a water value chain for storing, treating and transporting bulk water. While some water services infrastructure is new, a lot of investments were made decades ago, leading to difficult decisions about whether to upgrade or renew existing infrastructure or invest in new infrastructure for people who have never enjoyed water services.

When infrastructure is not maintained, renewed or upgraded, leaks and infrastructure failures occur more frequently, contributing to the problem of non-revenue water (water which is produced, treated, and pumped into the distribution system, but which is "lost" generating no revenue for the water utility). Non-revenue water is unmetered and unbilled water use, including water from communal taps. According to a recent Auditor-General audit of the water value chain, annual losses from non-revenue water sit at R14.89 billion.[13]

Officials also complain about extensive theft and vandalism of water services infrastructure, including intentional tampering with the water services network to create the need for water tankering services, theft of borehole pumps, and electrical cabling.

Consumers' inability or unwillingness to pay has also reached crisis proportions. As of 31 March 2025, total consumer debt owed to municipalities was R416.1 billion (up from R347.6 billion in 2023/24). Of the R416.1 billion owed, the largest proportion (72%) is owed by households.[14] When municipalities are not paid, they are unable to pay Water Boards, who are responsible for bulk water services provision. In 2024, municipalities owed Water Boards R24.58 billion, which prompted the National Treasury to take the drastic measure of threatening to withhold allocation of the equitable share of national revenue to 34 defaulting municipalities to prevent the financial collapse of certain Water Boards.[15] Water Boards, in turn, cannot pay the Department of Water and Sanitation (DWS) for the bulk water they purchase for treatment. In this way, the impacts of non-payment are felt throughout the water value chain.

In many municipalities across South Africa, political instability, infighting, corruption and violence undermine or even gut the capacity of technical water services departments. A significant proportion of local authorities are in financial distress.

In the run up to the 2026 local government elections, and in light of the factors outlined above, there are therefore growing calls for the state of water services in South Africa to be declared a national disaster.

A Mountain of Data

There is no shortage of data documenting the state of South Africa's drinking water crisis, including data collected by the DWS through the audited *Blue Drop*, *Green Drop* and *No Drop* reports, Statistics South Africa, the Auditor-General of South Africa (AGSA), and National Treasury. Yes! Media publishes a Local Government Report that includes a valuable non-financial census of municipalities. There is also a wealth of data generated by municipalities themselves in the form of their multi-year Integrated Development Plans (IDPs), by-laws and tariff schedules. Many other media outlets have captured the deepening water crisis across the country.

Recommendations, directives, and orders made by the DWS, the South African Human Rights Commission (SAHRC) and the courts constitute another source of data, which must also be tracked.

Table 1 summarizes what each dataset or report tells us about the state of water services in South Africa.

Institution	Dataset/Report	Value
DWS	*Blue Drop* Report	Comprehensive periodic evaluation of South Africa's drinking water systems. Contains audited information on all Water Services Authorities and Providers, including: number of consumers; biophysical sources of water; authorised water abstraction; water infrastructure portfolio; water treatment work design and used capacity; infrastructure value; staff shortfalls; microbiological and chemical compliance; water use efficiency index; regulatory surveillance and actions.
DWS	*Green Drop* Report	Comprehensive periodic evaluation of South Africa's wastewater systems. Assigns a risk rating to each Water Services Authority based on technical, financial and environmental management and capacity, and effluent/sludge compliance.
DWS	*No Drop* Report	Comprehensive periodic evaluation of municipal water efficiency, focusing specifically on water losses and non-revenue water. Assigns a risk rating to each Water Services Authority and identifies reasons for high water losses.
Statistics South Africa	2022 Census	Official source of demographic data such as total population, age structure, dependency ratio, sex ratio, population growth rate, education levels, number of households, and household services.
Yes! Media	Local Government Handbook	Publishes the annual *Local Government Handbook* and maintains interactive website (municipalities.co.za) including information on municipal area, political composition of Council, physical access to water services (+/- 200m from household or within the yard), number of municipal services delivery points, number of domestic households with access to free basic services.
AGSA	Local Government Audit Outcomes	Maintains an interactive website (https://mfma-2024.agsareports.co.za/) on local government audit outcomes including levels and value of NRW.
National Treasury	Municipal Finance Management	Oversight of all Schedule 71 budgets and reports under the Municipal Finance Management Act 56 of 2003 which contain information on operational budgets, capital allocations,

	(MFMA) budgets and reports	maintenance expenditure, renewal expenditure and information from which revenue collection rates can be determined.
Municipalities	Integrated Development Plans (IDPs), by-laws, tariff schedules and tariffs	IDPs contain information on number of wards, overlap with traditional authorities, unemployment rates, demographic data, water and sanitation services achievements and challenges. By-laws set out the local rules applicable to the provision of water services. Tariff schedules identify categories of consumers and assign a monetary value to volumetric consumption of water, usually organised as increasing blocks (increasing block tariffs).
SAHRC	Investigative Hearing Reports	Detailed recommendations and findings relating to the state of water services based on investigative hearings into water and sanitation services and/or service delivery in four provinces (Mpumalanga, Limpopo, KwaZulu-Natal, Free State.
Courts	Decided court decisions	Binding legal precedent on water services-related issues, available through the open access South African Freedom of Legal Information Institute (https://www.saflii.org/content/databases.html).

Table 1: Sources of Data on Water Services in South Africa

Despite this mountain of data, there is no comprehensive platform or dataset that brings the information together in a way that allows policy and decision-makers to assess progress in realising the human right to water at a sufficiently granular level.

The way in which data on water services in South Africa is organised has several limitations:

First, it is not organised in a way that centres rights holders or that highlights the specific elements of the human right to water. For example, while the *Drop* reports contain valuable technical detail, they say nothing about the socio-economic context or factors that determine economic access to water, such as the levels of water tariffs or free basic water coverage.

Second, the ways in which data is aggregated and reported often masks the specifics of water service provision in particular municipal Water Services Authorities. For example, while the *Blue Drop* report contains information on the extent to which the design capacity of water treatment works has been used, it does not correlate this with population growth rates in particular Water Services Authorities, which could point to where capital investment is most urgently needed.

Third, while specific datasets or reports highlight particular service delivery challenges, there is no encompassing evaluation of the systemic drivers that are leading to dysfunction in the water services sector.

Finally, while several institutions exercise oversight (DWS, the SAHRC, parliamentary committees, the courts), there is no platform or report that has collated recommendations, directives and orders for purposes of tracking subsequent compliance.

The South African Water Rights Tracker: A Formal Collaboration

It is against this background that the Water Rights Tracker (WRT) Project was conceived in mid-2022 and launched in June 2023 as a formal partnership between the SAHRC and the University of the Witwatersrand (Wits). The SAHRC, as a Chapter 9 institution, has a constitutional mandate to monitor how human rights, like the right to water, are being realised across the country. Wits, in turn, is an academic institution with the capacity to undertake complex research.

The ultimate aim of the WRT is to develop to develop a baseline, online, public-facing GIS-based tool that tracks progressive realisation of the right to water across all 144 South African Water Services Authorities. To achieve this, it was first necessary to decide how the right to water should be measured using an indicator approach, to gather information on each indicator from the datasets and reports outlined above, to verify and engage with local officials responsible for delivering water services, and to collate the data in a way that allows for a comprehensive picture to emerge on the state of water services delivery in each province and across the country as a whole. More information on the methodology underlying the project is provided in **Annexure A**.

The WRT has five key aims:

- To assist the SAHRC fulfil its constitutional mandate (as set out in section 184(1)(c) of the 1996 Constitution) to monitor the realisation of human rights.
- To support the work of other supervisory institutions, such as the DWS, the Auditor-General of South Africa, National Treasury, and parliamentary and provincial legislative committees.
- To create a reflexive space for engagement with Water Services Authorities and, technical officials employed in water services departments, in particular.
- To establish a baseline for tracking the progressive realisation of the right to water that is publicly accessible and easy to understand.
- To feed into and support ongoing research into South Africa's water sector.

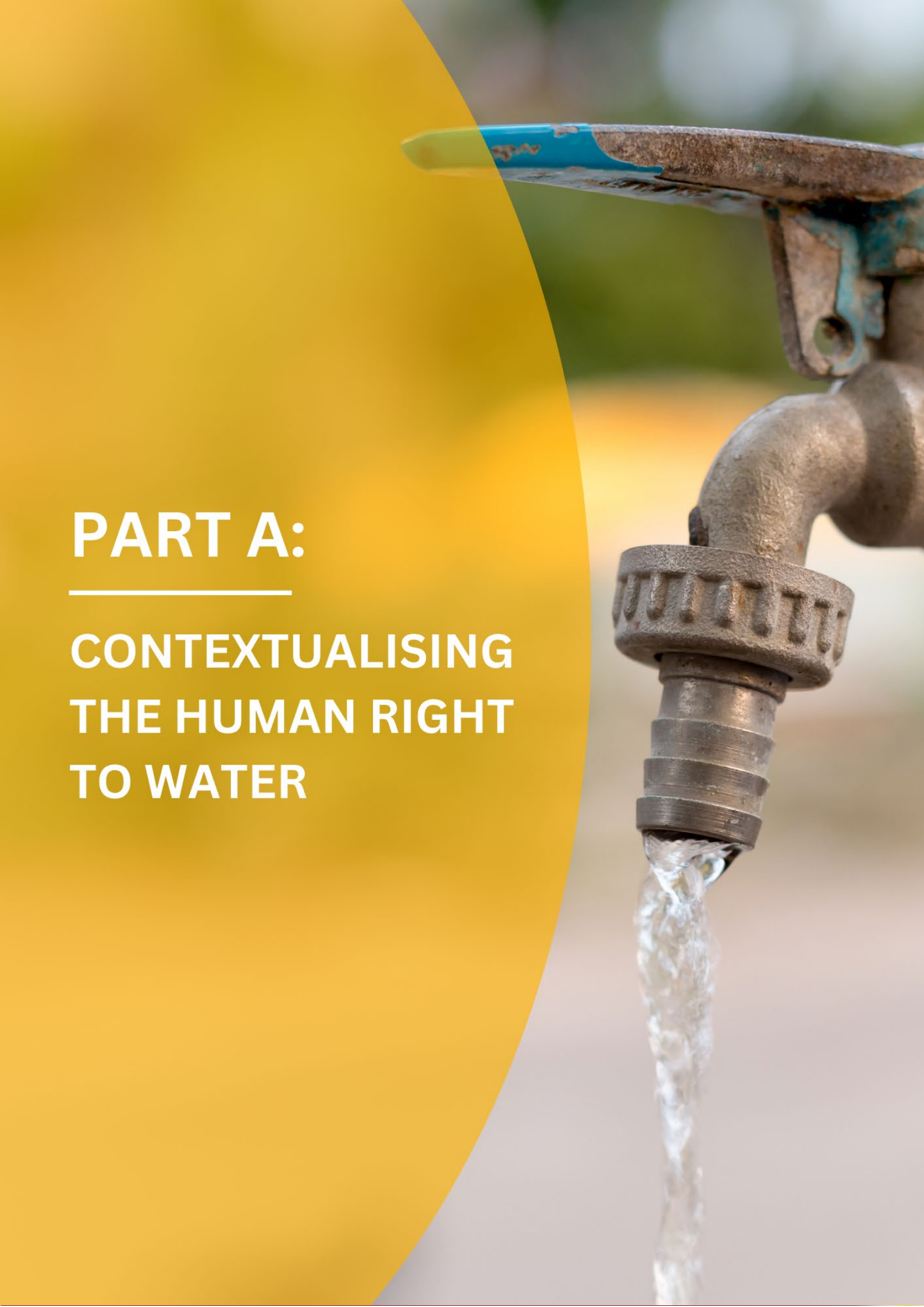
The intent underlying the WRT is to give government and the public practical, evidence-based recommendations that are tailored to each province. In simple terms, this project helps us take a step back, look at the full picture of water services in South Africa, and answer a simple but powerful question: What must be done now to ensure that every person in South Africa has access to clean and sufficient water?

Structure of the Report

This report is structured in two parts. Part A sets out critical contextual information on the right of access to sufficient water. This includes information on:

- The elements of the human right to water
- The meaning of "progressive realisation" and how it is measured
- The meaning of "reasonable measures"
- How policy and legislation, finances, infrastructure and human skills constitute reasonable measures
- The rights holders and duty bearers of the right of access to sufficient water
- The indicator approach utilised in this report to measure the right to water
- The meaning of systemic drivers of non-compliance

Part A is generic to all the provincial WRT reports, while Part B focuses on the situation in each particular province, in this instance, Kwa-Zulu Natal.



PART A:

CONTEXTUALISING THE HUMAN RIGHT TO WATER

Elements of the Human Right to Water

Section 27 of the Constitution of South Africa guarantees everyone the right to access sufficient water. This right encompasses various categories of domestic use, including water for consumption, personal and household hygiene, amenities, and productive use. These uses of water are closely linked to other constitutional rights such as the rights to life, health, dignity, food, education, culture, and a healthy environment.

Over the last thirty years, the content of the right to water has taken shape. At an international level, one of the most important sources on the scope of the right to water is General Comment 15, which was issued by the Committee on Economic, Social and Cultural Rights in 2002.[16] Another important source is the United Nations General Assembly Resolution on the Right to Water of 2010.

The basic idea of the right to water is that *rights holders* have an entitlement or claim against *duty bearers* to provide them with a certain good or service. Ordinarily, rights holders are individuals, and the duty-bearer is the State, but rights holders can also claim rights collectively (as a group or community) and on behalf of other rights holders. Further, the South African Constitution allows for so-called horizontal application whereby rights holders can also make claims against private actors.

Either way, *rights holders* – not technology, infrastructure or management systems – sit at the very centre of a human rights-based approach to water services.

According to General Comment 15, the basic human rights norm is that duty bearers must provide water to rights holders that is *adequate* for human dignity, life, and health. This recognises that water is a social and cultural good, and not simply an economic good governed by market forces.

The adequacy of water supply services must meet basic standards relating to **availability**, **quality**, and **accessibility**. The general standard for accessibility is that water and water facilities and services must be accessible to everyone without discrimination. This encompasses **physical**, **economic**, and **information accessibility**.

Table 2 summarises these standards according to international and South African law.

Element	International Law (General Comment 15, WHO Guidelines)	South African Law
Availability	The water supply for personal and domestic uses[17] must be *sufficient* and *continuous*. "Continuous" means that the *regularity* of the water supply is sufficient for personal and domestic uses.	Everyone has a right of access to *sufficient* water[19] The minimum standard for basic water services consists of a minimum quantity of drinking water of 6kl/household per month (25 litres per person per day) with

	The quantity of water for each person should correspond with World Health Organisation (WHO) guidelines (between 50-100 litres per person per day).[18]	an effectiveness that water is made available for at least 358 days per year.[20] Water should not be interrupted for longer than 48 hours.[21] Where water supply is interrupted for a period longer than 48 hours, a Water Services Authority must take reasonable measures to ensure that a consumer has access to alternative water supply of at least 15 litres per person per day, made available at strategically determined points of delivery that are relatively convenient and safe.[22]
Quality	The water required for each personal or domestic use must be *safe* (free from micro-organisms, chemical substances and radiological hazards that constitute a threat to a person's health. Water should be of an acceptable colour, odour and taste for personal or domestic use.	A water services institution must ensure that distributed drinking water is fit for human consumption as per SANS 241 (South African drinking water quality standard).[23] Where emergency or alternative supply is provided, a water services institution must ensure that distributed water is fit for human consumption as per SANS 241.[24]
Physical Accessibility	Water, and adequate water facilities and services, must be within *safe* physical reach for all sections of the population; i.e. in the immediate vicinity, of each household, educational institution and workplace. All water facilities and services must be of sufficient quality, culturally appropriate and sensitive to gender, life cycle and privacy requirements. Physical security should not be threatened during access to water facilities and services. Water sources should be within 1,000 metres of the home and collection time should not exceed 30 minutes (WHO Guideline).	The minimum standard for basic water supply services is a minimum quantity of potable water within 200m of a household.[25] By 6 June 2027, the minimum standard for basic water services entails an access or delivery point which must be at least at the end boundary of the yard (user connection point) of the existing settlement.[26]
Economic Accessibility	The direct and indirect costs associated with securing water and water facilities and services must be affordable for all and should not threaten other rights. Water costs should not exceed 3% of household income (WHO Guideline).	At no cost to indigent households, upon depletion of the initial 6kl per month allocation, qualifying indigent households will be subject to usage restrictions and will be responsible for payment based on the adopted tariff policy for any additional water consumed.[27]

		Tariffs must be reasonable enough to ensure that at least a basic level water supply is affordable and pro-poor to accommodate low-income groups.[28]
Information Accessibility	Accessibility includes the right to seek, receive and impart information concerning water issues.	The Minister must ensure there is national information system on water services.[29] The public is entitled to reasonable access to the information contained in the national information system, subject to limitations necessitated by rights enshrined in the Bill of Rights.[30]

Table 2: Elements of the Human Right to Water in International and South African Law

In summary, access to water must be adequate for human dignity. This means that enough water must be available for personal and domestic use. The water must be free from contaminants and safe for human consumption in addition to being of acceptable colour, odour and taste. Water must be affordable and physically accessible on a non-discriminatory basis. Lastly, information concerning water issues must be readily available to the public.

Progressive Realisation of the Human Right to Water

Treating and distributing potable water to millions of people requires money, expertise, skilled human resources, and systems. Water services institutions need capital to construct dams and maintain bulk pipelines, pump stations, reservoirs and reticulation networks. They need operational funds to buy raw water, energy, and chemicals and pay staff. Apart from the day-to-day costs of putting water through pipes, they also need to set aside funds for infrastructure maintenance, renewal, and refurbishment and account for depreciation, borrowing costs, and other overheads.

Meaning of Progressive Realisation

For these reasons, and as a socio-economic right, access to water is not immediately and universally realisable but must be achieved progressively. This means that the state has a duty to take reasonable legislative, policy, and budgetary steps over time to expand and improve water access.[31] Progressive realisation implies that:

- Residents must experience improved access over time, not stagnation or regression.
- Existing access must be maintained or enhanced, not diminished.
- The State should provide basic, potable water close to households, particularly for the most vulnerable.

Progressive realisation includes both positive and negative obligations. Positively, the government must expand access and improve the quality and proximity of water supply. Negatively, it must not interfere with existing access by reducing supply or quality without just cause.

However, this right is qualified. Interruptions in water supply may be lawful when they are reasonable, temporary, and necessary (e.g., for maintenance or in emergencies). In all cases, alternative access must be ensured. In situations of non-payment, disconnections are generally not allowed if they would deny access to basic water, especially for those who are genuinely unable to pay (as confirmed in the case of *Residents of Bon Vista Mansions v Southern Metropolitan Local Council*).[32]

In essence, progressive realisation of the right to water requires deliberate, equitable, and sustained action by the state, balancing resource constraints with the imperative to fulfil one of the most basic conditions for life and dignity.

Reasonable Measures to Ensure Realisation of the Right to Water

Under the South African Constitution, the State must take reasonable policy, legislative, and "other" measures (such as setting budgets and building institutions) to expand and improve water access.

Policy and Legislation

In 1997 the democratic government passed the Water Services Act, which is still the main piece of national legislation that governs water services. The Water Services Act empowers the Minister of Water to set national standards on the provision of water services and water tariffs.[33] Compulsory national standards on water services were first published in 2001 and will be replaced by a new set of standards in 2026. Compulsory standards on water tariffs were first published in 2003 and were replaced in 2024.

The Water Services Act also establishes **water services institutions**. These include **Water Services Authorities (WSAs)** responsible for treating and/or distributing water at a local level,[34] and Water Boards, which provide water services to other institutions (such as treating water in bulk and selling it to local WSAs).

Every WSA has a duty to all consumers or potential consumers in its area of jurisdiction to progressively ensure efficient, affordable, economical and sustainable access to water services.[35]

Every WSA also has a duty to develop a **Water Services Development Plan**.[36] A WSDP must be prepared as part of the process of developing an Integrated Development Plan (IDP) under municipal legislation or as a separate process. It serves as a detailed strategic and operational plan to provide water services in the WSA's jurisdictional area.[37]

In addition to the WSDP, and as part of the reasonable measures necessary to progressively realise access to sufficient water, WSA's must make **by-laws** that set out the conditions under which water services are provided. By-laws typically deal with applications for water services, water tariffs, management of water accounts, termination of services (cut-offs), unauthorised use of water services, protection of water sources, and enforcement powers.

As part of their constitutional mandate to provide basic services, municipalities must also provide a package of free basic services to households that cannot afford to pay. This is governed by the 2006 *National indigent Policy* which directs local government to provide access to essential household services (water supply, sanitation, refuse removal, basic energy and basic assistance with housing) to qualifying indigent households. Under the Municipal Systems Act 32 of 2000, WSA have a mandate and responsibility to develop an **Indigent Policy** and compile **Indigent Registers** for the allocation of free basic services, including **free basic water**.

In summary, reasonable measures necessary to realise the right to water include the WSDP, water by-laws, and indigent policies and registers.

Financial Resources

Municipalities in South Africa have access to multiple funding sources for water services. These include the municipality's own revenue, the equitable share, several grants administered by National Treasury and various other national government departments, municipal borrowing, and international sources (see **Annexure B**). These sources can either be classified as conditional or unconditional. Grants, international sources and loans are often conditional, and municipalities are limited in terms of what they may use these funds for.

The main source of funding for capital and operational expenses should be the revenue a municipality is able to raise from the sale of water services. Under municipal legislation, the authority to set water tariffs lies with the municipal council.[38] A WSA has complete autonomy in deciding how water revenues should be spent. However, its power to set water tariffs is not unfettered because all water tariffs must comply with ministerial norms and standards under the Water Services Act.[39] These norms and standards place a heavy emphasis on cost recovery for water services.

In most WSAs, the revenue raised through water tariffs is only enough (or barely enough) to cover operational expenses and some maintenance expenditure. To provide free basic services and invest in additional water infrastructure, WSAs typically rely on the **equitable share** which is the portion of the national tax revenue that is annually allocated to municipalities. This amount usually appears as "Transfers and subsidies" in the budget sheets municipalities are required to prepare on an annual basis under the Municipal Finance Management Act 56 of 2003 (MFMA).

Municipal legislation requires WSAs to budget for capital, maintenance and operational expenditure every year (prepared according to the Schedules set out under the MFMA). From these MFMA Schedules it is possible to determine budget and revenue sufficiency, capital and maintenance expenditure, and revenue collection rates. These form part of the financial measures necessary to progressively realise the right to water. Adequate maintenance expenditure, in particular, is necessary to maintain the asset base and prevent breakdowns and service interruptions. According to Circular 71 (Uniform Financial Ratios and Norms) issued under the MFMA, the total repairs and maintenance expenditure should be 8% of the carrying value of property, plant, equipment and investment property. As there are information gaps on the carrying value of water services infrastructure, and as this level of maintenance spend was regarded as impossible to achieve by many of the participants in the verification exercise, this report adopts a more realistic measure of a standard of 8% of revenue collected.

Infrastructure Resources

Providing water services requires investment in water infrastructure: Storage dams, pump stations, bulk water pipelines, water treatment works, water reservoirs, and reticulation pipelines. To collect water revenue, WSAs must also install water meters, including pre-paid meters. The *Blue Drop* audit administered by the DWS provides detailed specifications of the infrastructure resources controlled by South Africa's 144 WSAs.

Bulk infrastructure is designed with a certain capacity, usually measured in the capacity to produce kilo- or mega-litres (Ml) per day. The capacity of water treatment works, and the extent to which that capacity is used, can be used to assess progressive realisation of the right to water.

Scale is another important consideration. Not all WSAs, for example, operate water treatment works. And given the vast geographic extent of South Africa, many rural municipalities operate a water infrastructure network that extends over hundreds, if not thousands, of kilometres. This can impact a WSA's capacity to provide water services.

Human and Skills Resources

Providing, operating, and maintaining water services infrastructure requires a specific skills set. Scientists, process controllers, supervisors and technicians are needed to operate water treatment works. The *Blue Drop* process recently audited the human resource shortfall across all 144 WSAs. But beyond water treatment works, WSAs also employ staff or contract service providers to run their technical departments. The number of staff employed in these technical departments is more difficult to come by, but these human resources are also required to progressively realise the right to water.

Rights Holders and Duty Bearers

Bringing Rights Holders into View

One of the aims of the WRT Project is to re-centre the holders of the right to water. In South Africa, the right of access to sufficient water belongs to "everyone". This includes people living in urban, peri-urban, and rural areas; rich and poor; young and old.

None of the grounds of prohibited discrimination in the South Africa Constitution – race, gender, ethnicity, age, or disability (amongst others) – should explicitly or implicitly deny anyone access to water as a life-sustaining resource.

Knowing *who* the rights holders are provides critical contextual information for the sustained delivery of water services.

At a very basic level, it is necessary to know how many people live in a particular town or city because this information enables planners to decide on the capacity of bulk water treatment infrastructure and the scale of investment required. But in a context of rapid migration and urbanisation, this is no easy task. It is also necessary to know the population growth rate, as this can guide water planners on where to locate new water services investments.

Over and above the number of people, the number of households in a town or city impacts water services planning. On the one hand, the trend for household sizes to become smaller increases the burden on WSAs because it increases the demand for more service delivery points. On the other, a standard that assumes a particular household size (such as the South African basic water standard of 6kl per household per month) can come completely undone where multiple households are established on a stand of land with a single delivery point, or where the household is larger than the assumed size of 4 family members.

The gender split of rights holders is significant, because women still bear a disproportionate amount of "water work" (fetching water, washing, cooking, cleaning) in a household.

Although they are unable to contribute to water services cost recovery, children (below the age of 15 years) are rights holders to water as much as adults and it is important to bring them into view.

Working-age adults must pay for water services in line with the tariffs a WSA imposes but their ability to do so may be constrained by a high dependency ratio (care for the young and the elderly) and the scourge of unemployment.

Knowing who the rights holders are in each WSA across South Africa's vast and unequal social terrain – even if only in terms of these basic parameters – will go some way to understanding the workability of the reasonable measures policy makers and planners put in place for the provision of water services.



Duty Bearers: A Whole-of-Government and Whole of Society Approach

Who is responsible for progressively realising the right to water in South Africa?

The critical role of local government

From a narrow perspective, the answer is local government. This is because the 1996 Constitution lists "water and sanitation services" as a local government matter.[40] It therefore comes as no surprise that under the Water Services Act of 1997, WSAs are municipalities. Out of South Africa's 257 municipalities, approximately 144 serve as WSAs. They can be one of the large metropolitan municipalities like the City of Tshwane, Johannesburg or Cape Town, a district municipality like Gert Sibande in Mpumalanga, or a local municipality like Newcastle in KwaZulu-Natal.

The Water Services Act distinguishes between the roles of the WSA and Water Services Providers (WSPs). The basic difference is that WSAs are ultimately responsible for the provision of water services to all consumers or potential consumers in their areas of jurisdiction. To this end, they have certain planning, budgeting and regulatory functions. WSPs are responsible for the day-to-day operational roll-out of water services. For the last 30 years, this role distinction has not mattered too much because almost all WSAs in South Africa also function as WSPs. However, if the proposed Water Services Amendment Bill enters into force, WSPs will need to be licensed by the Department of Water and Sanitation (DWS).

A whole-of-government approach

However, the narrow perspective is misleading because the successful provision of water services is part of a value chain that pulls in many other actors, within and outside of government.

In fact, the supply of potable water requires a whole-of-government approach.

In addition to municipalities, the DWS, Water Boards, Water Services Intermediaries, other national government departments such as National Treasury and the Department of Co-operative Governance and Traditional Affairs, and provincial governments play important roles in ensuring that South Africa's natural water resources are properly managed, investments in bulk water storage and treatment capacity are made on time, and local governments are politically and financially stable.

Traditional leaders, while not having an express mandate to provide water services, also impact on the municipal supply of potable when they allocate land to households under their authority.

A range of other State institutions have a supportive or oversight role. They include:

- The DWS itself, which is responsible for setting and enforcing uniform standards on water services provision across South Africa. To its credit, the Department has recently reinvigorated its oversight role through the *Blue Drop*, *Green Drop* and *No Drop* reports.
- The courts, which decide disputes relating to water services and set rules for future-related cases through judicial precedent. Judicial precedent are the rulings judges make in particular cases that become binding for everyone.
- Chapter 9 Institutions, including the South African Human Rights Commission, the Auditor-General of South Africa, and the Public Protector.
- Parliamentary Portfolio Committees and Provincial Portfolio Committees.

A detailed overview of the duty bearers responsible for progressively realising the right to water in South Africa is set out in **Annexure C** to this report.

A whole-of-society responsibility

But government efforts to progressively realise the right to water will come to nothing if the whole of society is not pulling in the same direction. The right to water is detrimentally impacted for everyone:

- When owners of land in remote rural areas refuse to provide water services for their employees, further burdening poorly-resourced municipalities.
- When the businesses, government departments, schools, clinics and households who can afford to pay for water refuse to do so.
- When business, institutions and households waste water (for example, through excessive use, leaking toilets, and running taps).
- When unscrupulous operators intentionally damage water infrastructure to create or perpetuate the need for water tankering services.
- When groups or individuals damage fire hydrants, communal taps, valves, and standpipes.
- When criminal elements steal borehole pumps, electricity cables and other critical electrical and water infrastructure.

All spheres of South Africa's government must work together to ensure progressive realisation of the right to water, and every South African must realise and respect that water and water infrastructure are a common, public good.

Using Indicators to Measure Progressive Realisation of the Right to Water

Different methods can be used to measure progressive realisation of the right to water. Following the lead of the Studies in Poverty and Inequality Institute,[41] the WRT uses an indicator approach to measure the progressive realisation of this right. An indicator is a specific, measurable, observable variable that can be used to track progress toward achieving a goal. In the literature on the right to water, indicators have been used to promote accountability.[42]

There are various ways of categorising indicators (structural, process, and outcome).[43] The WRT relies on five categories namely, context, policy efforts, resource efforts, implementation and oversight. Within each category, indicators were selected to answer specific questions (see examples in Table 3). A total of 85 indicators were initially identified to measure progressive realisation of the right across all 144 WSAs. A detailed explanation of the methodological choices and limitations associated with these indicators is set out in **Annexure A** to this report.

Category	Question Examples	Indicator Examples
Context	*What is the geographical and spatial extent of the WSA?* *How is the political landscape in each WSA organised?* *What is the population of each WSA?* *What are the gender and age characteristics of the population?* *How many households and service delivery points are in each WSA?* *What are the economic characteristics of the population?* *Is the WSA financially distressed?* *What percentage of the population is provided with Free Basic Water?* *On what water resources does the WSA rely?* *What water infrastructure is under the WSA's authority?*	• Geographical location • Extent of spatial jurisdiction • No. of municipal wards • No. of traditional authorities • Population size (three measures) • Household size • Service delivery point/household ratio • Gender split • Population under 15 • Dependency ratio • Unemployment rate • Water infrastructure (no. of water treatment works, km of bulk pipelines, reservoirs, km of distribution network) • Media reports on political instability, violence, corruption
Policy Efforts	*Does the WSA have an updated Water Services Development Plan (WSDP)?* *Does the WSA have a water by-law?* *Does the WSA have an Indigent Policy?* *What water services-related issues are identified in the WSA's Integrated Development Plan (IDP)?*	• Date of approved WSDP • Citation of by-law • Date of Indigent Policy • Express mention of water services-related issues in IDP
Resource Efforts	*Does the WSA's infrastructure budget cover operational costs? Is there sufficient revenue for capital costs?* *What is the revenue collection rate?*	• Budget sufficiency (trend analysis 2021/22 – 2024-25) • Revenue sufficiency (trend analysis 2021/22 – 2024-25)

	What is the WSA's annual spend on renewal and maintenance of infrastructure assets? *How many people are employed in water treatment works and in technical departments? What is the human resource shortfall?*	• Maintenance and renewal percentage spend (trend analysis 2021/22 – 2024-25) • Revenue collection (trend analysis 2021/22 – 2024-25) • Human resources shortfall (process controllers, scientists, technicians)
Implementation	*What is state of physical access to water services in the WSA?* *What is the state of economic access to water services in the WSA?* *What is the state of water quality?* *Are the water services adequate (stoppages and outages)?* *Is the water use efficient?*	• Percentage of households with access more and less than 200m from household, piped water in yard • Tariff blocks and levels • No. of planned and unplanned outages • Microbiological and chemical compliance (acute and chronic) • Water Use Efficiency Index • Percentage non-revenue water
Oversight	*What regulatory actions have been taken against the WSA, if any?* *Are there any court orders against the WSA?* *What directives and recommendations has the SAHRC issued against the WSA?* *What oversight actions have been conducted by Parliamentary or provincial committees?*	• *Blue Drop* and *Green Drop* regulatory actions • Court decisions • SAHRC recommendations and directives • Parliamentary Portfolio Committee recommendations

Table 3: Elements of the Human Right to Water in International and South African Law

The WRT researchers compiled a profile for every WSA using desktop methods of research. Within this profile, the complete analysis across all indicators and categories is set out in the "Expanded Table". Over the course of two years, the SAHRC hosted nine provincial in-person engagements with water services officials from all WSAs in South Africa to verify the analysis and findings.

From this initial analysis, the researchers selected a more limited set of indicators organised around the themes of rights holders, key implementation indicators, reasonable measures, systemic drivers of non-compliance, and unique drivers of non-compliance, set out in the "Assessment Table" and "Narrative" sections of each WSA profile. This provincial report is a synthesis of this more limited set of indicators.

Systemic Drivers Undermining Progressive Realisation

As the WRT project unfolded, particular systemic drivers that undermine progressive realisation of the right to water in South Africa became apparent. Across the vast landscape of South Africa, these drivers undermine efforts to ensure that every South African enjoys access to sufficient water to lead a life of dignity.

The systemic drivers cluster around the eleven themes of leadership, planning, funding, infrastructure, electricity, scarce skills, the physical environment, consumer issues, third-party interference, co-ordination and co-operation, and scale.

Leadership

Political instability, political interference, and management instability disrupt and destabilise the operation of water services. These problems arise in all nine of South Africa's provinces. Political instability (hung and shifting coalitions) impacts the appointment of critical positions, spending of grants, planning, approval of budgets and staff morale. In some WSAs, political infighting has deteriorated to the point of intimidation, violence, and even murder. Management instability, in the form of vacancies or frequent changes in the Municipal Manager, Chief Financial Officer and Heads of Technical Departments also detrimentally impact the delivery of water services, as does corruption on the part of municipal officials.

Planning

The law prescribes that local WSAs must plan for the progressive realisation of the right to water. To this end, they must prepare a detailed and comprehensive WSDP that sets out the where, what, who and how of water services provision in the municipality concerned. This plan should undergo a rigorous public participation process and serve as a tool to hold WSAs accountable. But in many WSAs, the WSDPs are inaccessible or outdated. And in a context of increasing migration and urbanisation, WSAs grapple with inaccurate population and household data that affects the funding municipalities receive from the national sphere as well as the municipality grading. WSAs in some provinces also struggle with the misalignment between traditional land allocation and municipal water services provision, a structural planning failure that perpetuates unsustainable settlement patterns, erodes municipal finances, and exacerbates service inequities.

Infrastructure

Potable water is not an "ecological gift". Local WSAs can also only provide it if there is bulk and reticulation infrastructure to extract, store, treat, and distribute water to households and businesses. Many of the investments in water services infrastructure were made in the colonial and apartheid eras, but these were skewed, leaving millions

without access to services. For the last thirty years, WSAs have had the unenviable task of managing the trade-off between servicing previously unserved areas and maintaining the existing aging infrastructure that serves as the WSA's shrinking revenue base. The law requires WSAs to prioritise investments in the provision of basic water supply, but in many of these new areas of supply consumers are unable or unwilling to pay. Meanwhile, the existing aging infrastructure deteriorates from deferred maintenance and poor management. This drives a vicious cycle: Increased levels of non-revenue water, a dissatisfied customer base, and further shrinkage of the revenue base. Officials across all nine provinces consistently emphasised aging infrastructure as a significant driver of dysfunctional water services.

Funding

Since 1994, the municipal funding model rests on the expectation that over and above the equitable share, funding for the backlog of new infrastructure would be addressed through targeted grants. Funding for maintaining existing infrastructure, and for operating water services was expected to come from the water services own revenues in line with the cost recovery principle. Over thirty years, the weaknesses in this model have become apparent: Many WSAs lack the capacity to access the grants or spend them on time. The equitable share is insufficient to fund the true demand for basic water, tariff structures are frequently flat, revenue collection rates are low because consumers are too poor or financially stressed for cost recovery to work, cross-subsidies are shrinking, and pre-paid meters come with technological, financial and justice complexities.

Retaining Scarce Skills

Water services require scientific, engineering and technological expertise. Through the *Blue* and *Green Drop* audit, the DWS has correctly flagged the link between under-staffing/poorly-qualified staff and dysfunctional water and wastewater treatment plants. Recent regulations (such as the 2023 Regulation 3630 on process controllers) aim to professionalise the sector. At the same time, municipalities must comply with the minimum standards set out in the 2021 Municipal Staffing Regulations under the Municipal Systems Act. But across South Africa, WSAs find that the current national staffing and qualification regulations do not align with practical realities. In many of smaller towns and rural areas, WSAs struggle with retaining staff willing to work for the pay scale of a small municipality (municipal pay scales are linked to grading), and willing to stay in a small, rural town.

Electricity Issues

South Africa extensive water infrastructure investments move approximately 12 billion litres of water around the country every day. Return flows of sewage and wastewater constitute about 70% of this amount. The approximately 2600 pump stations, 1000 water

treatment works and 1000 wastewater treatment works require a stable supply of electricity to function properly. Most WSAs are still highly dependent on Eskom's coal-fired power for the operation of water and wastewater infrastructure. As a trading service, electricity has subsidised other municipal services. With a shift to renewable sources of energy and increases in the cost of Eskom supply, margins have fallen. Although the country seems to have turned the corner on load-shedding, Eskom has imposed intentional *load reductions* on municipalities with high levels of debt for bulk electricity supply. This punitive measure, aimed at forcing payment of the debt, has resulted in the catastrophic disruption of water services in several localities. Even when Eskom does not impose load-shedding or load reduction, municipal authorities struggle with the time it takes Eskom to repair faults and restore power. Theft and vandalism of electrical infrastructure can also severely disrupt the essential supply of electricity to water infrastructure.

Physical and Ecological Issues

Local water services authorities can only provide water if it is physically available. South Africa is a water stressed country: Rainfall is unevenly distributed, and evapotranspiration is high. Historically, the country has always experienced alternating cycles of drought and floods. With the advent of climate change, some regions, such as the Northern Cape, are becoming hotter and drier, while others – such as the Western Cape, Eastern Cape and KwaZulu-Natal are dealing with more frequent and damaging droughts and floods which impact the availability of water (either too much or too little) and damage water and wastewater treatment infrastructure. Across the country, alien and invasive species choke water resources. The siltation of dams is also a pressing and ongoing issue.

Consumer Issues

Since 1994, the funding model for water services in South Africa rests on the principle of cost recovery. The cost recovery principle is enshrined in policy, legislation and regulations, including the most recent ministerial Norms and Standards published under the Water Services Act which enter into effect in 2026. WSAs cannot, by law, set tariffs that depart from this principle. But the funding model and cost recovery principle bump up against a socio-economic context of (i) youthfulness (in most water services authorities, a quarter to a third of water consumers are children – they consume no less water than adults); (ii) unemployment (which exceeds 80% in some municipalities); (iii) indigency (even where people earn a little money, they may not earn enough to pay the full cost of water provided to them); (iv) increased demand; and (v) a culture where payment for water services is not the first priority of consumers, or where they believe water should be provided for free. All of these factors make the principle of cost recovery

unworkable and undermine the municipality's capacity to generate its own revenue to fund maintenance and operations.

Third Party Interference

Third party interference in the provision of water services takes the form of intentional and negligent conduct. The most egregious form of third-party interference in the provision of water services takes the form of so-called "water mafias" – organised groups that intentionally damage or tamper with the water distribution network, forcing community members to rely on their water tanking solutions. Municipalities across all provinces report vandalism of water and electrical infrastructure as a serious and constant threat to the provision of water services.

Intergovernmental Coordination

Poor intergovernmental coordination hampers progressive realisation of the right to water. Instances of poor coordination include the relationships between the municipal WSAs and StatsSA, Home Affairs, SAPS, the DWS, and the ministries responsible for housing, electricity, minerals, trade and Industry (scrap metals). Many municipalities complain about a lack of coordination and alignment in the demarcation of new settlements, roll-out of housing, and provision of bulk services.

Scale

It is commonly assumed that most water services authorities in South Africa are either metropolitan or district municipalities, but this is a false assumption. There are provincial variations – in some district municipalities predominate (Mpumalanga), in others local municipalities are mainly responsible (Northern Cape). The policy shift in favour of district municipalities reflects a bias that there is incapacity at local level, but any movement up the scale of governance risks inefficiencies, as water services need to be able to respond quickly to local service needs. Much of South Africa is under-populated, with long distances between settlements, impacting the effectiveness and efficiency of water services provision in service of progressive realisation of the right to water.

PART B:

PROGRESSIVE REALISATION OF THE RIGHT TO WATER IN GAUTENG



Gauteng Overview

Total Population for Gauteng: 15 million (2022) Census; 15.9 million (2024 mid-year population estimates)

Number of Households in Gauteng (2022 Census): 5.3 million

Gauteng is situated in the heart of South Africa, bordered by the Limpopo, Mpumalanga, North West and Free State Provinces. It has three metropolitan municipalities (Johannesburg, Tshwane, and Ekurhuleni) and two district municipalities, which are further sub-divided into six local municipalities (see **Figure 1**).[44]

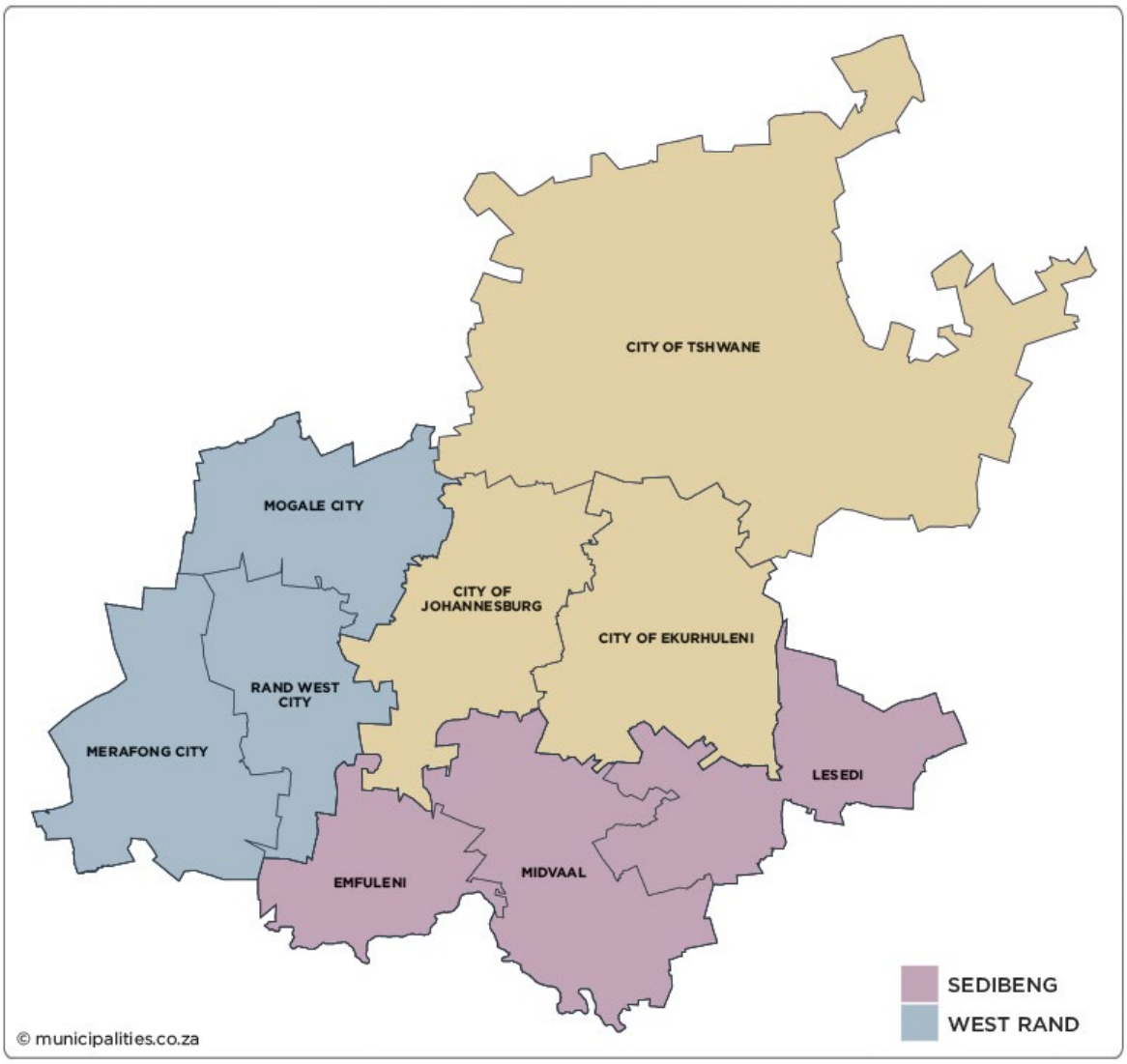


Figure 1: Metropolitan, District and Local Municipalities, Gauteng Province *(Source: Municipalities of South Africa)*

The province comprises nine Water Service Authorities (WSAs), two Water Boards (Randwater and Magalies Water) and Johannesburg Water[45] all of which deliver potable water to more than 15 million residents. Gauteng is South Africa's most populous

province and is a dense urban conglomeration with almost no areas under traditional authority and minimal rural areas.[46]

Gauteng is South Africa's largest provincial economy, accounting for 33.1% of national GDP in 2023. The province's real economy (agriculture, mining, manufacturing and construction) accounted for 23% of provincial GDP in 2023. Manufacturing was the dominant real-economy sector (17% of provincial GDP), followed by construction (2.4%), mining (2.1%), and agriculture (0.6%). The services economy is also substantial, with professional business services adding R397.5 billion to the provincial economy in 2023. In terms of employment in the real economy, manufacturing is the largest employer (502,000 workers in 2023), followed by construction (approximately 328,000 workers), and agriculture (around 34,000 people). Gauteng accounted for 27% of total employment nationally, the highest proportion of any province, although manufacturing employment declined by 7% between 2022 and 2023. Despite its relatively strong employment base, joblessness remains high, with unemployment reaching 34% in 2023, up from 27% in 2010.[47]

Contrary to other provinces which have a moderate female majority, females only slightly outnumber males in half of Gauteng's WSAs. Nevertheless, because female labour tends to be closely linked to household management, care responsibilities, and community health outcomes it is important to incorporate gender considerations into water services planning. Based on 2022 Census figures, 23.3% of the population is under 15 (23% according to Stats SA's 2024 mid-year population estimates)[48], which is lower than other provinces and the national average of 26.2%.[49] None of the WSAs in Gauteng have under 15 populations exceeding this national average. In all but one WSA, however, the province growth rate exceeds the national average with Tshwane Metro having the highest rate of growth of 3.2%. There elevated population growth rates exert considerable pressure on the existing water and electricity infrastructure.

Although the province displays diverse socio-economic patterns, high unemployment rates contribute to widespread defaults on water service payments, thereby complicating revenue collection. Additionally, theft of electrical cables, vandalism, and general theft are identified as the primary obstacles to service reliability and asset security in the province.

Most municipalities within the province have enacted policies (water service by-laws, water service development plans, and indigent policies) to foster efficient and transparent service delivery. However, certain regulatory instruments must be reviewed and updated to ensure their continued relevance in the contemporary context. Despite the availability of policies, financial sustainability remains a substantial challenge. At least two WSAs (Lesedi and Midvaal Local Municipalities) do not have a sufficient budget to cover operational expenditure on water services, however, with capital and

intergovernmental transfers all WSAs have sufficient revenue. Compared with some other provinces, the revenue collection rate in Gauteng is concerning (for the 2023/24 FY only one WSA was able to collect 100% of their revenue. The lowest revenue collection rate was 58% in Merafong Local Municipality. In the 2023/2024 FY spending on renewing ageing water infrastructure varied widely across WSAs in Gauteng and maintenance spending ranged from as low as 0% of revenue collected in Merafong Local Municipality to as high as 12% in Midvaal Local Municipality. These snapshot figures must nevertheless be read in the context of a longer trend analysis, which is set out in the relevant WSA profiles.

In Gauteng, the populace is heavily reliant on Rand Water, which accounts for 95% of daily production volume, and Magalies Water, which brings total reliance on bulk service providers to 96.2%. While this assures a generally reliable supply of good quality water, this does also mean that the security of water supply of the whole Gauteng City Region is heavily reliant on these two bulk providers, both of which are operating in excess of 80% of capacity. Contrary to the situation in many other WSAs across the country, none of the other WTWs in Gauteng are operating at above 90% of their capacity.

It is crucial to ensure that the requisite human resources, particularly process controllers, qualified scientists and technicians are sufficiently available. Gauteng has some staffing shortages but compared to other provinces it is relatively well-resourced.

While significant progress has been made in providing households access to a communal tap within 200m, in five WSAs here are still some consumers who only have access to a communal tap more than 200m from their households, with Merafong, Midvaal and Rand West Local Municipalities having the highest percentages in this regard.

In terms of economic access, with the exception of the City of Johannesburg (which provides the first tariff block of 0-6kl free to all consumers, though not strictly speaking as a FBW allocation) none of the WSAs provide Free Basic Water (FBW) universally and the number of households benefiting from FBW on the basis of indigency registration remains extremely limited in most municipalities. In seven of the nine WSAs, FBW allocation falls below the national indigency rate of 22%.

Gauteng experiences frequent interruptions in water services, restricting access to water for the population. With the exception of a dataset provided by the Gauteng City Region Observatory, records of water interruptions are currently incomplete and unreliable.

Unlike other provinces, and due to the important role played by Rand Water, water quality is generally not a significant problem across Gauteng. However, efficiency emerges as a major concern. In all but two WSAs the average daily rate of consumption exceeds the upper limit of what is considered ‘average to good’ (250 litres per person per day). In

Emfuleni Local Municipality (390 l/p/d), Tshwane Metropolitan Municipality (414 l/p/d) and Midvaal Local Municipality (a whopping 513 l/p/d), the levels of consumption are particularly concerning. Non-revenue water is also a major concern with almost all WSAs exceeding the upper limit of the National Treasury Guideline of 30%.

Leadership instability, corruption, and political interference constitute major impediments to the effective provision of water services within the province. Furthermore, ecological factors such as drought, invasive alien plant species, and pollution significantly affect the province. Structural deficiencies, including planning inadequacies, financial and funding difficulties, infrastructure and electricity concerns, and consumer-related issues such as illegal connections, tampering, and non-payment of water bills, further compound these challenges. The level of oversight of WSAs in Gauteng – by Chapter 9 institutions, the DWS, parliamentary committees, and the courts – has nevertheless been less when compared to other provinces.



Rights Holders

To progressively measure access to sufficient water, the first point of departure is the rights holders themselves. The section 27(1)(b) right belongs to *everyone* regardless of citizenship or legal status. This inclusive interpretation aligns with the Constitution's commitment to human dignity, equality, and the advancement of human rights and freedoms. Courts and legal scholars generally agree that this right applies to all individuals—citizens, non-citizens, refugees, asylum seekers, and undocumented migrants—ensuring that access to water, as a basic and essential service, is not restricted based on nationality or legal residence.

Knowing *who* the rights holders are provides critical contextual information for the sustained delivery of water services. The nature of this information is both quantitative and qualitative in nature. Water planners need to know *how many* people and households they should currently serve, and how the population will likely grow in the future. Given the imperative of non-discrimination, they should also be aware of the demographic breakdown of their customer base in terms of sex, age and disability to ensure that the needs of vulnerable groups are accommodated.

Understanding the profile of rights holders is also important for revenue planning. Children and pensioners use as much (or even more) water as economically active consumers, but only working adults can contribute to a WSA's revenue base. Further, in a country wracked by inequality and high levels of poverty and unemployment, cost recovery principles cannot be blindly pursued.

Demographics

According to the 2022 census, Gauteng is home to approximately 15 million people and 5.3 million households. Statistics South Africa's 2024 mid-year population estimates pitch the total population at 15.9 million people, which amounts to about 25.3% of South Africa's population.[50] Breaking these figures down in terms of WSAs shows that five serve smaller populations of fewer than 200,000 residents, only one WSA (Emfuleni LM) serves a population in the mid-tier range (between 200,000 and 400,000 residents), and the remaining three metropolitan municipalities service populations in excess of 4 million residents (see **Figure 2** below). The City of Johannesburg is the largest WSA in the province, servicing a population of over 4.8 million. Most municipalities in Gauteng get their water from the Rand Water Board.

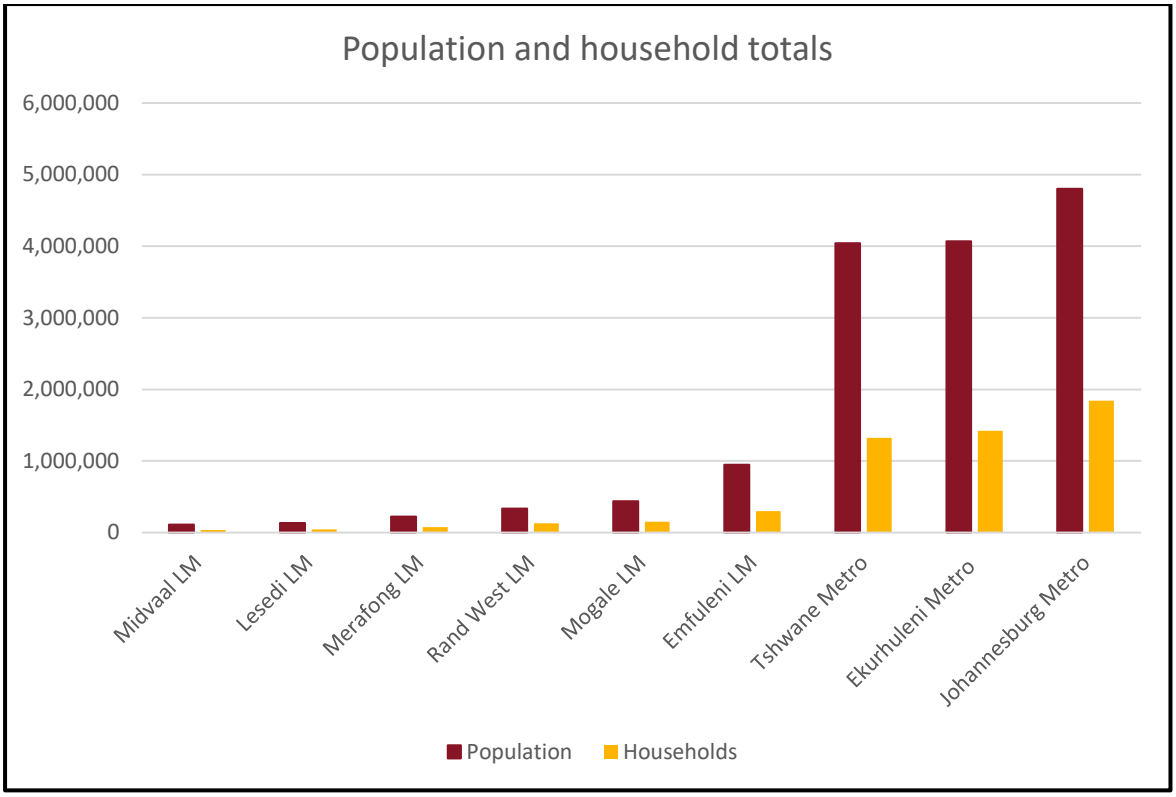


Figure 2: Breakdown of population and households per WSA, Gauteng *(Source: 2022 Census)*

Sixty-six percent of the WSAs in Gauteng therefore service populations in excess of 100,000 people. To put this into perspective, according to the 2025/27 *European Local Government Report*, the average number of inhabitants per municipality in Europe is 22,455.[51] South African law nevertheless dictates that everyone must be provided with sufficient water meaning that WSAs must develop and maintain the infrastructures and systems to provide services at this scale.

In terms of the number of households, the smaller municipalities in the province service households of between approximately 36,400 (Midvaal Local Municipality) and 77,500 (Merafong) units. In the largest WSAs, total households range from 1.3 million (City of Tshwane) to 1.8 million (City of Johannesburg) units.

Based on the 2022 Census Data, household size ranges from 2.61 (City of Johannesburg) to 3,17 members per household (Emfuleni) (see **Figure 3**). Unlike several other provinces, household size does not tend to increase with population size, and the average household size of the three metros is smaller than the WSAs servicing smaller populations.

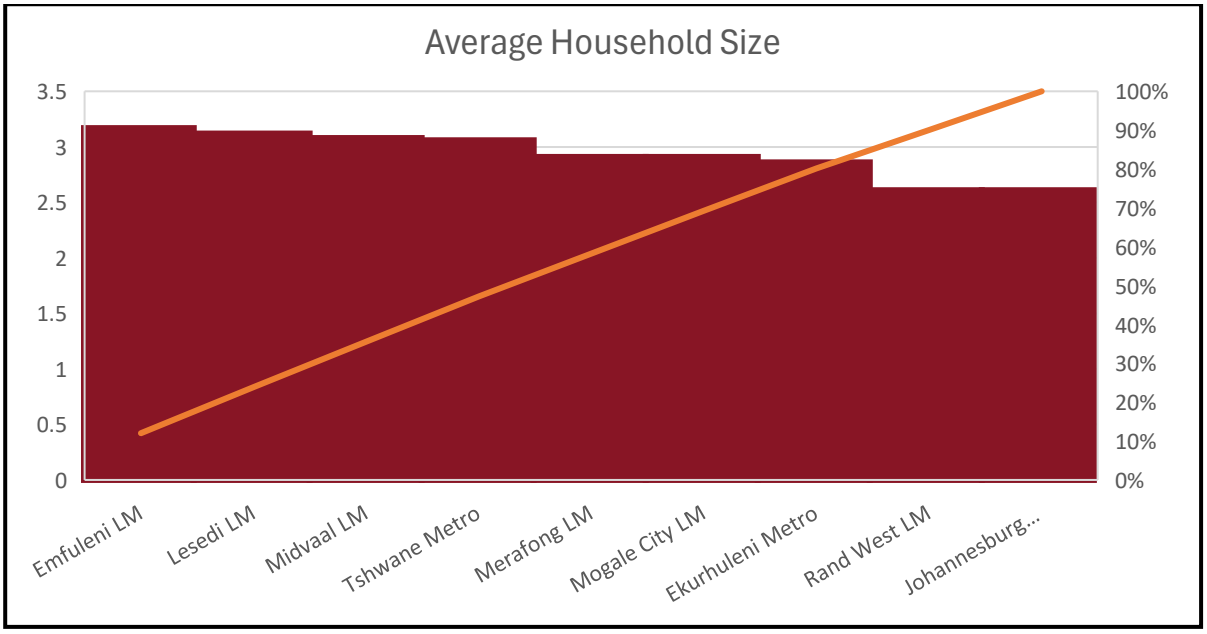


Figure 3: Average household size per WSA, Gauteng *(Source: 2022 Census)*

In terms of policy and governance implications, household size impacts the number of service delivery points WSAs must provide (smaller household size drives the need for more service delivery points) as well as the allocation of free basic water. If a national standard of 6kl per household prevails, people living in smaller WSAs receive more water. For rights holders, free basic water/household standard may create a negative incentive to reduce household size, paradoxically placing additional pressure on WSAs to provide more service delivery points.

Across WSAs in Gauteng, and as stressed in the in-person engagement, the significant variation between population figures reported in different official sources, namely Census 2022, the DWS *Blue Drop* Report, and municipal IDPs is a concern (see **Figure 4**). The discrepancies in Gauteng are not as marked as in other provinces, with only the City of Tshwane being off kilter in terms of the population reported in the 2023 *Blue Drop* report.

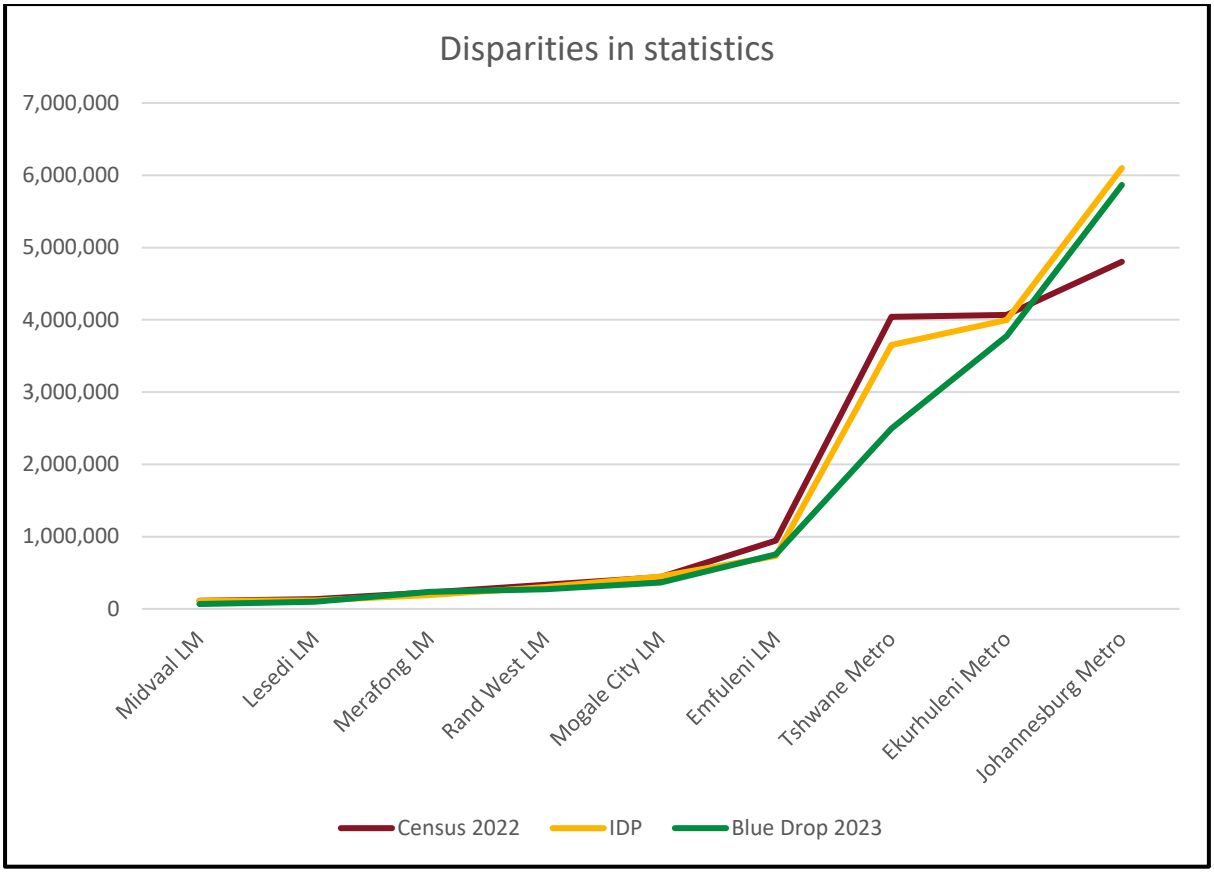


Figure 4: Discrepancies in population size reporting *(Sources: 2022 Census, 2023 Blue Drop report, municipal IDPs)*

It should be noted that discrepancies in population totals also affect calculations of the Water Use Efficiency Index (which divides the water System Input Value by population size), as will be noted below. This means that the WUE may be much lower in the WSAs where the population has been undercounted in the *Blue Drop* report.

Population growth trends further increase these planning pressures. Most of Gauteng's municipalities are experiencing population growth rates that are higher than the national average (see **Figure 5**), with some growing at more than double the national rate. This pattern means that Gauteng cannot rely on national planning norms alone. Municipalities with high growth rates will reach the limits of their existing water infrastructure much sooner and must therefore plan to expand capacity at a faster pace than is typically assumed at national level. None of the WSAs in Gauteng have a negative population growth rate.

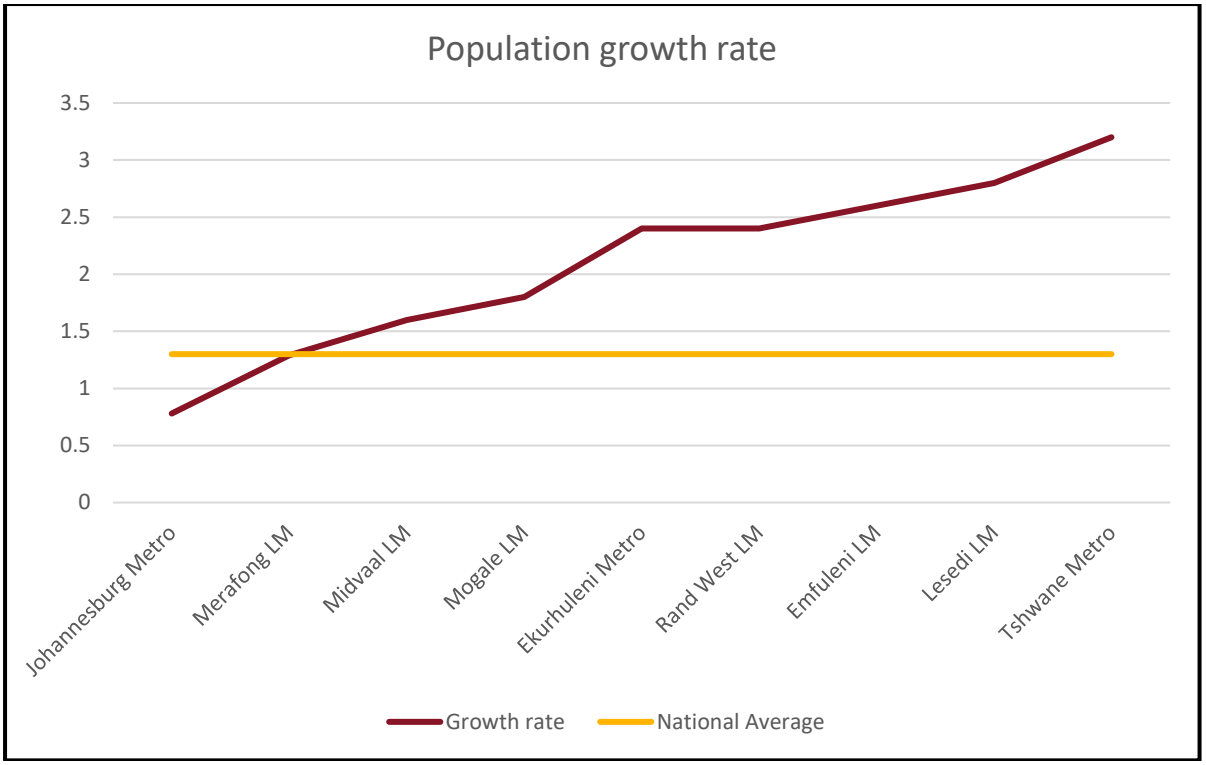


Figure 5: Population growth rate *(Source: Census 2022)*

The demographic profile of the province shows that in most WSAs, the female population is similar to the male population (see **Figure 6**). Nevertheless, because female labour tends to be closely linked to household management, care responsibilities, and community health outcomes it is important to incorporate gender considerations into water services planning.

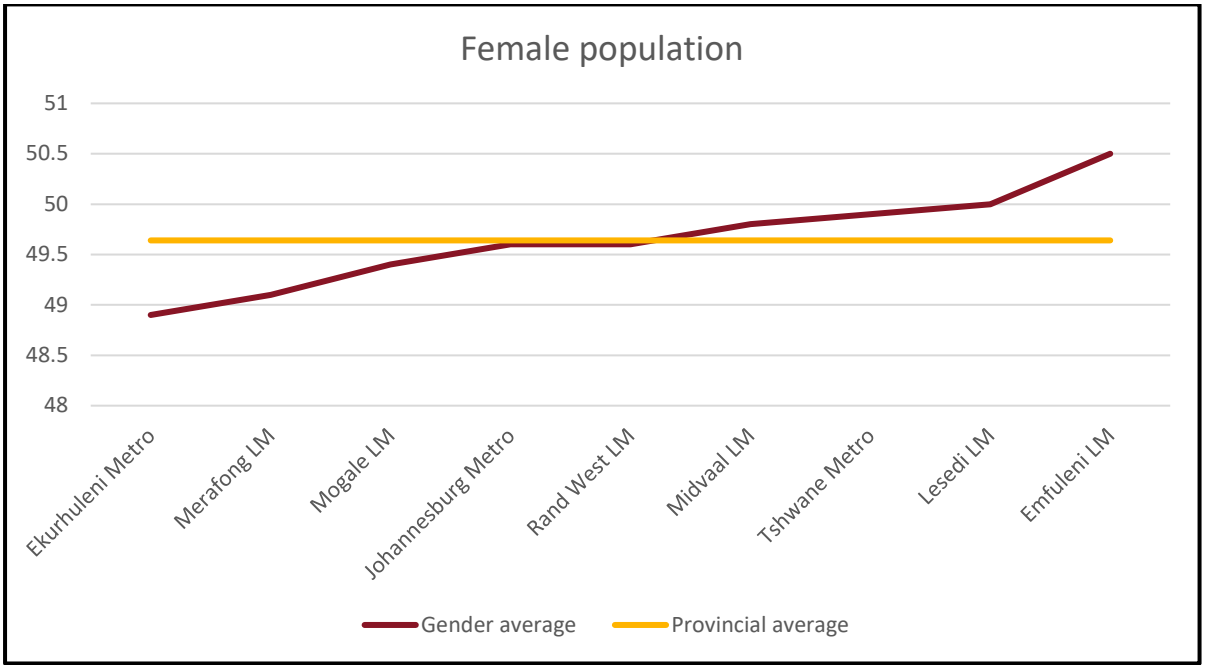


Figure 6: Gender Split (Female Population) *(Source: Census 2022)*

The provincial average proportion of residents under the age of 15 is 23.31%, which is lower than the national average of 26.2% (see **Figure 7**). However, this still represents a substantial portion of the population that does not generate income and therefore cannot contribute directly to municipal revenue through service payments. This pattern is relatively consistent across the province, with no major differences between municipalities.

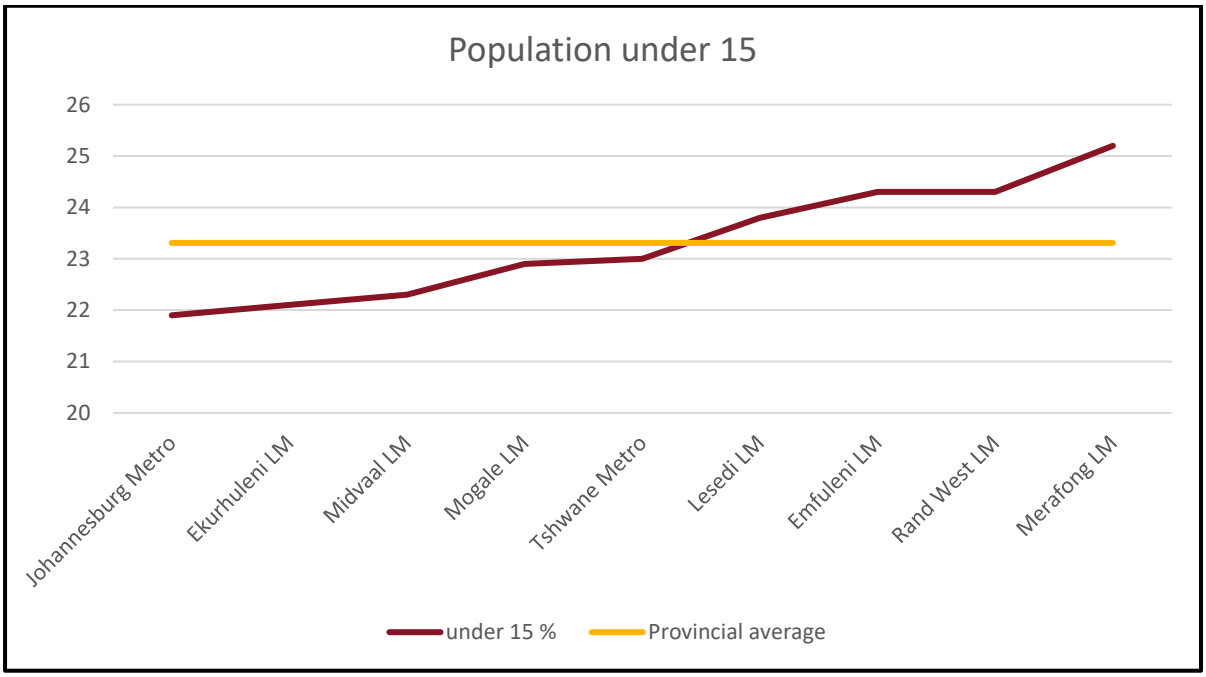


Figure 7: Percentage of Population under 15, WSAs in Gauteng *(Source: Census 2022)*

Potential Revenue Base

The second set of demographic indicators focuses on the potential revenue base of Gauteng's water service authorities. In simple terms, this assesses how many residents are likely to be able to pay for municipal services, and how many will require support through free basic services and subsidies. This information is important for understanding whether municipalities can fund water services through their own income, or whether they will remain heavily dependent on intergovernmental transfers.

In Gauteng, the data points to significant revenue pressures. The average unemployment rate across the province is 33.92%, which is high (see **Figure 8**). In some areas the situation is far more severe. Emfuleni Local Municipality has an unemployment rate of 50.7%, while Mogale City Local Municipality stands at 47%. In practical terms, this means that in these municipalities, a very large share of the population is unlikely to be able to afford municipal services on a regular basis.

However, in terms of the range of the data range, a limitation of this analysis is that municipal IDPs do not always indicate whether the unemployment rates in their IDPs are for a narrow or expanded definition of unemployment. This means that in WSAs below the provincial average, the expanded unemployment rate may be higher.

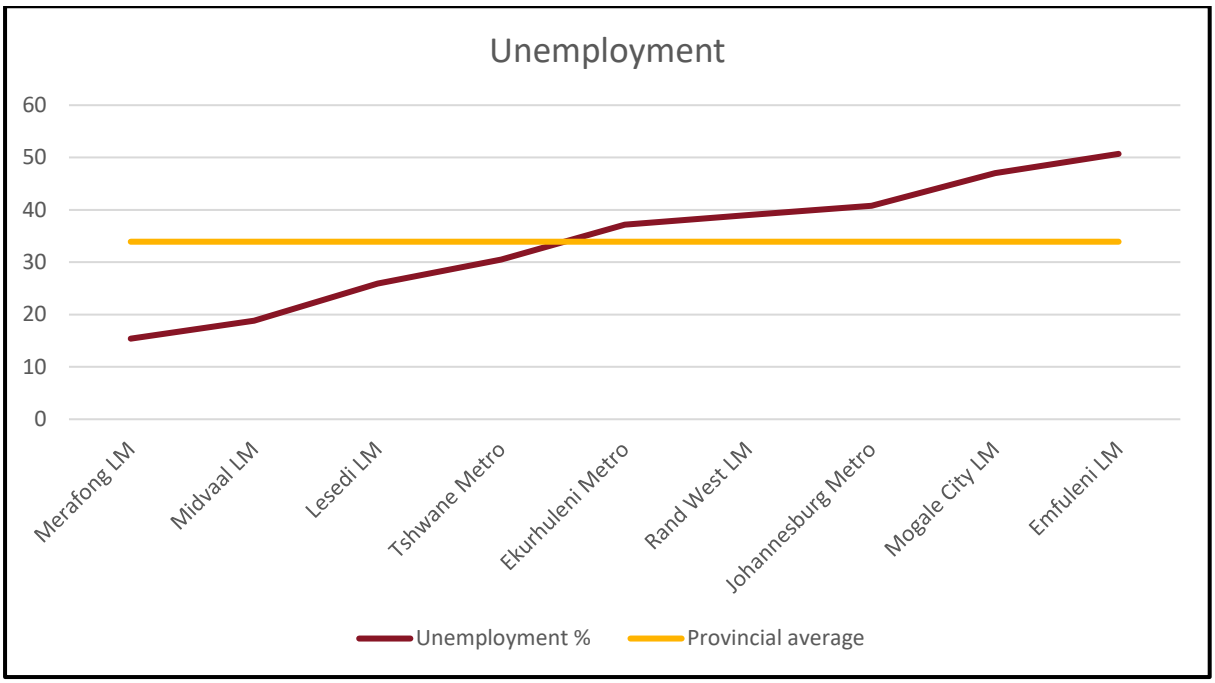


Figure 8: Unemployment Rates, Gauteng WSAs *(Source: Municipal IDPs)*

Another important indicator is the dependency ratio. This measures the proportion of the population that is dependent on others due to age (children and older persons), illness, or disability. In Gauteng, all municipalities have dependency ratios that are lower than

the national average (see **Figure 9**). This means that the number of working adults is supporting a manageable number of dependents when compared to other provinces.

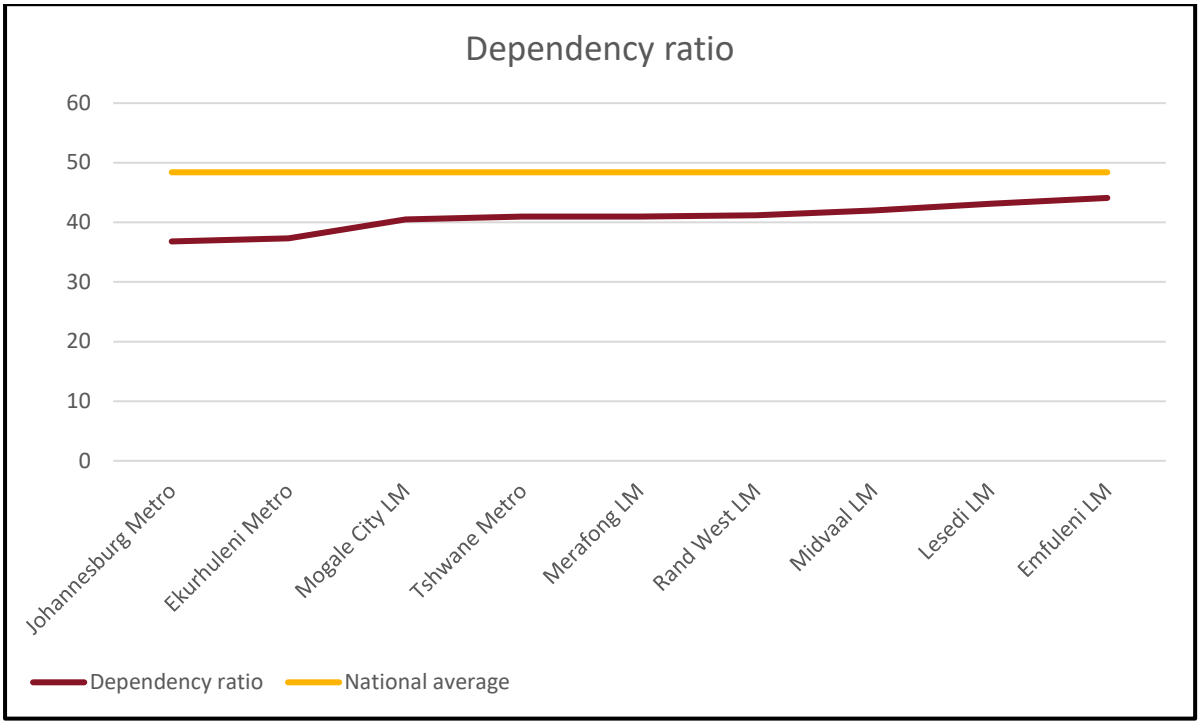


Figure 9: Dependency ratio, Gauteng WSAs *(Source: Census 2022)*

Taken together, these indicators show that many municipalities in Gauteng are serving populations where a sizeable proportion of residents may not be in a financial position to pay for services. This limits the ability of municipalities to generate their own revenue and increases their reliance on grants and subsidies to fund water services.

Reasonable Measures

The second set of indicators comprising the WRT focuses on the reasonable measures WSAs should be taking to provide water services in their jurisdictions. As outlined in Part A, these measures encompass policy and legislation and financial, infrastructure and human and skills resources respectively.

Policy and Legislation

As part of their legal and policy responsibilities to realise the right to water, WSAs are required to adopt three key instruments: a Water Services By-Law, a Water Services Development Plan (WSDP), and an Indigent Policy. These documents provide the foundation for planning, regulation, and equitable access to water.

Only five of the nine WSAs in Gauteng had all three instruments in place; two had no WSDPs and another two had no water services by-laws (see **Table 4**). Notably, Rand West Local Municipality did not have a valid water services by-law or an Indigent Policy.

Municipality	By-law	WSDP	Indigent Policy
Ekurhuleni Metro	x	x	x
Johannesburg Metro	x	!	x
Tshwane Metro	x	x	x
Emfuleni LM	x	x	x
Lesedi LM	x	x	x
Merafong LM	!	x	x
Midvaal LM	x	x	x
Mogale City LM	x	!	x
Rand West LM	!	x	!

Table 4: Reasonable policy and legislative measures to realise the right to water, Gauteng

The presence of these instruments provides an important foundation for planning and managing water services and for ensuring that support measures are available to households that are unable to afford services. However, the effectiveness of these instruments depends on whether they are regularly reviewed, updated, and implemented in practice.

Financial Resources

WSAs in South Africa require access to financial resources to provide, operate, renew and maintain water services infrastructure and to pay the salaries of process controllers, scientists, and technical staff. As outlined in the methodology, the WRT relied on five indicators to measure the reasonableness of financial resources, namely budget sufficiency (excluding capital transfers and contributions), revenue sufficiency (including capital transfers and contributions), percentage of the capital budget allocated to the renewal of infrastructure, percentage of total revenue spent on maintenance, and revenue collection rate.

While a trend analysis for the financial years 2021/22 to 2023/24 was conducted and is available in the profiles for each WSA, the comparative graphs below report only on the data for FY 2023/24. Further, it should be noted that as the MFMA Schedules do not disaggregate data per infrastructure type (electricity vs water infrastructure expenditure, for example), the financial figures are for the total infrastructure budgeting and spending.

Financial sustainability plays an important role in water service delivery in Gauteng. All municipalities generate enough revenue to cover the operating costs of water services (see **Figure 10**).

When total budgets are considered, including own revenue, equitable share, and grants, seven WSAs have sufficient funding to fully cover their planned water services expenditure (see **Figure 11**). The remaining two municipalities fall slightly short: Lesedi Local Municipality's budget covers 93% of planned expenditure, while Midvaal Local Municipality's covers 95%. This indicates that, overall, Gauteng municipalities are largely able to fund water services delivery from available resources.

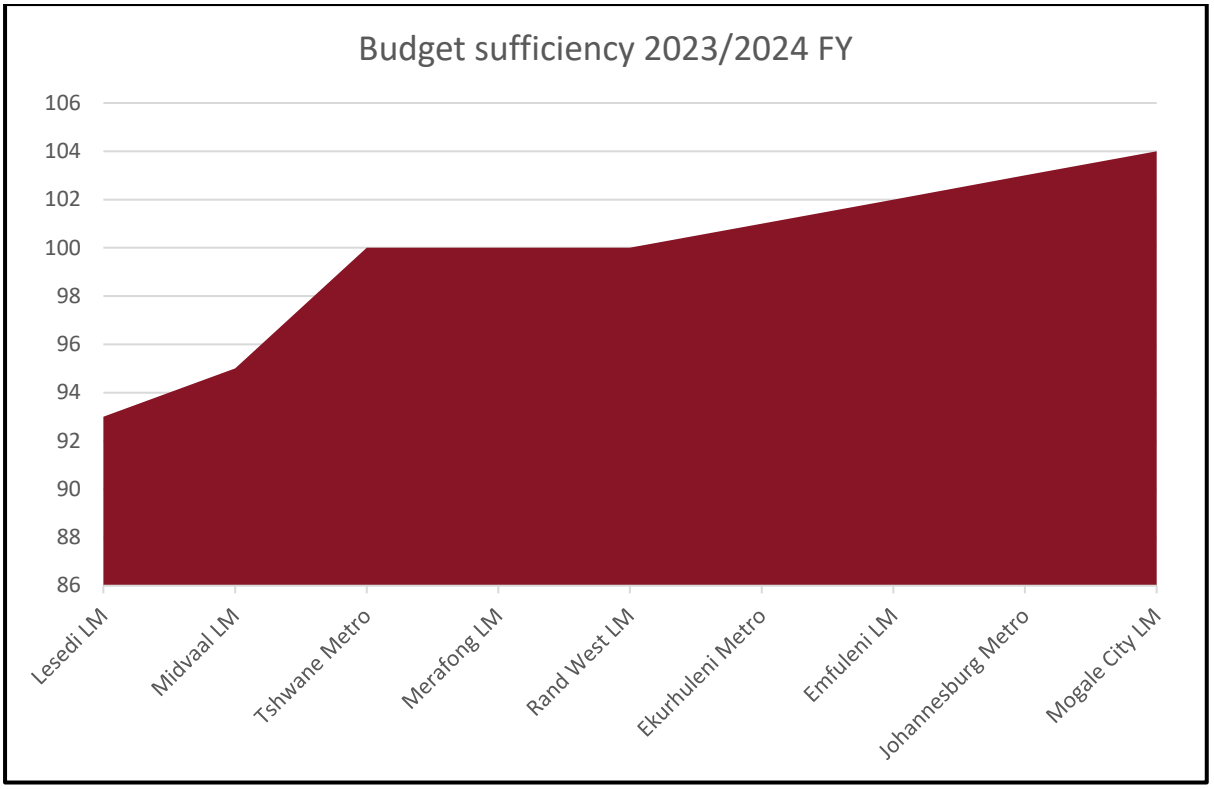


Figure 10: Total budgeted revenue/total budgeted expenditure (excl. capital transfers and contributions), WSAs in Gauteng *(Source: Table C1, MFMA Schedules)*

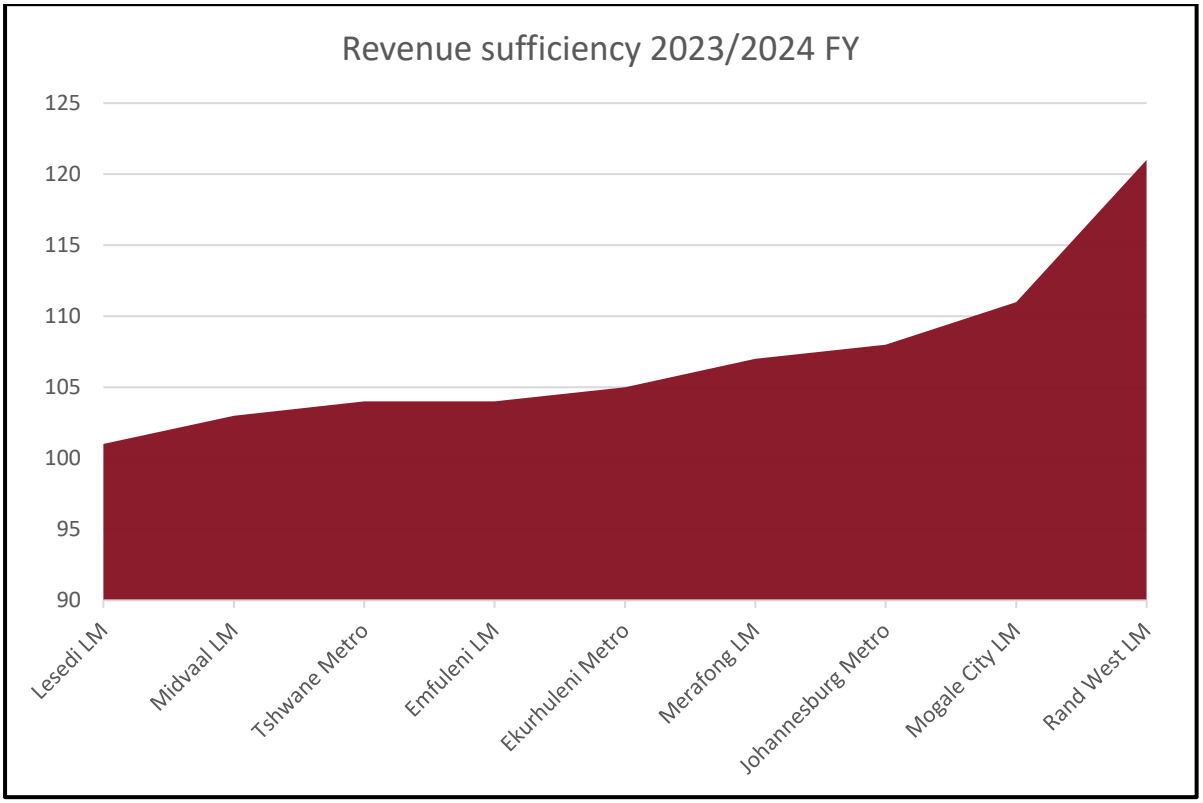


Figure 11: Total budgeted revenue (incl. capital transfers)/total budgeted CAPEX+OPEX, WSAs in Gauteng *(Source: Table C2, MFMA Schedules)*

A key area of concern is infrastructure renewal. Spending on renewing ageing water infrastructure varies widely across WSAs in Gauteng (see **Figure 12**). In FY 2023/2024

Merafong Local Municipality allocated only 7% of its water services expenditure to infrastructure renewal, while Ekurhuleni Metropolitan Municipality allocated a substantially higher 79%, indicating a strong focus on long-term sustainability. No data was available for Lesedi Local Municipality. Low levels of renewal investment increase the risk of system failures, breakdowns, and service interruptions over time.

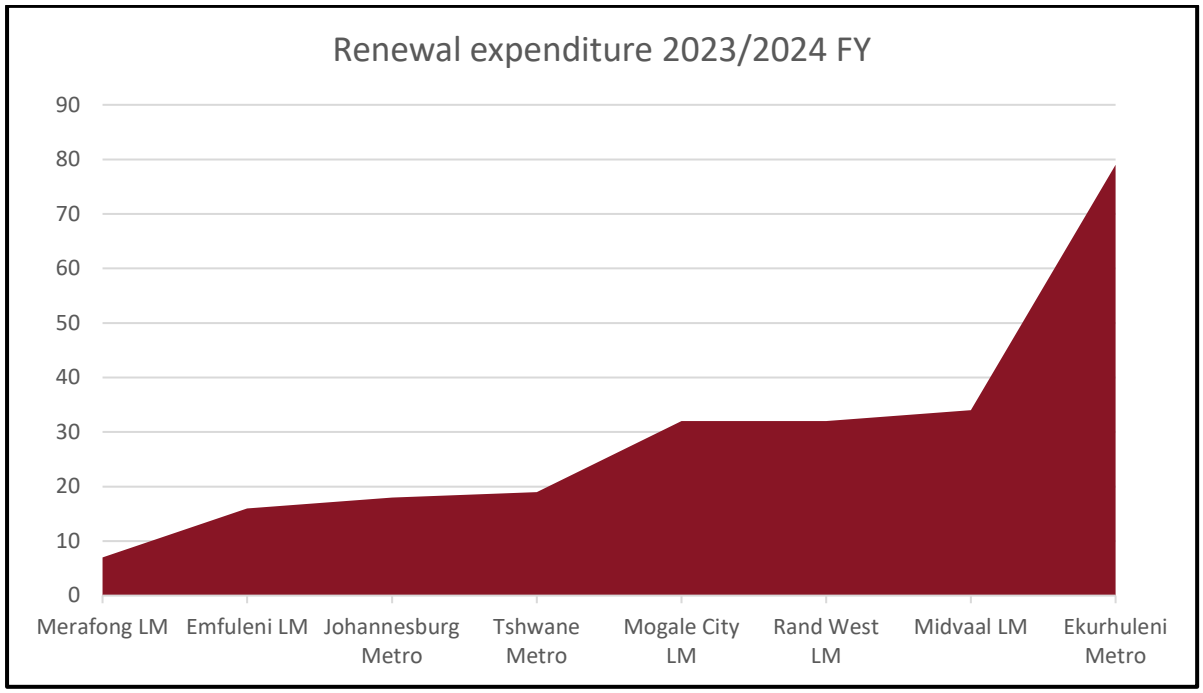


Figure 12: Amount allocated to asset renewal/total capital budget, WSAs in Gauteng *(Source: Table SC13a and Table C5, MFMA Schedules)*

Eight out of nine WSAs allocate some funding towards infrastructure maintenance, but spending levels differ significantly (see **Figure 13**). In FY 2023/2024 maintenance expenditure ranged from 0% in Merafong Local Municipality to 12% in Midvaal Local Municipality. In five of the nine municipalities, maintenance spending is 5% or less, suggesting that maintenance is not yet a clear priority despite ageing infrastructure and frequent pipe bursts and leaks being identified as major challenges in water service delivery.

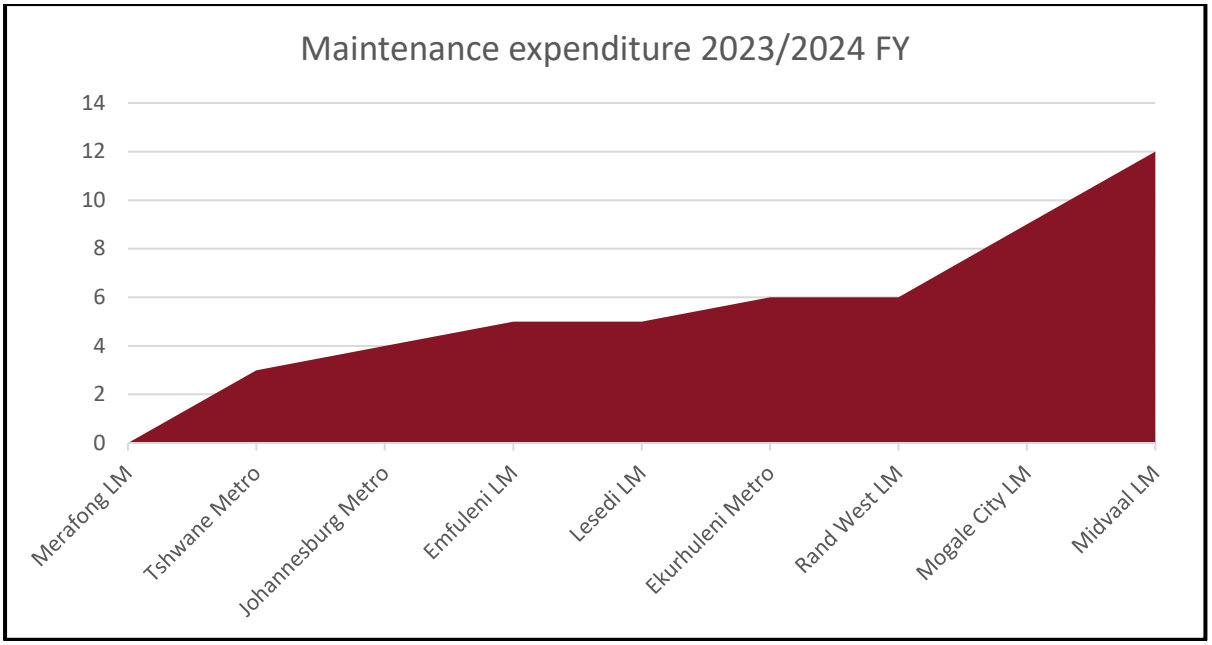


Figure 13: Total maintenance expenditure/total revenue collected, WSAS in Gauteng *(Source: Table SC13a and Table C2, MFMA Schedules)*

Revenue collection performance across Gauteng municipalities is somewhat concerning with only two WSAs collecting 100% of their revenues (see **Figure 14**). The revenue collection rate in Merafong Local Municipality (58%) is particularly concerning.

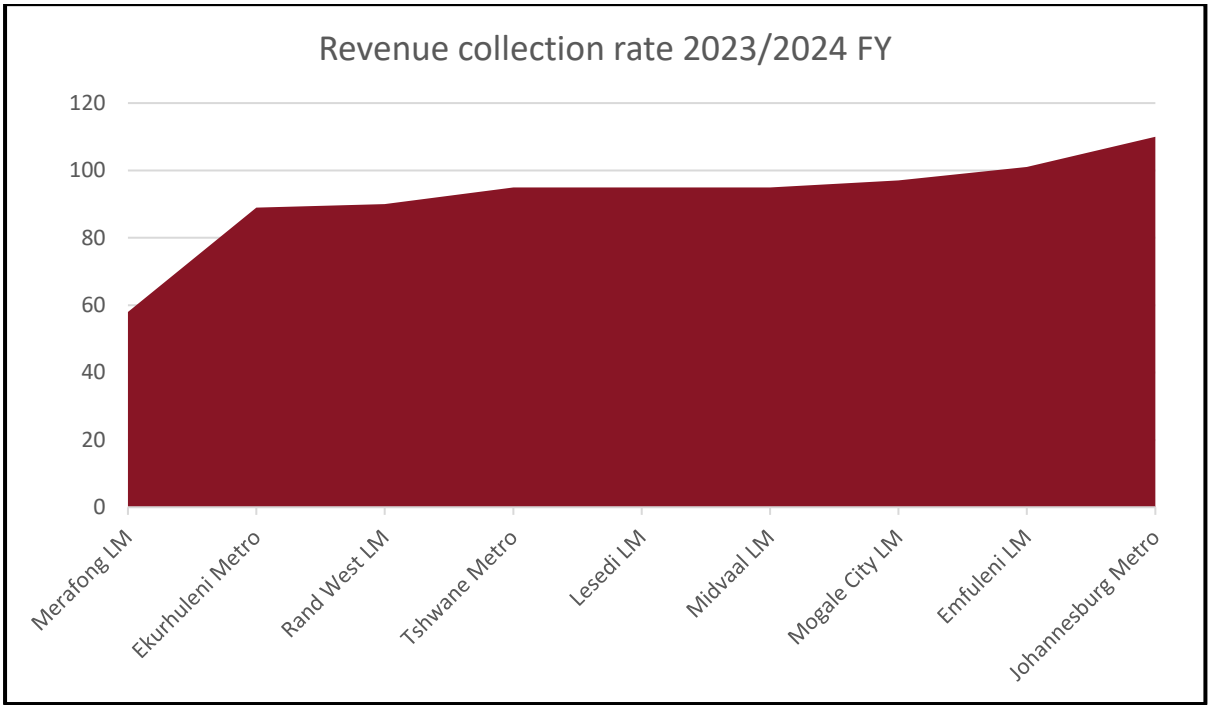


Figure 14: Actual revenue collected/budgeted revenue, WSAs in Gauteng *(Source: Table C2, MFMA Schedules)*

Infrastructure Resources

Delivering potable water to households and businesses requires infrastructure: Storage dams, boreholes, pump stations, bulk water pipelines, water treatment works, water reservoirs, and reticulation pipelines. An assessment of water treatment capacity across WSAs in Gauteng shows whether existing infrastructure has sufficient spare capacity to accommodate changes in demand, maintenance requirements and system disruptions, or whether it is operating under significant pressure.

Water treatment works (WTWs) are facilities where raw water from either surface or underground sources is treated to potable standards. In Gauteng, there are 19 WTWs producing an average daily treatment volume of 4,923Ml.[52] Available design capacity is about 1,000 Ml higher, at 5,831 Ml per day.[53] Randwater's WTWs and supply systems account for 95% of daily production volume. The added capacity of Magalies Water brings the capacity contribution of bulk providers to 96.2%.[54] This does also mean that the security of water supply of the whole Gauteng City Region is precariously balanced on these two bulk providers, both of which are operating in excess of 80% of capacity (see **Figure 15**).

A further observation is that Midvaal and Emfuleni Local Municipalities are only using 10% and 30% of their treatment capacity respectively. This is somewhat unusual and requires further investigation. Possible explanations include treatment plants that are offline, abandoned, or dysfunctional, or reliance on alternative water supply arrangements. Without clarity on the reasons, it is difficult to assess the reliability and sustainability of water services in these areas.

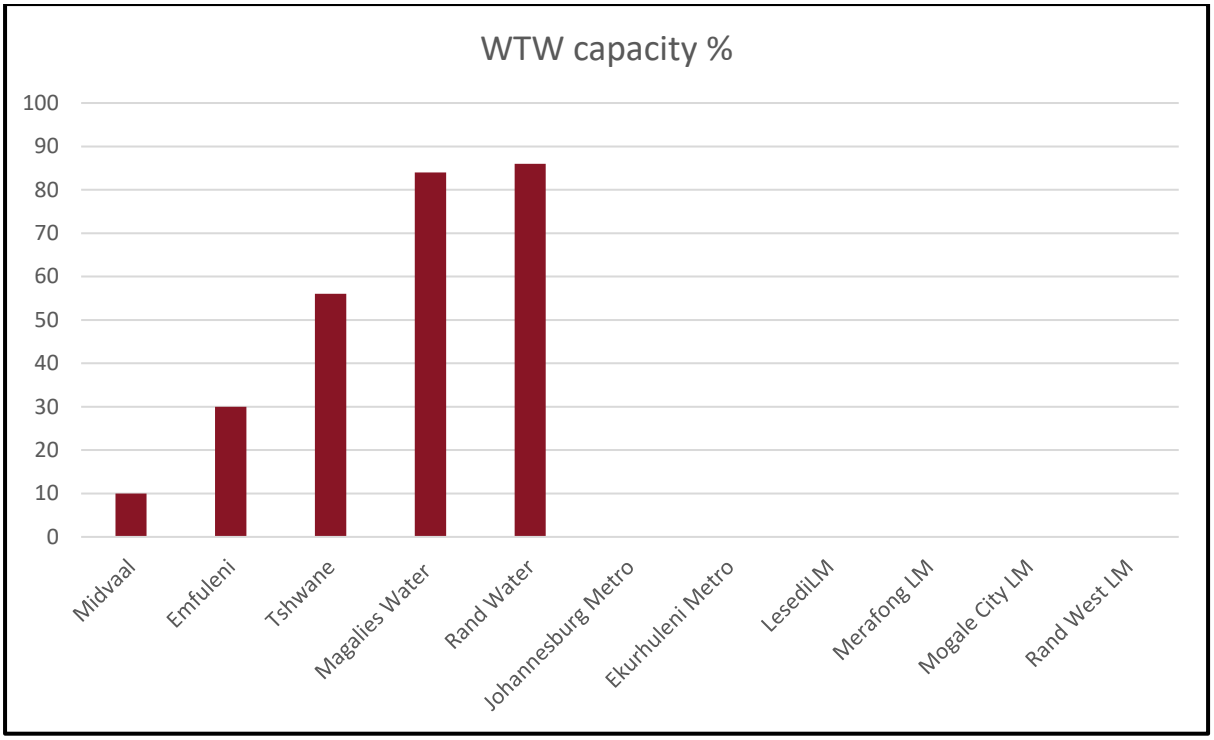


Figure 15: Percentage of used WTW capacity, Gauteng WSAs and Water Boards *(Source: 2023 Blue Drop Watch Report)*

In addition to WTWs, WSAs across South Africa must manage borehole schemes, reservoirs, bulk pipelines and a pipeline distribution network. There are vast differences in the infrastructure assets each WSA must manage. Rand West Local Municipality doesn't manage any reservoirs, and all the Local Municipalities manage fewer than 25 (see **Figure 16**). The metros understandably manage much more: Ekurhuleni manages 80 while the City of Tshwane and the City of Johannesburg manage 128 and 195 respectively.

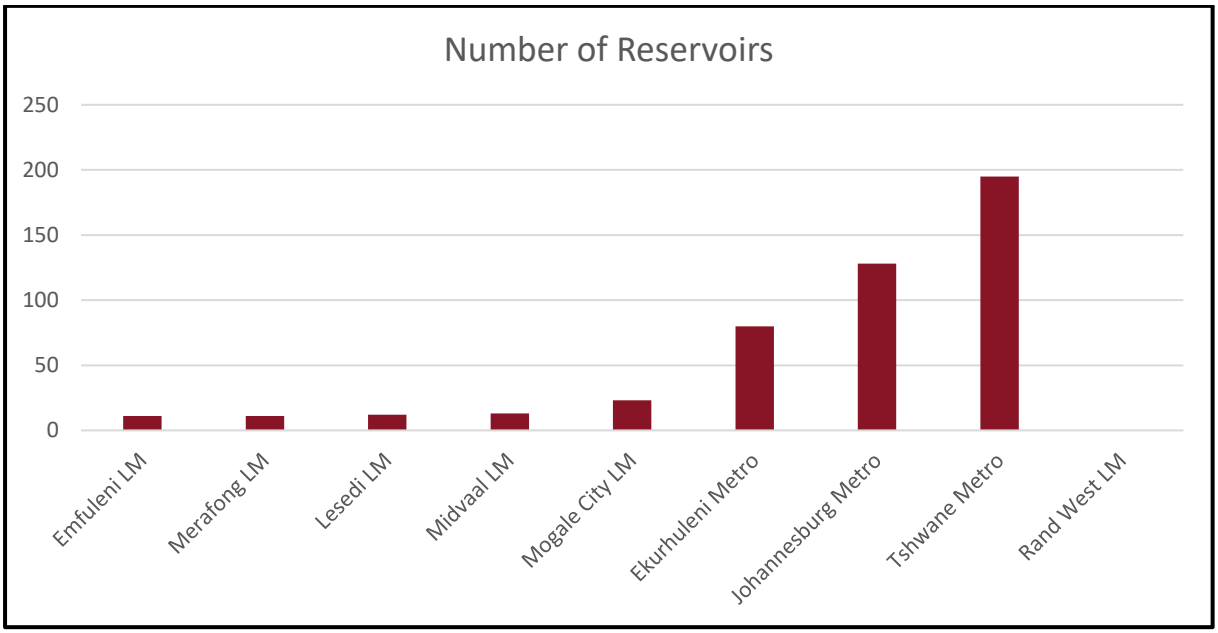


Figure 16: Number of reservoirs WSAs, Gauteng *(Source: 2023 Blue Drop Watch Report)*

The 2023 *Blue Drop* Report provides an overview of the scale and composition of water services infrastructure in Gauteng WSAs, including reservoirs, bulk pipelines, and distribution pipelines. The data highlights significant differences in how infrastructure is owned, reported, and managed across the province.

An important pattern emerges in relation to infrastructure ownership and reporting. For Rand West Local Municipality, no infrastructure information could be found in the *Blue Drop* data (see **Figure 17**). In addition, four WSAs do not report ownership of bulk pipelines. Merafong Local Municipality reports neither bulk nor distribution pipelines.

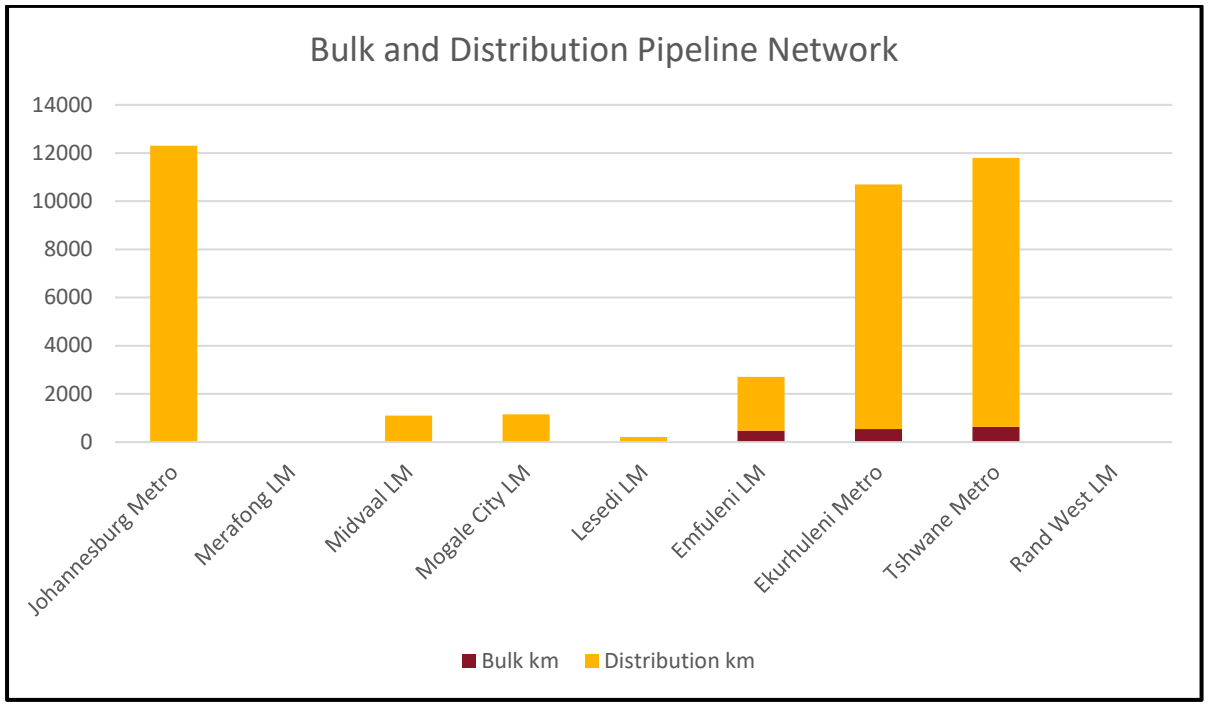


Figure 17: Extent of bulk and distribution pipeline networks, Gauteng WSAs *(Source: 2023 Blue Drop Watch Report)*

This does not necessarily mean that bulk or distribution infrastructure is absent. Rather, it reflects Gauteng's reliance on Rand Water Board as the primary bulk water supplier to most municipalities. As a result, large portions of bulk infrastructure are owned and operated by Rand Water and therefore do not appear on municipal asset registers.

Human Resources

Water services authorities rely heavily on process controllers, qualified scientists and other technicians to operate their water treatment and distribution systems. These professionals are indispensable. Process controllers are responsible for the day-to-day running of treatment works: adjusting chemical dosing, monitoring pumps and filtration units, responding to equipment faults, and ensuring that the plant consistently produces water that meets national safety standards. Scientists, on the other hand, conduct specialised water-quality testing, interpret laboratory results, ensure microbiological and chemical compliance, and guide the technical decisions needed to protect public health. Without these two groups of specialists, a municipality cannot safely treat water or respond to contamination risks.

Gauteng has some staffing shortages, although these are not as severe in some other provinces. Staff shortages for process controllers are only pertinent to the WSAs that manage WTWs as Randwater and Magalies Water supply the metros of the Johannesburg and Ekurhuleni as well as four Local Municipalities. The most severe capacity gap is in Tshwane Metropolitan Municipality, which requires an additional 20 process controllers and one qualified scientist (see **Figure 18**). Shortages of this scale place significant strain on existing staff and severely limit the municipality's ability to operate treatment works safely and consistently. In the 2023 *Bluedrop* assessment, Randwater recorded a shortage of five process controllers and 14 scientists, while Magalies Water also had a shortfall of 5 scientists.

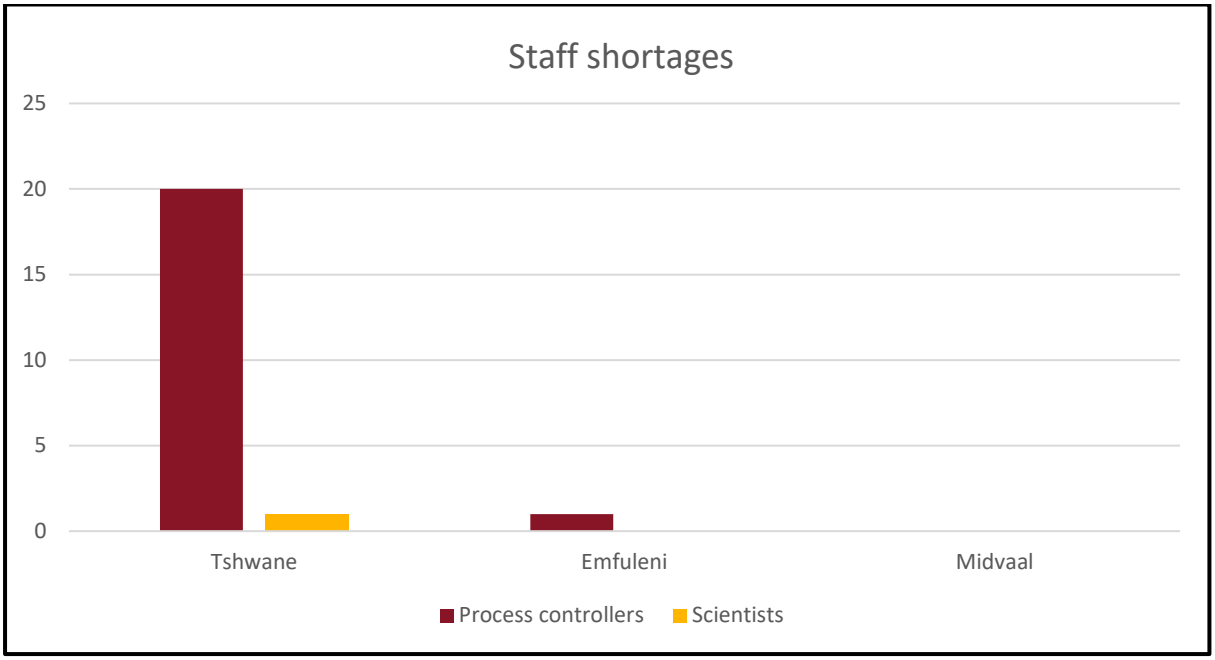


Figure 18: Shortages of process controllers and scientists, Gauteng WSAs *(Source: 2023 Blue Drop Watch Report)*

Quantitatively, staff shortages are linked to the number of water treatment works (WTW) or water supply systems (WSS) each WSA operates. A better comparative indication of skills shortages across WSAs is provided by the Supervisor/WTW and Technical Staff/WTW ratios measured in the 2023 *Blue Drop* report (see **Table 5**). The ratios show the nominal number of staff per WTW or WSS. the ratio of supervisory staff across the province exceeds a 1:1 ratio in all WSA. However in Tshwane Metro, Merafong Local Municipality, and Rand West Local Municipality the Technical Staff/WTW Ratio is very low.

Municipality	Supervisor/WTW Ratio	Technical Staff /WTW Ratio
City of Ekurhuleni	n/a	16.0
City of Johannesburg	n/a	12.0
Tshwane Metro	2.5	0.4
Emfuleni LM	4.6	2.0
Lesedi LM	n/a	1.0
Merafong LM	n/a	0.7
Midvaal LM	8.0	5.0
Mogale City LM	n/a	5.0
Rand West LM	n/a	0.4

Table 5: Supervisor/WTW and Technical Staff/WTW ratios, Gauteng *(Source: 2023 Blue Drop report)*

Overall, these staffing gaps create some constraints on water service delivery in Gauteng. Without adequate numbers of trained process controllers and scientists, treatment plants cannot function optimally, water quality monitoring is weakened, and the risk of operational failures and public health incidents increases.



Key Implementation Indicators

The third set of indicators comprising the WRT focus on the key elements of the human right to water, namely physical access, economic access, adequacy, quality and efficiency. The sections that follow assess the extent to which WSAs in Gauteng meet international and national standards in this regard.

Physical Access

The South African minimum standard for physical accessibility (an access point within 200m of a household) exceeds the WHO Guideline (which states that water sources should be within 1,000 meters of the home and collection time should not exceed 30 minutes). Nevertheless, the WHO Guideline adds the dimension of *safety*: Water facilities and services must be within safe physical reach for all sections of the population, including women, children, disabled people, and the elderly.

When new Compulsory National Norms and Standards enter into force in June 2027, the South African minimum standard will increase from a user connection within 200m of a household to a yard connection.

Service delivery indicators were used to assess the level of physical access to water services in Gauteng. These indicators consider whether residents have access to water through a tap in their yard, a communal tap within 200 meters, or a communal tap situated more than 200 meters away. A further indicator considers the proportion of residents with access to water directly inside their homes.

The data shows mixed service levels across the province but with comparatively higher levels of service compared to other provinces. Six out of Gauteng's nine WSAs provide at least 80% of households with access to a water service point in the yard (see **Figure 19**). In Merafong, Midvaal, Mogale City, and Rand West the population still relying on communal taps further than 200m from their homes ranged from 6.5 to 12,9% according to the 2021/2022 non-financial census of municipalities.

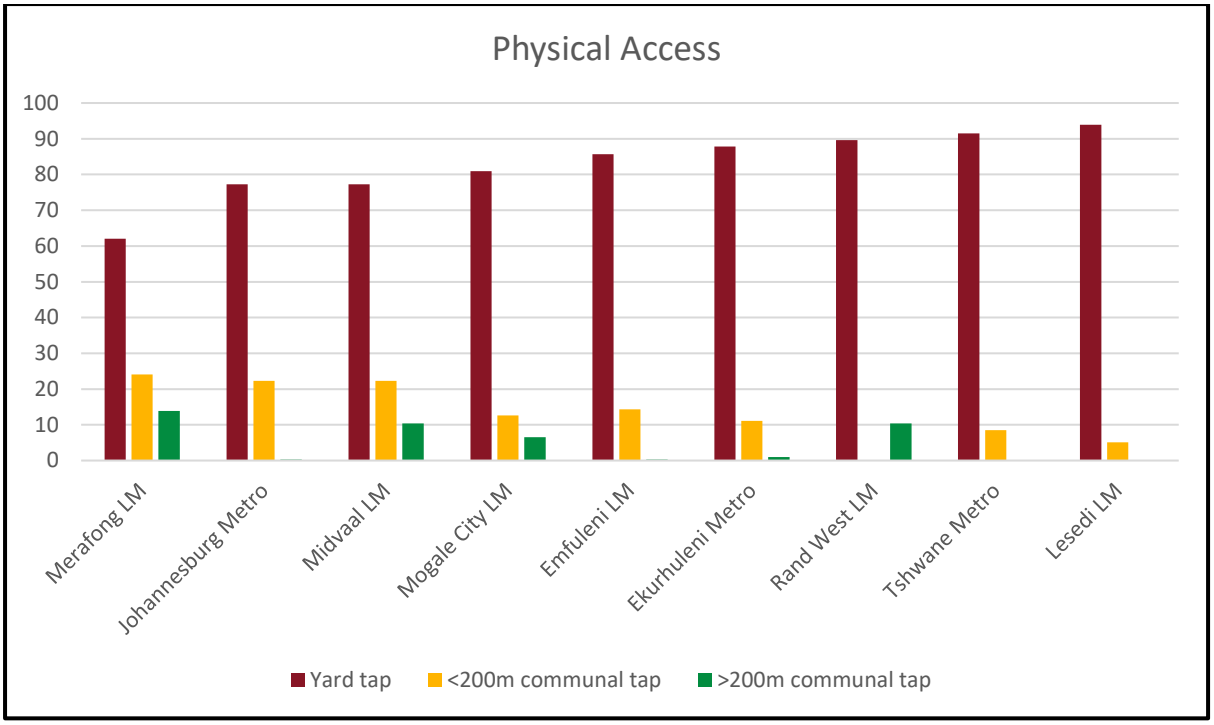


Figure 19: Physical access to a potable water access point, Gauteng WSAs *(Source: 2021/22 non-Financial Census of Municipalities)*

Based on the 2022 Census figures, all municipalities provide at 70% of households with access to water inside their homes, which is a comparatively higher level of service compared to other provinces (see **Figure 20**).

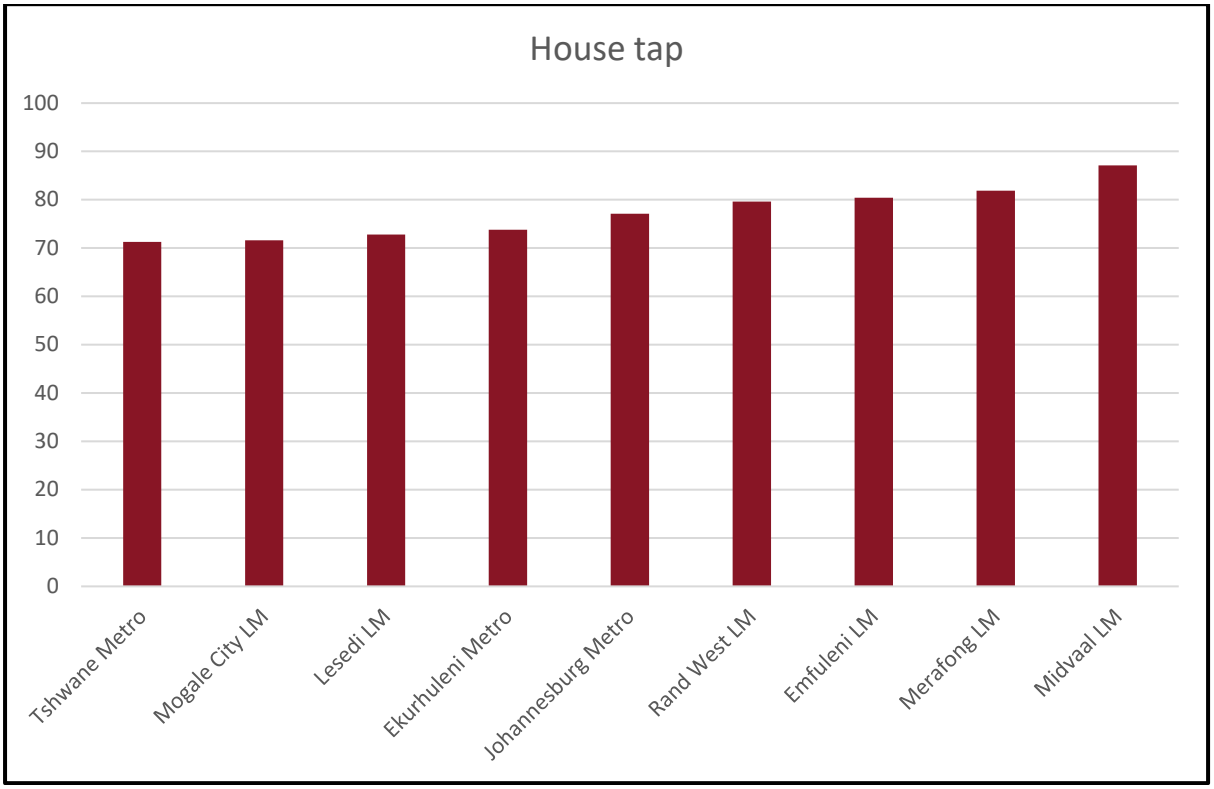


Figure 20: Piped water within a dwelling, Gauteng WSAs *(Source: 2022 Census)*

For purposes of measures the adequacy of physical service delivery points, the WRT used the alternative measures of a *service point coverage ratio*, being the number of service delivery points divided by the number of households. A ratio in excess of 1 indicates the extent of *excess capacity*, while a ratio under 1 indicates the extent of *under-capacity*. Overall, Gauteng has a provincial average service point coverage ratio of 0.91. This means that, on average, 9 out of every 10 households in the province have access to a clearly defined level of water service. Put differently, only 1 out of every 10 households in Gauteng still lack reliable access to water.

Two municipalities show lower service point coverage ratios when compared with the rest of the municipalities in the province (see **Figure 21**). Mogale City Local Municipality has a ratio of 0.59, while Rand West Local Municipality has a ratio of 0.60. These figures point to significant service delivery challenges and highlight areas where targeted support and infrastructure investment may be most urgently needed.

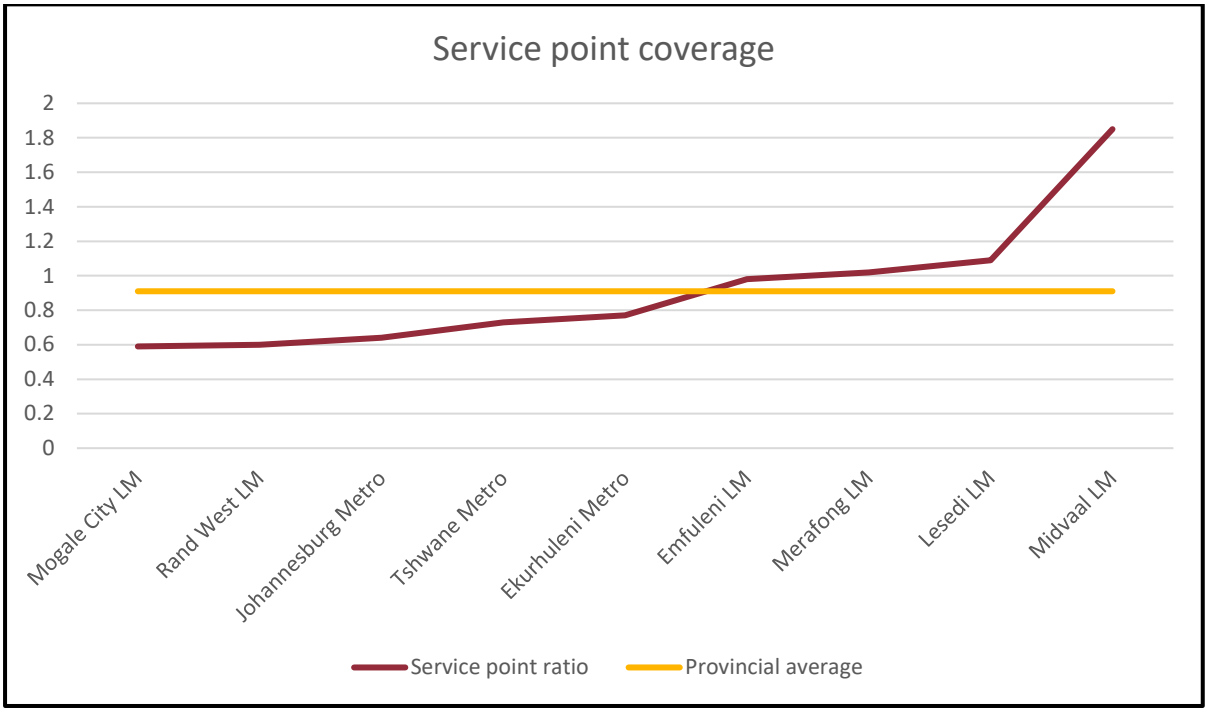


Figure 21: Service point coverage ratio, Gauteng WSAs *(Source: 2022 Census, 2021/22 Non-financial census of municipalities)*

Economic Access

South African law does not uphold a quantitative affordability standard such as the WHO's Guideline that water costs should not exceed 3% of household income. Revised South African Tariff Norms and Standards nevertheless stipulate that tariffs must be reasonable enough to ensure that at last a basic level of water supply is affordable and pro-poor to accommodate low-income groups. This can be achieved if the cheapest tariff bracket in a WSA is low enough for low-income groups to afford or if increasing block tariffs (progressively increased costs for using larger volumes of water) do not increase too steeply.

Since the early 2000s, South African law and policy have recognised a *basic water supply* of 6kl per household per month with the *recommendation* that this level of service be provided for free. However, not all WSAs are able to provide this level of free service universally and most choose only to provide free basic water to qualifying indigent households in terms of their indigent policy. Since 2006, the national government consolidated fragmented basic services policies into a *National Indigent Policy* which allows for **free basic water** to be provided as part of a package of free basic services to qualifying indigent households, funded by the equitable share.

To assess progressive realisation of the right to water in terms of the element of economic access, the WRT looked at the spread of cheapest and most expensive tariff blocks across WSAs, the allocation of FBW and the percentage of households that benefit from FBW in a WSA.

Water Tariffs

With the exception of the City of Johannesburg which provides its first tariff block (0-6kl) for free,[1] none of the WSAs in Gauteng provide a universal FBW allocation (see **Table 6**).

Municipality	All	Indigent
Ekurhuleni Metropolitan Municipality		x
Johannesburg Metropolitan Municipality	x	
Tshwane Metropolitan Municipality		x
Emfuleni Local Municipality		x
Lesedi Local Municipality		x
Merafong Local Municipality		x
Midvaal Local Municipality		x
Mogale City Local Municipality		x
Rand West Local Municipality		x

Table 6: Universal/qualified allocation of FBW, Gauteng WSAs *(Source: Municipal Tariff Schedules)*

[1] It is important to note that the City of Johannesburg's first block tariff for water services is free, even though the Indigent Policy states that no universal free basic water is provided to residents. In all other municipalities in the province, access to FBW is restricted to households registered on indigent support programs.

The lack of universal FBW allocation is reflected in tariff structures. As **Figure 22** below shows, in 2020/21 the cheapest tariff blocks started at R0 in the City of Johannesburg for the 6Kl free allocation, with Midvaal Local Municipality at the other end of the spectrum where the lowest tariff was R32.34. Apart from the City of Johannesburg, the City of Tshwane Metropolitan Municipality and Merafong Local Municipality have the lowest water tariffs in Gauteng. Rand West Local Municipality reflects the typical tariff level for the province. Its water tariffs sit roughly in the middle of the range charged across Gauteng for the cheapest bracket.

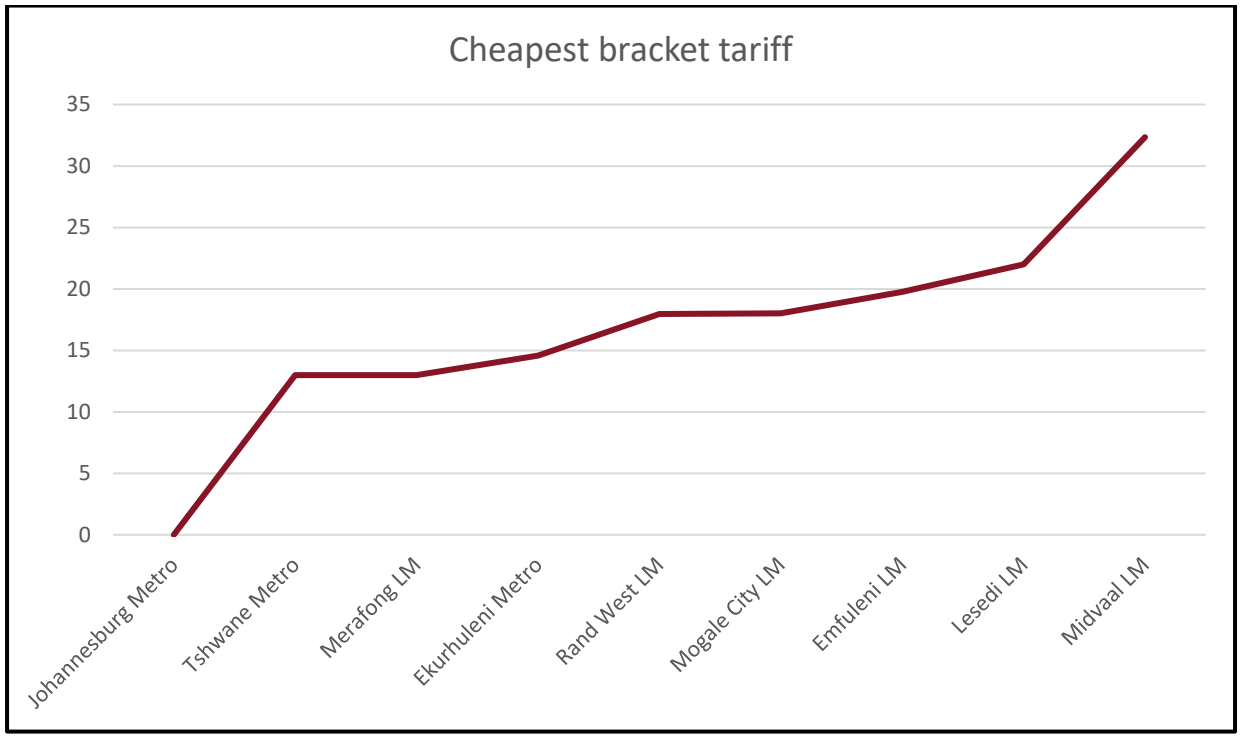


Figure 22: Cheapest tariff block, Gauteng WSAs *(Source: 2021/2022 Municipal Tariff Schedules)*

Differences become considerably greater in the most expensive tariff bracket (see **Figure 23**). The median is approximately R44 per kilolitre. Sundays River Valley's most expensive tariff was R13.39 per kilolitre, while Joe Gqabi recorded the highest at R179.20. Nelson Mandela Bay had the second-highest tariff at R134.09 per kilolitre. Buffalo City, at R42.71 was also among the more expensive municipalities, although below Kouga and Amathole.

In Rand West, the lowest tariff bracket is R17.97 per kiloliter, while the middle of the range highest tariff bracket is Midvaal Local Municipality at R44.41 per kiloliter (Midvaal Local Municipality) with Lesedi Local Municipality having the most expensive tariff bracket at R58 per kilolitre. These figures provide a useful indication of what households can generally expect to pay for water services in Gauteng. These figures provide a useful indication of what water services typically cost in Gauteng for basic and higher levels of consumption.

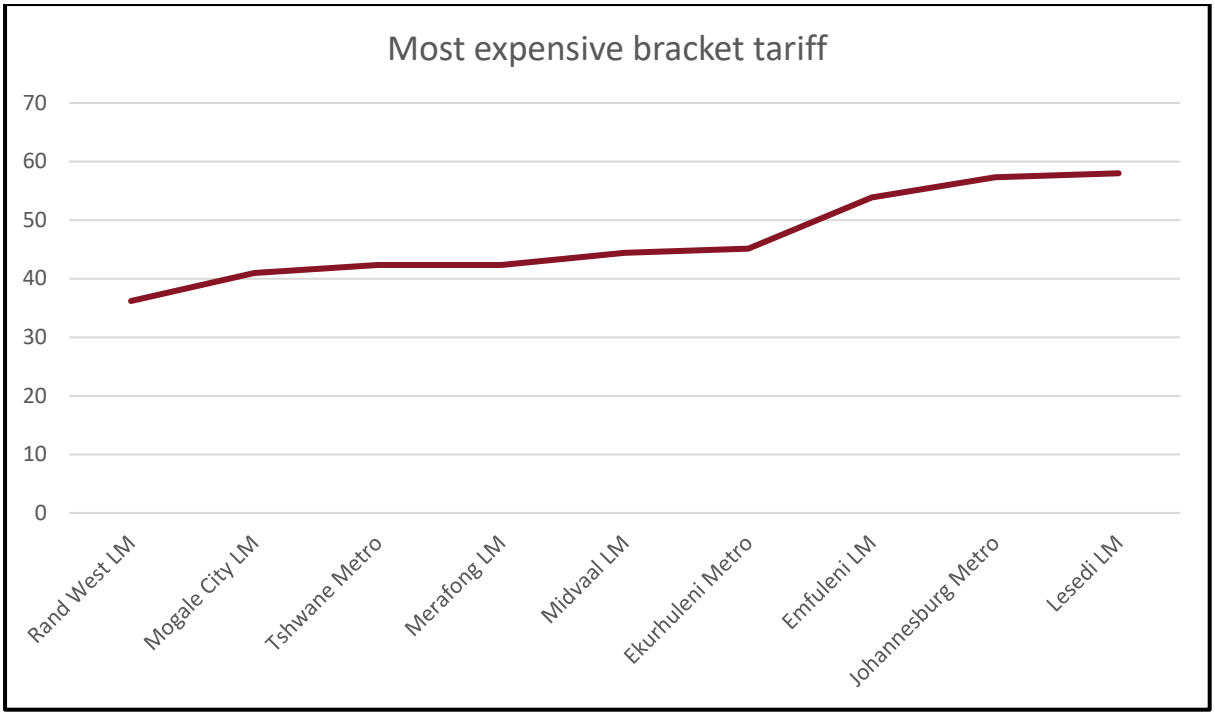


Figure 23: Most expensive tariff block, Gauteng WSAs *(Source: 2021/2022 Municipal Tariff Schedules)*

Free Basic Water

As noted above, with the exception of the City of Johannesburg, no WSAs in Gauteng provide FBW as a universal allocation, which means that qualifying households can only access free basic services if they are on the indigent register (see Table 6 above). It is important to emphasise that municipalities are not legally required to provide universal FBW to all residents. The absence of universal provision should therefore not, in itself, be interpreted as non-compliance. The more important question for purposes of affordability is the extent to which financially vulnerable households are actually reached by the available support.

The WRT assessed the number of households receiving Free Basic Water (FBW) or indigent support as a percentage of total households and total service delivery points (see **Figure 24** below). These two indicators differ because not every household has its own service delivery point, and some service points belong to businesses or industries rather than domestic users.

In Gauteng, the number of households benefiting from Free Basic Water remains extremely limited in most municipalities. The City of Johannesburg appears to have the lowest allocation, but this is for an additional indigency allocation over and above universal FBW allocation. With the exception of Emfuleni Local Municipality, which provides FBW to nearly 31% of its households, all FBW allocations in Gauteng fall below the national indigency percentage of approximately 22%. In terms of FBW allocation as a percentage of service delivery points, with the exception of Merafong Local Municipality,

in all Gauteng WSAs the allocation of FBW to service delivery points is less than a percentage.

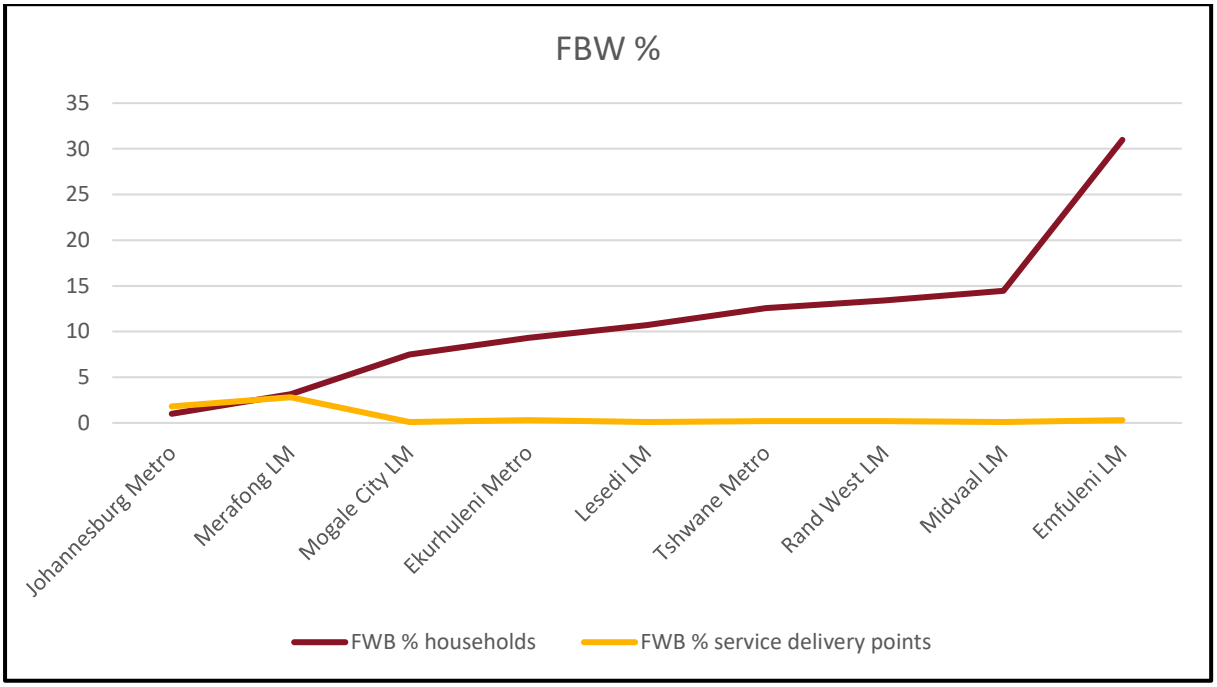


Figure 24: Percentage of FBW per number of households and service delivery points, Gauteng WSAs
(Source: 2022 Census, 2021/2022 Non-Financial Census of Municipalities)

Overall, the data suggests that affordability remains a challenge in the province. Limited FBW coverage places pressure on households that are already financially vulnerable. At the same time, municipalities must balance affordability with the need to maintain financial sustainability in an environment of constrained revenue.

Adequacy

The WRT also sought to assess the reliability and continuity of water services by determining the percentage of households in each WSA that experience water interruptions at least once a month. This indicator is important because access to water infrastructure does not necessarily mean that households receive a continuous and reliable water supply. A household may have a tap inside the home, in the yard, or within the required distance, but still experience frequent interruptions that limit effective access to water.

Unlike all other provinces, the WRT was able to source a data set on water interruptions in Gauteng. The information is drawn from a single source, namely the Gauteng City-Region Observatory (GCRO) dataset for 2020/21 (see **Figure 25**). According to this data, the level of interruptions varies significantly across municipalities, ranging from 17% (Midvaal Local Municipality) to 49% (Emfuleni Local Municipality).

It is important to note that this data reflects the 2020/21 period, which coincided with the COVID-19 pandemic. Conditions may therefore have changed since then. In addition, local government elections took place in 2021, meaning that many municipalities now have new councils and administrations in place, which may have shifted priorities and approaches to water service delivery.

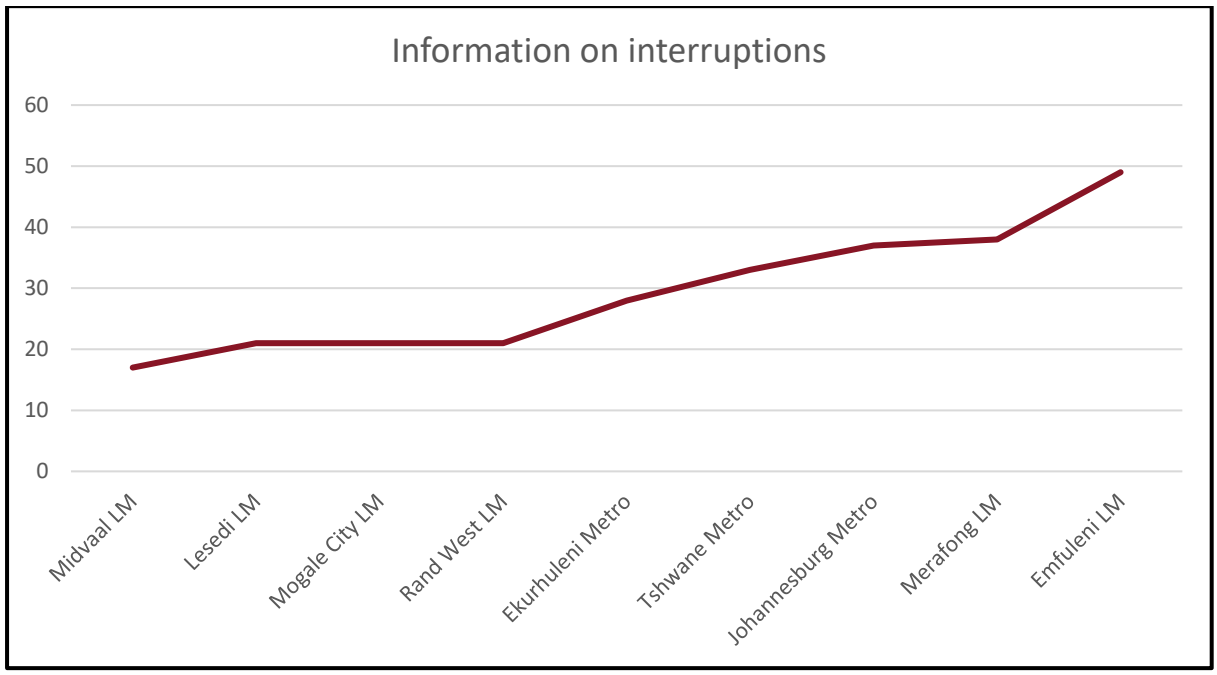


Figure 25: Percentage of households experiencing water interruptions at least once a month in Gauteng *(Source: Gauteng City Regional Observatory)*

Like other provinces, the absence of this information represents an important limitation in assessing water service delivery in the province. The physical access indicators discussed above can show whether water infrastructure is available to households, but

without information on the frequency and duration of interruptions, they cannot establish whether that infrastructure provides households with a reliable and continuous supply of water.



Quality

Everyone has a right to water that is safe, meaning water that is free from micro-organisms, chemical substances and radiological hazards that could threaten a person's health. In South Africa, the drinking water quality standard (SANS 241) prescribes the thresholds for microbiological and chemical (acute and chronic) compliance. WSAs are legally bound to ensure that distributed drinking water complies with SANS 241.[55] They are also required to develop and annually review a water safety plan,[56] and develop and implement a monitoring programme for all potable water distributed through their water supply systems.[57] Samples should only be handled by laboratories that use ISO-accredited methodologies and results must be reported to the DWS.[58]

In assessing progressive realisation of the right to water in its qualitative dimension, the WRT relied on the reported microbiological and chemical compliance scores in the 2023 *Blue Drop* report. These scores establish a baseline for evaluating progressive realisation of water quality going forward and point to existing weaknesses and potential human rights non-compliance across WSAs in Gauteng.

The DWS *Blue Drop* report measures water quality across three parameters. Microbiological compliance checks whether drinking water contains harmful bacteria, such as *E. coli*, which can cause illness and usually indicates contamination from sewage or poor treatment. Chemical acute compliance looks for chemicals that can cause immediate health effects if present at high levels over a short time, while chemical chronic compliance measures chemicals that may not cause instant harm but can lead to serious health problems if people are exposed to them over many years, such as damage to organs or increased cancer risk.

In assessing compliance with microbiological standards, for a population of less than 100,000 people, any score below 96% is unacceptable as microbiological determinants pose an immediate unacceptable health risk if present at counts or values exceeding the numerical limits specified in SANS 241.[59] For a population exceeding 100,000 the standard is even stricter – any score below 98% is unacceptable.

Due to the fact that much of the Gauteng City Region is supplied by Randwater, microbiological compliance was excellent in the Johannesburg and Ekurhuleni Metros and in Lesedi, Rand West, Mogale City, and Merafong Local Municipalities (see **Figure 26** below). In WSAs with their own WTWs, microbiological scores met the SANS 241 requirements with the exception of Midvaal Local Municipality which recorded 95.1% in the *Blue Drop* assessment. This score is nevertheless much higher than many WSAs across the rest of the country.

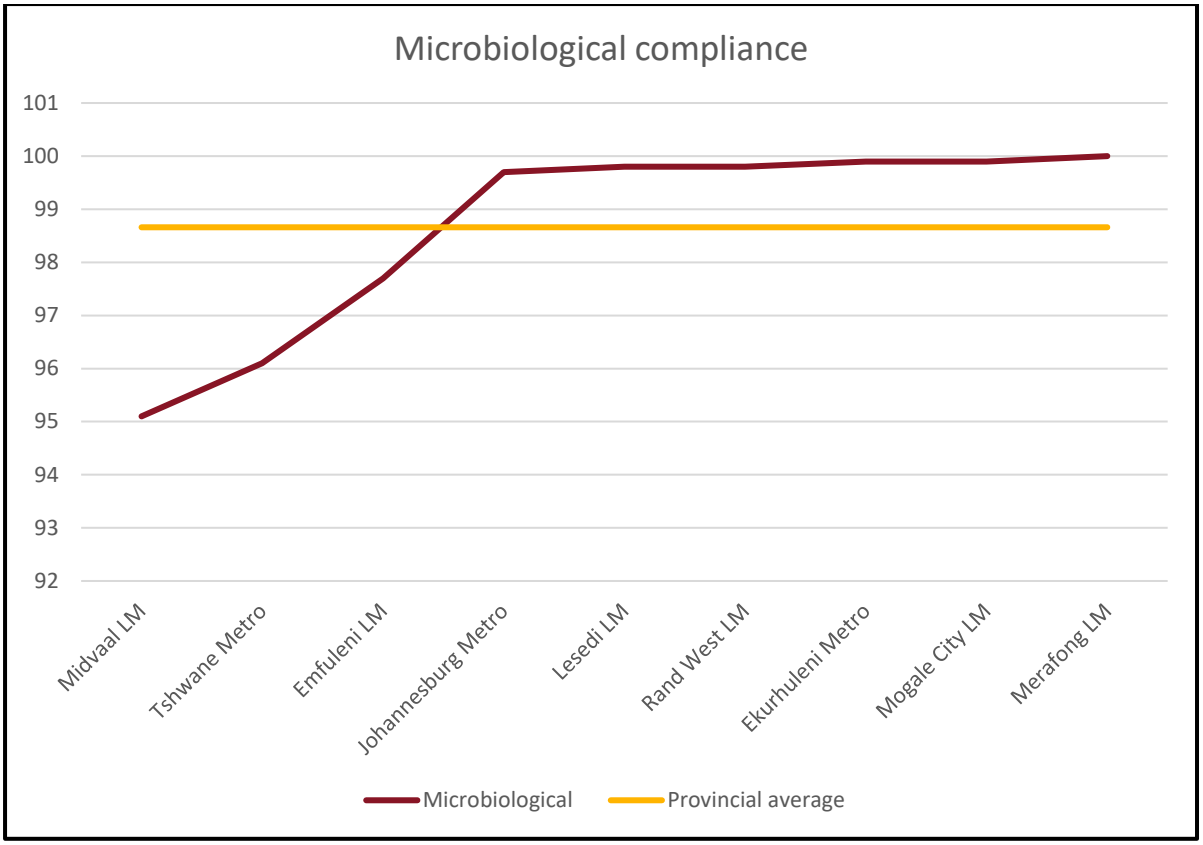


Figure 26: Microbiological compliance, Gauteng WSAs *(Source: 2023 Blue Drop Report)*

In the case of chemical (acute) compliance, for a population less than 100,000 people any score below 95% is unacceptable; for chemical (chronic) compliance the bar is set at below 93%. Similarly, for a population exceeding 100,000 people the standard is stricter: A score below 97% and 95% for acute and chronic chemical compliance respectively will be regarded as unacceptable.

Following the pattern for microbiological compliance, the scores for chemical (acute) and chemical (chronic) compliance are excellent across the Gauteng City Region. The only outlier was Emfuleni Local Municipality which recorded a score of 66.7% for chemical (acute) compliance (see **Figure 27** below) and 66.1% for chemical (chronic) compliance (see **Figure 28** below).

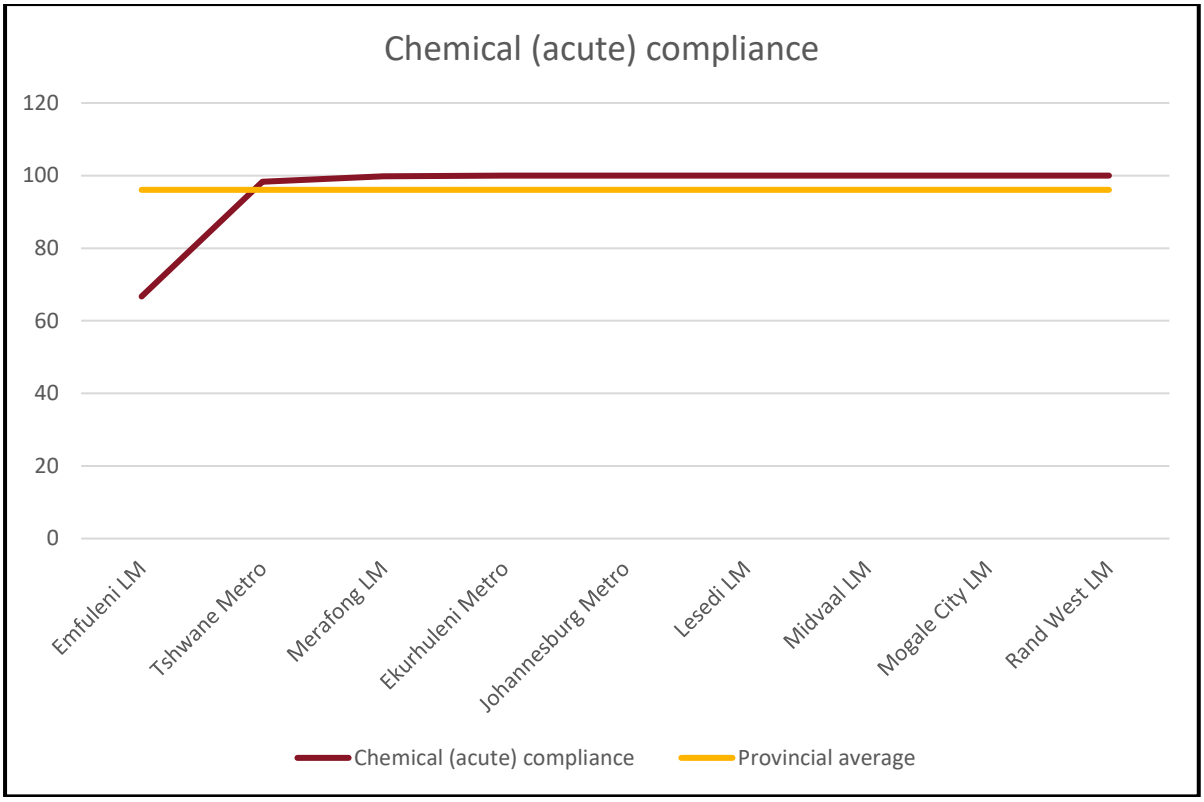


Figure 27: Chemical (acute) compliance, Gauteng WSAs *(Source: 2023 Blue Drop Report)*

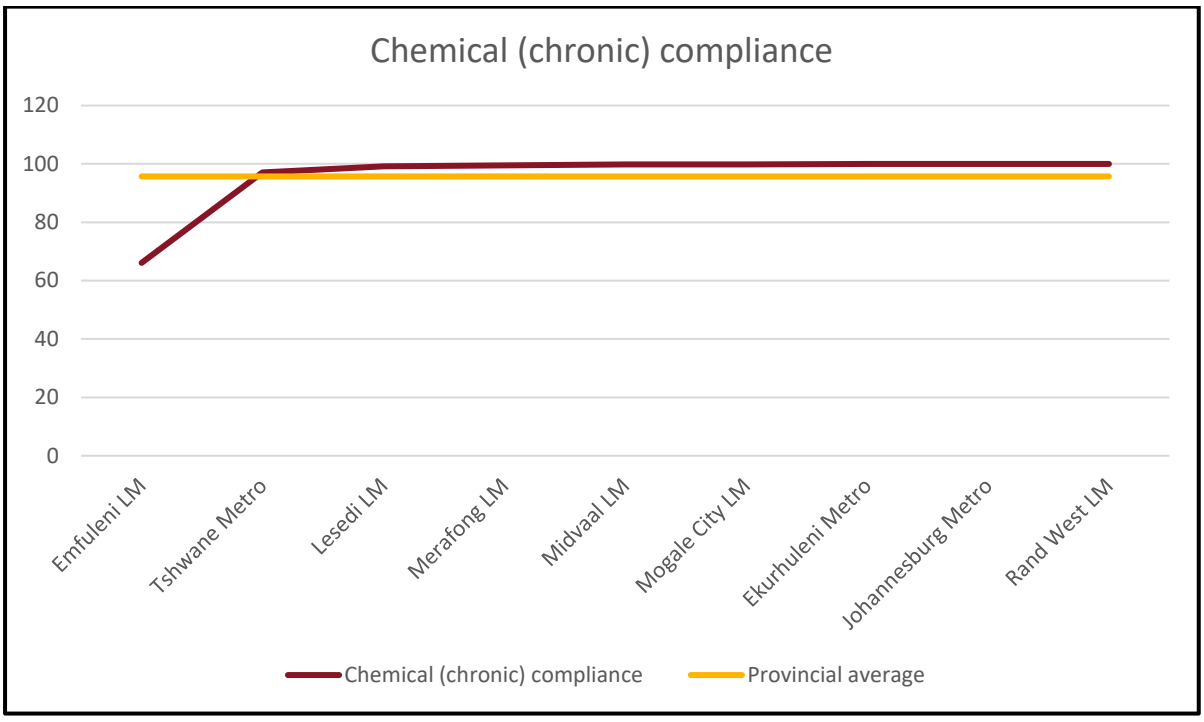


Figure 28: Chemical (chronic) compliance, Gauteng WSAs *(Source: 2023 Blue Drop Report)*

Overall, these results show that unlike several other provinces, the water quality across Gauteng is mostly safe for human consumption.

Efficiency

International human rights norms do not expressly highlight the value of efficiency. But in terms of the Water Services Act, all WSAs in South Africa have a duty to all consumers and potential consumers in their area of jurisdiction to progressively ensure "efficient" and "economical" access to water services.[60]

In assessing efficiency as an element of the progressive realisation of the right to water, the WRT relied on two indicators, namely the **Water Use Efficiency (WUE)** score and the amount of **non-revenue water**.

The WUE score is a metric used in the *Blue Drop* reports to compare how many litres of water a person uses per day in each WSA. The WUE score is obtained by dividing how many kilolitres of water enters a WSA's water supply system(s) per day (System Input Volume (SIV)) by total population. The score takes the form of a notional average amount of litres per person per day (l/p/d). The international "benchmark" in this regard is 180l per person per day.[61] The *Blue Drop* report defines various "performance categories" based on thresholds of use (see **Table 7** below).

Colour	WUE Range	Performance
	>300	Extremely high per capita water use
	>250-300	Poor per capita water use
	>200-250	Average per capita water use with potential for marked improvement
	>150-200	Good per capita water use with room for improvement
	<150	Excellent per capita water use management

Table 7: WUE Performance Categories *(Source: 2023 Blue Drop Report)*

The WUE score is subject to three important caveats.

The first is that while it can be used to compare the "performance" of WSAs, the amount of water people use every day is influenced by several factors (the physical availability of the source, access points, economic accessibility) and not simply by either the efficiency of the WSA's management systems or the water conservation attitudes of consumers.

The second is that as an average, it tells us very little about water inequalities *within* each WSA. Thus, some consumers may be consuming very little, while others consume a lot.

Thirdly, the score relies on accurate population statistics. As noted above in the section on demographics, the WUE score will be inflated if total population is underestimated.

On average, people in Gauteng use 316 liters per person per day (l/p/d) which is considerably higher than other provinces (see **Figure 29** below). Two-thirds of Gauteng's WSAs fall below this average. The highest water users in Gauteng are Midvaal Local Municipality and the City of Tshwane Metropolitan Municipality at over 400 and 500 liters per person per day respectively.

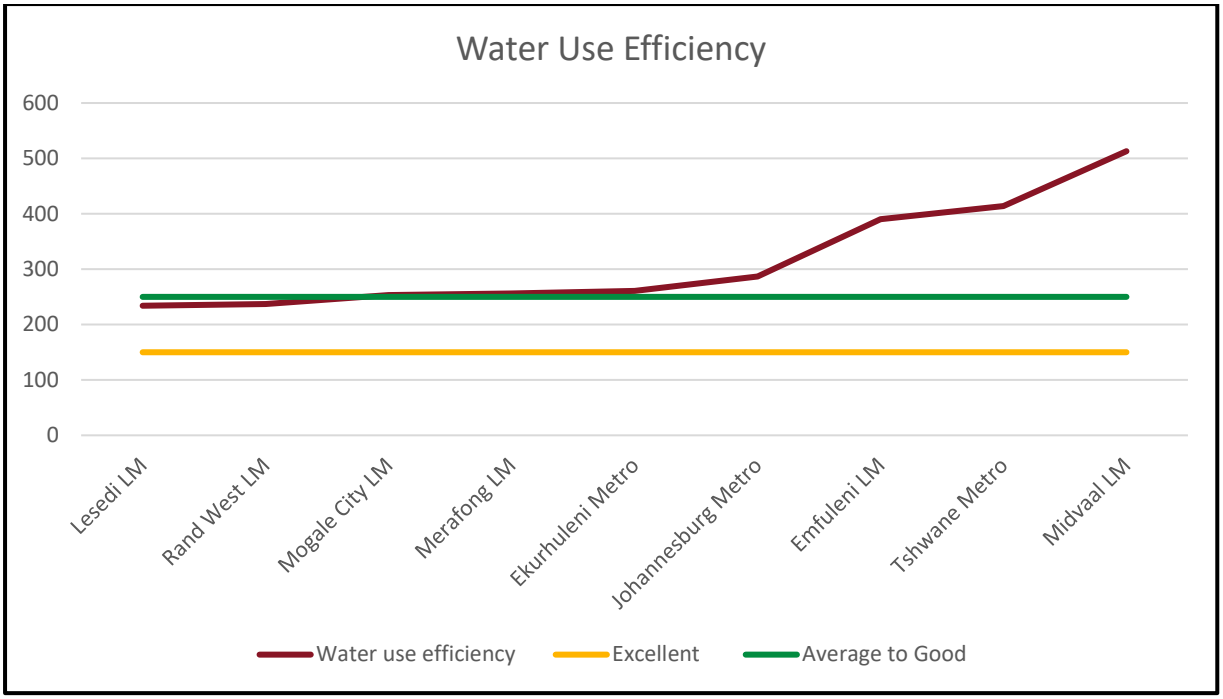


Figure 29: WUE Scores, Gauteng WSAs *(Source: 2023 Blue Drop Report)*

Non-revenue water means the water that WSAs treat and distribute for consumption but for which they recover no revenue as a result of various losses throughout the system. Calculated as a percentage of all water produced, it includes physical losses, unbilled water, billing inaccuracies and water lost through illegal connections. According to a 2022 water balance published in the *National Water Resources Strategy III*, 39.8% of all water treated in South Africa is non-revenue water.[62] This marks an increase from an average of 36.8% in 2012.[63] The global average for non-revenue water is estimated at 35%[64] but "well-performing" water utilities should have an average closer to 25%. The National Treasury Norm is between 15-30%.

The levels of non-revenue water in Gauteng are a cause for concern (see **Figure 30** below). Almost all the WSAs – including all the metros – are either on the upper cusp of the National Treasury Norm, or slightly exceeding it. The levels of non-revenue water in Rand West Local Municipality (54%) and Emfuleni Local Municipality (62.1%) are particularly worrying.

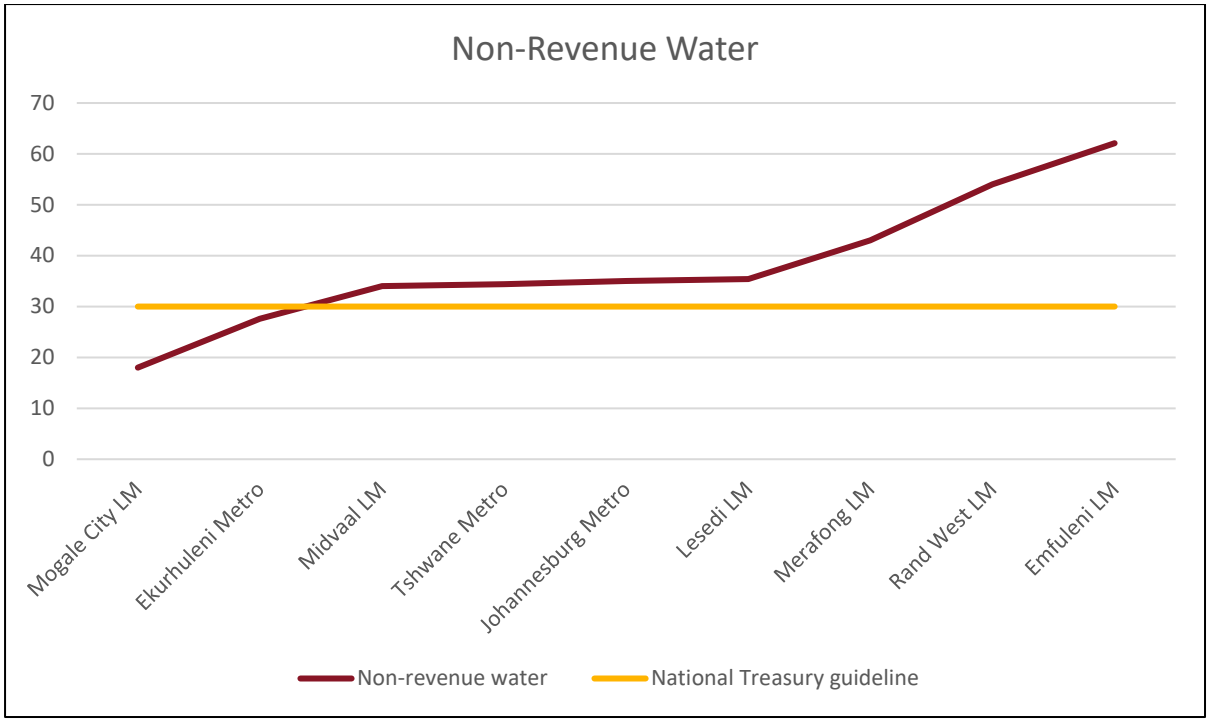


Figure 30: Non-revenue Water, Gauteng WSAs *(Source: Auditor-General 2023/24 MFMA Audit)*

Systemic Drivers of Non-Compliance

The fourth set of indicators focuses on the systemic drivers that are undermining progressive realisation of the right to sufficient water in South Africa. Several systemic and structural factors continue to limit the ability of water services authorities in Gauteng to meet the legal standard of access to sufficient water. These challenges are often interconnected, compounding one another over time and creating persistent barriers to sustainable service delivery.

As noted in Part A, these systemic drivers cluster around several themes including leadership, planning, funding, infrastructure, electricity, ecological, consumer, intermediary, and third-party interference issues. Based on statements made in the most recent IDPs of Gauteng's WSAs, it can be seen that with the exception of intermediaries, these issues are widespread and entrenched (see **Table 8** below).

Municipality	Leadership	Planning	Funding	Infrastructure	Electricity	Ecological	Consumer	Intermediaries	Third Party
Ekurhuleni	x	x	x	x	o	o	o	o	o
Johannesburg	x	x	x	x	o	o	x	o	x
Tshwane	x	x	x	x	o	x	x	o	x
Emfuleni	x	x	x	x	x	x	x	o	x
Lesedi	o	x	x	x	x	o	x	x	x
Merafong	x	x	x	x	o	x	o	o	x
Midvaal	o	x	o	x	o	x	x	o	x
Mogale	o	x	x	x	o	x	o	o	x
Rand West	x	x	x	x	o	x	x	o	x

Table 8: Systemic Drivers Undermining Progressive Realisation of the Right to Water *(Source: Municipal IDPs)*

Several systemic and structural challenges continue to limit the ability of WSAs in Gauteng to meet legal and constitutional standards for water service delivery. These challenges are common across municipalities and are closely linked, reinforcing one another and undermining long-term sustainability.

All municipalities in Gauteng experience serious water services planning challenges. A key constraint is the lack of reliable and up-to-date statistics, which makes it difficult for municipalities to plan infrastructure investment, accurately assess demand, and prioritise spending. In addition, all municipalities face infrastructure-related challenges, with ageing water infrastructure being the most widely reported problem. Ageing pipes, treatment works, and pumping systems contribute to frequent breakdowns, water losses, and service interruptions.

Governance instability affects several municipalities. Three of the nine municipalities report ongoing leadership instability, with the City of Johannesburg and the City of Tshwane being particularly affected by unstable coalition councils. Frequent changes in political leadership disrupt decision-making, weaken oversight, and delay the implementation of long-term water services plans.

Financial pressure is a widespread concern. Eight of the nine municipalities report funding challenges, largely driven by high levels of unemployment and an inability of households to pay for services. Consumer-related issues, including a culture of non-payment, further reduce available revenue and limit the ability of municipalities to invest in maintenance and infrastructure renewal.

Municipalities also report significant challenges linked to third-party interference, including fraud, corruption, illegal connections, and vandalism. During engagements, all municipalities raised serious concerns about organised crime groups operating within water tankering services and maintenance or repair contracts. In one particularly severe case, an entire water treatment works was reportedly operating under the effective control of such a group. These activities increase costs, disrupt service delivery, and undermine institutional control.

Ecological pressures further compound service delivery challenges. Many municipalities highlighted the growing impacts of climate change, including both droughts and flooding, which place additional stress on already vulnerable water systems. Pollution of the Vaal River, identified as the second most frequently mentioned challenge in this category, is of particular concern, as it serves as the primary natural source of raw water for large parts of Gauteng.

Leadership instability, corruption and political interference

Based on media reports and statements in WSA's IDPs, leadership instability, corruption, and political interference continue to undermine effective water service delivery in almost all WSAs across Gauteng. In some areas, the instability has escalated beyond administrative dysfunction to include violent conflict, deeply affecting the ability of WSAs to provide consistent and accountable governance.

The three metropolitan municipalities have been rocked by highly volatile coalition politics, shocking allegations of corruption, and assassination of whistleblowers. Since the last local government elections in 2021, the City of Johannesburg has had no fewer than six mayoral shifts;[65] the City of Tshwane has had four;[66] while Ekurhuleni Metro has had three.[67] Johannesburg, in particular, has faced allegations of mounting financial mismanagement and corruption with damning reports published in October 2026 detailing how political, criminal, and business interests are colluding to keep the city broken.[68] Following revelations at the Madlanga Commission, the City of Tshwane had to clear the air on serious allegations of corruption[69] involving water tankering services.[70] Ekurhuleni Metro has also faced intense national scrutiny following serious revelations made at the ongoing Madlanga Commission of Inquiry and parliamentary reports. Investigations have uncovered deep institutional corruption, including the infiltration of

municipal police by organized crime syndicates and the targeted assassinations of whistleblowers and state witnesses.[71]

Volatile coalition politics has also no spared the smaller WSAs.[72] Emfuleni Local Municipality stands out for buckling under decades of systemic governance failure. In July 2023, an oversight visit by the Select Committee on Co-operative Governance and Traditional Affairs found 'a municipality on its knees or worse beyond the grave'. At that time, the municipality owed Eskom R6.8 billion and could only recover 35% of the cost of the water it received from Randwater.[73] In 2025, the Minister of Finance identified the WSA as one of 39 municipalities that had persistently failed to pay water boards, amongst other entities.[74] And in July 2026, Martha Mani Rantsofu was brutally shot for exposing massive fraud and corruption at the municipality.[75]

Geographical scale

The 2023 *Blue Drop* Report provides an overview of the scale and composition of water services infrastructure in Gauteng municipalities, including reservoirs, bulk pipelines, and distribution pipelines (see **Figure 31**). The data highlights significant differences in how infrastructure is owned, reported, and managed across the province.

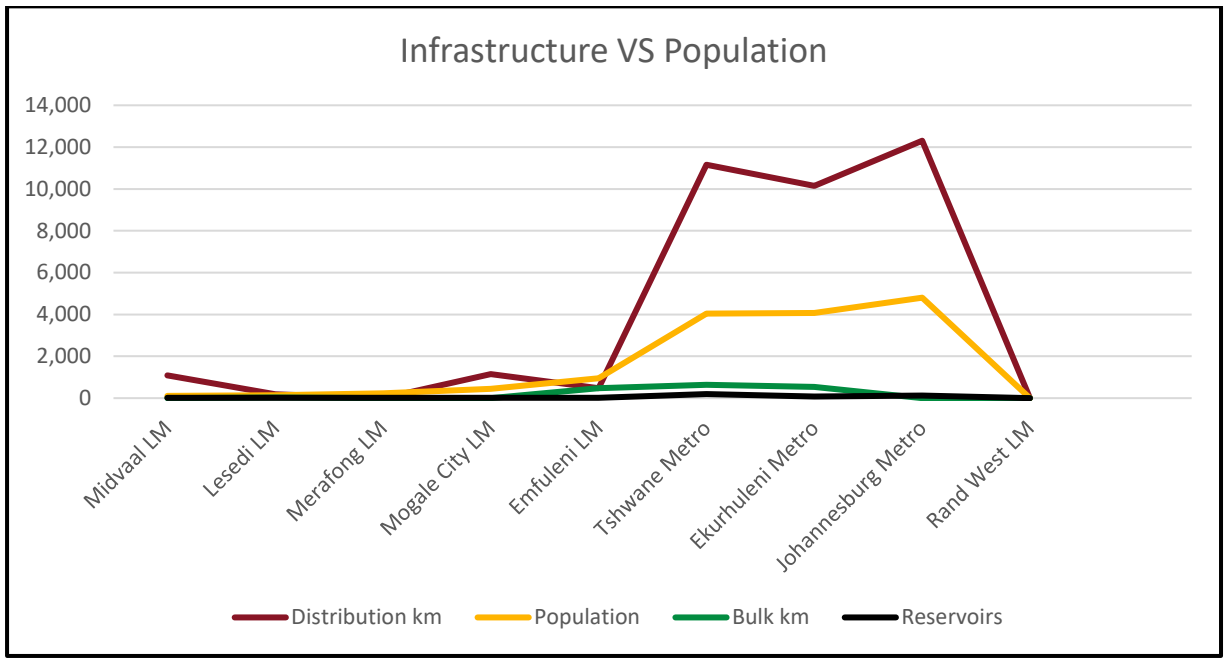


Figure 31: Relationship between infrastructure extent and population size *(Source: 2023 Blue Drop Report)*

An important pattern emerges in relation to infrastructure ownership and reporting. For Rand West Local Municipality, no infrastructure information could be found in the *Blue Drop* data. In addition, four municipalities do not report ownership of bulk pipelines. Merafong Local Municipality reports neither bulk nor distribution pipelines and lists only 11 reservoirs under municipal ownership. This does not necessarily mean that bulk or

distribution infrastructure is absent. Rather, it reflects Gauteng's reliance on Rand Water as the primary bulk water supplier to most municipalities. As a result, large portions of bulk infrastructure are owned and operated by Rand Water and therefore do not appear on municipal asset registers.

Where distribution networks are reported, a clear relationship can be observed between population size and the extent of distribution pipeline infrastructure. Municipalities with larger populations generally report more extensive distribution networks, reflecting higher demand and broader service coverage. Emfuleni Local Municipality is the main exception to this trend, suggesting possible infrastructure constraints, reporting gaps, or management challenges relative to population size.

Overall, the findings highlight the complexity of infrastructure ownership arrangements in Gauteng. Heavy reliance on Rand Water complicates direct comparisons between municipalities and limits the visibility of bulk infrastructure in municipal reporting. These arrangements underline the importance of clear asset registers, transparent reporting, and well-defined responsibilities between municipalities and bulk water providers for infrastructure operation, maintenance, and long-term planning.

Oversight

As noted in Part A of this report, the successful provision of water services requires a whole-of-government approach. In addition to Water Boards and enabling ministries such as National Treasury and the Department of Co-operative Government and Traditional Affairs, several institutions exercise an oversight function. Of these, the most important are the Department of Water and Sanitation, the SAHRC, Parliament, provincial oversight committees and the courts.

Regulatory Enforcement by the Department of Water and Sanitation

The WSA requires that the Minister of Water or the relevant province monitor water services (section 62, WSA). If a WSA fails to effectively perform any function imposed on it under the WSA, section 63 allows the Minister of Water to intervene through a rather convoluted process linked to section 139 of the Constitution. This requires provincial governments to intervene in the first instance.

The DWS undertakes proactive regulatory oversight of WSAs through incentive-based regulation. This is conducted through the *Drop* reports which entail periodic audits of all WSAs in South Africa.

- **Blue Drop Report:** This report evaluates the country's drinking water quality management systems and local municipal water distribution networks. It assesses the delivery, treatment, and distribution of potable water across five Key Performance Areas (capacity management, drinking water quality risk management, financial management, technical management, and drinking water quality compliance). Each WSA receives a *Blue Drop* score and risk rating. WSAs with a *Blue Drop* score below 31% are placed under the DWS' regulatory surveillance and are required to submit a detailed corrective action plan within 20 days after the publication of the *Blue Drop* report. WSAs and associated water treatment systems categorised as "high" or "critical risk" (posing a serious risk to public health) must assess their risk contributors and provide corrective measures in their action plans.[76] Many of the verified indicators from the 2023 *Blue Drop* report were used in this report to measure progressive realisation of the right to water.
- **Green Drop Report:** This report evaluates South Africa's municipal wastewater treatment systems against five KPAs (Capacity Management, Environmental Management, Financial Management, Technical Management, and Effluent and Sludge Compliance). Similarly to the *Blue Drop*, each WSA receives a *Green Drop* score and risk rating. Regulatory surveillance is triggered when a system achieves a score of be low 31%.

- **No Drop Report**: This report is focused on water use targets, non-revenue water, water losses and water use efficiency. WSAs across the whole country are assessed against four criteria (Water Conservation/Water Demand Management (WC/WDM) plans, asset management of meters, technical skills of the WC/WDM team, and compliance and performance based on year-on-year improvements against KPIs). Participating WSAs achieve a *No Drop* score. The 2023 *No Drop* report contains national and provincial recommendations.

The *Blue* and *Green Drop* Programmes were introduced in 2008 and ran until 2014. Following a lapse, the programme was revived in 2021/2022 with the latest reports dating from 2023 (*Blue Drop*, *No Drop*) and 2025 (*Green Drop*).

In the latest *Blue Drop* audit, none of the water supply systems in Gauteng were received Blue Drop scores below 31%. Therefore, none of the WSAs were placed under regulatory surveillance.

Parliamentary Oversight

As noted above, the Co-operative Governance and Traditional Affairs Committee of the National Council of Provinces (NCOP) has exercised oversight of Emfuleni Local Municipality.

Auditor-General investigations

In the annual local government audit under the Municipal Finance Management Act, the Auditor-General consistently flags water distribution losses; underspending of municipal infrastructure grants; failure to comply with grant conditions, municipal indebtedness to Water Boards; lack of maintenance policies, planning and spending; poor project management and weak contract management; skills deficits; and the allocation of funds intended for water services to other functions. Since 1 April 2019, the Auditor-General has also been empowered to institute binding remedial action when material irregularities recommendations are not implemented. The Auditor-General may refer material irregularities to the relevant public organisations for further investigations and issue debt certificates for failure to implement remedial action.

The Office of Auditor-General tracks the status of response to material irregularities, flagging areas of concerns. While such material irregularities do not necessarily relate to water services, they draw attention to financial mismanagement in particular WSAs. Despite the serious allegations of financial misconduct, no WSAs in Gauteng have been flagged for remedial action, as set out in **Table 9** below.

Auditor-General Action to resolve material irregularities (MI)	WSAs in Gauteng flagged for further remedial action

Recommendations in audit report as accounting officer to little or no action to address MI	None
Remedial action taken as recommendations were not implemented	None
Further action taken as remedial action was not implemented	None
Recommendations in audit report and referral to public bodies	None
Referral to public bodies for further investigation	None
Referral and remedial action	None
Notice of certificate-of-debt process	None

Table 9: Summary of remedial action taken in relation to material irregularities in WSAs in Gauteng *(Source: Auditor-General, South Africa)*[77]

Judicial oversight and limits of court intervention

Across Gauteng, persistent failures in water service delivery have triggered oversight and intervention by the High Court on two separate occasions. Further, the well-known *Mazubiko* case, which called on the Constitutional Court to interpret section 27(1)(b) of the Constitution, was brought against the City of Johannesburg. The extent of oversight and support in this province is less when compared to other provinces.

In *Barstow and Others v City of Johannesburg Metropolitan Council*, the dispute concerned a faulty water meter that resulted in incorrect billing. The court ordered the municipality to disregard the faulty meter readings and instead calculate charges based on the average readings from a functioning meter. In *Body Corporate of SS Country View v City of Johannesburg Metropolitan Municipality and Another*, the court dealt with the reconnection of water supply during a billing dispute and reaffirmed the principle of procedural fairness, confirming that water services may not be disconnected while a billing dispute is unresolved.

In *Mazibuko v City of Johannesburg*, the Constitutional Court unanimously ruled that the right to access sufficient water does not entitle citizens to claim a specific quantity upon demand immediately. Instead, the Court held that Section 27 of the Constitution requires the state to take reasonable legislative and progressive measures to realise this right within its available resources. Consequently, the Court overturned lower court orders and declared the city's Free Basic Water policy (limiting free water to 6 kilolitres per household monthly) and its installation of prepaid water meters to be entirely lawful and reasonable. As a Constitutional Court decision, this precedent is binding throughout South Africa.

Overall assessment of oversight impact

Beyond these three court cases, no other formal oversight or support actions were identified in Gauteng. There were no South African Human Rights Commission provincial inquiries, no regulatory enforcement actions by the Department of Water and Sanitation, and no parliamentary or portfolio committee interventions related to water services. In addition, no investigations by the Auditor-General or the Public Protector were recorded. As a result, Gauteng emerges as one of the provinces with the lowest levels of oversight and institutional support aimed at improving delivery of water services.

Conclusion: Red Flags for Human Rights Compliance

The WRT Project aims to develop a method and establish a baseline for tracking the progressive realisation of the right to sufficient water in South Africa that is publicly accessible and easy to understand. This work is intended to assist the SAHRC in the fulfilment of its constitutional mandate, support the work of other supervisory institutions, create a reflexive space for WSAs and their officials, and support ongoing research into South Africa's water sector.

Part A of this report has outlined the conceptual frame of the project in terms of rights holders, duty bearers, the elements of the right to water (physical access, economic access, adequacy, quality, and efficiency) and reasonable measures (policy and legislation, financial resources, infrastructure resources, and human resources). It has also provided a detailed explanation of the indicator approach and methodology (see also Annexure A).

Part B of this report has applied the conceptual frame and methodology to the state of water services delivery in the province of Gauteng. Using graphs, tables, and explanatory text it has provided a detailed baseline snapshot of progressive realisation of the right to sufficient water in the province.

In this concluding section, we present an even higher-level summary of the state of progressive realisation of the right to water in Gauteng by selecting **one representative indicator** from each of the main outcomes-based or procedural/structural (enabling) indicator sets. As outlined in **Table 10** below, we frame these final set of indicators as **red flags**. In other words, considering the diverse norms and standards canvassed in the report on the one hand, and the key outcomes and enabling factors on the other, the red flag indicators arguably capture the clearest grounds for proving human rights non-compliance or violation. For purposes of the SAHRC and other oversight institutions, they focus attention on the issues and localities that place human rights compliance at risk. They are presented in the spirit of an opening gambit in an ongoing dialogue on how best to monitor the right of access to sufficient water in South Africa.

Set	Element	Red Flag	Reason
Outcomes	Physical Access	More than 7% of the population with service delivery point access greater than 200m from a household	Since 2001, Compulsory Norms and Standards have provided that basic water supply requires physical access within 200m of a household. Approximately 93% of households have access according to this standard, leaving 7% with access further than 200m.[78] Although it is unacceptable that even 7% of households have no physical access point less than 200m from their households, this red flag indicator draws attention to WSAs that exceed this percentage.
	Economic Access	Less than 22% of the population have access to Free Basic Water (FBW)	In principle, every household in South Africa should have access to 6kl per household per month provided either as a universal allocation or in terms of a WSA's indigency programme. The red flag indicator calls attention to WSAs where less than 22% of the population have access to FBW, this being the national average of people living below the poverty line.
	Quality	Microbiological compliance score below 98% Chemical (acute) compliance score below 97%	In assessing compliance with microbiological standards, for a population of less than 100,000 people, any score below 96% is unacceptable; for a population exceeding 100,000 the standard is any score below 98%. The red flag indicator uses the stricter standard, calling attention to WSAs where microbiological compliance (as per the 2023 *Blue Drop* report) was below 98%. In assessing compliance with chemical (acute) standards, for a population less than 100,000 people any score below 95% is unacceptable; for a population exceeding 100,000 the standard is 97%. The red flag indicator uses the stricter standard, calling attention to WSAs where chemical (acute) compliance (as per the 2023 *Blue Drop* report) was below 97%.
	Adequacy	None	Insufficient baseline data to be able to formulate a red flag indicator. However, when data becomes available the indicator should capture the average frequency and duration of water stoppages in a WSA.
	Efficiency	Water Use Efficiency Score (WUE score) exceeds 250 l/p/d Non-revenue water exceeds 30%	The water use efficiency score captures the average amount of water used per person per day in a WSA, considering the system input value and the population size. The red flag indicator calls attention to WSAs where the WUE score exceeds 250 l/p/d. Non-revenue water refers to water which is produced, treated, and pumped into the distribution system, but which is 'lost', generating no revenue for the water utility. According to National Treasury norms, NRW should lie in the range of 15-30%. The red flag indicator calls attention to WSAs where NWR exceeds 30%.

Enablers	Leadership	Evidence of political disruption in the form of corruption, intimidation, violence or factional fighting	Political disruption causes instability, weakens accountability, and fosters a culture of fear in WSAs. The red flag indicators focuses attention on WSAs where various forms of political disruption have been recorded.
	Planning	Lack of or outdated Water Services Development Plan (WSDP)	A WSDP is a prescribed, detailed strategic and operational plan to provide water services in the WSA's jurisdictional area. The red flag indicator calls attention to WSAs where there is no, or an outdated WSDP.
	Financial Resources	Revenue collection rate <90%	Apart from the intergovernmental financial transfers, WSAs are reliant on revenue collected from the sale of water in line with their prescribed water tariffs. Failure to collect water revenues places capital and operational expenditure at risk. For purposes of this report, a revenue collection rate below 90% for the 23023/24 FY was adopted as the red flag indicator.
	Infrastructure Resources	Water Treatment Work (WTW) Capacity >90% Percentage maintenance spend <8% of revenue collected	Operating WTWs at or above their design capacity places strain on the infrastructure which can lead to breakdowns and service delays. This red flag indicator calls attention to WSAs in which WTW capacity operates at 90% or more of design capacity. Sufficient maintenance spend is critical to maintain infrastructure to minimise breakdowns, prevent outages, and lower levels of non-revenue water. For purposes of this report, the red flag indicator of maintenance spend less than 8% of revenue collected is used to focus attention on WSAs where this is not happening.
	Human Resources	Technical staff/WTW ratio <1	WTWs and WSSs require process controllers, scientists and technicians to operate water services infrastructure. While many WSAs have a shortage of process controllers in quantitative terms, this report uses the red flag indicator of the technical staff/WTW ratio to call attention to staff shortfalls in particular WSAs.

Table 10: Representative indicators (red flags) for monitoring progressive realisation of the right to water

Progressive Realisation Snapshot: Red Flags – Outcomes

Table 11 below provides a snapshot baseline assessment of progressive realisation of the right to sufficient water in Gauteng from the perspectives of outcomes, these being the essential pillars of the human right to water of physical accessibility, economic accessibility, quality, and efficiency. As already noted at several points, the lack of quality data on water shortages prevented an assessment of adequacy.

The assessment shows that the primary human rights compliance risks in Gauteng are **water use efficiency** (particularly chemical acute compliance), **non-revenue water**, and **economic access**.

WSA	>200m Physical Access >7%	FBW <22% of population	Microbio-logical Non-Compliance	Chemical (Acute) Compliance	WUE Score >250 l/p/d	NRW >30%
Ekurhuleni Metro	No	Yes	No	No	Yes	No
Emfuleni LM	No	No	No	Yes	Yes	Yes
Johannesburg Metro	No	No	No	No	Yes	Yes
Lesedi LM	No	Yes	No	No	No	Yes
Merafong LM	Yes	Yes	No	No	Yes	Yes
Midvaal LM	Yes	Yes	Yes	No	Yes	Yes
Mogale City LM	No	Yes	No	No	Yes	No
Rand West LM	Yes	Yes	No	No	N o	Yes
Tshwane Metro	No	Yes	Yes	No	Yes	Yes

Table 11: Red flag indicators (outcomes), Gauteng

The water quality red flags in Gauteng buck the trend observed in other provinces, where microbiological or chemical compliance emerged as the top red flag issues. Due to the valuable role played by Rand Water, people in Gauteng can be assured of good water quality. In the last *Blue Drop* assessment, the outliers in this regard were Midvaal Local Municipality (which nevertheless still scored highly, at 95.1% compliance) and Emfuleni Local Municipality (which scored only around 66% for both acute and chronic chemical compliance).

In terms of economic access, with the exception of the City of Johannesburg, none of the WSAs in Gauteng provide 6 kl per household as a universal allocation. In seven of the nine WSAs (77%) in Gauteng the FBW allocation falls below the national indigency average of 22% of the population. The percentage of households receiving FBW ranges from a low of 2.8% in Merafong to 14.4% in Midvaal Local Municipality. It should also be noted that the number of households receiving an indigency allocation above the universal allocation in the City of Johannesburg, is also very small, at around only 1%.

Water efficiency emerges as a major concern across the Gauteng City Region. Compared to other provinces, in all but two WSAs the average daily rate of consumption exceeds the

upper limit of what is considered 'average to good'. In Emfuleni Local Municipality (390 l/p/d), Tshwane Metropolitan Municipality (414 l/p/d) and Midvaal Local Municipality (a whopping 513 l/p/d), the levels of consumption are particularly concerning. It is not clear from the data, however, whether these high usage levels arise from household, business or industry consumption. Given the criteria the DWS has defined for regulatory oversight action over WSAs, and the lack of any regulatory interventions following the last *Blue Drop* audit, questions arise around what regulatory measures should be taken when WSAs are not encouraging or implementing water conservation and demand management measures.

Non-revenue water is also a major concern across Gauteng, with only two WSAs not exceeding the upper Treasury Guideline limit of 30%. According to the 2023/2024 Auditor-General audit, the situation is particularly egregious in Merafong (43%), Rand West (54%) and Emfuleni (62.1%) Local Municipalities. It is also curious that the comparatively *well resourced* metros of Johannesburg and Tshwane should have non-revenue water exceeding the Treasury guideline, when many smaller WSAs across South Africa are able to keep within the bounded range. Ekurhuleni Metro is also at the very cusp of compliance with non-revenue water of 30%. The data is not able to show the extent to which this is this is due to the complexity of managing water distribution systems in these large urban conglomerations or due to an intent to keep these cities "broken", as claimed in recent civil society reports (see the section on Leadership instability, corruption, and political interference above).

From the perspective of outcome indicators, Midvaal Local Municipality had the most red flags (five), followed by Merafong Local Municipality, with four. It should nevertheless be stressed that when compared to the performance of some WSAs in other provinces, Midvaal's performance on economic access (14.4% FBW allocation) and water quality issues (95% microbiological compliance) is comparatively good. The red flag designation must therefore be read carefully against the full data set in this report and the profiles.

Progressive Realisation Snapshot: Red Flags – Enablers

Table 12 provides a snapshot baseline assessment of progressive realisation of the right to sufficient water in Gauteng from the perspectives of enablers, these being the policy, legislative, financial, infrastructural, and human resource reasonable measures necessary to realise the right.

The baseline assessment shows red flags across the board with the most numerous being political disruption and maintenance spending.

WSA	Political Disruption	Outdated or No WSDP	Revenue Collection Rate <90%	WTW Capacity >90%	Maintenance Spending <8%	Technical/WTW Ratio <1:1
Ekurhuleni Metro	Yes	No	Yes	n/a	Yes	No
Emfuleni LM	Yes	No	No	No	Yes	No
Johannesburg Metro	Yes	Yes	No	n/a	Yes	No
Lesedi LM	Yes	No	No	n/a	Yes	No
Merafong LM	Yes	No	Yes	n/a	Yes	Yes
Midvaal LM	No	No	No	No	No	No
Mogale City LM	Yes	Yes	No	n/a	No	No
Rand West LM	Yes	No	No	n/a	Yes	Yes
Tshwane Metro	Yes	No	No	No	Yes	Yes

Table 12: Red flag indicators (enablers), Gauteng

As outlined in the section on Leadership instability, corruption, and political interference above, political disruption has plagued almost all the WSAs in Gauteng. The three metropolitan municipalities have been rocked by highly volatile coalition politics, shocking allegations of corruption, and assassination of whistleblowers. Volatile coalition politics has also impacted the smaller WSAs, with Emfuleni standing out as a particularly worrying case.

In terms of maintenance spending, in the 2023/24 FY only two WSAs spent more than 8% of their budgets on maintenance. As noted in the relevant section, this comprises spending on all municipal infrastructure and not water infrastructure alone. In five of the nine WSAs, maintenance spending was 5% or less, suggesting that maintenance is not yet a clear priority despite ageing infrastructure and frequent pipe bursts and leaks being identified as major challenges in water service delivery.

From the perspective of enabling indicators, Merafong had the most red flag indicators, followed by Ekurhuleni, Johannesburg and Tshwane with three each. Curiously, despite having the most red flag outcome indicators, Midvaal Local Municipality had no red flags in the domain of enablers.

Recommendations

As with the other provincial Water Rights Tracker reports, this report repeatedly demonstrates six central findings:

- the crisis is primarily one of **governance and implementation**, not simply infrastructure;
- **planning is weakened by poor data**, particularly around population, households and indigency;
- the current **municipal financial model is under severe strain**, particularly in poorer municipalities;
- **human rights monitoring should become systematic**, not ad hoc; and
- systemic drivers such as leadership instability, political interference, theft, electricity insecurity and skills shortages require coordinated policy responses rather than municipal-level fixes.

Continuing Monitoring and Evaluation: The WRT presents a comprehensive methodology for and baseline assessment of the right of access to sufficient water. The WRT should not remain a once-off research project but should evolve into a permanent monitoring framework supporting the constitutional oversight mandates of the SAHRC, DWS and other supervisory institutions. Comprehensive assessments should be undertaken every five years, supplemented by shorter annual or biennial updates aligned with the publication of *Blue Drop*, *Green Drop* and *No Drop* reports. Progress should be measured against the baseline established in this report to determine whether WSAs are progressively realising—or regressing in—the fulfilment of the right of access to sufficient water.

Monitoring the adequacy of water services: Develop a national water service continuity reporting framework. Every WSA should be required to record, classify and publicly report planned and unplanned interruptions according to nationally prescribed standards, including their duration, geographical extent, cause, population affected, emergency measures implemented and time taken to restore services. Without such information, the regulatory requirements that interruptions be reasonable and temporary cannot be meaningfully monitored.

Protect the operational independence and stability of municipal water services. Water services are highly vulnerable to political instability, leadership turnover and corruption. National and provincial government should strengthen measures that promote continuity in technical management, reduce political interference in operational decision-making, and ensure that critical technical posts remain filled through merit-

based appointments. Stable institutional leadership should be recognised as a prerequisite for the progressive realisation of the right to water rather than simply a governance objective. Outstanding leadership in the water services sector (often exercised under very trying circumstances), should be recognised and celebrated. At the same time, the effect of political disruption on the water services function is an area needing further research. The role of traditional authorities in water services provision also needs to be urgently recognised.

Planning: The baseline assessment has highlighted disparities in the statistics used to determine population and household sizes. National government should establish a coordinated population and household data protocol for water services planning involving Statistics South Africa, DWS, municipalities and National Treasury. Persistent discrepancies between Census data, municipal planning documents and *Blue Drop* information undermine infrastructure planning, financial allocations and performance measurement. The baseline assessment also exposed unevenness in the effective use of the prescribed WSDP regulatory tool. The design of this tool in the Water Services Act, needs to be revisited with a view to possibly separating strategic from operational planning and promoting better accessibility and accountability.

Review the long-term sustainability of the municipal water services funding model. The evidence presented in this report suggests that the assumptions underpinning universal municipal cost recovery are increasingly inconsistent with the demographic and socio-economic realities of many WSAs. National government should undertake a comprehensive review of the financing framework for water services, including the balance between tariffs, fiscal transfers, cross-subsidisation and infrastructure funding, with specific consideration of municipalities characterised by high unemployment, high dependency ratios and limited revenue bases.

Infrastructure renewal and asset management. WSAs should progressively move towards risk-based asset management systems that prioritise preventative maintenance, infrastructure renewal and lifecycle costing. National oversight should focus not only on new infrastructure investment but also on the sustainability of existing assets.

Human resources and technical capacity. National and provincial government should develop targeted strategies to recruit, retain and support scarce technical skills within WSAs, particularly process controllers, engineers, scientists and technical managers. Consideration should be given to differentiated staffing models, shared technical services, rural retention incentives and expanded professional development programmes for municipalities experiencing chronic capacity shortages.

Economic accessibility: While strong gains have been made in terms of physical access and service delivery point coverage, economic accessibility to sufficient water remains a key concern. Only a small percentage of qualifying indigent households are accessing free basic services. National government and municipalities should simplify, standardise and digitise indigent registration processes while improving proactive identification of qualifying households. Municipalities should routinely evaluate whether indigent support reaches the households most at risk of exclusion from water services and whether administrative barriers unnecessarily limit access to free basic services.

Water quality: High levels of microbiological and chemical non-compliance must be addressed not merely as issues of water engineering, technical standards and regulatory directives, but as a human rights issue. In this regard, information accessibility – as highlighted in the international water rights norm – should receive as much attention. Microbiological and chemical (acute) non-compliance, in particular, are of grave concern and cannot be delinked from systematic failures in the sanitation system. Persistent microbiological and chemical non-compliance should trigger mandatory public notification, strengthened regulatory oversight and time-bound remedial action plans.

Water efficiency standards: The use of water efficiency standards as a way to reduce high per capita rates of water use should be investigated to curb excessive or wasteful use on the part of both low- and high-income users.

Systematic drivers undermining progressive realisation of the right to water: Municipal IDPs contain a wealth of data on systematic drivers undermining progressive realisation of the right to water, including infrastructure theft and vandalism, ecological factors, the role of water services intermediaries, and the role of traditional authorities. Each of these drivers merits further research and policy and regulatory development.

Climate resilience and water security: Long-term water services planning should explicitly incorporate climate change projections, drought preparedness, diversification of water sources, groundwater protection and ecosystem restoration. Water security should increasingly be treated as an essential component of progressive realisation of the right to water.

Tracking implementation of oversight recommendations: National government should establish a publicly accessible mechanism that consolidates and tracks recommendations, directives, remedial actions and court orders relating to water services issued by the DWS, SAHRC, Auditor-General, Public Protector and the courts. Progress in implementing these measures should become a measurable indicator of progressive realisation of the right to water.

Annexures

Annexure A: Methodology

1 Overview of the methodology

This report utilises an indicator-based approach to measure progressive realisation of the right to water across South Africa's Water Services Authorities (WSAs). The research was meticulously designed to ensure that its findings and recommendations are precise and empirically substantiated on the basis of existing datasets on water services. A fundamental consideration was to ensure that the indicators utilised within the report were relevant, robust, and valid.

2 Research Collaboration and Conceptualisation

In March 2022, officials from the South African Human Rights Commission (SAHRC) and researchers from the School of Law, University of the Witwatersrand, met to explore the possibility of developing an indicator-based framework for measuring progressive realisation of the right to water. Realising the synergies between the SAHRC's constitutional mandate to monitor progressive realisation of the right to water and its convening power, on the one hand; and the research capacity and water-specific focus of the Claude Leon paired Chair initiative based at Wits University, on the other; the parties agreed to co-operate on a project subsequently titled the *South African Water Justice Tracker*. Co-operation between the parties was subsequently institutionalised through a formal Framework Agreement, executed on 2 February 2023, and a Project Agreement, executed on 31 March 2023. In April 2026, the parties agreed to rename the project the *South Africa Water Rights Tracker* to reflect the Project's primary focus on the constitutional right to water, rather than justice concepts.

The aim of the Project, as outlined in the aforementioned Agreements, was to compile a database on progressive realisation of the constitutional right of access to sufficient water, organised on the basis of the 144 appointed Water Services Authorities (WSAs) in South Africa, and drawing on existing certification processes, reports, court judgments and formal complaints. The Project involved identifying indicators to measure progressive realisation of the right to water across several broad themes, set out in a profile for each WSA. The WSA profiles were intended to integrate with a GIS-based online tool, enabling policy- and decision-makers, activists, officials and citizens to track progressive realisation of the right to sufficient water. At the end of the Project, data would be integrated into nine provincial Synthesis Reports and one National Report to assess the state of progressive realisation of the right to water across all nine provinces and the nation as a whole.

3 Design

The research design encompassed five interconnected stages: 1) development and validation of a data profile framework; 2) indicator development and categorisation; 3) data mining, collection, and cataloguing; 4) profile validation and dissemination; and 5) data plotting, analysis, interpretation, and synthesis. The research was conducted from 2023 to 2026, with key milestones detailed in Table 1.

Dates	**Activities**
March – June 2023	Developing and validating a profile framework
July -October 2023	Indicator development, choice and categorisation

October 2023 – March 2025	Data mining, collection and cataloguing
June 2024 – May 2025	Profile dissemination and validation
June 2025 – June 2026	Data analysis and synthesis

Table 1: SAHRC-Wits *Water Justice Tracker Project* – Key Milestones

The following sections elaborate on each stage of the research design.

3.1 Developing and validating the profile framework

The Project aimed to measure progressive realisation of the right to water in every South Africa WSA (*n=144*) with the first deliverable conceptualised as a "profile" for each WSA. Drawing on work undertaken by the Institute for Poverty and Inequality (*Monitoring and Evaluating the Progressive Realisation of the Right to Water and Sanitation in South Africa*), the research team conceptualised a profile framework covering the following five key areas:

Context

The purpose of this part of the profiles was to situate the delivery of water services in the specifics of the **rights holders** and **duty bearers** in the WSA. This was conceptualised in terms of basic information on the WSA, such as the WSA's spatial extent, number of wards, and governance structures and also in terms of demographics, financial capacity, current state of water management and political stability. This contextual information was intended to broaden the lens of water services management beyond a narrow technical focus on the state of water treatment works.

Policy Efforts

Section 27(2) of the Constitution of the Republic of South Africa binds the State to take "reasonable legislative and other measures" to ensure progressive realisation of the right to water. Reasonable measures include policy and legislative efforts (such as passing legislation on water services and developing plans) and allocating financial and human resources. In the policy efforts section of the profiles, researchers focused on the statutory obligations of WSAs to pass a water by-law, develop and maintain a Water Services Development Plan (WSDP), formulate an indigent policy, and identify issues relating to water services provision in its municipal Integrated Development Plan (IDP). These policy measures – and the extent to which they are up-to-date and complete – help in assessing whether a WSA has taken reasonable measures to realise the right to water.

Resource Efforts

The "other" measures necessary to realise the human right to water include financial and human resources. It is impossible to provide water in taps unless funds are spent on providing, upgrading, renewing and maintaining water infrastructure such as dams, reservoirs, treatment works, pumping stations, and pipelines. Human resources – in the form of process controllers, scientists, supervisors and technical staff, are required to oversee and operate this infrastructure. To assess financial measures, the Project focused on budget and revenue sufficiency, the capital budget allocated to renewal of infrastructure, the maintenance spending percentage, and the revenue collection rate. The profiles included information on the total infrastructure value, where this was available. In the case of human and skills resources, the Project drew on information detailing number of staff and staff ratios and shortfalls, where this information was available.

Implementation

The implementation sections of the profile detail what is happening on the ground – essentially the outcomes of various "reasonable" policy, financial and human resource efforts. The key conceptual elements of the right to water as set out in international law informed the sub-categories of this theme, namely physical access, economic access, adequacy (uninterrupted water supply), quality, and efficiency. Quality encompassed microbiological and chemical compliance, while efficiency incorporated scores detailing water use efficiency scores (total system input value divided by total population) and non-revenue water rates.

Oversight

The final section of each profile aimed to synthesise the efforts of several national and provincial supervisory institutions, namely the Department of Water and Sanitation (DWS), the judiciary, the SAHRC, Parliament, and "other" institutions such as provincial oversight committees.

3.2 Indicator development, choice and categorisation

Within the international human rights framework, indicators have supported a move toward accountability. Their use arose in tandem with the recognition of a duty to monitor the human right to water effectively, an obligation set out in General Comment 15. States are also obliged to identify the factors and difficulties affecting implementation of their obligations.

In 2014, the Special Rapporteur on the Human Right to Drinking Water identified three types of indicators to measure realisation of the right to water, namely **structural indicators** (which focus on the setting up of institutions and finalisation of policy and legislative frameworks); **process indicators** (which focus on the specific actions needed to provide the right to water); and **outcome indicators** (quantitative measurements regarding the availability of water and sanitation. In line with the Project aim to broaden the lens of water services management beyond a narrow technical focus and to synthesise the efforts of oversight institutions, the research team also identified several **contextual indicators** (which focus on the demographic, economic, political, biophysical and infrastructural variables in each WSA) and **oversight indicators** (recording the oversight efforts of the DWS, courts, SAHRC, legislatures, and other institutions).

In total, the research team identified **85 indicators** spread across these five categories (see **Figure 1**). In selecting the indicators, the team preferred simple indicators over composite ones. The former measure a single variable and are straightforward to calculate and interpret, whereas the latter combine multiple, multidimensional metrics. For this profile, simple indicators were deemed more accessible to the intended audience. In most sections, point indicators were utilised rather than trend indicators. However, trend indicators were employed in the financial sections of the profile.

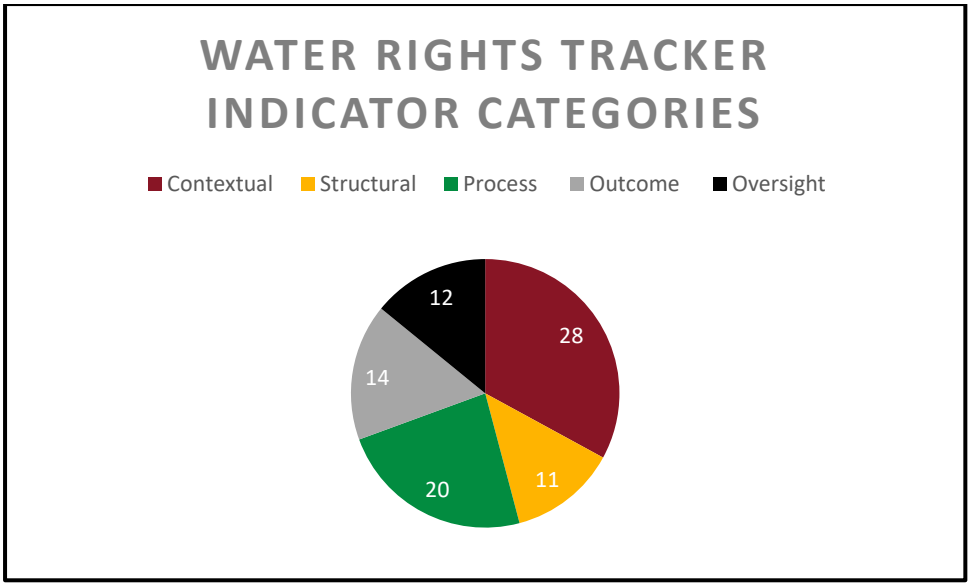


Figure 1: Overview of Indicator Categories, Water Rights Tracker, South Africa

Each indicator was interrogated to establish its relationship to realisation of the right of access to sufficient water and grouped under one of the five key thematic areas (context, policy efforts, resource efforts, implementation, and oversight), as set out in **Table 2** below.

Legend

Contextual Indicator	
Structural Indicator	
Process Indicator	
Outcome Indicator	
Oversight Indicator	

Indicator	**Measurement**
Name of the WSA	
Geographical information about the WSA.	
Spatial extent in km^2	
# Municipal wards	
# Traditional Authorities	
Is the WSA authorized to provide water services?	
Is the WSA currently providing water services?	
Method of service provision	
CONTEXT INDICATORS	
Details of any water-related stresses experienced within the past five years.	
Demographics	
Population	
Number of households (Census 2022)	
Number of domestic household service delivery points (2021/2022) (*Non-Financial Census of Municipalities*)	
Ratio service delivery points / households	

Number of non-domestic consumers	
Males per 100 females	
Gender Split	
Population growth rate per annum	
Education	
Financial capacity	
Economically active population (15-64)	
Unemployment rate	
Dependency rate	
Population under 15	
Universal FBW Allowance	
Number of service delivery points receiving FBW: 2021/22	
Percentage of FBW service delivery points	
Increase/decrease of FBW 2018/2019 – 2021/2022	
Is the WSA currently experiencing financial problems? (As at 2022/23 Third Quarter)	
Details of the triggers present.	
Is municipality considered to be in financial distress?	
Is the municipality currently subject to a provincial intervention?	
Water management	
Is the rainfall within the WSA area (July 2022 to January 2023) above or below the average rainfall (464mm) for South Africa?	
Water abstraction authorized?	
Volume of authorized/(unauthorized) water abstraction?	
How many water treatment plants are in the WSA's water services network?	
How many biophysical water sources does this WSA have access to?	
Names of rivers and dams	
How many infrastructure water sources does this WSA have?	
Political Stability	
Is there a coalition government?	
Has there been mayoral instability in the last 5 years?	
MM/CFO Vacancy Snapshot	
POLICY EFFORTS	
Water By-law	
Is there a water by-law?	
Citation of by-law	
When last was the by-law reviewed?	
Mark with "yes" if the by-law makes provision for the following:	
Water Services Development Plan	

Is there a water services development plan?	
The validity duration of the plan (which years)	
General Policy Framework	
Is there an Indigent Policy?	
IDP	
Water services issues identified in the IDP	
RESOURCE EFFORTS	
Financial Resources	
Budget Sufficiency	
Revenue Coverage	
Revenue Collection Rate	
Capital Budget Allocated to Renewal of Existing Assets	
Maintenance Spending Rate	
Infrastructure Resources	
Current infrastructure value	
Human and Skills Resources	
Total number of staff employed in the water services provision department.	
Total number of staff employed in water treatment	
Supervisor Staff/WTW Ratio	
Technical Staff/WTW Ratio	
Staff Shortfall	
IMPLEMENTATION	
Physical Access	
Physical access to water 2021/22 (*Non-financial census)*	
Piped water inside dwelling	
Economic Access	
Economic access to water.	
Step tariff for households in rand excl VAT. For 2020/21	
Categories of water use:	
Tariffs for schools.	
Tariffs for clinics	
Do schools and clinics have access to water on their premises.	
Adequacy	
Percentage households with water interruptions of at least once a month 2020/21	
Media reports on outages:	
Quality	
What is the WSA's blue drop score?	
Blue Drop Score Improved/Deteriorated (2011-2023)	
Blue Drop microbiological compliance score	
Blue Drop chemical (acute) compliance score	
Blue Drop chemical (chronic health) compliance score	

Does the WSA have a contract with the lab to test water samples?	
Green Drop Risk Rating	
Efficiency	
Blue Drop Water Use Efficiency Score	
No Drop Score 2021/22	
Amount of non-revenue water in liters and in rands value.	
Main reasons for water losses.	
OVERSIGHT	
Department of Water and Sanitation	
Blue Drop actions	
Green Drop actions	
Judicial Oversight	
Where any judgements delivered that involved water services delivery?	
Full citation of judgement.	
SAHRC Reports	
Where any reports received and investigated on the right to water by the SAHRC?	
Legislature Oversight	
Other Oversight Institutions	

Table 2: Basic Table of Indicators, Water Rights Tracker

Using the sources outlined in section 3.3 below, the research team extracted information pertinent to each indicator. In a few instances, calculations were also necessary to determine appropriate indicator data points. The method of calculating scores used in data sources (for example, the water use efficiency ratio and *Blue Drop* scores set out in the *Blue Drop* reports, and calculations of non-revenue water presented in the reports of the Auditor-General), or which are generally well-known (for example, calculating the sex ration from the known number of males to 100 females) are not repeated in this report. The calculations to determine the ratio of service-delivery points to households and the financial resources indicators nevertheless require further explanation.

a) Ratio of service delivery points to households

The 2022 census provided information on the number of households in each WSA, whereas the Non-Financial Census of Municipalities reports on the number of water service delivery points in each municipality. By dividing the number of service delivery points by the number of households, the research team was able to estimate the coverage of service delivery points. A ratio of 1 or above indicates that service delivery points match or exceed the number of households, while a ratio below 1 indicates the extent to which service delivery points fall short of the number of households (for example, a ratio of 0.6 indicates a 60% coverage rate).

b) Financial Resources

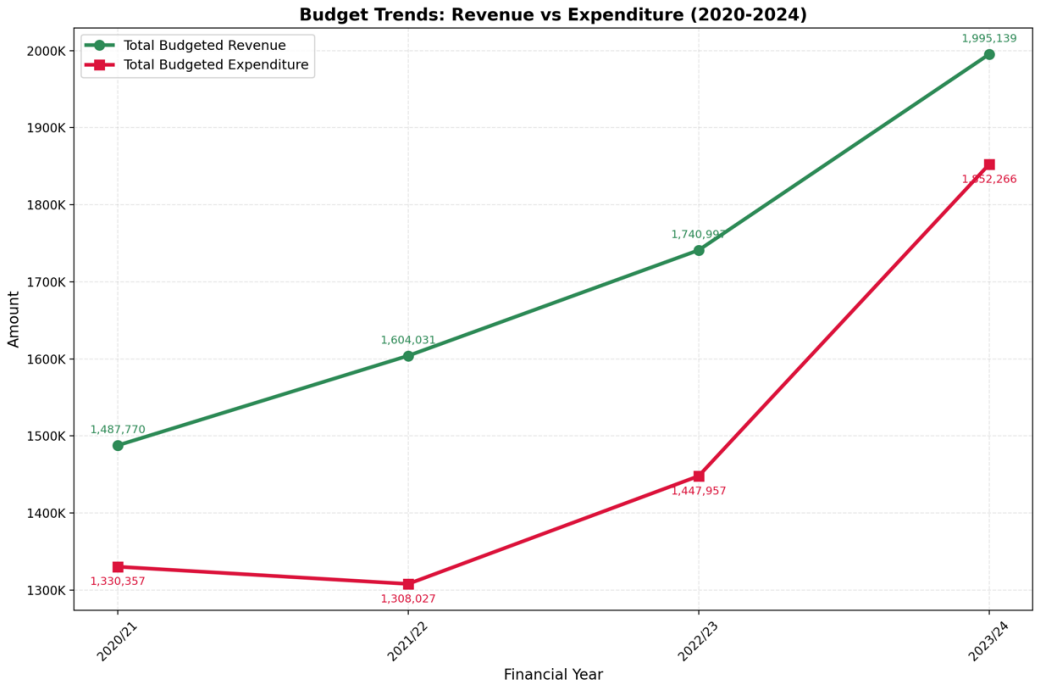
Under financial resources, five key questions were addressed by analysing historical financial data from MFMA Section 71 – Schedule C reports and presenting trends over time, thereby offering greater insight into financial resources and their allocation. Data specific to water services could not be utilised due to numerous inherent gaps. Nonetheless, the adjusted budgets were chiefly employed to infer budgetary allocations for water services.

i) The first question we addressed was: How adequate is CAPEX/OPEX? To evaluate **budget sufficiency**, a ratio formula was employed, with the sufficiency of CAPEX/OPEX assessed as:

$$Budget\ Sufficiency = \frac{\text{Total Budgeted Revenue (exc capital transafers \& contributions)}}{\text{Total Budgeted Expenditure}}$$

The research team utilised data from the adjusted budget columns in Table C1 of the C-schedules to perform the calculation. Consequently, the total revenue excludes capital transfers and contributions. A result of less than 100% indicates a surplus (expenditure less than revenue), whereas a figure exceeding 100% signifies a deficit (expenditure surpassing revenue). We subsequently analysed sufficiency across fiscal years 2021/2022 to 2024/25, noting instances of data gaps.

Example: The results of a ratio **< 1** = shows a surplus (spending less than revenue) and a ratio **> 1** = indicate a deficit (spending more than revenue). Following this, we analysed the sufficiency over fiscal years 2020/2021 to 2023/24 and the results of the analysis are as follows:



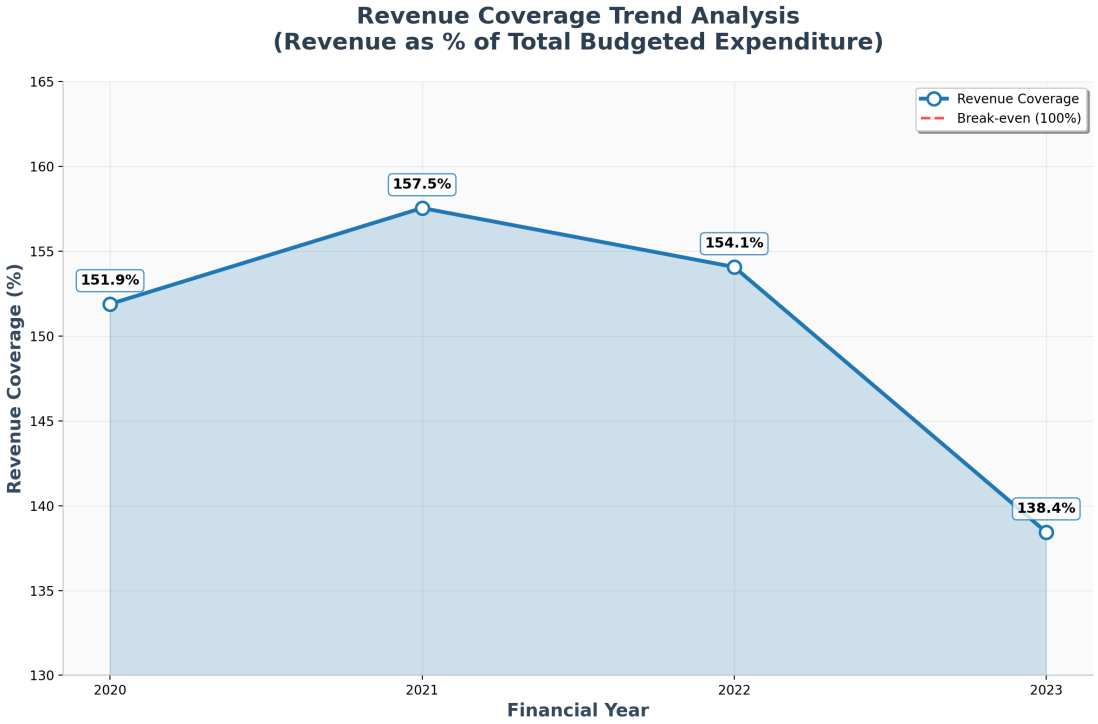
The graph shows that the total budgeted revenue has been consistently growing year over year. It also shows the municipality maintained a budget surplus in all four years, with the largest surplus in 2021/22 (296,004). While the year 2023/24 shows the highest total budgeted revenue and total budgeted expenditure, the surplus decreased to the lowest level (142,873). Overall, the municipality has had sufficient budget to cover both CAPEX/OPEX over the four-year period.

ii) The second question posed was: What does revenue cover in relation to CAPEX and OPEX? This was determined using the adjusted budgets presented in Table C2 - Financial Performance, which displays figures categorised by revenue and expenditure functions, with revenue including capital transfers and contributions. To evaluate **revenue coverage,** defined as the extent to which total revenue exceeds the budgeted expenditure (OPEX plus CAPEX), expressed as a percentage, we analysed data from 2021/22 to 2024/25 and employed the following formula:

$$Revenue\ Coverage\ (\%) = \frac{Total\ Budgeted\ Revenue}{Total\ Budgeted\ (OPEX + CAPEX)} \text{x}100$$

Using this formula, a value of 100% or higher signifies that the budgeted revenue is sufficient to fully cover the budgeted expenses. Conversely, a percentage below 100% indicates that the budgeted revenue falls short of covering all budgeted expenses.

Example: The findings on budgeted revenue coverage shows that the budgeted revenue coverage consistently covers OPEX and CAPEX by a healthy margin, but there is a declining trend from the peak in 2021/22 to 2023/24. This indicates that while the budgeted revenue still exceeds budgeted expenditure, the gap is narrowing over time.

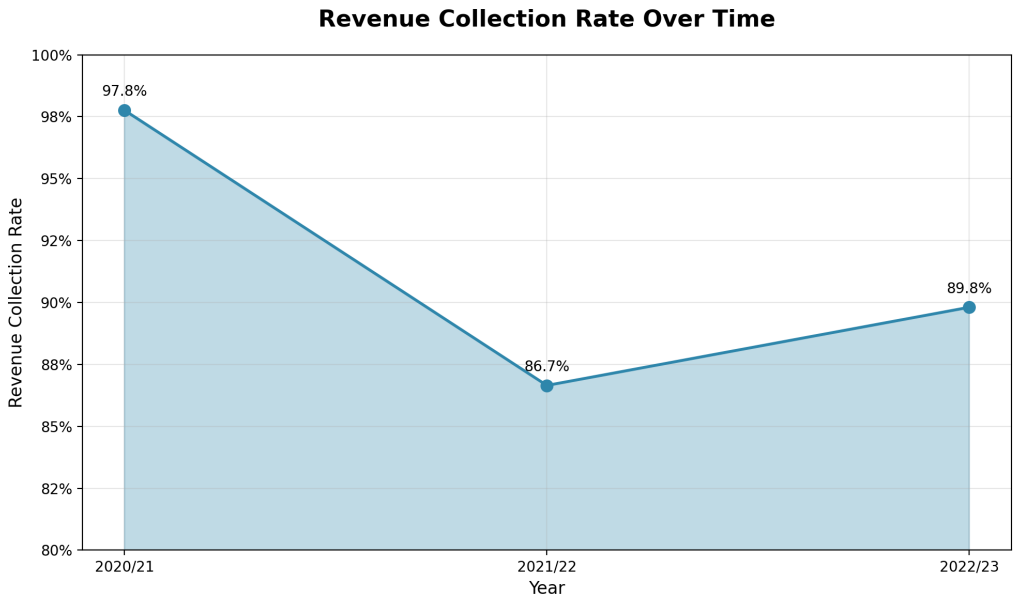


iii) The third question was: how much revenue is collected against the budget? The research team used the revenue collected to date against the adjusted budget shown in Table C2-Financial Performance. To address the question, we used the **revenue collection rate** formula:

$$Revenue\ Collection\ Rate\ = \frac{Actual\ Revenue\ Collected}{Budgeted\ Revenue}\ x100$$

A revenue collection rate approaching 100% signifies high efficiency in revenue collection, whereas a rate below 50% indicates inefficiency. Financial data from 2021/22 to 2024/25 was analysed. Years with data gaps were noted.

Example: For the period 2020/21 and 2022/2024 the results show a significant drop in revenue collection efficiency in 2021/22, with some improvement in 2022/23 but still below the 2020/21 baseline.



iv) The fourth question was: how much capital budget is allocated to the renewal of existing assets? This question elicits information on the amount the municipality spends to renew its existing assets. To calculate the capital budget allocated to the **renewal of existing assets**, we used the following formula:

$$Capital\ budget\ for\ renewal\ of\ assets = \frac{\text{Amount Allocated to Assets Renewal}}{\text{Total Capital Budget}} \text{ x } 100$$

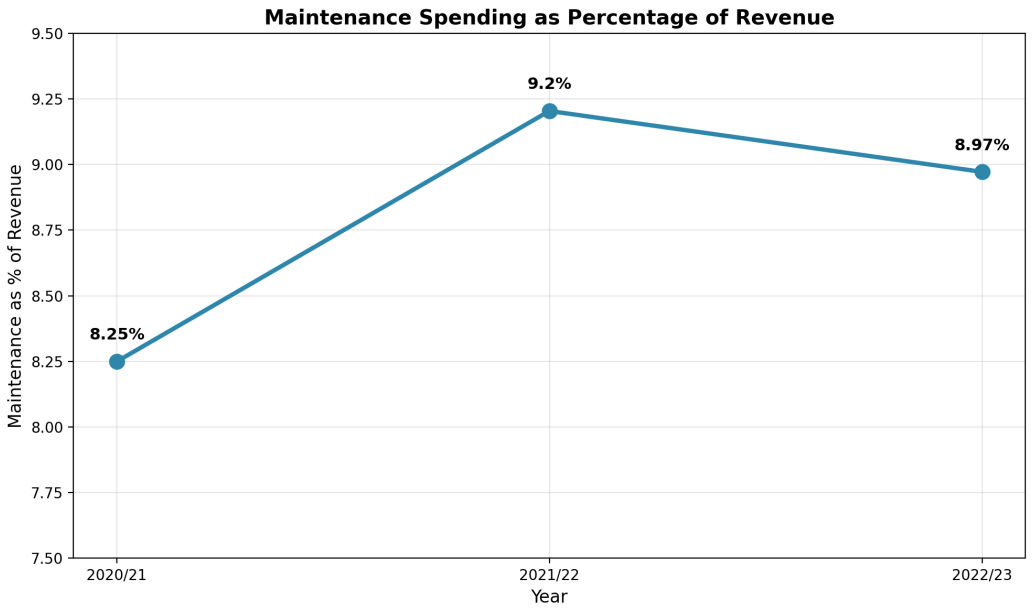
The research team utilised data from the adjusted budget column in Table SC13a as the numerator and data from Table C5 as the denominator. A higher percentage signifies a robust budget allocation towards the renewal of existing assets. Conversely, a lower percentage for asset renewals suggests an inadequate budget allocation for renewing existing assets.

v) The last question was: how much of the revenue is spent on maintenance? The research team used the formula:

$$Maintenance\ Spending\ Rate\ (\%) = \frac{\text{Total Maintenance Expenditure}}{\text{Total Revenue Collected}} x100$$

The research team used data from Table SC13c regarding repairs and maintenance expenditure by asset class alongside year-to-date revenue collection data from Table C2 - Financial Performance. A higher percentage indicates that the municipality allocates a larger share of its revenue to asset maintenance and repair. As a caveat, in cases where assets are new or substantial maintenance has recently been undertaken, future allocations may be lower without compromising asset integrity.

Example: The average percentage of revenue spent on maintenance over the 3 years is 8.81%. Noteworthy, the municipality spend 8.25%, 9,2%, and 8,97% of the revenue it collected on maintenance in 2020/21, 2021/22, and 2022/23 respectively. The municipality started from a lower threshold than the recommended 8,3% threshold but is now above threshold.



3.3 Data collection and cataloguing

Data collection involved researchers identifying and cataloguing data sources pertinent to addressing the research question and developing the profiles. The researchers undertook data mining, including a review of existing published and publicly available literature on the right to water in South Africa. Data mining also encompassed a thorough legal review of South African laws and policies that outline the government's responsibilities for the provision of water. Data were collected through online searches and the mined data were stored within a central database accessible to all researchers.

The catalogued data was reviewed, and indicators were extracted from the data sources. The primary sources of information that were used to extract indicators were as follows:

- *Municipalities.co.za:* is a reliable portal that aggregates data from reputable sources, including the National Treasury. The legal research undertaken confirmed the reliability of this source, which has been utilised by other researchers engaged in comparable investigations. The source was considered credible, with its data regarded as valid and pertinent to the development of the profiles. Specifically, this source provided data for several indicators in the Context, Resource Efforts, Financial Capacity, Political Stability, and Implementation sections of the profile. Notably, the datasets from Section 71 of the Municipal Finance Management Act, Schedule C were derived from this source.
- *Blue Drop Report*: A comprehensive and authoritative analysis of water services in South Africa which is widely utilised by policymakers, researchers, and practitioners. This report provided data on indicators across the domains of Context, Human and Skills Resources, Quality, Efficiency, Oversight, Water Management, Financial Capacity, and Implementation within the profile.
- *Green Drop Report*: Another authoritative document whose data was employed to inform the *Green Drop* Risk Rating and the *Green Drop* action indicators.
- *No Drop Report*: is a source of quality, national-level information that provides data for the no drop score and the main reasons for water losses indicators.
- *Municipal By*-laws: Data derived from these addressed the Policy Efforts section, particularly water By-law indicators.
- *Indigent Policy:* This was reviewed to inform indicators within the Reasonable Measures, General Policy Framework, and Implementation sections of the profile.

- *Water Service Development Plan:* This plan was reviewed to address the Reasonable Measures and Implementation section of the profile.
- *Integrated Development Plan (IDP):* The IDP is an authoritative source of municipal information, especially plans. Data derived from the IDP were used to respond to the indicators in the General Policy Framework and Implementation sections of the profile. Data was drawn from the IDPs for 2022-2024. Information from the IDP was also used to identify systemic drivers of non-compliance across all WSAs.
- *Municipality Annual Report:* These provided information that addressed the Annual Report section of the profile, particularly the water services issues identified in the IDP and/or MSA Annual Report. Included are data from the municipal budget documents for the financial year 2021/22.
- *National Treasury website:* Data to inform indicators were also extracted from this website. The data were used to address indicators under Financial Capacity.
- *South African Weather Services- (WeatherSA):* Data was drawn from WeatherSA to inform the water management indicators. Specifically, the question the data were used to respond to was: *Is the rainfall within the WSA area (July 2022 to January 2023) above or below the average rainfall (464mm) for South Africa?*
- *The Auditor-General of South Africa (AGSA) web-based reports:* these are among the most authoritative documents on various facets of governance in South Africa. For this profile, data extracted from these reports were utilised to address indicators within the Political Stability and Efficiency sections.
- *Provincial Gazettes:* These provided data for indicators under Policy Efforts and Implementation, particularly those pertaining to Economic Access.
- *South African Human Rights Commission (SAHRC) Reports:* The data from these reports address the Judicial Oversight section as well as the SAHRC Reports
- *South African Freedom of Legal Information Institute:* This site was used to find court cases dealing with water services.

The Water Services Development Planning Tool, the Municipal Strategic Self-Assessments (MuSSA), and the capacity assessments from the Municipal Demarcation Board 2018 were also analysed for purposes of data mining. Additionally, to evaluate oversight and accountability, researchers reviewed documents and reports from the SAHRC, the Public Protector, Parliament, the courts, and the Department of Water and Sanitation.

Stored data were classified under the five key areas encompassed within the profile framework. For instance, data on context were categorised separately from data on policy efforts. Data organisation was conducted thematically. All data entries were reviewed by researchers, and quality control measures were implemented to exclude irrelevant information. Following this, a secondary desktop legal search was undertaken to capture any data overlooked in the initial search. The data gathered through this process were catalogued and subjected to quality assessment. The thematically organised data were then evaluated for quality, with inclusion or exclusion from the study determined accordingly. Notably, reports, documents, and literature with significant influence on policy and practice were included and considered primarily for indicator extraction.

The extracted data were plotted in a data extraction tool, showing the indicator category, the indicator, and the variable and/or data point associated with the indicator. Subsequently, the plotted data were reviewed and subjected to quality control by the researchers to ensure accuracy, reliability, and validity for each indicator. Any conflicting data were excluded from the profile. The data analysis was conducted following meticulous data cleaning to confirm that all analysed data had undergone quality assurance.

Once the process of plotting data against each indicator in the profile was complete, the SAHRC-funded researcher wrote a narrative for each profile and listed questions for answering during the profile validation phase.

3.4 Profile validation and dissemination

Between June 2024 and May 2025, the research team undertook a process of profile dissemination and validation. Completed profiles (comprising the completed table and narrative) were disseminated to the relevant WSA through the regional offices of the SAHRC. Approximately six weeks later, the SAHRC convened a mandatory, in-person information-sharing session with water services officials from the WSAs in each relevant province (see Table 3 below). At the in-person sessions, the research team outlined the purpose and design of the *South African Water Rights Tracker* and obtained written consent from officials present to record their comments on the profiles and on the state of the water services function in their particular localities. Ethics clearance for this process was obtained from the University of the Witwatersrand's Human Research Ethics Committee (Non-Medical) under Protocol No. H24/06/12.

Province	Location	Date	No. of Attendees
Limpopo	Polokwane	11 June 2024	15
Mpumalanga	Mbombela	6 August 2024	27
Kwa-Zulu Natal	eThekwini	24 August 2024	21
Gauteng	Johannesburg	25 November 2024	16
North-West	Rustenberg	26 November 2024	5
Eastern Cape	Queenstown	4 February 2025	15
Free State	Mangaung	25 February 2025	31
Northern Cape	Upington	6 May 2025	14
Western Cape	Worcester	26-27 May 2025	32
Total			**176**

Table 3: Dates of Provincial Information-Sharing Sessions

Following the in-person convening, WSAs were given a further opportunity to submit written comments on their respective profiles. Further written comments were especially important for purposes of ascertaining the frequency of water stoppages and the number of staff employed in the WSA's water services department as a whole.

3.5 Data analysis and synthesis

The research team carefully verified that each profile accurately captured all the necessary data points, including written comments submitted by WSAs. Following this verification, they conducted a comprehensive synthesis of the profiles, employing a systematic data synthesis approach to ensure consistency and coherence. This process included the standardisation of profiles across WSAs, which involved aligning indicators and information to ensure comparable datasets. This standardisation was crucial for facilitating meaningful comparisons and ensuring that data from various sources were formatted uniformly, thereby enhancing the reliability and validity of the overall analysis.

For purposes of compiling the provincial and national synthesis reports, the research team refined and reorganised the indicators in the Basic Table into a shortened Assessment Table (see **Table 4** below). The assessment table draws on the most salient indicators describing the rights holders, key implementation indicators, reasonable measures (policy, financial, human resources), and a limited number of systemic drivers of human rights non-compliance. The systemic drivers of non-compliance were determined based on a grounded theory approach strongly rooted in the in-person consultations with water services officials.

Rights Holders	
Demographics	Current Population: Population ranges as set out in the *Blue Drop*, IDP and Census 2022 respectively Population growth rate: Sex Ratio: Dependency: # of consumers under 15; dependency ratio
Unemployment rate	
Key Implementation Indicators	
Availability	Sources of supply, including capacity used
Physical Access	No communal source: % Communal source +200m: % Communal source – 200m: % Water source in yard: % Piped water in house: % Service delivery point/household coverage ratio: ratio
Economic Access	Tariff variation: # and types of tariff categories as per tariff policy Tariff structure: Type (linear, increasing block tariff) FBW: Whether universal or only for indigents Indigency: % of service delivery points, increasing/decreasing trend
Adequacy Percentage households with water interruptions of at least once a month	%
Quality	Microbiological compliance: % Chemical (acute) compliance: % Chemical (chronic) compliance: %
Efficiency	WUE Score: l/p/d Non-revenue water: %
Reasonable Measures	
Policy Efforts	Whether WSDP, by-law or indigent policy in place
Financial Resources (2024/25)	Budget sufficiency: % Revenue coverage: % Renewal spending: % Maintenance spending rate: % Revenue collection rate: %
Human Resources	*Blue Drop* shortfall: # Process Controllers, Supervisors, Technicians
Systemic Drivers of Human Rights Non-Compliance	
Leadership issues	As identified in IDP or apparent from indicators
Water planning issues	As identified in IDP or apparent from indicators
Funding model	As identified in IDP or apparent from indicators
Infrastructure issues	As identified in IDP or apparent from indicators
Electricity issues	As identified in IDP or apparent from indicators
Ecological drivers	As identified in IDP or apparent from indicators
Consumer issues	As identified in IDP or apparent from indicators
Water services intermediaries	As identified in IDP or apparent from indicators

Third-party interference	As identified in IDP or apparent from indicators
Intergovernmental coordination	As identified in IDP or apparent from indicators
Scale	Area of jurisdiction in km^2 Scale of water infrastructure managed by WSA
Unique Drivers of Human Rights Non-Compliance	
Overlapping governance structures	# of municipal and traditional authority structures
Low literacy and education levels	No Schooling: %, higher Education: %
Infrastructure backlogs	As identified in IDP or apparent from indicators
Limited yellow fleet	As identified in IDP or apparent from indicators
High vacancy rate	As identified in IDP or apparent from indicators

Table 4: Assessment Table, Water Rights Tracker

Based on information in the Assessment Table, the research team was able to compile tables enabling comparisons and contrasts between WSAs in each province, and across South Africa as a whole, for purposes of compiling each provincial synthesis report and the national synthesis report.

Following completion of the Assessment Table, the narrative section in each profile was revised.



Annexure B: Funding Framework for Water Services Delivery in South Africa

Municipality's own revenue

Municipalities have the authority to raise their own revenue through *inter alia* taxes and selling municipal services. They have complete autonomy on deciding how this revenue may be spent.

Local Government Equitable Share

The equitable share is a portion of nationally raised revenue that is awarded to local government annually. Each municipality, and by implication WSA receives a portion of this equitable share. This is an unconditional money transfer from national government and municipalities may decide how to spend it.

Municipal Infrastructure Grant

This grant is administered by the Department of Cooperative Governance and Traditional Affairs. The allocation of the grant is done vertically and horizontally. This means that a specific amount is earmarked per sector and then further subdivided according to specific regions. Therefore, only a portion of this conditional grant is spent toward addressing water and sanitation services backlogs. Provinces with the least access to basic water and sanitation services have preference to this grant.

Regional Bulk Infrastructure Grant

A conditional grant for the development of new water services infrastructure. This grant from the Department of Water and Sanitation, may also be used to replace, renew, revitalise or refurbish existing dilapidated water services infrastructure.

Water Services Infrastructure Grant

This is also a conditional grant from the Department of Water and Sanitation to construct new or rehabilitate existing water services infrastructure. This grant is transferred directly to water services institutions.

Integrated Urban Development Grant

This is a conditional grant and administered by the Department of Cooperative Governance and Traditional Affairs. The aim is to provide financial support the development of spatially aligned public infrastructure that will lead to functional and efficient urban spaces that unlock economic and social growth.

Urban Settlements Development Grant

This is a conditional grant and administered by the Department of Human Settlements. The goal is to supplement the capital revenues of metropolitan municipalities so they can implement infrastructure that will promote equitable, integrated, productive, inclusive and sustainable urban development. It further aims to specifically upgrade informal settlements. Water services provision would form part of the outcome to increase access to public and socio-economic services.

Integrated City Development Grant

This grant is conditional and administered by National Treasury. The overall objective is to promote the development of more inclusive, liveable, productive and sustainable urban built environments in metropolitan municipalities. This is a financial incentive for metropolitan municipalities to optimise their infrastructure to achieve a more compact urban spatial form. This would for example help municipalities

to upgrade existing water services infrastructure so there are less leaky pipes, and more households can be serviced with the same pipeline.

Infrastructure Skills Development Grant

Another conditional grant administered by National Treasury. This grant aims to improve infrastructure delivery management capacity within municipalities. WSAs can use this grant to improve the skills and capacities of their human resource base.

Expanded Public Works Programme Integrated Grant for Municipalities

A conditional grant that is administered by the Department of Public Works and Infrastructure. This grant acts to incentivize municipalities to expand their job creation efforts by using labour intensive delivery methods. This particularly targets the distribution phase in the domestic water services supply chain.

Municipal borrowing

According to the MFMA, municipalities are allowed to access financing by loans. This means that municipalities may access capital (only) to fund the development or refurbishment of water services infrastructure. The loan instalments and interest may then be raised through rates and taxes. Municipalities may not borrow money to fund their operating budget.

Funding from the private sector

The legislative and policy framework enables municipalities to engage in public private partnerships or other partnerships to fund water services delivery.

International and other funding sources

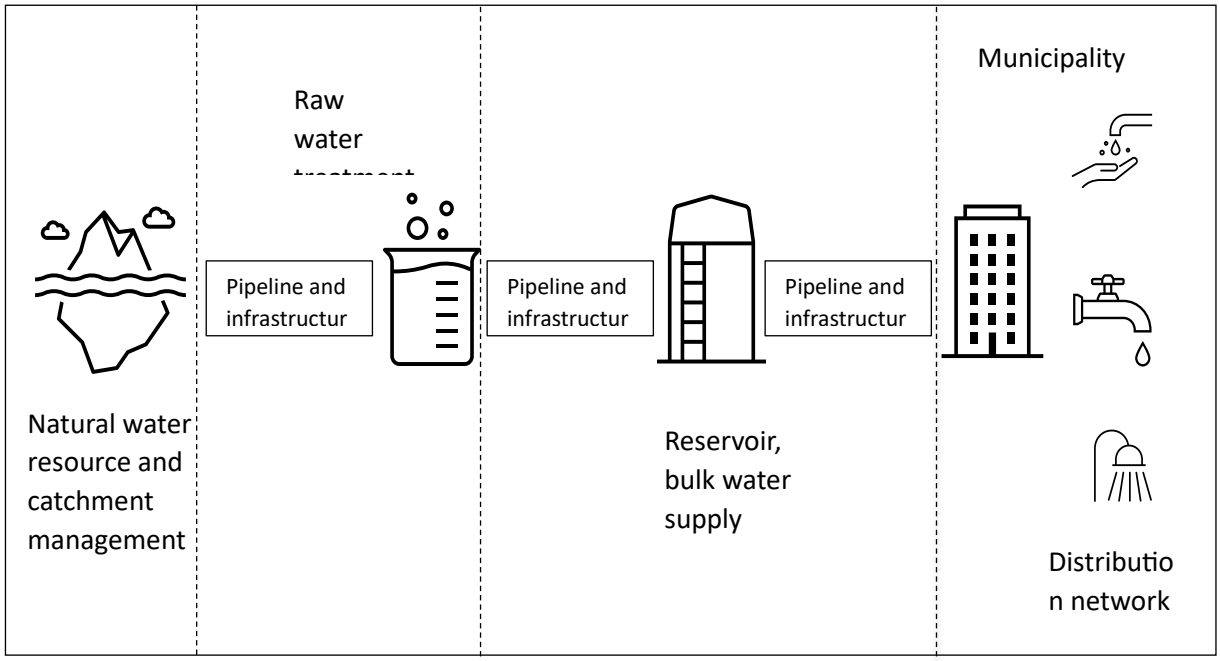
Municipalities are also allowed to access funding through international, multilateral and bilateral development agencies such as the World Bank. These institutions often offer grants, concessional loans and capacity building schemes to cities. Funding is governed on an *ad hoc* basis, often through a contractual relationship between the city authority and the institution.

Annexure C: Progressive Realisation of the Right to Water: Duty-Bearers

From a legislative and executive perspective, the water provision sector in South Africa can roughly be divided in three major subsectors namely, water resource management, water services provision, and disaster management. The national government has exclusive legislative and executive competence over water resource management, whereas local government carries the responsibility to provide water services limited to potable water supply systems. Lastly national and provincial government share responsibility for disaster management that can impact the availability of water resources needed to provide water services.

However, to pinpoint the specific responsibilities of the many stakeholders involved in water services provision, it would be beneficial to refer to the various stages of the water services supply chain. Responsibilities are also spread to different stakeholders in terms of implementation, planning, policymaking, regulating, monitoring and enforcement.

Below is a simple figure to explain the domestic water supply chain.



The discussion below will look at the different stakeholders involved in providing domestic water by referring to their definition and key responsibilities.

Municipalities as Water Services Authorities

Metropolitan, district and some authorised local municipalities are designated as Water Service Authorities (WSA) in terms of the Water Services Act 108 of 1997. Only one WSA can operate in a specific jurisdiction. WSA has the primary responsibility to provide domestic water services. This includes ensuring the progressive realisation of the right to water, preparing water services development plans, and regulating water service provision through *inter alia* a by-law. Industrial water is excluded from this mandate. The WSA is therefore ultimately responsible for the 2nd, 3rd, and 4th segments of the water supply chain. However, in practice water services provision is not as simple and many other water institutions contribute to the

realisation of the right to water, although the scope of their responsibilities may be somewhat unique depending on the circumstances.

Water Services Providers

A water services provider (WSP) is any person that (1) has a contract with a WSA or another WSP to sell water to that authority or provider (also sometimes called a bulk water supply services provider), (2) has a contract to provide water services on behalf of the WSA to consumers within a specific geographic area (also sometimes referred to as a retail water supply services provider), or (3) a WSA that provides either or both of the aforementioned. A WSP does not include water service intermediaries (see para 2.2.4 below). A bulk water supply services provider would be responsible for the 2nd and 3rd segments of the water supply chain. A retail water supply services provider may be responsible for only the 4th segment of the water supply chain depending on the specifics of the contract.

Water Boards

Water boards[2] are institutions that provide water services to other water services institutions within a determined geographical area. The Water Services Act further gives water boards the power to fulfil a range of other functions. A water board can provide management, training, and other support to water institutions with the aim of promoting cooperation in the provision of water services. They may supply raw water for industrial purposes. Water boards can also provide catchment management services on behalf of the other spheres of government. Furthermore, they may perform water conservation functions. The water board may also establish advisory forums or water committees. Depending on how the water board is established they may be responsible for all the segments of domestic water supply. In practice however, water boards are mostly concerned with providing bulk water services and maintaining bulk water services infrastructure, thus the 2nd and 3rd segments of the water supply chain.

Water Service Intermediaries

A water service intermediary is any person who is obliged to provide water services to another in terms of a contract where the obligation to provide water services is incidental to the main object of that contract. For example, a landlord leasing a property for residential use or a farmer that provides housing to his workers on the farm. WSA may keep a register where intermediaries must be listed. In addition, WSA may regulate intermediaries through by-laws.

Water Service Committees

A water service committee is established by the Minister for an area where the current WSA is not able to provide water services effectively. The idea is to establish a water institution that can provide water services to consumers within its service area.

Water Service Agents

Water services agents are entities that provide only a small specific function in the domestic water supply chain. One can distinguish these from other water services institutions because they do not take the full responsibility of a specific stage or segment in the water supply chain. Instead, they only provide support services such as meter reading to other water services providers. Currently legislation does not provide detailed information on these water institutions, but it can be interpreted to include services such as water tankers that serve as an alternative means of water services provision.

[2] Rand Water, Umgeni Water, Magalies Water, Bloem Water, Mhlathuze Water, Lepelle Northern Water, Overberg Water, Sedibeng Water.

National Department of Water and Sanitation

As previously mentioned, national government has the primary responsibility to manage natural water resources. National government also has the responsibility to support and capacitate local government to provide domestic water services. The designated national department to do this is the Department of Water and Sanitation (previously the Department of Water and Forestry). The Department has an important policy, regulatory and oversight function that should be aimed at monitoring sector performance and making regulatory interventions where necessary. Under the principle of cooperative governance, the Department has an important support function which may include providing financial aid to WSA. Currently, some water services works, and the implementation of new water services infrastructure is being undertaken by the Department. The Department is also the sole shareholder and the primary regulator of all waterboards.

Other National Departments

Some other national departments are also vital to the healthy functioning of the domestic water services supply chain. These include National Treasury, Department for Cooperative Government and Traditional Affairs (department responsible for local government), Department of Health, Department of Education, Department of Housing, Department of Public Works, and Department of Environment and Tourism. National Treasury (NT) for example, regulates the financial matters of all public bodies. It is the Department's responsibility to ensure that maximum benefit and impact is gained from public expenditure. NT, therefore, plays a key supportive and oversight role in the provision of basic water services.

The Department of Cooperation and Traditional Affairs (CoGTA) is the relevant national department that must exercise oversight, regulation and support in all executive matters that may relate to water services provision, because municipalities have the primary responsibility to deliver basic water services. For this reason, CoGTA should engage in capacity building, grant allocation, policy-making and other activities needed to help municipalities fulfil their basic water services provision function. In terms of the *White Paper on Municipal Service Partnerships*, CoGTA is responsible to regulate municipal service partnerships, where municipal services such as basic water services are outsourced or delegated to an institution other than a WSA. It is also worth noting that where it becomes apparent that a WSA is not able to fulfil its water services provision function, CoGTA must take responsibility to intervene and take steps to ensure that basic water services are provided through alternative means such as a water services committee. For more details see the *Strategic Framework for Water Services 2003*.

Provincial Government

According to the Constitution, provincial government should also support local government in the fulfilment of its functions which include providing domestic water services. It may sometimes be necessary for the relevant provincial department (such as public works) to undertake the construction of water and sanitation infrastructure which would require setting design standards for water facilities in schools, hospitals and clinics. Furthermore, as with national government, provincial government must support, monitor and supervise local government which includes the delivery of water services. This may include taking action such as a section 139 intervention when it becomes clear that a WSA is not able to provide domestic water services.

South African Human Rights Commission

This is a Chapter 9 institution and has the constitutional mandate to promote the respect, protection, development, and fulfilment of human rights. In addition, the SAHRC should monitor and assess the observance of constitutional rights. To be able to fulfil this mandate the SAHRC is given the powers to: " investigate on its own initiative or on receipt of a complaint, any alleged violation of human rights, and if,

after due investigation, the Commission is of the opinion that there is substance in any complaint made to it, it must, in so far as it is able to do so, assist the complainant and other persons adversely affected thereby, to secure redress, and where it is necessary for that purpose to do so, it may arrange for or provide financial assistance to enable proceedings to be taken to a competent court for the necessary relief or may direct a complainant to an appropriate forum; and to bring proceedings in a competent court or tribunal in its own name, or on behalf of a person or a group or class of persons."[3]

The SAHRC is therefore placed in a unique position to both monitor the progressive realisation of the right to water and to help communities obtain legal relief where this right is violated by any person, including an organ of state. These powers ensure that the SAHRC can take on both a monitoring and enforcement role.

Auditor-General

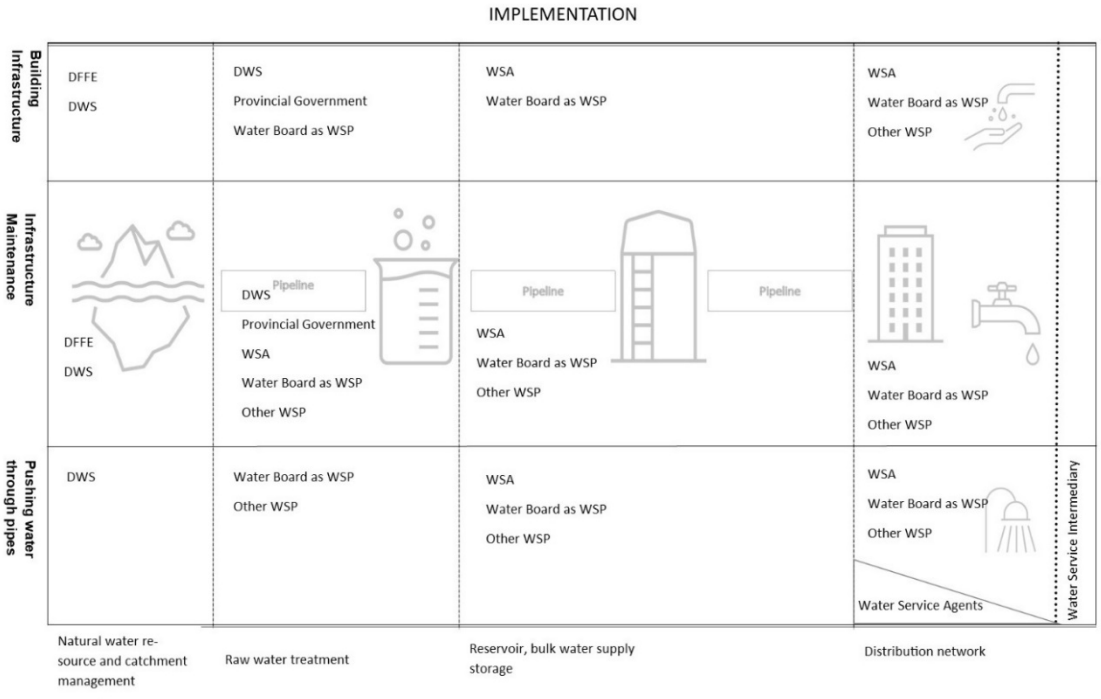
The Auditor-General is constitutionally mandated to audit and report on the general public financial management of all organs of state. Included in this mandate is to audit and report on any material irregularities that may take place in the scope of public management or governance where material irregularity is defined as "any non-compliance with, or contravention of, legislation, fraud, theft or a breach of a fiduciary duty identified during an audit performed under this Act that resulted in or is likely to result in a material financial loss, the misuse or loss of a material public resource or substantial harm to a public sector institution or the general public."[4] In addition, the Auditor-General has been given powers to take remedial action where such irregularities have been uncovered. Some of the enforcement mechanisms include issuing certificates of debt and recovering funds where accounting officials such as municipal managers are to blame for irregularities. To help with the progressive realisation of the right to water, this is an extremely broad scope to monitor organs of state and take enforcement action on many matters that relate to the mismanagement and poor governance of public institutions in the domestic water supply chain.

Public Protector

The Public Protector's constitutional mandate is perhaps the broadest of all Chapter 9 institutions and may investigate (and take appropriate remedial action) any allegation of "maladministration in connection with the affairs of government at any level, the abuse of or unjustifiable exercise of power by a person performing a public function, improper or unlawful enrichment as a result of an act or omission in the public administration or of a person performing a public function, and any act or omission by a government employee or a person performing a public function which results in unlawful or improper prejudice to any other person."[5] The powers of the Public Protector includes reporting on findings, providing advice on appropriate remedies or to take any other action that is expedient in the circumstances to resolve a dispute or rectify any act or omission. These powers, however, do not include the performance of judicial functions as a court of law.

It is important to note at this point that all Chapter 9 institutions may conduct investigations out of their own accord, they do not need to wait for complaints, which means that they are active supervisors of the fulfilment of the progressive realisation of the right to water.

[3] Sections 13(3) of the SAHRC Act.
[4] Section 1 of the Public Audit Act.
[5] Hoexter 89.



[1]***Introduction***

[1] Section 27(1)(b) of the Constitution guarantees the right of everyone to have access to 'sufficient food and water'. This right is subject to progressive realisation in that section 27(2) provides that "[t]he state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of [the right of access to sufficient water]'.

[2] Department of Water *White Paper on Water Supply and Sanitation*, 1994.

[3] Government of the Republic of South Africa *Reconstruction and Development Programme* (1994), available at https://omalley.nelsonmandela.org/index.php/site/q/03lv02039/04lv02103/05lv02120/06lv02126.htm.

[4] eNCA "Johannesburg residents 'desperate' as taps run dry" 11 February 2026 https://www.enca.com/news/johannesburg-residents-desperate-taps-run-dry; Statistics South Africa "Nearly 1 in 5 South Africans lack access to safely managed sanitation" 27 May 2025 https://www.statssa.gov.za/?p=18433.

[5] Bheki C. Simelane "While Joburg battles for water tankers, they've been failing at informal settlements for years" 10 February 2026 *Daily Maverick* *https://www.dailymaverick.co.za/article/while-joburg-battles-for-water-tankers-t-tankers-theyve-been-failing-at-informal/*.

[6] South African Human Rights Commission "Hammanskraal cholera crisis: It can happen anywhere in the country" 26 May 2023, https://www.sahrc.org.za/index.php/sahrc-media/news/item/3622-hammanskraal-cholera-crisis-it-can-happen-anywhere-in-the-country.

[7] Tracy Ledger "Op ed: South Africa has failed to deliver access to enough water for millions – a new approach is needed" 18 February 2025 Public Affairs Research Institute (PARI) https://pari.org.za/op-ed-south-africa-has-failed-to-deliver-access-to-enough-water-for-millions-a-new-approach-is-needed/.

[8] Laura Bratton "Poor service leads to illegal water connections" 8 November 2017 *GroundUp* https://groundup.org.za/article/poor-service-leads-illegal-water-connections/.

[9] Statistics South Africa "Alleviating poverty: The provision of free basic services" 1 July 2025 https://www.statssa.gov.za/?p=18545.

[10] Department of Water and Sanitation "There is still too much irresponsible water use from households" 7 October 2016 https://www.dws.gov.za/stories/OP%20-

%20There%20is%20still%20too%20much%20irresponsible%20water%20use%20from%20households.pdf.

[11] Leonie Joubert & Gina Ziervogel "Day Zero: One City's response to a record-breaking drought" https://dayzero.org.za/; Knysna Municipality "Water – Day Zero" 10 February 2026 https://www.knysna.gov.za/news/water-dayzero/.

[12] Rishidze Nenweli, Andrew Watson, Andrea Brookfield, Zahn Münch & Reynold Chow "Is groundwater running out in the Western Cape South Africa? Evaluating GRACE data to assess groundwater storage during droughts" (2024) 52 *Journal of Hydrology: Regional Studies* https://doi.org/10.1016/j.ejrh.2024.101699.

[13] Auditor-General, South Africa "Source to supply: A shared responsibility for a water resilient future" Presentation to the Parliamentary Portfolio Committee on Water and Sanitation, 2 December 2025.

[14] South African Government News Agency "Report shows that consumers owe municipalities R416.1 billion' 19 June 2025 https://www.sanews.gov.za/south-africa/report-shows-consumers-owe-municipalities-r4161-billion.

[15] Parliament of the Republic of South Africa "Media Statement: Water and Sanitation Committee welcomes positive impact of withholding equitable share" 16 September 2025 https://www.parliament.gov.za/press-releases/media-statement-water-and-sanitation-committee-welcomes-positive-impact-withholding-equitable-share.

Elements of the Right to Water

[16] Economic and Social Council *General Comment No. 15 (2002: The right to water (arts 11 and 12 of the International Covenant on Economic, Social and Cultural Rights* https://www2.ohchr.org/english/issues/water/docs/CESCR_GC_15.pdf.

[17] According to General Comment 15, personal and domestic uses include water for drinking, personal sanitation, washing of clothes, food preparation, and personal and household hygiene.

[18] World Health Organisation "Water" available at https://www.un.org/en/global-issues/water.

[19] Section 27(1)(b), Constitution of the Republic of South Africa, 1996.

[20] Regulation 2(2)(b) *Revised Compulsory National Water and Sanitation Services Standards in Terms of Section 9(1) of the Water Services Act, No. 108 of 1997* GN 2692 of 6 June 2025 (2025 Compulsory National Standards, 2025.

[21] Regulation 2(2)(b)(iii), Compulsory National Standards, 2025.

[22] Regulation 4(1), Compulsory National Standards, 2025.

[23] Regulation 5(1), Compulsory National Standards, 2025.

[24] Regulation 4(2), Compulsory National Standards, 2025.

[25] Regulation 3(b)(ii) *Regulations Relating to Compulsory National Standards and Measures to Conserve Water* GN 509 of 8 June 2001 (Compulsory National Standards, 2001).

[26] Regulation 2(2)(a), Compulsory National Standards, 2025.

[27] Regulation 2(2)(b)(iv), Compulsory National Standards, 2025.

[28] Regulation 2(1), *Revised Norms and Standards in Respect of Tariffs for Water Services in terms of Section 10(1) of the Water Services Act No. 108 of 1997* GN 2524 of 27 May 2024.

[29] Section 67(1), Water Services Act 198 of 1997.

[30] Section 67(3), Water Services Act 198 of 1997.

Progressive Realisation of the Human Right to Water

[31] Section 27(2), Constitution of the Republic of South Africa, 1996.

[32] 2006 (6) BCLR 625 (W).

[33] See Chapter II of the Water Services Act.

[34] See Chapter III of the Water Services Act.

[35] Section 11(1), Water Services Act, 1997.

[36] Section 12, Water Services Act, 1997.

[37] Section 13, Water Services Act, 1997.

[38] Section 11(3)(1), Municipal Systems Act, 2000.

[39] Section 10, Water Services Act 1997.

Rights Holders and Duty Bearers

[40] Schedule 4B, Constitution of the Republic of South Africa, 1996.

Using Indicators to Measure Progressive Realisation of the Right to Water

[41] Studies in Poverty and Inequality *Monitoring and Evaluating the Progressive Realisation of the Right to Water and Sanitation in South Africa* (Foundation for Human Rights, 2016).

[42] Jennifer Schiff "Measuring the human right to water: An assessment of compliance indicators" (2019) 6 *WIREs: Water* 1321.

[43] Ibid.

Progressive Realisation of the Right to Water in Gauteng

[44] Municipalities of South Africa, Gauteng Municipalities, available at https://municipalities.co.za/provinces/view/3/gauteng.

[45] Department of Water and Sanitation *Blue Drop Report* (2023) at 151.

[46] StatsSA 'District Population Estimates – Gauteng Report' MYPE 2025, available at https://www.statssa.gov.za/publications/P0302/REPORT%20District%20estimates%202025%20series%20data_GT%20(28%20January2025)%20GP.pdf.

[47] TIPS 'Real Economy Bulletin: Provincial Review 2024: Gauteng' (2024).

[48] South African Gateway 'South Africa's population' (2025), available at https://southafrica-info.com/people/south-africa-population/.

[49] Ibid.

[50] South African Gateway 'South Africa's population' (2025), available at https://southafrica-info.com/people/south-africa-population/.

[51] KDZ Centre for Public Administration Research *European Local Government Report 2025* (2025) https://www.kdz.eu/en/knowledge/studies/european-local-government-report-2025?utm_campaign=buffer&utm_content=buffer16a7d&utm_medium=social&utm_source=linkedin.com.

[52] Department of Water and Sanitation *Blue Drop Report* (2023) at 162.

[53] Ibid.

[54] Ibid.

[55] Regulation 5(1), Revised Compulsory National Water and Sanitation Services Standards, 2025.

[56] Regulation 5(2) and (3) Revised Compulsory National Water and Sanitation Services Standards, 2025.

[57] Regulation 5(4)-(5), Revised Compulsory National Water and Sanitation Services Standards, 2025.

[58] Regulation (6)-(7), Revised Compulsory National Water and Sanitation Services Standards, 2025.

[59] Department of Water and Sanitation *Blue Drop Report* (2023) p. 5.

[60] Section 11(1) Water Services Act, 1997.

[61] Department of Water and Sanitation *Blue Drop Report* (2023) p. 5.

[62] Department of Water and Sanitation *National Water Resource Strategy III* p. 22.

[63] R McKenzie, ZN Siqabala & WA Wegelin *The State of Non-Revenue Water in South Africa* (2012).

[64] Advancing the Blue Revolution *The Manager's Non-Revenue Water Handbook for Africa: A Guide to Understanding Water Losses* (2010) https://aquaknow.jrc.ec.europa.eu/sites/default/files/nrw_manual_english_final.pdf.

[65] Wikipedia 'Mayor of Johannesburg', available at https://en.wikipedia.org/wiki/Mayor_of_Johannesburg.

[66] Wikipedia 'Mayor of Tshwane', available at https://en.wikipedia.org/wiki/Mayor_of_Tshwane.

[67] Wikipedia 'Mayor of Ekurhuleni', available at https://en.wikipedia.org/wiki/Mayor_of_Ekurhuleni.

[68] Centre for Development and Enterprise *Johannesburg Matters: Time for Action – Corruption in Joburg* (October 2026), available at https://cde.org.za/johannesburg-matters-time-for-action-corruption-in-joburg/; Anna Cox 'Joburg stalls release of R4.07bn misconduct files until after elections' *Daily Maverick* 5 October 2026, available at https://www.dailymaverick.co.za/article/2026-10-05-joburg/.

[69] SABC News 'City of Tshwane to clear air on corruption allegations', https://www.youtube.com/watch?v=ozVeJjSFsnc.

[70] Thabiso Goba ;Tshwane COO Gareth Mnisi officially reinstated after final written warning' *EWN* 23 July 2026, available at https://www.ewn.co.za/2026/07/23/tshwane-coo-gareth-mnisi-officially-reinstated-after-final-written-warning.

[71] Steve Kretzmann 'Ekurhuleni police force employed convicted killers, Parliament told' *Daily Maverick* 8 October 2026, available at https://www.dailymaverick.co.za/article/2026-10-08-ekurhuleni-police-force-employed-convicted-killers-parliament-told/; SABC News 'Madlanga Commission: Focus on alleged corruption in Ekurhuleni municipality', available at https://www.youtube.com/watch?v=gzwaZP9D5DM&t=200s.

[72] Queenin Masuabi 'Meet the African Transformation Movement's first mayor, Danny Thupane' *Daily Maverick* 25 April 2023, available at https://www.dailymaverick.co.za/article/2023-04-25-meet-the-african-transformation-movements-first-mayor-danny-thupane/; Malaika Ditabo 'Mayor says DA "playing politics" after concerns over delayed West Rand mayco appointments' *News24* 11 May 2023, available at https://www.news24.com/politics/west-rand-remains-without-a-municipal-council-nearly-a-month-after-electing-new-aic-mayor-20230511; Mduduzi Nonyane 'Court grants Lesedi municipal manager interdict against disruptive political party, leader' *City Press* 24 May 2022, available at https://www.news24.com/citypress/news/court-grants-lesedi-municipal-manager-interdict-against-disruptive-political-party-leader-20220524/.

[73] Parliament of the Republic of South Africa 'Lack of service delivery in Emfuleni a sore point for NCOP Committee' 19 July 2023, available at https://www.parliament.gov.za/news/lack-service-delivery-emfuleni-sore-point-ncop-committee.

[74] Sune Payne & Bheki C. Simelane 'Emfuleni crisis highlights local government debt as Treasury cracks the whip' *Daily Maverick* 1 August 2025, available at https://www.dailymaverick.co.za/article/2025-08-01-emfuleni-crisis-highlights-local-government-debt-as-treasury-cracks-the-whip/.

[75] eNCA News 'Emfuleni fraud investigation widens' 7 September 2026, available at https://www.facebook.com/reel/1663206828714192.

[76] Department of Water and Sanitation *Blue Drop Report* (2023) p. 22-3.

[77] Auditor-General of South Africa 'Material irregularities 2023-2024', available at https://mfma-2024.agsa.co.za/pages/status-of-mis.

[78] Sue Matthews, 'Water and sanitation services – how are we doing? *The Water Wheel* Sep/Oct 20 24.