



WATER RIGHTS TRACKER

PROVINCIAL REPORT FOR

MPUMALANGA

OCTOBER 2026



Table of Contents

Table of Contents	2
List of Figures	4
List of Tables	5
Prepared By	6
Acknowledgements	6
Abbreviations	7
Introduction	8
Water Services in South Africa: A Sector in Crisis	8
A Mountain of Data	10
The South African Water Rights Tracker: A Formal Collaboration	12
Structure of the Report	13
Elements of the Human Right to Water	15
Progressive Realisation of the Human Right to Water	18
Meaning of Progressive Realisation	18
Reasonable Measures to Ensure Realisation of the Right to Water	19
Policy and Legislation	19
Financial Resources	20
Infrastructure Resources	21
Human and Skills Resources	21
Rights Holders and Duty Bearers	22
Bringing Rights Holders into View	22
Duty Bearers: A Whole-of-Government and Whole of Society Approach	24
Using Indicators to Measure Progressive Realisation of the Right to Water	26
Systemic Drivers Undermining Progressive Realisation	28
Mpumalanga Overview	33
Rights Holders	36
Demographics	36
Potential Revenue Base	42
Reasonable Measures	44
Policy and Legislation	44
Financial Resources	46
Infrastructure Resources	50
Human Resources	54
Key Implementation Indicators	56

Physical Access	56
Economic Access	59
Water Tariffs	59
Free Basic Water	61
Adequacy	63
Quality	65
Efficiency	68
Systemic Drivers Undermining Progressive Realisation	71
Leadership instability, corruption and political interference	73
Geographical scale	75
Oversight	76
Regulatory Oversight by the Department of Water and Sanitation.....	76
South African Human Rights Commission Oversight	77
Parliamentary and Legislative Oversight.....	78
Public Protector Oversight	78
Auditor-General Oversight	78
Judicial Oversight	79
Overall Assessment of Oversight	79
Conclusion: Red Flags for Human Rights Compliance.....	81
Progressive Realisation Snapshot: Red Flags – Outcomes	84
Progressive Realisation Snapshot: Red Flags – Enablers.....	85
Recommendations	87
Annexures	90
Annexure A: Methodology	90
1 Overview of the methodology	90
2 Research Collaboration and Conceptualisation	90
3 Design.....	90
Annexure B: Funding Framework for Water Services Delivery in South Africa.....	105
Annexure C: Progressive Realisation of the Right to Water: Duty-Bearers.....	107

List of Figures

Figure 1: Local and District Municipalities, Mpumalanga Province (<i>Source: Municipalities of South Africa</i>).....	33
Figure 2: Breakdown of population and households per WSA, Mpumalanga (<i>Source: 2022 Census</i>)..	37
Figure 3: Average household size per WSA, Mpumalanga (<i>Source: 2022 Census</i>)	38
Figure 4: Discrepancies in population size reporting (<i>Sources: 2022 Census, 2023 Blue Drop Report, municipal IDPs</i>).....	39
Figure 5: Population growth rate (<i>Source: Census 2022</i>)	40
Figure 6: Gender Split (Female Population) (<i>Source: Census 2022</i>).....	40
Figure 7: Percentage of Population under 15, WSAs in Mpumalanga (<i>Source: Census 2022</i>)	41
Figure 8: Unemployment Rates, Mpumalanga WSAs (<i>Source: Municipal IDPs</i>)	42
Figure 9: Dependency ratio, Mpumalanga WSAs (<i>Source: Census 2022</i>)	43
Figure 10: Total budgeted revenue/total budgeted expenditure (excl. capital transfers and contributions), WSAs in Mpumalanga (<i>Source: Table C1, MFMA Schedules</i>)	47
Figure 11: Total budgeted revenue (incl. capital transfers)/total budgeted CAPEX+OPEX, WSAs in Mpumalanga (<i>Source: Table C2, MFMA Schedules</i>).....	47
Figure 12: Amount allocated to asset renewal/total capital budget (<i>Source: Table SC13a and Table C5, MFMA Schedules</i>)	48
Figure 13: Total maintenance expenditure/total revenue collected (<i>Source: Table SC13a and Table C2, MFMA Schedules</i>)	49
Figure 14: Actual revenue collected/budgeted revenue (<i>Source: Table C2, MFMA Schedules</i>)	49
Figure 15: Percentage of used WTW capacity, Mpumalanga WSAs (<i>Source: 2023 Blue Drop Watch Report</i>)	50
Figure 16: Number of WTWs and reservoirs, Mpumalanga WSAs (<i>Source: 2023 Blue Drop Watch Report</i>)	52
Figure 17: Extent of bulk and distribution pipeline networks, Mpumalanga WSAs (<i>Source: 2023 Blue Drop Watch Report</i>)	52
Figure 18: Shortages of process controllers and scientists, Mpumalanga WSAs (<i>Source: 2023 Blue Drop Watch Report</i>)	54
Figure 19: Physical access to a potable water access point, Mpumalanga WSAs (<i>Source: 2021/22 non-Financial Census of Municipalities</i>)	57
Figure 20: Piped water within a dwelling, Mpumalanga WSAs (<i>Source: 2022 Census</i>)	57
Figure 21: Service point coverage ratio, Mpumalanga WSAs (<i>Source: 2022 Census, 2021/22 Non-financial census of municipalities</i>)	58
Figure 22: Cheapest tariff block, Mpumalanga WSAs (<i>Source: 2021/2022 Municipal Tariff Schedules</i>)	60
Figure 23: Most expensive tariff block, Mpumalanga WSAs (<i>Source: 2021/2022 Municipal Tariff Schedules</i>)	61
Figure 24: Percentage of FBW per number of households and service delivery points, Mpumalanga WSAs (<i>Source: 2022 Census, 2021/2022 Non-Financial Census of Municipalities</i>)	62
Figure 25: Microbiological compliance, Mpumalanga WSAs (<i>Source: 2023 Blue Drop Report</i>)	66
Figure 26: Microbiological compliance, Mpumalanga WSAs (<i>Source: 2023 Blue Drop Report</i>)	67
Figure 27: Microbiological compliance, Mpumalanga WSAs (<i>Source: 2023 Blue Drop Report</i>)	67
Figure 28: WUE Scores, Mpumalanga WSAs (<i>Source: 2023 Blue Drop Report</i>)	69
Figure 29: Non-revenue Water, Mpumalanga WSAs (<i>Source: Auditor-General 2023/24 MFMA Audit</i>)	70

Figure 30: Relationship between infrastructure extent and population size (*Source: 2023 Blue Drop Report*) 75

List of Tables

Table 1: Sources of Data on Water Services in South Africa	11
Table 2: Elements of the Human Right to Water in International and South African Law.....	17
Table 3: Elements of the Human Right to Water in International and South African Law.....	27
Table 4: Reasonable policy and legislative measures to realise the right to water, Mpumalanga.....	44
Table 5: Supervisor/WTW and Technical Staff/WTW ratios, Mpumalanga (<i>Source: 2023 Blue Drop Report</i>)	55
Table 6: Universal/qualified allocation of FBW, Mpumalanga WSAs (<i>Source: Municipal Tariff Schedules</i>)	60
Table 7: Summary of water outages, Mpumalanga	64
Table 8: WUE Performance Categories (<i>Source: 2023 Blue Drop Report</i>).....	68
Table 9: Systemic Drivers Undermining Progressive Realisation of the Right to Water (<i>Source: Municipal IDPs</i>)	71
Table 10: Summary of Water and Sanitation Oversight, Mpumalanga (<i>Source: 2023 Blue Drop Report, SAFLII, South African Human Rights Commission, Mpumalanga Provincial Legislature</i>)	76
Table 11: Summary of remedial action taken in relation to material irregularities in WSAs in Mpumalanga (<i>Source: Auditor-General, South Africa</i>).....	79
Table 12: Representative indicators (red flags) for monitoring progressive realisation of the right to water	83
Table 13: Red flag indicators (outcomes), Mpumalanga	84
Table 14: Red flag indicators (enablers), Mpumalanga	85

Prepared By

Tracy-Lynn Field
Johandri Wright
Albert Edgar Manyuchi

Acknowledgements

Commissioner Henk Boshoff, Commissioner Philile Ntuli, Peacemore Mhodi, Mpho Tsoku, Darshen Naidoo, Alliance Ndhlovu, Tshepo Mothemi, Ursula Dillner-Dangor, Nina Jacobs, Magda Janse van Noordwyk, and Lee Anne Gaertner.

The financial support of the South African Human Rights Commission and the Claude Leon Foundation is gratefully acknowledged.



Abbreviations

AGSA	Auditor-General of South Africa
COGTA	Cooperative Government and Traditional Affairs
DM	District Municipality
DWS	Department of Water and Sanitation
FBW	Free Basic Water
GIS	Geographic Information System
IDP	Integrated Development Plan
KPA	Key Performance Area
LM	Local Municipality
MFMA	Municipal Finance Management Act
NRW	Non-Revenue Water
RDP	Reconstruction and Development Programme
SAHRC	South African Human Rights Commission
WSA	Water Services Authority
WSDP	Water Services Development Plan
WRT	Water Rights Tracker
WSS	Water Supply System
WTW	Water Treatment Works
WUE	Water Use Efficiency

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: *Water 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 December 2025, total consumer debt owed to municipalities stood at R467.2 billion (up from R416.1 billion in March 2025). Of the R467 billion owed, the largest proportion (71.8%) 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	<i>Blue Drop</i> 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	<i>Green Drop</i> 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	<i>No Drop</i> 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 <i>Local Government Handbook</i> 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 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, Mpumalanga.

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
<i>Availability</i>	The water supply for personal and domestic uses ¹⁷ must be <i>sufficient</i> and <i>continuous</i> . “Continuous” means that the <i>regularity</i> of the water supply is sufficient for personal and domestic uses.	Everyone has a right of access to <i>sufficient</i> 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
<i>Quality</i>	The water required for each personal or domestic use must be <i>safe</i> (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
<i>Physical Accessibility</i>	Water, and adequate water facilities and services, must be within <i>safe</i> 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
<i>Economic Accessibility</i>	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
<i>Information Accessibility</i>	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 wastewater (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 progressive realisation of the 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	<i>What is the geographical and spatial extent of the WSA?</i> <i>How is the political landscape in each WSA organised?</i> <i>What is the population of each WSA?</i> <i>What are the gender and age characteristics of the population?</i> <i>How many households and service delivery points are in each WSA?</i> <i>What are the economic characteristics of the population?</i> <i>Is the WSA financially distressed?</i> <i>What percentage of the population is provided with Free Basic Water?</i> <i>On what water resources does the WSA rely?</i> <i>What water infrastructure is under the WSA's authority?</i>	• 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	<i>Does the WSA have an updated Water Services Development Plan (WSDP)?</i> <i>Does the WSA have a water by-law?</i> <i>Does the WSA have an Indigent Policy?</i> <i>What water services-related issues are identified in the WSA's Integrated Development Plan (IDP)?</i>	• Date of approved WSDP • Citation of by-law • Date of Indigent Policy • Express mention of water services-related issues in IDP
Resource Efforts	<i>Does the WSA's infrastructure budget cover operational costs? Is there sufficient revenue for capital costs?</i> <i>What is the revenue collection rate?</i>	• Budget sufficiency (trend analysis 2021/22 – 2024-25) • Revenue sufficiency (trend analysis 2021/22 – 2024-25)

	<i>What is the WSA's annual spend on renewal and maintenance of infrastructure assets?</i> <i>How many people are employed in water treatment works and in technical departments? What is the human resource shortfall?</i>	• 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)
<i>Implementation</i>	<i>What is state of physical access to water services in the WSA?</i> <i>What is the state of economic access to water services in the WSA?</i> <i>What is the state of water quality?</i> <i>Are the water services adequate (stoppages and outages)?</i> <i>Is the water use efficient?</i>	• 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
<i>Oversight</i>	<i>What regulatory actions have been taken against the WSA, if any?</i> <i>Are there any court orders against the WSA?</i> <i>What directives and recommendations have the SAHRC issued against the WSA?</i> <i>What oversight actions have been conducted by Parliamentary or provincial committees?</i>	• <i>Blue Drop</i> and <i>Green Drop</i> 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 understaffing/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 MPUMALANGA



Mpumalanga Overview

Total Population for Mpumalanga: 5,143.324

Number of Households in Mpumalanga: 1,400,000

The Mpumalanga province is situated in the northeastern part of South Africa. It shares borders with eSwatini and Mozambique. It is divided into three district municipalities, Ehlanzeni, Gert Sibande and Nkangala, and 17 local municipalities.

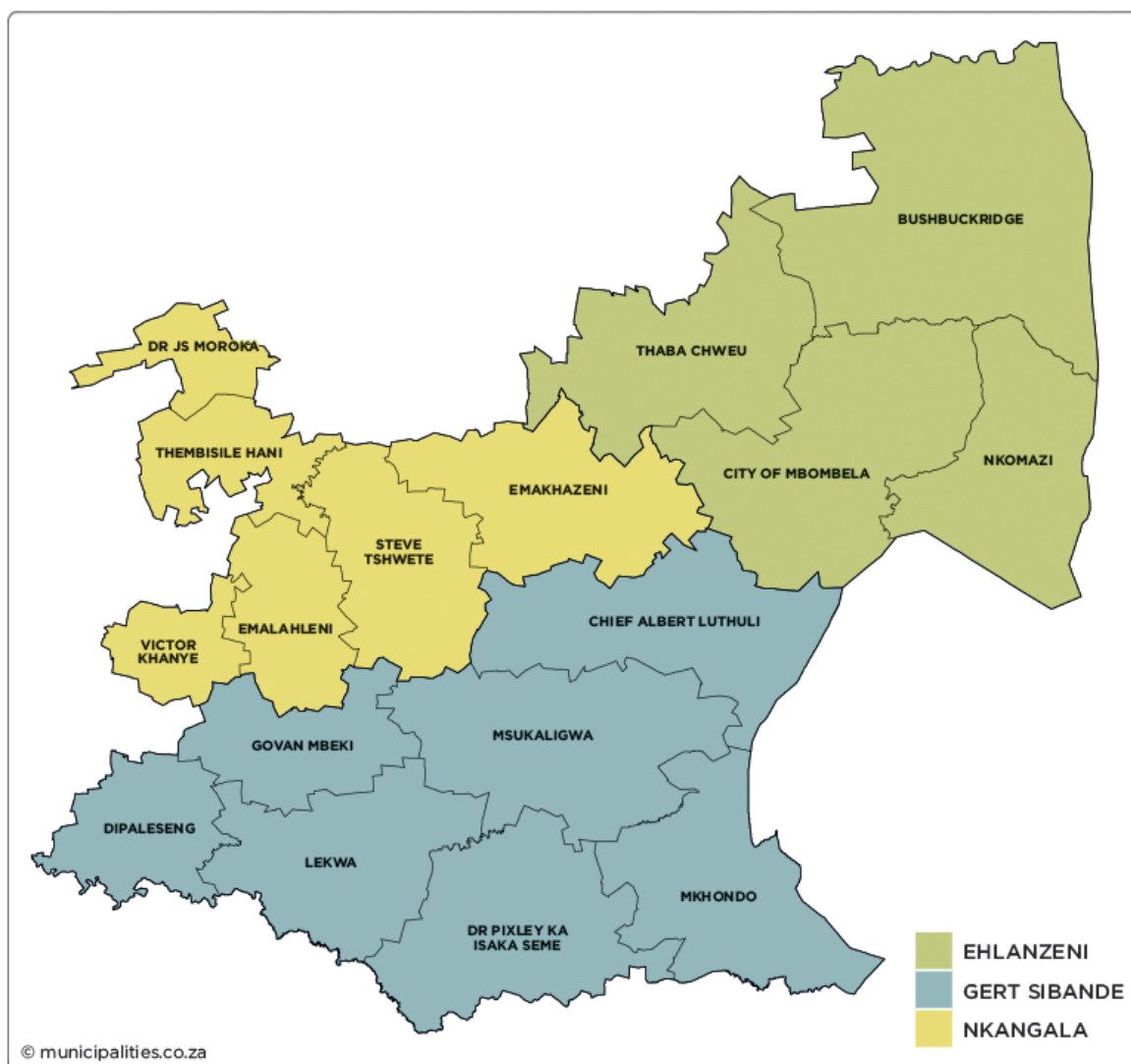


Figure 1: Local and District Municipalities, Mpumalanga Province (Source: Municipalities of South Africa)

The province comprises 17 Water Service Areas (WSAs), 100 water supply systems, one Water Board, and four Water Service Providers (WSPs), all of which deliver potable water to approximately 4,770,957 residents. The region encompasses both urban and rural areas, and the former have higher population densities.

Demographically, several municipalities exhibit a higher ratio of women to men. A substantial proportion of the population is under 15 years old. The province experiences elevated population growth rates, exerting 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, including 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 for most WSAs. The revenue collected differs among municipalities. Certain municipalities generate revenue that is inadequate to cover operational expenses. Consequently, these municipalities depend substantially on grants to fund capital projects and other expenditures.

The outlook for the province's water infrastructure utilisation remains varied. While five municipalities are not utilising their water treatment capacity at all, an additional five are operating at over 85% of capacity, and seven are operating within acceptable capacity limits. Consequently, long-term planning and infrastructure upgrades are imperative. Moreover, it is crucial to ensure that the requisite human resources, particularly process controllers and qualified scientists for water treatment, are sufficiently available. Notably, Mpumalanga faces significant shortages of these vital personnel.

The province experiences interruptions in water services, restricting access to water for the population. In general, service delivery points serve approximately 80% of households. The municipalities within the province offer either the first 6 kilolitres of water free of charge to all residents or provide free backup water to eligible indigent households, thereby ensuring an affordable and pro-poor water supply. Water service disruptions occur regularly for various reasons. However, records of water interruptions are currently incomplete and unreliable. Although positive developments in water quality are reported between 2023 and 2025, the province must continue to monitor municipalities to ensure these improvements are sustained. Notably, most municipalities use water efficiently and economically, though some experience high water losses that require urgent intervention.

Leadership instability, corruption, and political interference constitute principal systemic 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.



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, yet 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, Mpumalanga is home to approximately 5.1 million people and 1.4 million households. Statistics South Africa's 2024 mid-year population estimates pitch the total population at 5 million people, which amounts to about 8% of South Africa's population.⁴⁴ Breaking these figures down in terms of WSAs shows that approximately a third of serve smaller populations of fewer than 200,000 residents, a third serve populations of between 200,000 and 400,000 residents, and the remainder serve moderately large communities of between 400 000 and 800 000 residents) (see **Figure 2** below). The City of Mbombela – which is a local and not a metropolitan municipality – has the highest population in the province.

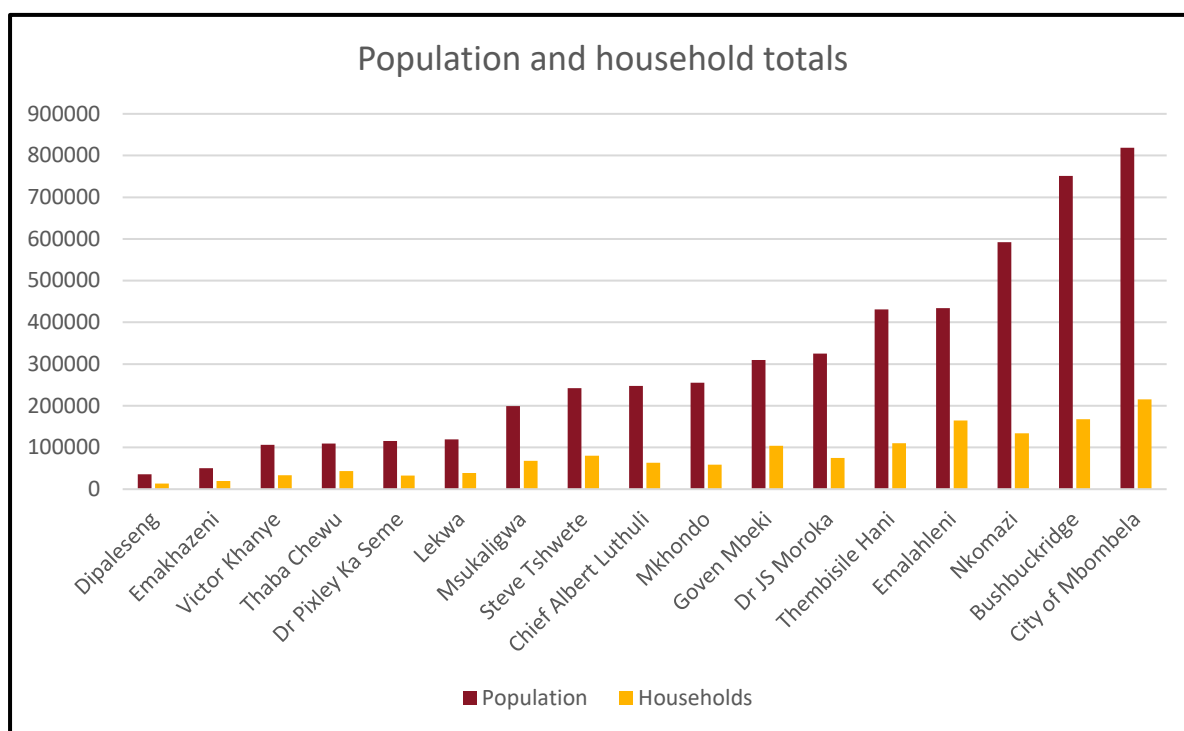


Figure 2: Breakdown of population and households per WSA, Mpumalanga (Source: 2022 Census)

WSAs in Mpumalanga face an enormous service delivery challenge, where all but two of the authorities have 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 22,455.⁴⁵ 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 lower third of WSAs in the province service households of between approximately 13,000 (Dipaleseng) and 43,000 (Thaba Chweu) units. The middle third services units of approximately 58,500 (Mkhondo) to 103,800 (Govan Mbeki), while the remaining WSA service units of approximately 110,500 (Thembisile Hani) to 215,000 (City of Mbombela).

Based on the 2022 Census Data, household size ranges from 2.5 (Thaba Chweu) to 4.47 members per household (Bushbuckridge) (see **Figure 3**). Household size tends to increase with population size, with the average household size for the lower third of WSAs at 2.92 members per household, the middle third at 3.59 members per household, and the upper third at 3.84 members per household. Within each band there are outliers – for example, Mkhondo in the middle band of WSAs has an average household size of 4.37 members per household, while Emalahleni in the highest band tends to have smaller household sizes (2.64 members per household).

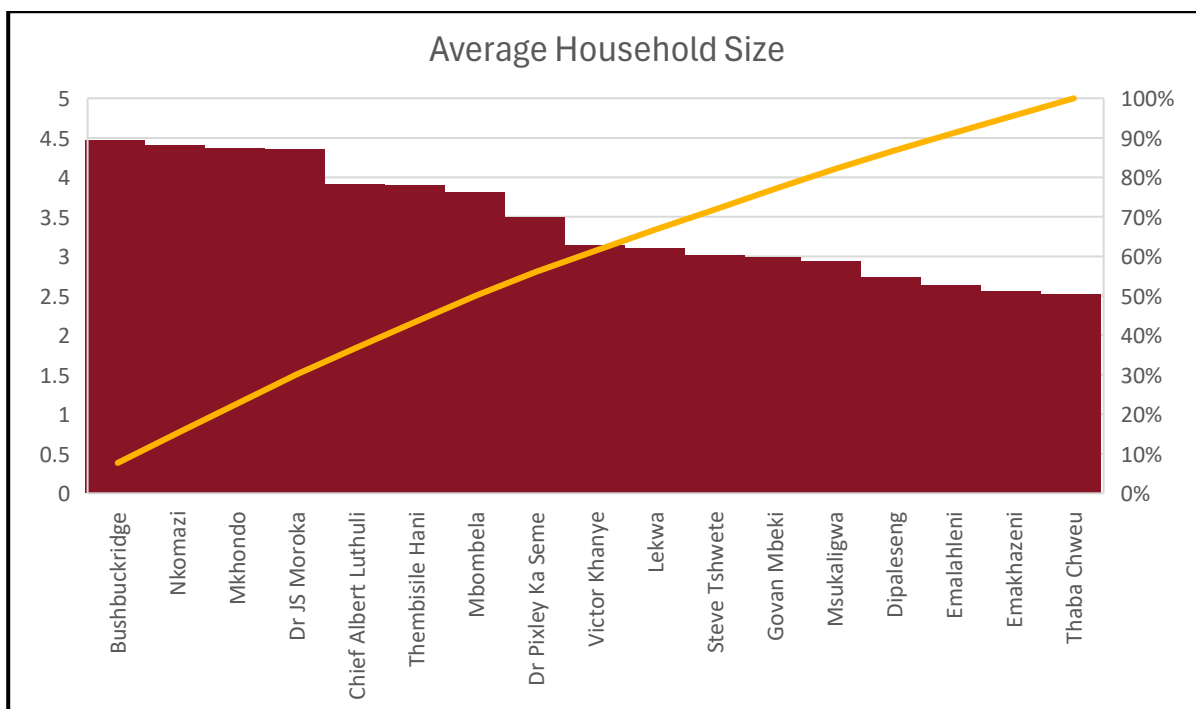


Figure 3: Average household size per WSA, Mpumalanga (Source: 2022 Census)

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 Mpumalanga, 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**). In several cases, the discrepancies were as high as 200 000 residents for population size. Differences of this scale create serious planning risks and can have substantial financial consequences, particularly when budgeting for infrastructure, staffing, and future demand. Discrepancies were especially marked in the upper band of WSAs, with Thembesile Hani, Nkomazi and Bushbuckridge the worst affected.

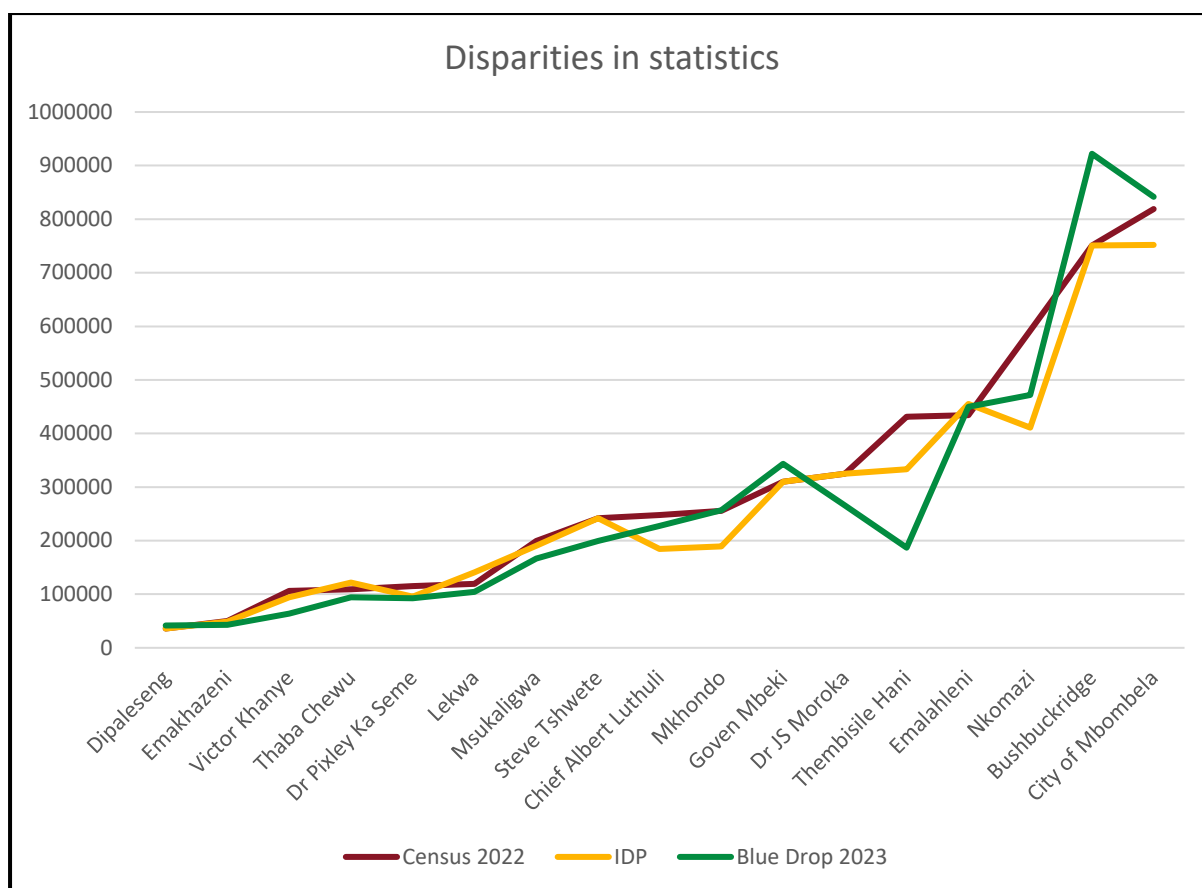


Figure 4: Discrepancies in population size reporting (Sources: 2022 Census, 2023 Blue Drop Report, municipal IDPs)

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, for example, that the WUE may be much lower in the WSAs where the population has been undercounted in the *Blue Drop* report.

For water planning purposes, WSAs must also take population growth into account. More than half of Mpumalanga’s WSAs have population growth rates above the national average (see **Figure 5**). This has important implications for how they plan and deliver water services. Instead of relying on national guidelines based on average growth, these municipalities must expand their infrastructure and capacity at a much faster pace. Without adapting their planning to these higher growth rates, they risk falling further behind in meeting the basic water needs of their communities. It should also be noted that during the provincial consultation, several officials contested the official population growth rates, arguing that the rates were in fact much higher.

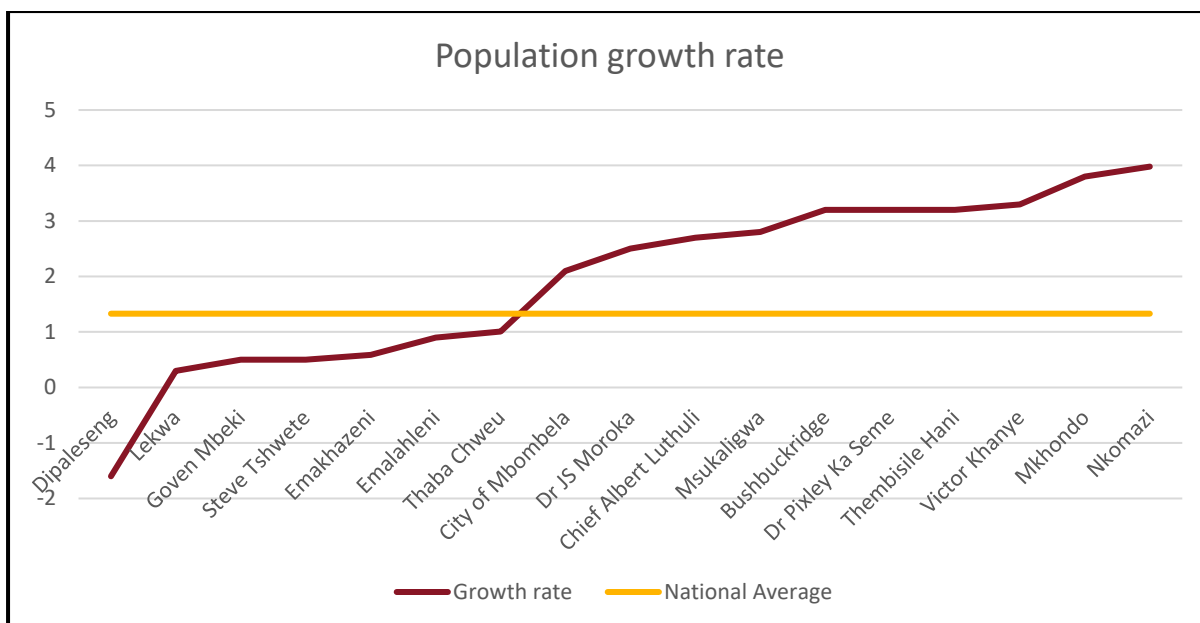


Figure 5: Population growth rate (Source: Census 2022)

Across Mpumalanga, there are slightly more women than men, but in several WSAs the gender split is more pronounced than the provincial average (see **Figure 6**). In approximately half of the province's WSAs, there are more men than women, while the female population is larger in the other half. WSAs in which females predominate are situated on the eastern borders of Mpumalanga (with Mozambique and Swaziland) and on the western border (with Limpopo and Gauteng). While all WSAs should be viewing water planning through a gendered lens, in WSAs in which females predominate there is an even more compelling case for water services provision to take gender into account.

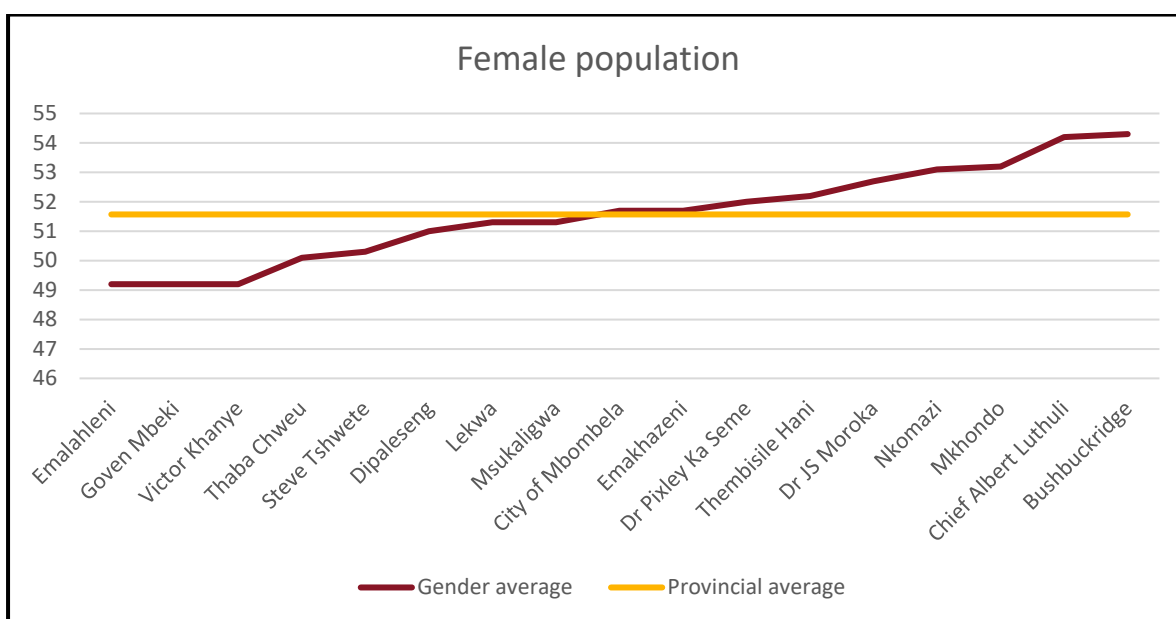


Figure 6: Gender Split (Female Population) (Source: Census 2022)

In terms of the percentage of the population under 15, there is less deviation from the national average of 26.2% (see **Figure 7**). Once again, the WSAs on the eastern ridge of Mpumalanga (Bushbuckridge, Nkomazi and Chief Albert Luthuli have the highest percentage of the population under 15 years of age. While the provincial average of 26.8% is only slightly above the national average 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.

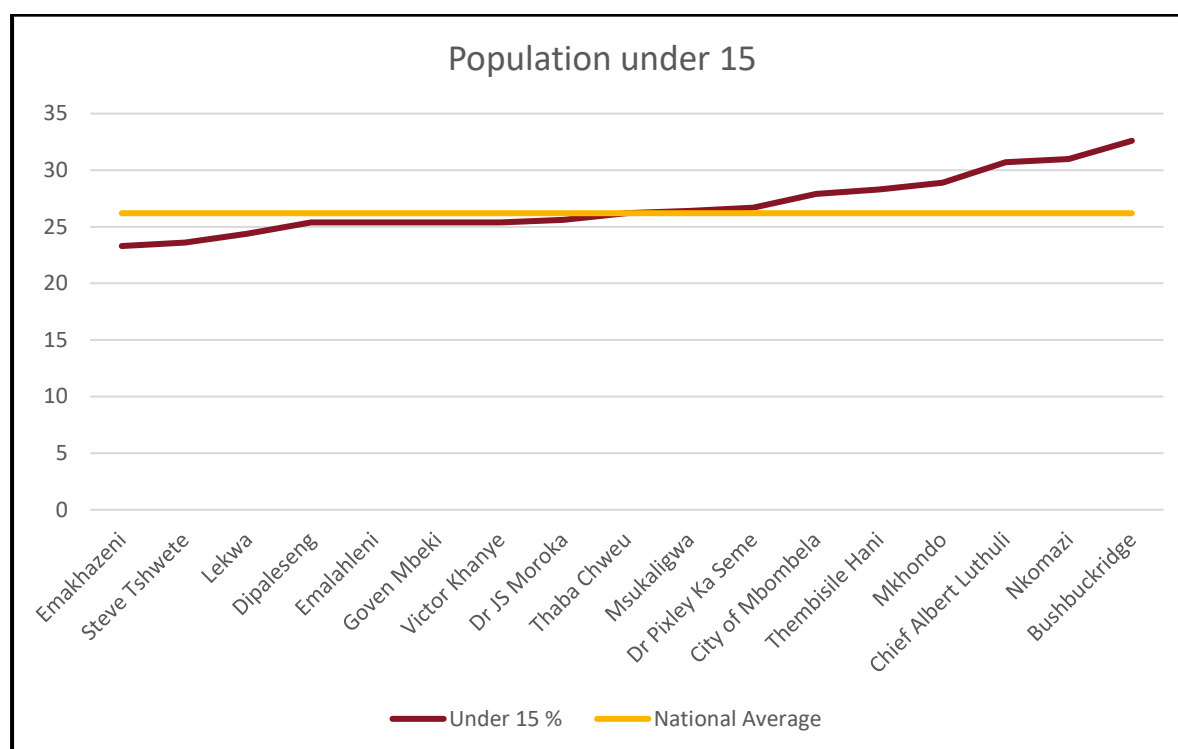


Figure 7: Percentage of Population under 15, WSAs in Mpumalanga (Source: Census 2022)

Potential Revenue Base

The second set of rights holder indicators focuses on assessing the potential revenue base of each WSA — essentially, how many residents are likely to be able to pay for municipal services. This information helps determine whether a municipality will have a strong income base through rates and service payments, or whether it will need to provide a large proportion of services through free basic services and subsidies.

In Mpumalanga, the data shows a province facing significant revenue pressures. Almost a third of the population (27%) is under the age of 15 and the average unemployment rate is high (35.5%). In six WSAs (Thembesile Hani, Dipaleseng, Nkomazi, Dr Pixley Ka Seme, Dr JS Moroka and Bushbuckridge) unemployment exceeds 40% (see **Figure 8**). Given these high rates of unemployment, the viability of a policy of strict cost recovery for water services must be questioned.

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.

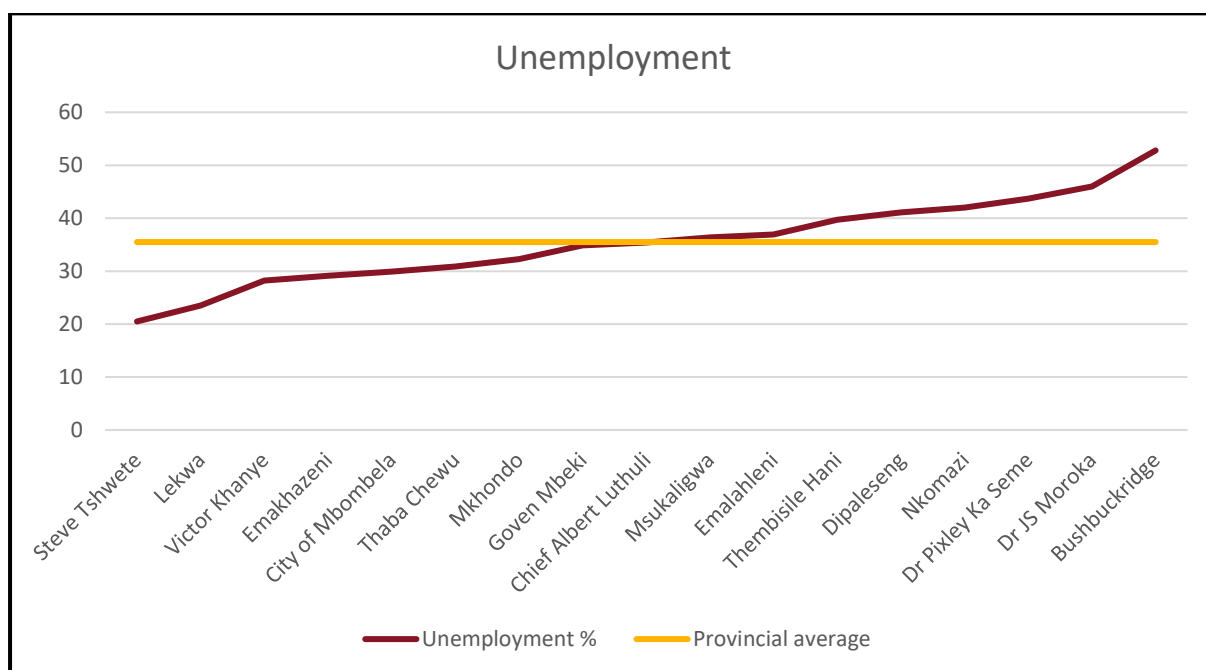


Figure 8: Unemployment Rates, Mpumalanga WSAs (Source: Municipal IDPs)

Rights holders' ability to pay may also be assessed by the dependency ratio, which is a measure of the pressure on a productive working-age population (15-64 years) to support non-working dependants, specifically children (0-14) and the elderly (+65). It is calculated as the ratio of dependents per 100 working-age people.⁴⁶

While most municipalities have dependency ratios lower than the national average of 48.3%,⁴⁷ three municipalities — Dr JS Moroka, Bushbuckridge, Nkomazi, and Chief Albert Luthuli — stand out as especially vulnerable (see **Figure 9**). All three have unemployment rates, proportions of children under 15, and overall dependency ratios that exceed the provincial or national averages. This points to very weak revenue bases in these municipalities. As a result, they will potentially remain heavily dependent on intergovernmental grants to fund water services and other basic functions, with limited ability to generate their own income through municipal billing.

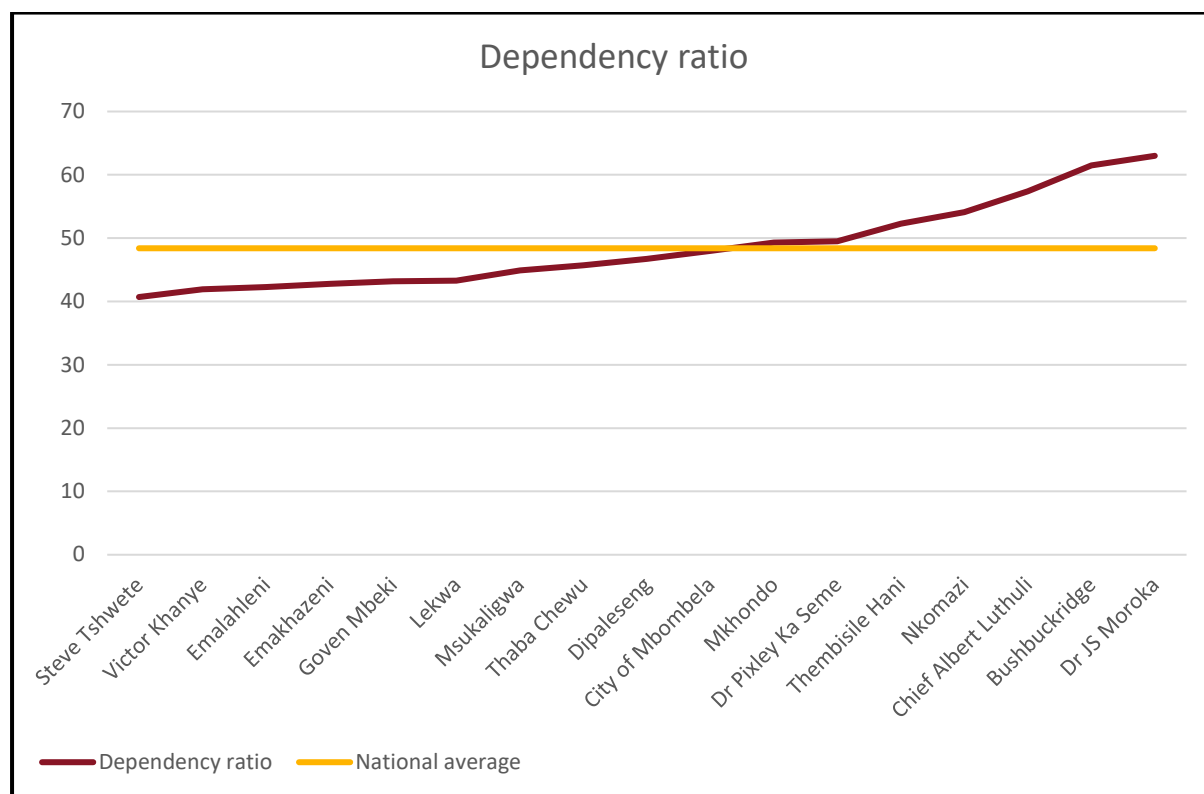


Figure 9: Dependency ratio, Mpumalanga WSAs (Source: Census 2022)

Taken together, these indicators show that many WSAs in Mpumalanga are serving populations where a large proportion of residents are not in a financial position to pay for services. This significantly 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, water services authorities 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.

In general, most WSAs in Mpumalanga had all three instruments in place (see **Table 4**); however, many of the WSDPs were outdated and required urgent review to remain effective (marked in yellow below). Notably, Dipaleseng Local Municipality had neither a Water Services By-law nor a WSDP, while Lekwa Local Municipality lacked both a Water Services By-law and an Indigent Policy.

Municipality	By-law	WSDP	Indigent Policy
Bushbuckridge	X	X	X
Chief Albert Luthuli	X	O	X
City of Mbombela	X	O	X
Dipaleseng	!	!	X
Dr JS Moroka	X	X	X
Dr Pixley Ka Seme	X	O	X
Emakhazeni	X	O	X
Emalahleni	X	X	X
Goven Mbeki	X	X	X
Lekwa	!	O	!
Mkhondo	X	O	X
Msukaligwa	X	X	X
Nkomazi	X	O	X
Steve Tshwete	X	O	X
Thaba Chweu	X	X	X
Thembisile Hani	X	O	X
Victor Khanye	X	O	X

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

One of the policy and governance implications of this analysis is the need for the national and provincial spheres of government to provide targeted support to almost all WSAs in Mpumalanga to update their WSDPs. Further, contrary to our expectation, almost none of the WSDPs were easily accessible in the public domain, with the research team

needing to rely on references in the WSAs IDP or responses to the verification exercise to ascertain the status quo.



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.

As is apparent from the figures below, financial sustainability remains a major challenge for most WSAs in Mpumalanga.

Twelve of the 16 municipalities do not have sufficient budgets to cover their total planned expenditure, with Emakhazeni and Lekwa Local Municipalities showing the lowest budget sufficiency (see **Figure 10** below).

In terms of revenue sufficiency, only seven municipalities generate enough revenue to meet their capital and operational expenditure needs, and once again, Emakhazeni and Lekwa recorded the lowest levels of sufficiency (see **Figure 11** below).

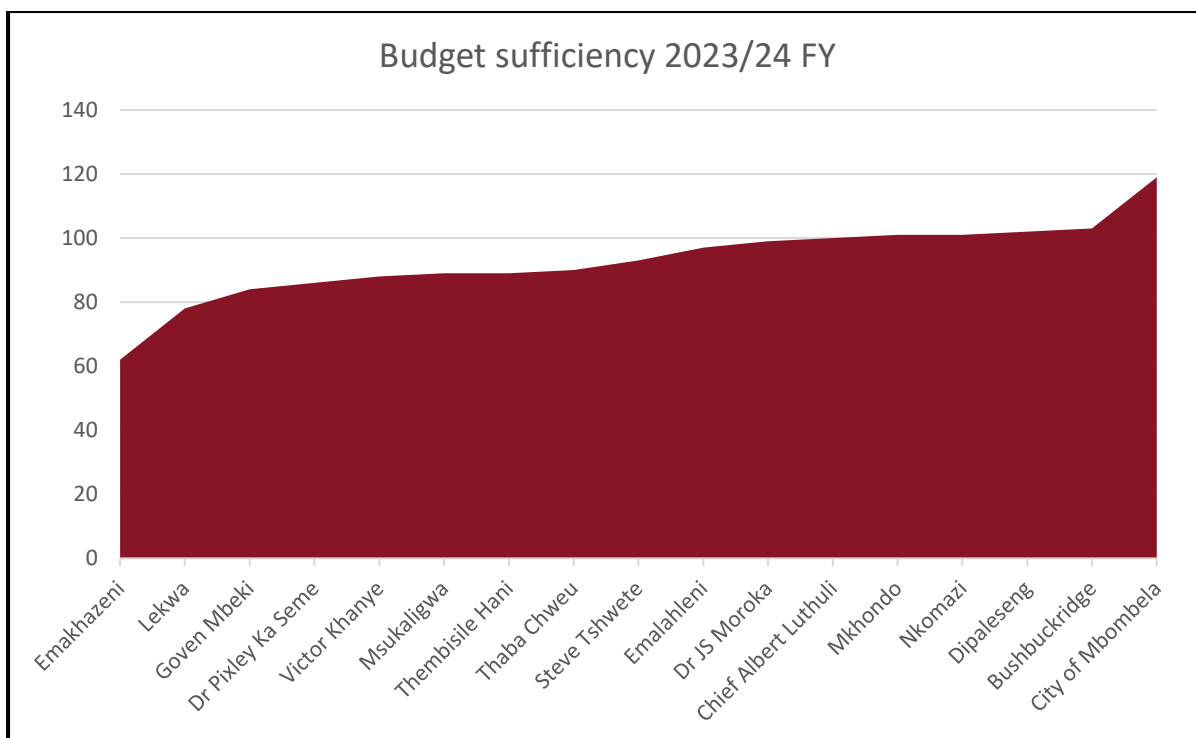


Figure 10: Total budgeted revenue/total budgeted expenditure (excl. capital transfers and contributions), WSAs in Mpumalanga (Source: Table C1, MFMA Schedules)

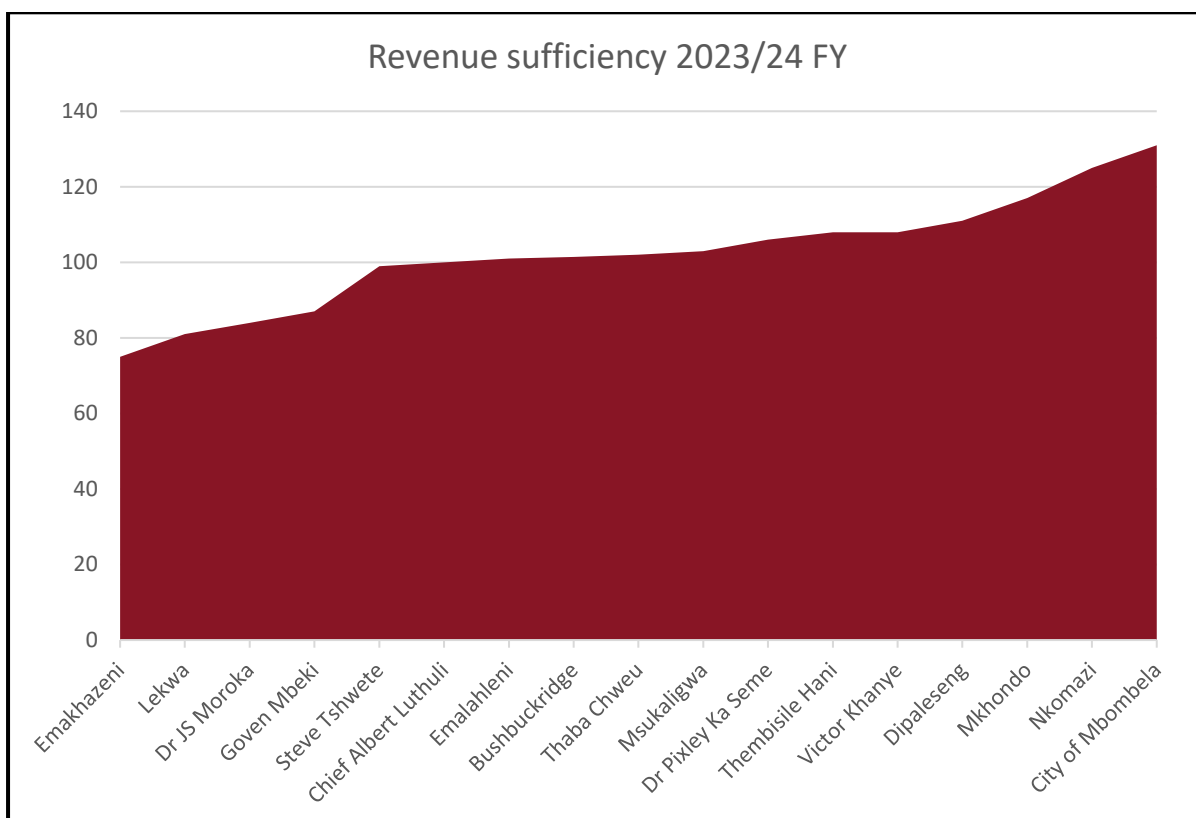


Figure 11: Total budgeted revenue (incl. capital transfers)/total budgeted CAPEX+OPEX, WSAs in Mpumalanga (Source: Table C2, MFMA Schedules)

In terms of renewal expenditure, which reflects investment in replacing ageing infrastructure, six municipalities allocated less than 10% of their total capital budgets to renewal projects, while Victor Khanye Local Municipality stood out with over 70% (see **Figure 12** below).

Maintenance expenditure showed a similar trend: six municipalities spent less than 5% of their capital budgets on maintenance, while Mkhondo Local Municipality spent over 20% (see **Figure 13** below).

Revenue collection rates varied widely across the province, ranging from below 60% in Bushbuckridge, Dipaleseng and Emakhazeni to close to 100% in Lekwa, Thembisile Hani and Thaba Chweu (see **Figure 14** below). Low spending on maintenance and renewal, combined with limited revenue and weak budget sufficiency, suggests that many municipalities face growing risks of infrastructure failure and declining service reliability over time.

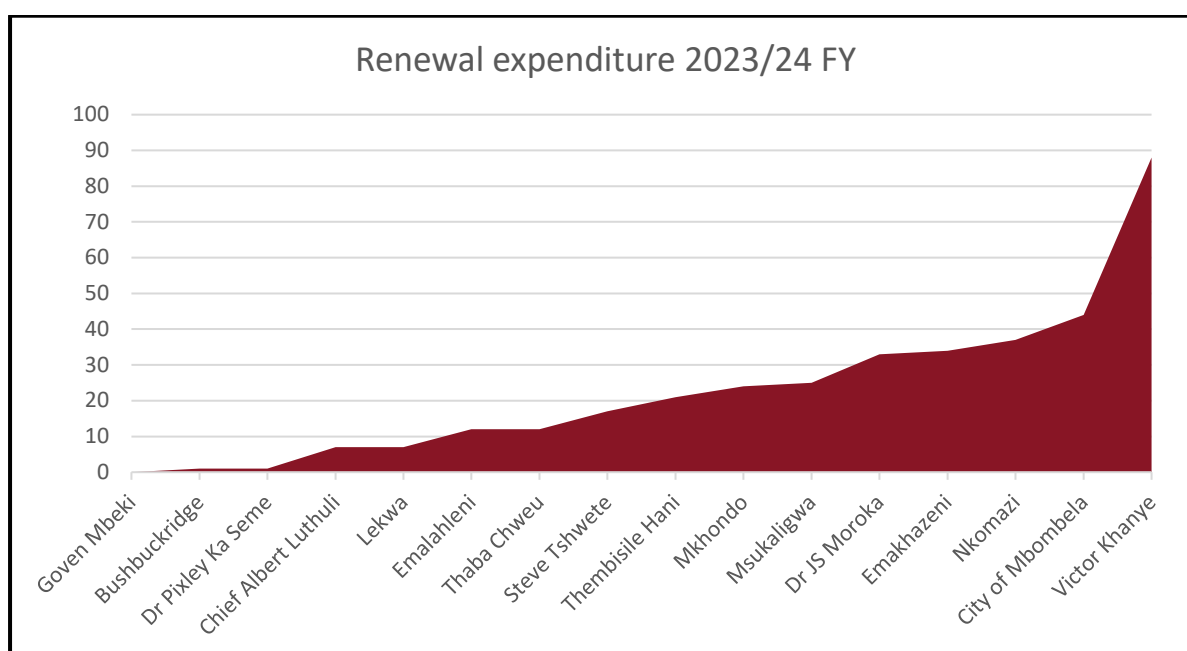


Figure 12: Amount allocated to asset renewal/total capital budget (Source: Table SC13a and Table C5, MFMA Schedules)

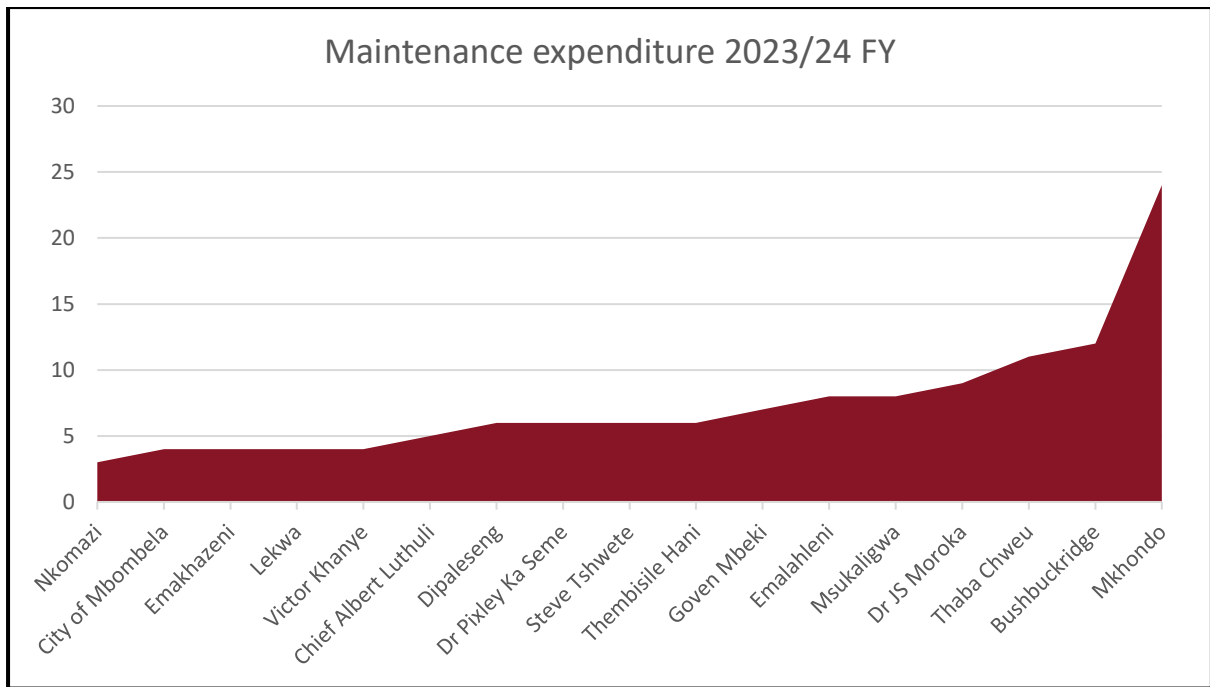


Figure 13: Total maintenance expenditure/total revenue collected (Source: Table SC13a and Table C2, MFMA Schedules)

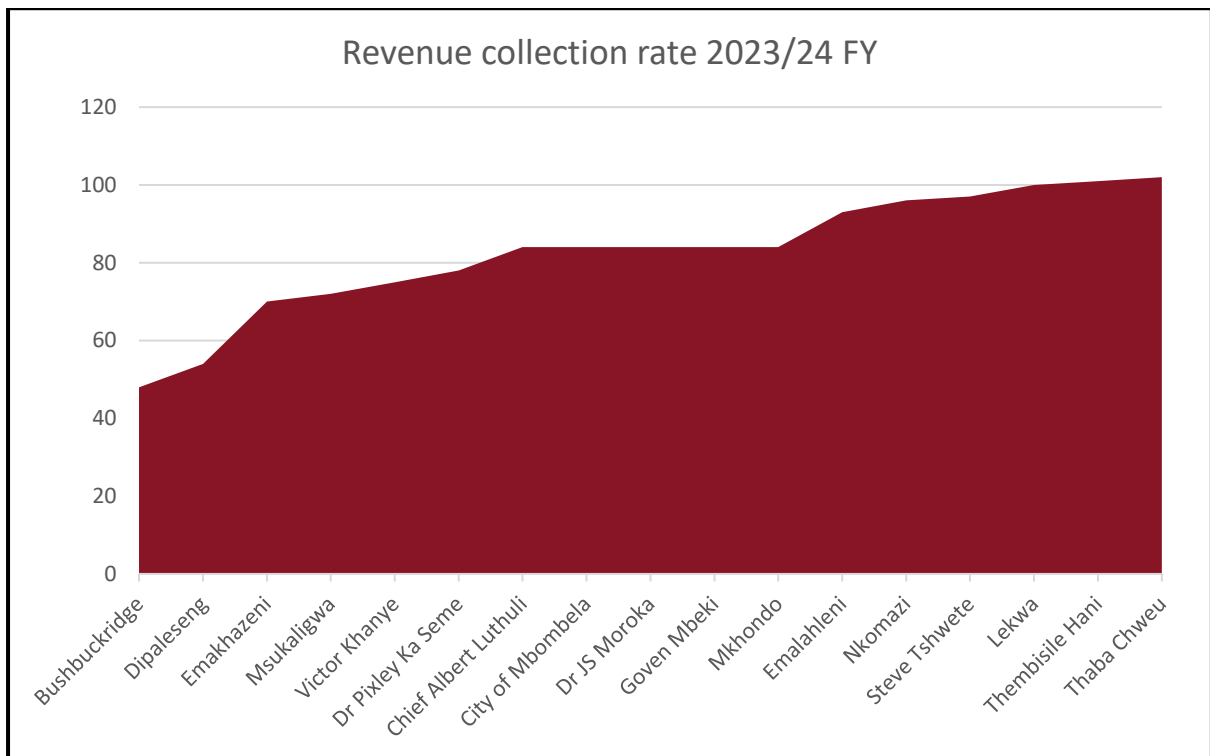


Figure 14: Actual revenue collected/budgeted revenue (Source: Table C2, MFMA Schedules)

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.

Water treatment works (WTWs) are facilities where raw water from either surface or underground sources is treated to potable standards. In the province of Mpumalanga, there are 107 WTWs producing an average daily treatment volume of 713,159ML.⁴⁸ But the capacity for water treatment is not evenly spread and it almost a third of the province's WSAs the WTWs are functioning at or even exceeding their design capacity (see **Figure 15** below).

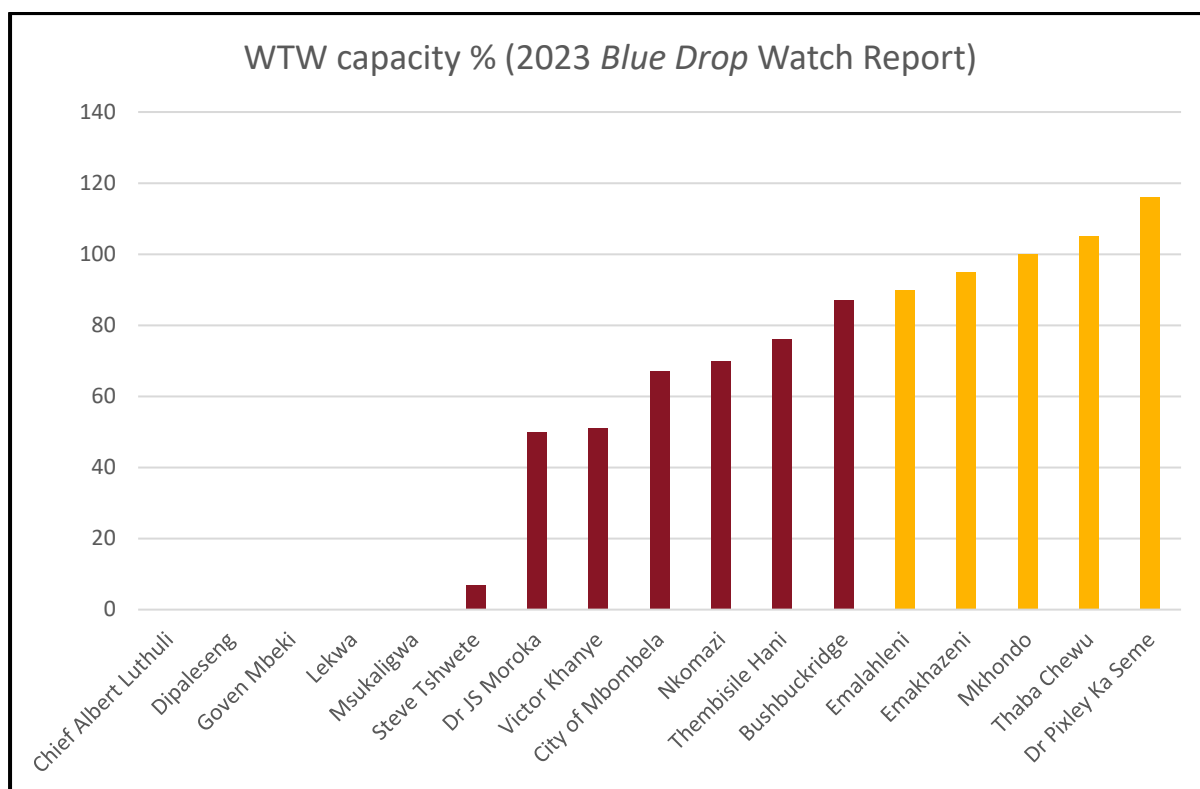


Figure 15: Percentage of used WTW capacity, Mpumalanga WSAs (Source: 2023 Blue Drop Watch Report)

Two key findings emerged. First, five municipalities are using none of their treatment capacity. This is highly unusual and warrants further investigation to determine whether plants are offline, abandoned, dysfunctional, or whether alternative supply sources are being used.

Second, another five municipalities are operating at more than 85% of their treatment capacity. Operating at these levels places significant strain on infrastructure and can

shorten the lifespan of the treatment works. It also indicates that these municipalities will struggle to meet future demand unless their treatment capacity is expanded.

Of particular concern are Thaba Chweu and Dr Pixley Ka Seme, both of which are already operating at over 100% capacity. This suggests one or more serious problems: that efficiency is being compromised, that parts of the community are receiving unreliable supply, or that the infrastructure is being pushed beyond its design limits. Running above capacity increases operational risks, reduces safety margins, and may lead to severe system failures in the near future.

Overall, only seven of the 17 municipalities are operating within reasonable capacity limits, highlighting the urgent need for infrastructure upgrades and improved long-term planning across the province.

In addition to WTWs, WSAs across South Africa must manage reservoirs, bulk pipelines and a pipeline distribution network. Using data from the 2023 *Blue Drop Watch* Report and ordered in accordance with population size (see Figure 2 above), the figures below show the additional infrastructure resources managed by Mpumalanga's WSAs.

As might be expected, WSAs in the lower population band (<200,000 residents) had fewer WTWs and reservoirs than WSAs in the upper population band (400,000 to 800,000 residents) (see **Figure 16** below). With the exception of Chief Albert Luthuli, the number of WTWs and Reservoirs in the middle band (200,000 to 400,000 residents) is not materially different from the smaller WSAs. While relying purely on the number of facilities is misleading – the design capacity of the utilities in the mid-sized WSAs is larger (for example, Dr JS Moroka's single WTW has a design capacity of 60ML per day – ten times that of Dipaleseng) – if the facilities in the mid-sized WSAs fail, a larger number of rights holders will be affected.

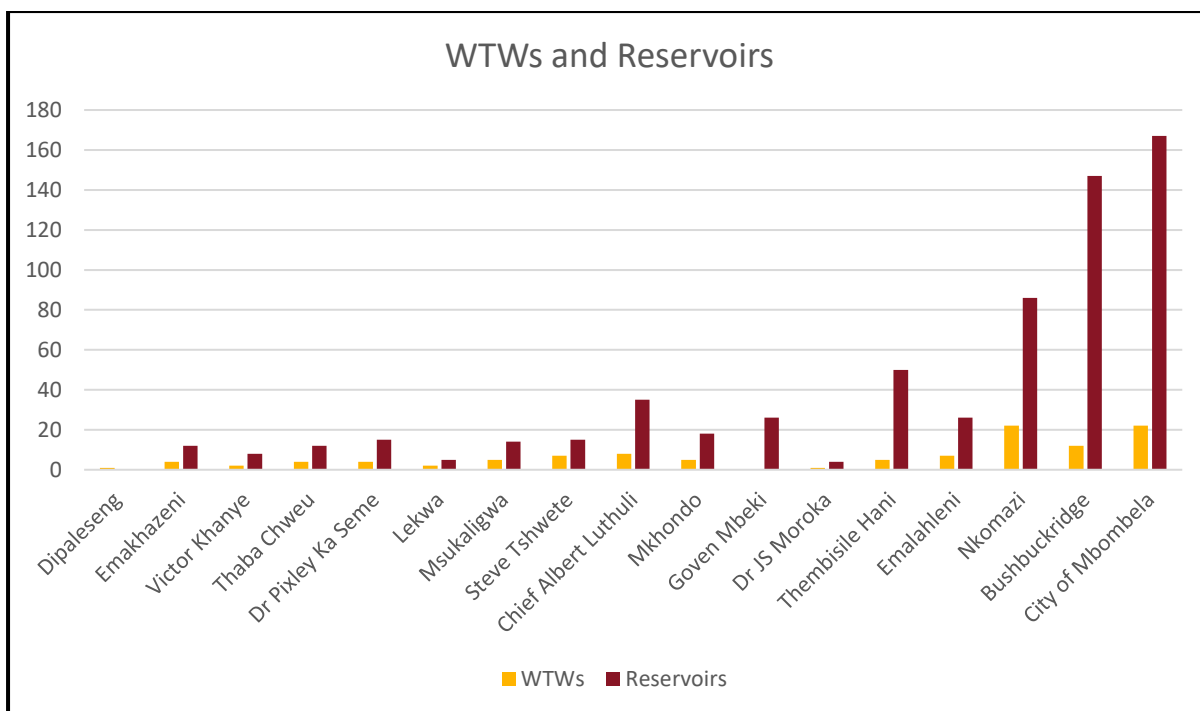


Figure 16: Number of WTWs and reservoirs, Mpumalanga WSAs (Source: 2023 Blue Drop Watch Report)

The extent of the bulk and distribution pipeline network under a WSA's stewardship does not correlate with population size (see **Figure 17**). Several small and mid-sized WSAs manage pipeline distribution networks equivalent to or even exceeding the networks in the largest WSAs (Victor Khanye, Steve Tshwete, Mkhondo, Govan Mbeki). Six municipalities reported distribution networks exceeding 1,000 km, indicating extensive service areas that require substantial maintenance and operational resources.

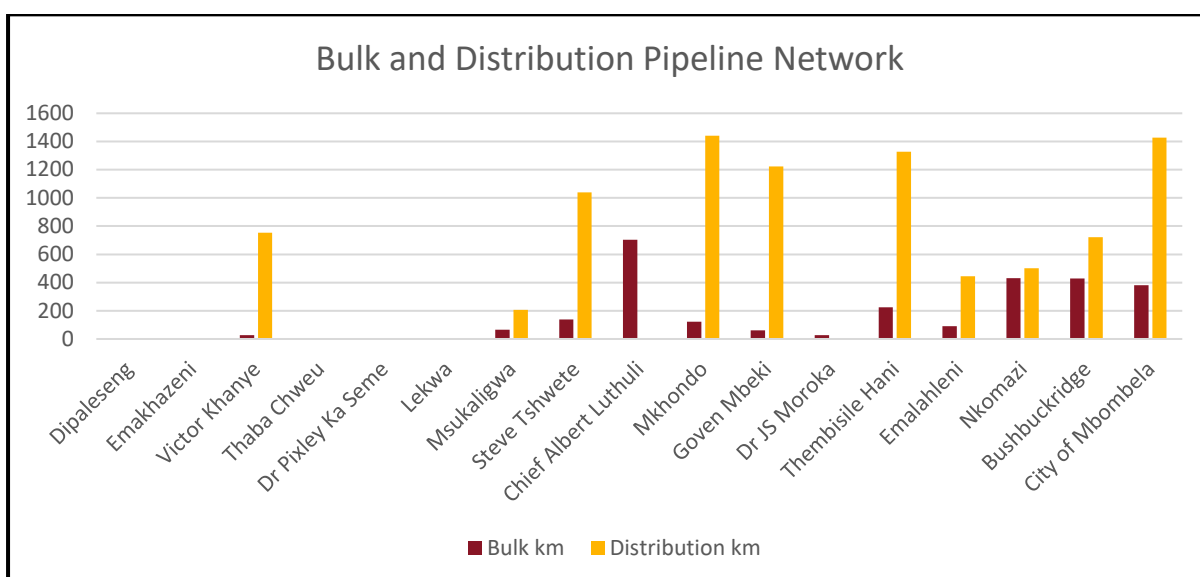


Figure 17: Extent of bulk and distribution pipeline networks, Mpumalanga WSAs (Source: 2023 Blue Drop Watch Report)

Some WSAs (see in particular, Dr JS Moroka and Chief Albert Luthuli Local Municipalities) had no distribution pipelines listed under their ownership, raising additional questions about the completeness of their asset registers or the nature of their service provider arrangements.



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.

According to the 2023 *Blue Drop Watch* Report, across Mpumalanga, significant staff shortages were found in **all** WSAs but were particularly pronounced in the middle population band (see **Figure 18** below). These shortages affected process controllers, supervisors, technicians, and scientists, creating serious capacity constraints. Only two municipalities—Victor Khanye and Dr JS Moroka—had enough process controllers, but both still lacked qualified scientists. Four municipalities had scientists but did not have enough process controllers to run their treatment plants effectively. A shortage of 35 process controllers in Mbombela, a key urban centre and tourist node, is of particular concern.

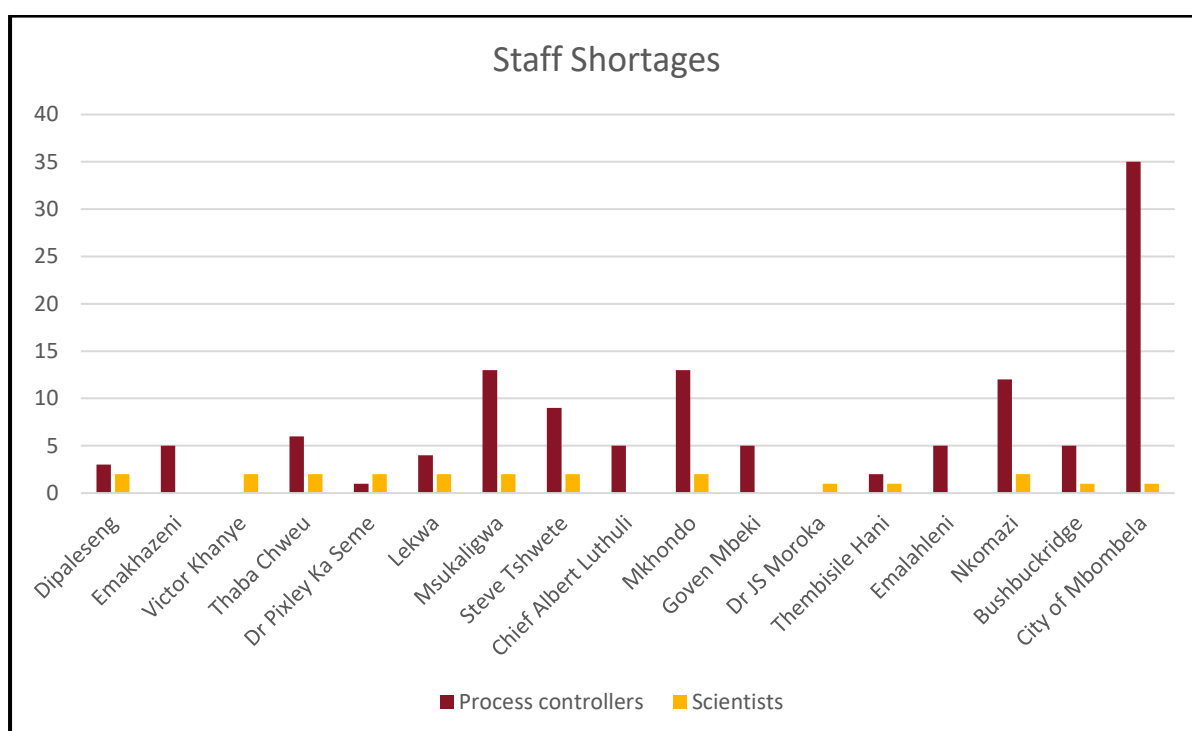


Figure 18: Shortages of process controllers and scientists, Mpumalanga WSAs (Source: 2023 *Blue Drop Watch* Report)

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. While the ratio of supervisory staff across the staff exceeds a 1:1 ratio, in the majority of WSAs the ratio of technical staff per work or system is below 1.

Municipality	Supervisor/WTW Ratio	Technical Staff /WTW Ratio
Bushbuckridge	5.4	0.9
Chief Albert Luthuli	5.8	0.3
City of Mbombela	4	0.7
Dipaleseng	1	0
Dr JS Moroka	7	5
Dr Pixley Ka Isaka Seme	5.3	1
Emakhazeni	3	1
Emalahleni	4.1	7.8
Govan Mbeki	NA	5
Lekwa	1	2
Mkhondo	1.4	0.6
Msukaligwa	1.8	0.4
Nkomazi	5.6	0.3
Steve Tshwete	5.6	1.3
Thaba Chweu	1.3	0.8
Thembisile	1.5	0.8
Victor Khanye	5	1

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

This mismatch in critical skills severely limits the ability of municipalities to deliver safe, reliable water services. Without adequate staffing in these key technical roles, infrastructure cannot operate efficiently, water quality cannot be safeguarded, and the risk of system failures increases substantially.

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 Mpumalanga 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.

Data sourced from the 2021/2022 non-financial census of municipalities shows almost 90% of WSAs in Mpumalanga already provide a yard connection for more than 80% of their customers (see **Figure 19** below). In all but two WSAs, a proportion of the population has access to a communal tap within 200m of their household, but of concern is that in all but five WSAs there are still some consumers who only have access to a communal tap more than 200m from their households, with Mkhondo, Emalahleni and Dr JS Moroka having the highest percentages in this regard. The City of Mbombela, the largest settlement in the province, will face a significant challenge in upgrading communal tap to yard connections by 2027.

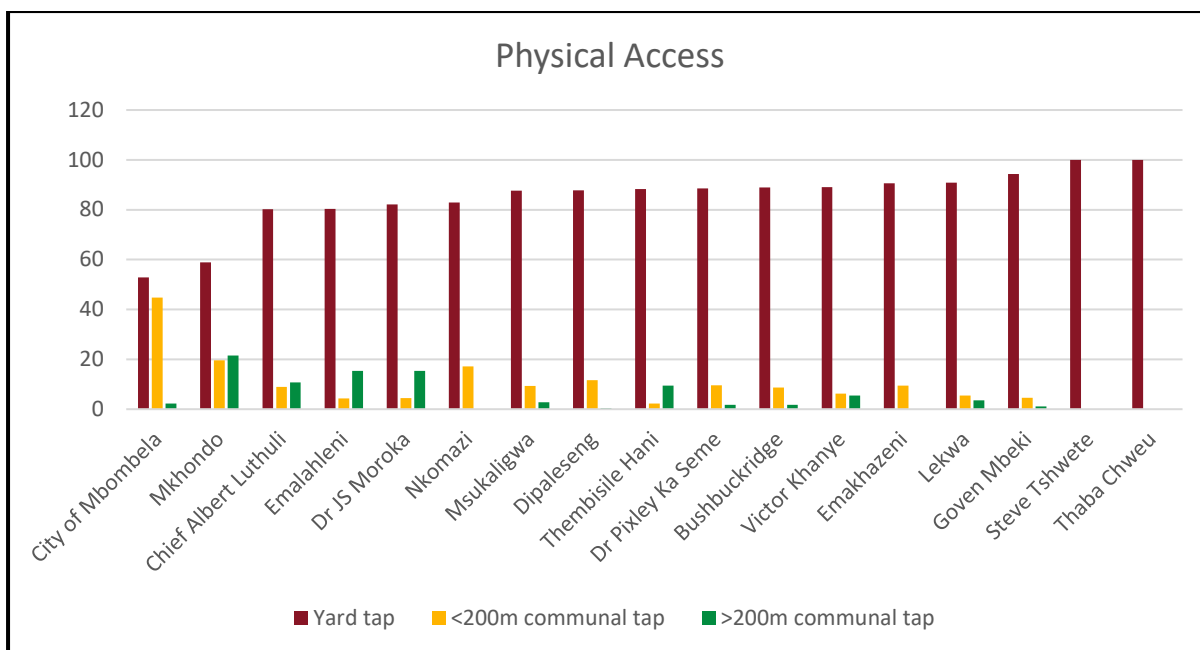


Figure 19: Physical access to a potable water access point, Mpumalanga WSAs (Source: 2021/22 non-Financial Census of Municipalities)

In the case of piped water within a dwelling, the percentage of customers that enjoy this service across the province is uneven. Interestingly, the WSAs in which piped water is within a dwelling is at 50% are all in the upper population band (see **Figure 20**).

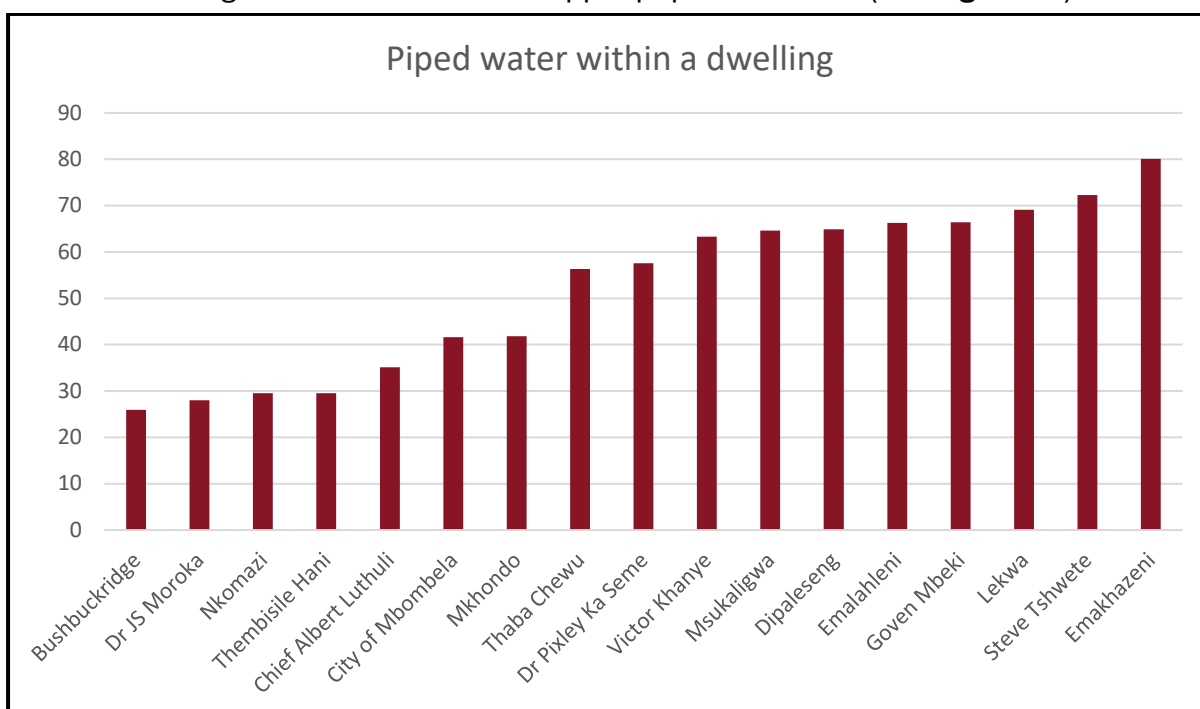


Figure 20: Piped water within a dwelling, Mpumalanga WSAs (Source: 2022 Census)

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, the province has a service point coverage ratio of 0.8, which means that service delivery points on average cover 80% of households. This means that, on average, 8 out of every 10 households have access to an improved water source (see **Figure 21** below). This average reflects the democratic government's achievement in rolling out physical access, although it also masks inequality. For example, according to South African standpipe design standards, a single standpipe should serve no more than 25 households.⁴⁹ However, in dense informal settlements, a single service point may be serving many more households.⁵⁰ For this report, the service point coverage ratio highlights WSAs where coverage is lower than the provincial average (Dr Pixley ke Seme, Steve Tshwete, Thembesile Hani, Msukaligwa).

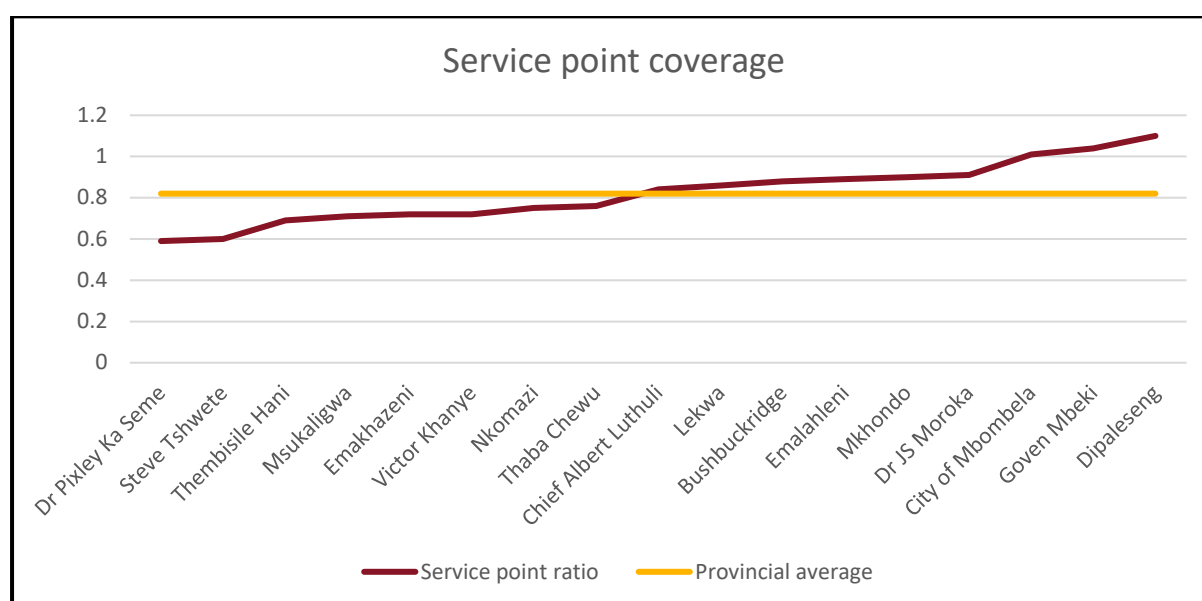


Figure 21: Service point coverage ratio, Mpumalanga WSAs (Source: 2022 Census, 2021/22 Non-financial census of municipalities)

Municipalities reported several reasons for these shortfalls, including funding constraints, land invasions, high levels of immigration, difficulties with service intermediaries, and insufficient infrastructure capacity. These challenges make it difficult to extend services to all households and highlight the need for targeted support and infrastructure investment.

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 least 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

Less than half (7) of the 17 municipalities in Mpumalanga provide the first 6 kilolitres (kl) of water free to all residents, while the remaining 10 only provide free basic water to qualifying indigent residents (see **Table 6** below).

Municipality	All	Indigent Only
Bushbuckridge	x	
City of Mbombela	x	
Dr JS Moroka	x	
Dr Pixley Ka Seme	x	
Nkomazi	x	
Steve Tshwete	x	
Thembisile Hani	x	
Chief Albert Luthuli		x
Dipaleseng		x
Emakhazeni		x
Emalahleni		x
Goven Mbeki		x
Lekwa		x

Mkhondo		x
Msukaligwa		x
Thaba Chweu		x
Victor Khanye		x

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

Universal FBW allocation is reflected in tariff structures. As **Figure 22** below shows, the cheapest tariff block for the seven afore-mentioned is “0”. In the remaining ten WSAs, however, the cheapest tariff varies quite extensively, from R5 for the first tariff block (usually 0-6kl per month) in Mkhondo to more than R20 in Govan Mbeki. The provincial mean for the cheapest tariff block was R9.43, which can be seen as a reasonable provincial standard for basic consumption.

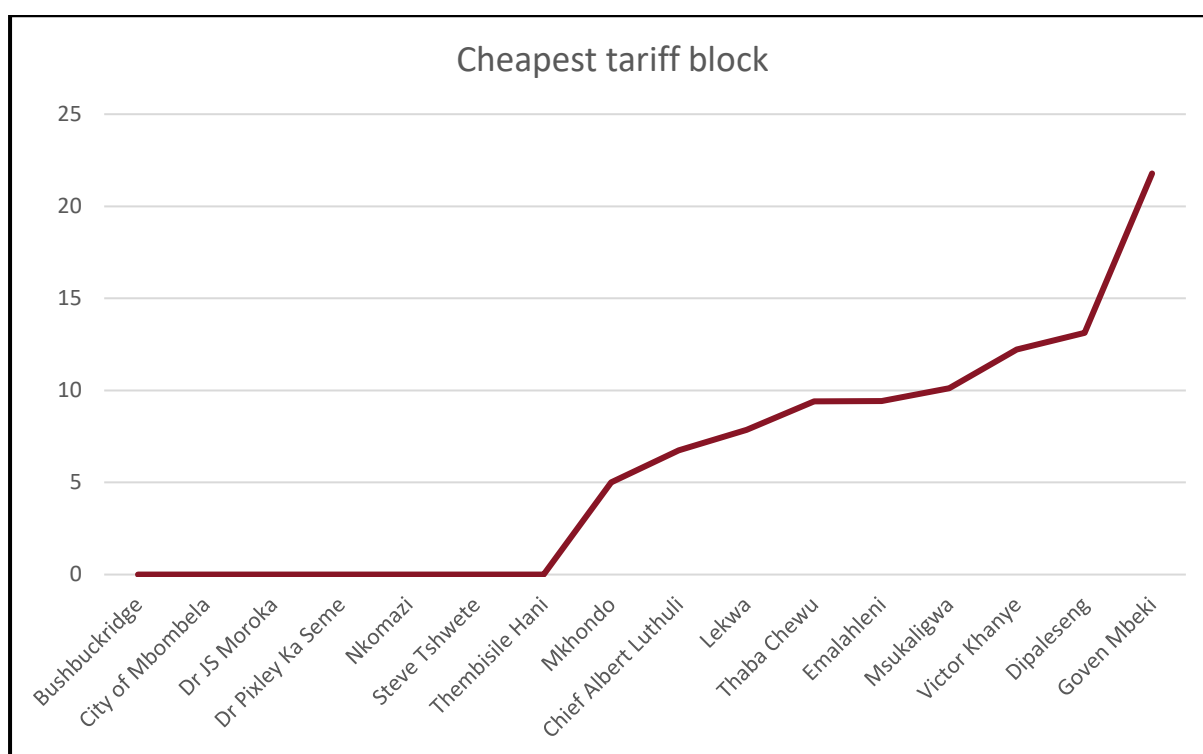


Figure 22: Cheapest tariff block, Mpumalanga WSAs (Source: 2021/2022 Municipal Tariff Schedules)

The highest tariff brackets ranged from R10.98 to R64.05, with a mean of R17.61, indicating what could be considered the typical upper tariff for the province.

The most expensive tariff blocks show that across WSAs in Mpumalanga water tariffs generally increase incrementally. On the one hand, this can be a good thing for affordability, but on the other cheap tariffs for using high volumes of water do not deter wasteful high volume use. Emalahleni and Msukaligwa are arguably the only two WSAs in Mpumalanga where steeply increasing block tariffs may disincentivise wasteful use.

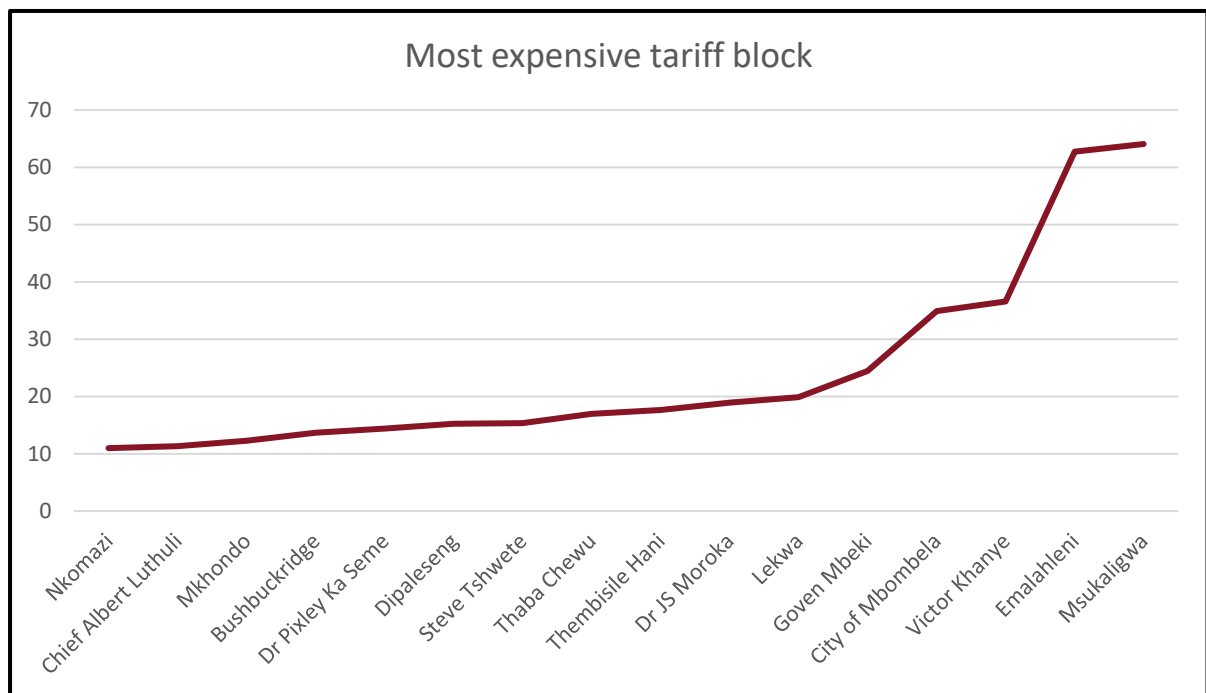


Figure 23: Most expensive tariff block, Mpumalanga WSAs (Source: 2021/2022 Municipal Tariff Schedules)

Free Basic Water

As noted above, seven WSAs in Mpumalanga provide FBW as a universal allocation while the remainder provide it only to qualifying indigent households. Even in WSAs that provide 0-6 kl per household per month for free, any further allocation is subject to meeting indigency criteria. As a further dimension of economic access to water, we 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 23** below). These two measures differ because not every household has its own service delivery point, and some service points belong to businesses or industries rather than domestic users.

From this analysis, we found that only five WSAs in Mpumalanga provide FBW or indigent support to more than 10% of their households (Victor Khanye, Dr Pixley ka Seme, Nkomazi, Steve Tshwete and Emakhazeni). This highlights the limited reach of affordability support in the province. Only two WSAs (Victor Khanye and Emakhazeni) provide free basic support that meets the average level of indigency in the country. Of 22% of households.⁵¹

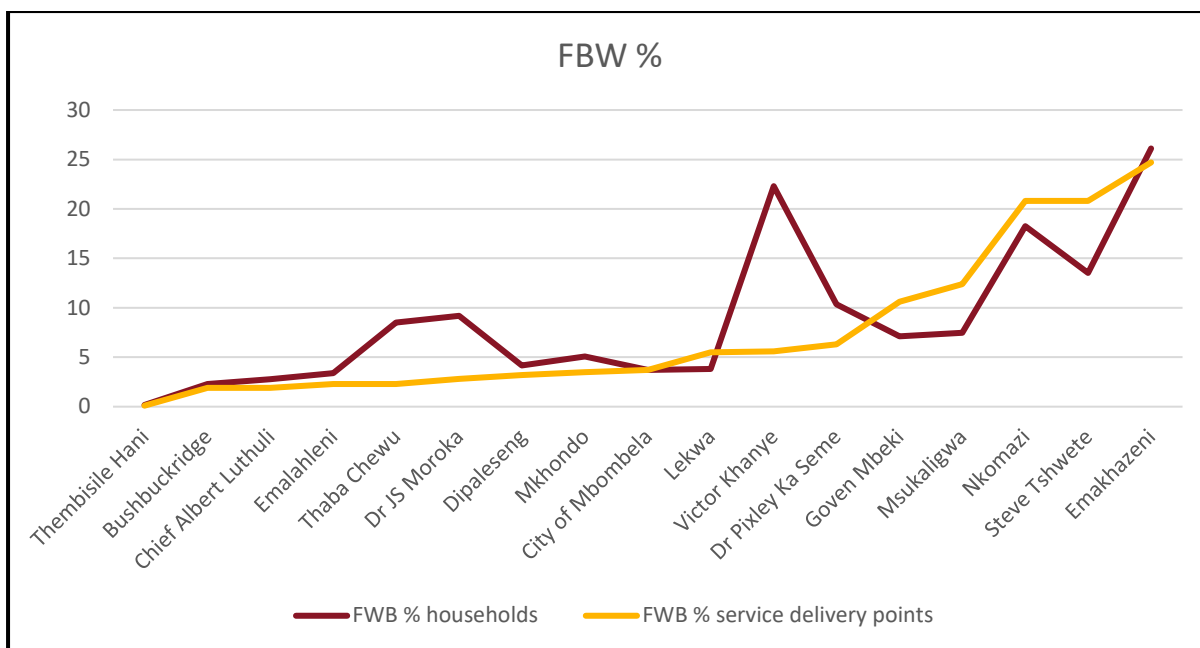


Figure 24: Percentage of FBW per number of households and service delivery points, Mpumalanga WSAs (Source: 2022 Census, 2021/2022 Non-Financial Census of Municipalities)

Overall, economic accessibility remains a major challenge. Mpumalanga’s WSAs operate within a weak revenue base, which means that households able to pay for water often face higher tariffs to compensate for budget shortfalls. Combined with a financially vulnerable population and the constitutional obligation in section 153 to be developmentally oriented, this places pressure on WSAs to design more affordable and equitable water services for their residents.

Adequacy

As part of the human right to water, the element of adequacy conveys the idea that water supply for personal and domestic use must be *sufficient* and *continuous*.

Sufficiency can be measured in terms of the quantity of water that must be made available for personal and domestic uses. WHO Guidelines recommend 50 to 100 litres of water per person per day, but the South African standard (as confirmed by the Constitutional Court) is 25 litres per person per day.

Continuity can be measured in terms of the absence of water interruptions. South African national norms and standards provide that water must be made available for at least 358 days per year and at any one time, water should not be interrupted for longer than 48 hours. Where water supply is interrupted for longer than 48 hours, a WSA 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.

At the outset, the research team for the WRT hoped to access information on the number of planned and unplanned interruptions across all WSAs. To source this information, the team consulted the Municipal Strategic Self-Assessment (MuSSA), Water Services Development Plans (WSDPs), Integrated Development Plans (IDPs), annual reports, the 2023 Blue Drop Report, and interviews with municipal representatives. Notwithstanding this wide search, collecting reliable details was challenging, and information was often incomplete (see **Table 7** below).

Table 7 presents information on interruptions in water supply across Mpumalanga's WSAs. In Dr JS Moroka and Govan Mbeki Local Municipalities, electricity interruptions, due to loadshedding and load reduction were identified as major causes of water supply disruptions. In contrast, Thaba Chweu Local Municipality reported that vandalism, illegal connections, and tampering were the primary reasons for service interruptions.

Municipality	Information on interruptions
Bushbuckridge	No information
Chief Albert Luthuli	No information
City of Mbombela	No information
Dipaleseng	No information
Dr JS Moroka	Interruptions due to load shedding: 361 incidents Interruption due to electrical and mechanical breakdown: 27 incidents Interruption due to pipe bursts: 18 incidents
Dr Pixley Ka Seme	No information
Emakhazeni	No information

Emalahleni	Unplanned interruptions (2023): 675 Average duration: 24-48 hours
Goven Mbeki	During January 2019, Bethal experienced an extended water outage after Rand Water limited its water supply due to non-payment. In June 2023, the WSA still owed Rand Water significant amounts.
Lekwa	In 2022/2023 community consultations participants in every ward raised issue of interrupted water supply
Mkhondo	No information
Msukaligwa	Unplanned interruptions (2023/24): 131
Nkomazi	75% of consumers experienced interruptions <48 hours at any given time, cumulative interruption time during the year <15 days
Steve Tshwete	No information
Thaba Chweu	Multi-day outages due to suspected tampering and illegal connections
Thembisile Hani	75% of consumers served experienced interruptions <48 hours, cumulative annual interruption of <15 days.
Victor Khanye	>50% of all consumers experience interruptions of less than 48 hours at any given time and a cumulative interruption time during the year of less than 15 days

Table 7: Summary of water outages, Mpumalanga

The lack of reliable information on water services interruptions is in itself a human rights issue as one of the recognised elements of the human right to water is information accessibility. According to General Comment 15, accessibility includes the right to seek, receive and impart information concerning water issues. This should include reliable local and national statistics on the number of planned and unplanned interruptions.

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 241.⁵² They are also required to develop and annually review a water safety plan,⁵³ and develop and implement a monitoring programme for all potable water distributed through their water supply systems.⁵⁴ Samples should only be handled by laboratories that use ISO-accredited methodologies and results must be reported to the DWS.⁵⁵

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 Mpumalanga.

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 241.⁵⁶ For a population exceeding 100,000 the standard is even stricter – any score below 98% is unacceptable. With this in mind, it is a matter of grave concern that the provincial average for microbiological compliance across Mpumalanga's WSAs is 71% (see **Figure 25** below). Only three WSAs (Victor Khanye, Govan Mbeki, and Bushbuckridge) have acceptable microbiological water quality according to this standard. In five WSAs (Dr Pixley ka Seme, Chief Albert Luthuli, the City of Mbombela, Thaba Chweu and Dipaleseng) the situation is especially serious. Dipaleseng and Thabo Chweu received a score of 0% because they did not have a monitoring programme in place.

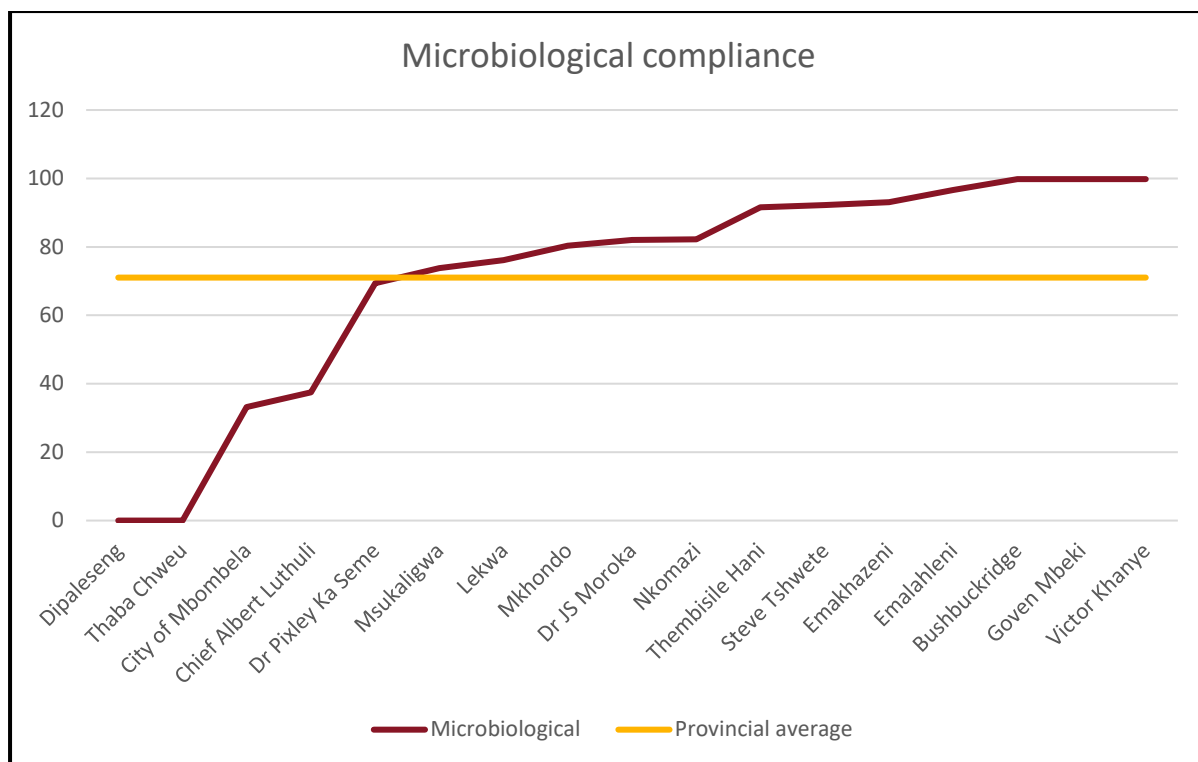


Figure 25: Microbiological compliance, Mpumalanga WSAs (Source: 2023 Blue Drop Report)

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.

Again, the situation is grave with the provincial averages for acute and chemical compliance well below these standards. Chemical (acute) quality is unacceptable in seven WSAs, including the City of Mbombela (see **Figure 26** below). For chemical (chronic) quality, this figure rises to eight (see **Figure 27** below). Once again, the WSAs who scored 0% for chemical acute and chronic compliance did not have a monitoring programme in place at the time the audit was conducted.

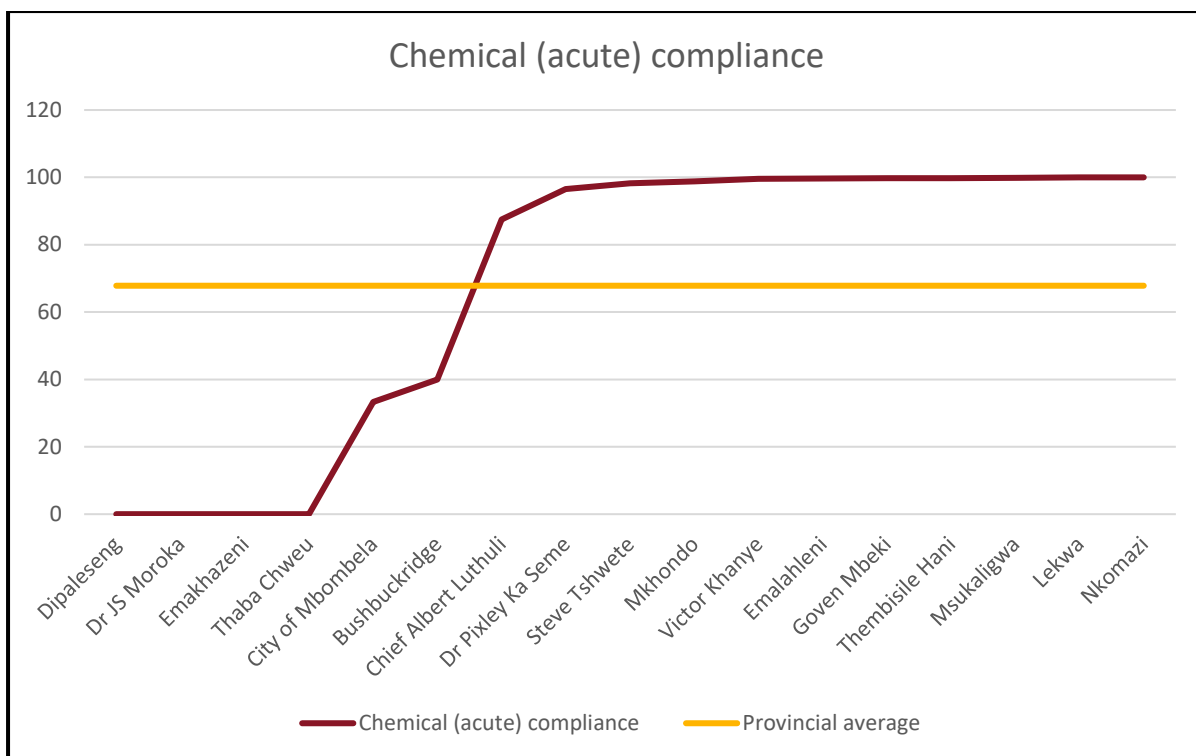


Figure 26: Microbiological compliance, Mpumalanga WSAs (Source: 2023 Blue Drop Report).

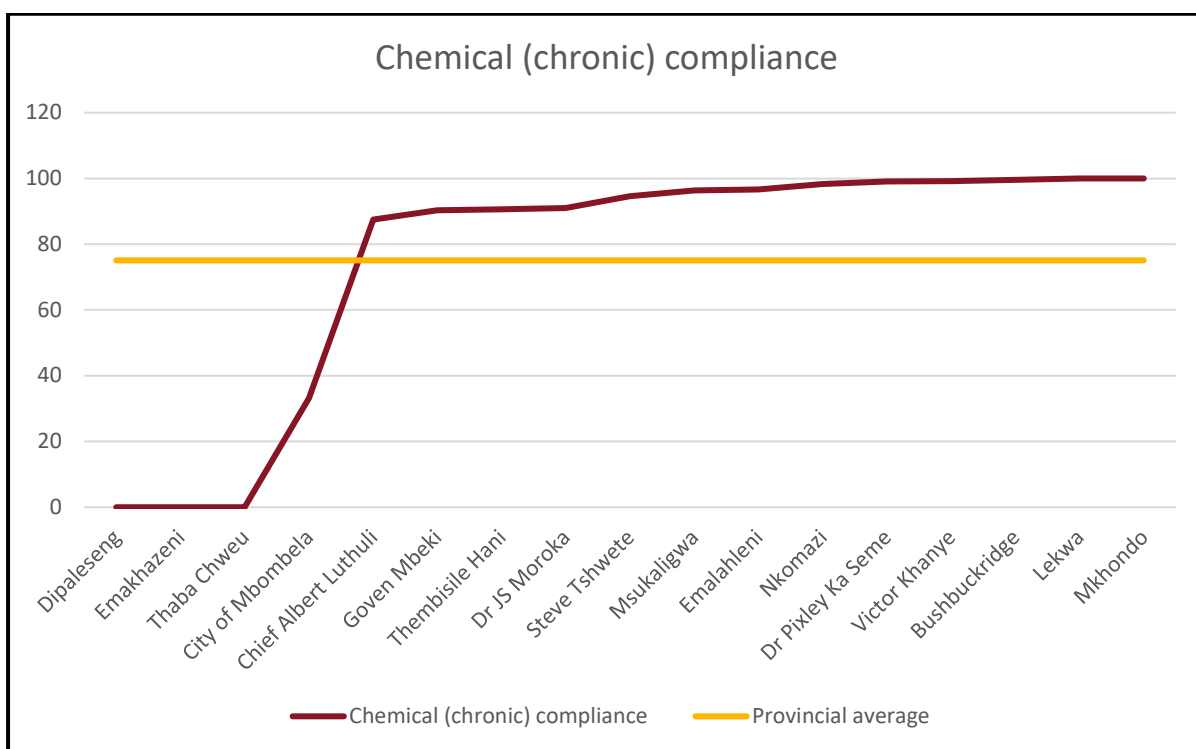


Figure 27: Microbiological compliance, Mpumalanga WSAs (Source: 2023 Blue Drop Report)

These poor results are amongst the clearest indicators of human rights non-compliance, triggering a need for a whole-of-government and whole-of-society remedial response.

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.⁵⁷

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.⁵⁸ The *Blue Drop* report defines various “performance categories” based on thresholds of use (see **Table 8** 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 8: 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. A WUE score will be inflated if total population is underestimated. In Mpumalanga, this is illustrated by the case of Thembisile Hani, for example which has an average WUE score of 214 l/p/d based on an estimated population of 187,000 and a SIV of 40,026.⁵⁹ But if one uses the 2022 Census figures for this WSA of 431,248 then the WUE score falls to 92 l/p/d which would be regarded as excellent.

The WUE scores of WSAs in Mpumalanga show that four WSAs fall within the excellent performance category (Mkhondo, Dr JS Moroka, Bushbuckridge and Dipaleseng), eight fall within the good to average range, and five have scores that are regarded as poor or extremely high (Govan Mbeki, Victor Khanye, Emalahleni, Thaba Chweu and Lekwa) (see **Figure 28** below). The provincial average is 222 l/p/d with Emalahleni having the highest usage of 434 l/p/d.

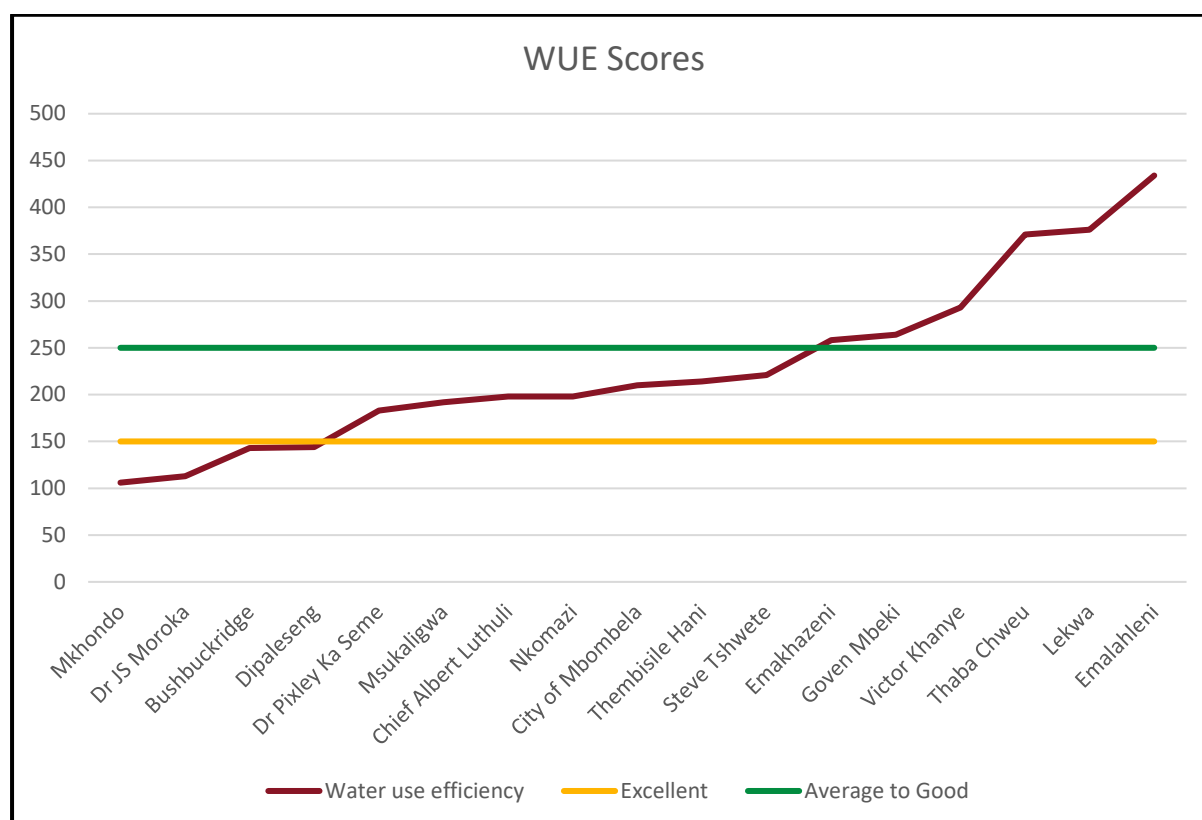


Figure 28: WUE Scores, Mpumalanga WSAs (Source: 2023 Blue Drop Report)

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.⁶⁰ This marks an increase from an average of 36.8% in 2012.⁶¹ The global average for non-revenue water is estimated at 35%⁶² but “well-performing” water utilities should have an average closer to 25%. The National Treasury Norm is between 15-30%.

Water services authorities must disclose water losses (as a percentage of water produced and rand value) as part of the annual Municipal Finance Management Act audit. The Auditor-General’s 2023/24 audit shows that non-revenue water is a serious problem in Mpumalanga (see **Figure 29** below). Only seven WSAs fall below the upper National Treasury norm of 30%. Five WSAs (Victor Khanye, Emakhazeni, Msukaligwa,

Bushbuckridge and Dipaleseng) disclosed non-revenue water in excess of 50%. Thaba Chweu failed to disclose its water losses in the 2023/24 FY.

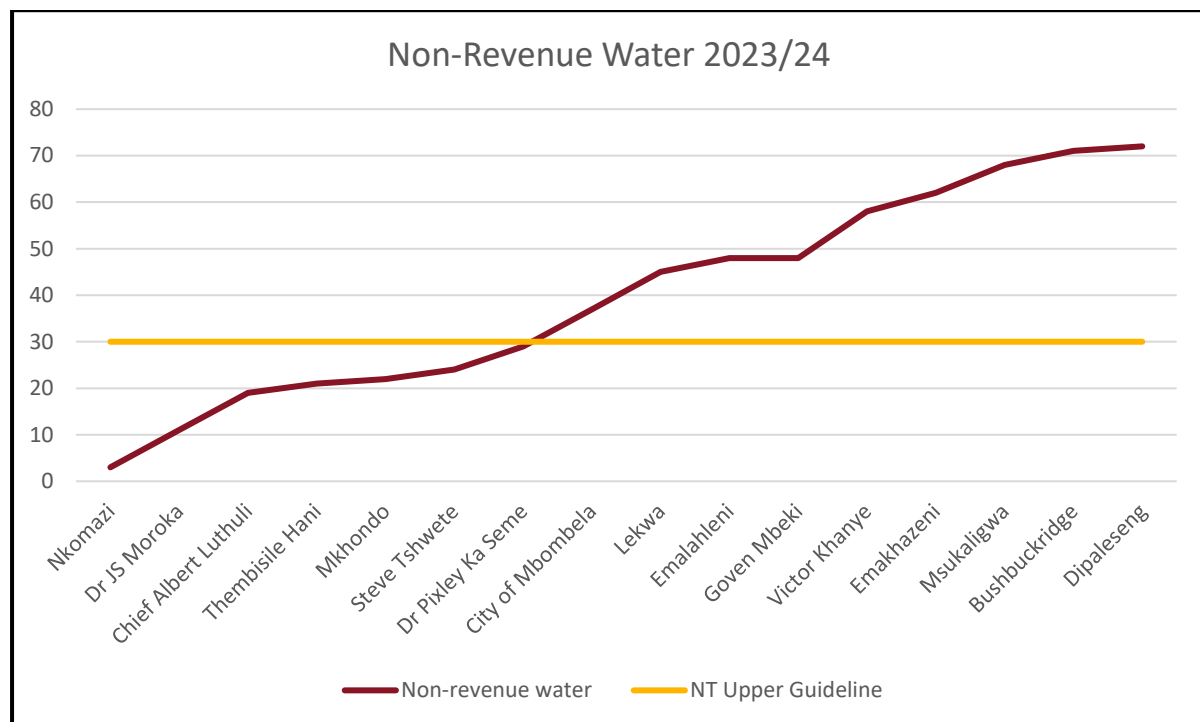


Figure 29: Non-revenue Water, Mpumalanga WSAs (Source: Auditor-General 2023/24 MFMA Audit)

Systemic Drivers Undermining Progressive Realisation

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 Mpumalanga 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 Mpumalanga's WSAs, it can be seen that with the exception of intermediaries, these issues are widespread and entrenched (see **Table 9** below).

Municipality	Leadership	Planning	Funding	Infrastructure	Electricity	Ecological	Consumer	Intermediaries	Third Party
Bushbuckridge	x	x	x	x		x	x		x
Chief Albert Luthuli	x	x	x	x	x		x		x
City of Mbombela	x	x	x	x		x	x		x
Dipaleseng	x	x	x	x	x	x	x		x
Dr JS Moroka	x	x	x	x	x	x	x		x
Dr Pixley Ka Seme	x	x	x	x	x	x	x		x
Emakhazeni	x	x	x	x		x	x	x	x
Emalahleni	x	x	x	x	x	x	x		x
Goven Mbeki	x	x	x	x	x				x
Lekwa	x	x	x	x	x		x		x
Mkhondo	x	x	x	x	x	x	x		x
Msukaligwa	x	x	x	x	x	x	x	x	x
Nkomazi	x	x	x	x	x	x	x		x
Steve Tshwete	x	x	x	x					x
Thaba Chweu	x	x	x	x	x		x		x
Thembisile Hani	x	x	x	x		x	x		x
Victor Khanye	x	x	x	x		x	x		x

Table 9: Systemic Drivers Undermining Progressive Realisation of the Right to Water (Source: Municipal IDPs)

Leadership and governance problems (see further below) remain one of the most serious obstacles. Many municipalities experience frequent leadership changes, weak internal controls, and political interference that disrupt continuity in water projects.

Planning weaknesses further undermine performance. Most municipalities in the province rely on outdated Water Services Development Plans (WSDPs) and inconsistent or unreliable statistics, making it difficult to plan realistically for population growth, infrastructure needs, or maintenance priorities. Without accurate data, capital projects are often misaligned with actual demand, leading to recurring backlogs and inefficient spending.

Financial and funding challenges are also widespread. Many municipalities are in financial distress, unable to collect enough revenue to cover operational and capital costs. Structural limitations of the current funding model further constrain performance. This leaves little room for preventative maintenance or infrastructure renewal, reinforcing the cycle of deterioration.

Infrastructure and electricity issues continue to disrupt water treatment and distribution. The frequent power outages caused by loadshedding and vandalism lead to pump failures and treatment plant interruptions across the province. In rural areas, ageing and poorly maintained infrastructure worsens the situation, resulting in recurring breakdowns and high repair costs.

Consumer-related problems add further strain. Illegal connections, tampering, and non-payment of water accounts reduce the revenue municipalities rely on to maintain their systems. In Lekwa Local Municipality, illegal connections are particularly widespread. Meanwhile, the City of Mbombela reports noted the effect of rapid in-migration has on the number of households without access to water, placing additional pressure on already stretched infrastructure. In Emakhazeni Local Municipality, water service backlogs persist mainly in remote rural and farming areas, where water is supplied through water services intermediaries.

Ecological drivers are becoming increasingly severe. Drought, invasive alien plants, and pollution are reducing the availability and quality of raw water sources. In Chief Albert Luthuli Local Municipality, some sources dry up entirely during winter, while alien and invasive species compete with local ecosystems for scarce water. Similarly, as highlighted in the Nkomazi Local Municipality IDP, the impacts of climate change are worsening water scarcity and increasing treatment costs, posing long-term risks to supply stability.

Third-party interference, including corruption and organised networks, remains a deeply entrenched concern. The Parliamentary Oversight Report of the Select Committee on Cooperative Governance and Traditional Affairs, Water, Sanitation and Human Settlements highlighted serious allegations of corruption in several Mpumalanga municipalities. Such interference erodes public trust and diverts resources away from essential service delivery.

Finally, the large geographic scale of some municipalities presents a practical challenge. Vast areas require extensive bulk and distribution infrastructure, which in turn demand significant financial and human resources to operate and maintain. This scale magnifies the effects of every other constraint—from staff shortages to energy costs—making sustained service delivery difficult.

Given their amplifying effect on water services delivery challenges, leadership instability, corruption and political interference and issues of scale are given a special focus in the following sections.

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 several WSAs across Mpumalanga. 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.

In Dipaleseng Local Municipality, governance challenges are closely tied to corruption allegations against senior leadership. The mayor, who remains in office, was accused in 2022 of accepting personal benefits in exchange for municipal tenders, following earlier reports of maladministration.⁶³ Recall, from the microbiological and chemical compliance scores above, that Dipaleseng scored 0% in the last *Blue Drop* reporting process, because they did not have a monitoring programme in place.

Similarly, Dr JS Moroka Local Municipality has faced recurring instability and corruption concerns, including allegations linking a former municipal manager to the VBS Mutual Bank scandal, which contributed to financial mismanagement and leadership turnover.⁶⁴ Like Dipaleseng Local Municipality, Dr JS Moroka scored 0% for microbiological compliance in the last *Blue Drop* reporting process.

Dr Pixley Ka Seme Local Municipality has also suffered from a long record of corrupt procurement practices, and its reputation for maladministration and weak controls was noted as far back as 2019.⁶⁵ Notably the municipality has the lowest service point delivery coverage ratio in the province, with only 60% of households serviced by a delivery point (see Figure 21 above). And with a high population growth rate, in terms of water treatment capacity, its infrastructure is the most stressed in the province (see Figure 15 above).

Political volatility has been particularly severe in Emalahleni, Mkhondo, and Steve Tshwete Local Municipalities, where leadership changes have been accompanied by violent incidents. In Emalahleni, the mayor who took office in early 2022 was dismissed within a year following widespread and violent protest action that paralysed municipal operations.⁶⁶ In Mkhondo Local Municipality the instability has been extreme. The newly elected mayor in late 2021 faced threats of removal within weeks of taking office after suspending senior executives, and in January 2023, three councillors were murdered in what are believed to be politically motivated killings.⁶⁷ In Steve Tshwete Local Municipality, tensions between council members and municipal management turned into open hostility, including intimidation, alleged arson, and death threats directed at

both the mayor and municipal manager. The resulting climate of fear has disrupted administrative work and eroded public confidence.⁶⁸ In Victor Khanye Local Municipality, a history of intimidation and vigilantism—linked to a group known locally as the “yellow overall” movement—created a climate of fear within council. The former speaker, reportedly involved with the group, was later prosecuted and, in 2023, seriously injured in a drive-by shooting, further highlighting the violent undercurrents that can accompany local political struggles.⁶⁹

In terms of their water services performance, both Emahleni and Mkhondo are amongst the third of WSAs in Mpumalanga whose water treatment works are operating above capacity (see Figure 15). They are also among the few municipalities with relatively high levels of access that fail to meet physical access standards for basic supply (>200 m) (see Figure 19). Nevertheless, the quality of water provided in these WSAs is still good.

Govan Mbeki Local Municipality has also been marked by political infighting and leadership turnover. In 2020, the mayor resigned shortly before a forensic report on maladministration was released, and in 2022, legal battles over council leadership positions further destabilised governance.⁷⁰ Lekwa Local Municipality presents a similar pattern of volatility: the municipality has endured extended periods without a sitting mayor or speaker, criminal charges against senior leaders, and even an assassination attempt on the mayor in 2023. Rumours and shifting alliances have compounded instability, with the leadership changing hands multiple times within the same year.⁷¹

Power struggles within governing parties have also fuelled instability elsewhere. In Msukaligwa Local Municipality, the mayor, speaker, and chief whip were suspended after publicly criticising corruption, triggering a protracted legal and political battle that disrupted municipal functioning.⁷² In Nkomazi Local Municipality, both the mayor and several councillors were dismissed in 2022 for defying party directives, leaving a leadership vacuum that delayed key decisions and weakened accountability.⁷³ Other municipalities have also faced internal divisions or allegations of misconduct. In Thaba Chweu Local Municipality, the mayor narrowly survived a motion of no confidence following disputes over the appointment of the municipal manager.⁷⁴

In contrast, municipalities such as Bushbuckridge, Chief Albert Luthuli, Emakhazeni, Thembisile Hani, and the City of Mbombela have not shown major incidents of political violence or severe corruption in recent years. While minor allegations and administrative challenges remain, leadership in these municipalities has been comparatively stable, allowing for a greater degree of institutional continuity and policy implementation.

While this report makes no claims about statistically-significant correlations between corruption, maladministration, political instability, political infighting, and political violence, these features of the political landscape no doubt make the technical services

delivery of water even more difficult. Overall, leadership instability and corruption represent a core structural constraint across the province. Where political appointments and internal party disputes dominate decision-making, municipal priorities are diverted away from service delivery. In the most affected areas, political violence and intimidation have created a culture of fear driving away skilled professionals and eroding public trust. Until governance stabilises, progress toward the realisation of the right to water will remain slow and uneven across Mpumalanga.

Geographical scale

When comparing the geographical extent of bulk and storage infrastructure with municipal population figures, a clear relationship emerged: generally, municipalities with larger populations have more extensive bulk pipelines and greater reservoir storage capacity. Only Emalahleni, Chief Albert Luthuli, and Dr JS Moroka deviated from this trend, with Chief Albert Luthuli in particular, showing an unusually large bulk pipeline network relative to its population size (see **Figure 29**).

No consistent relationship, however, was found between distribution pipeline length and population size. This suggests that distribution networks are influenced more by spatial layout, settlement patterns, and historical development than by population alone.

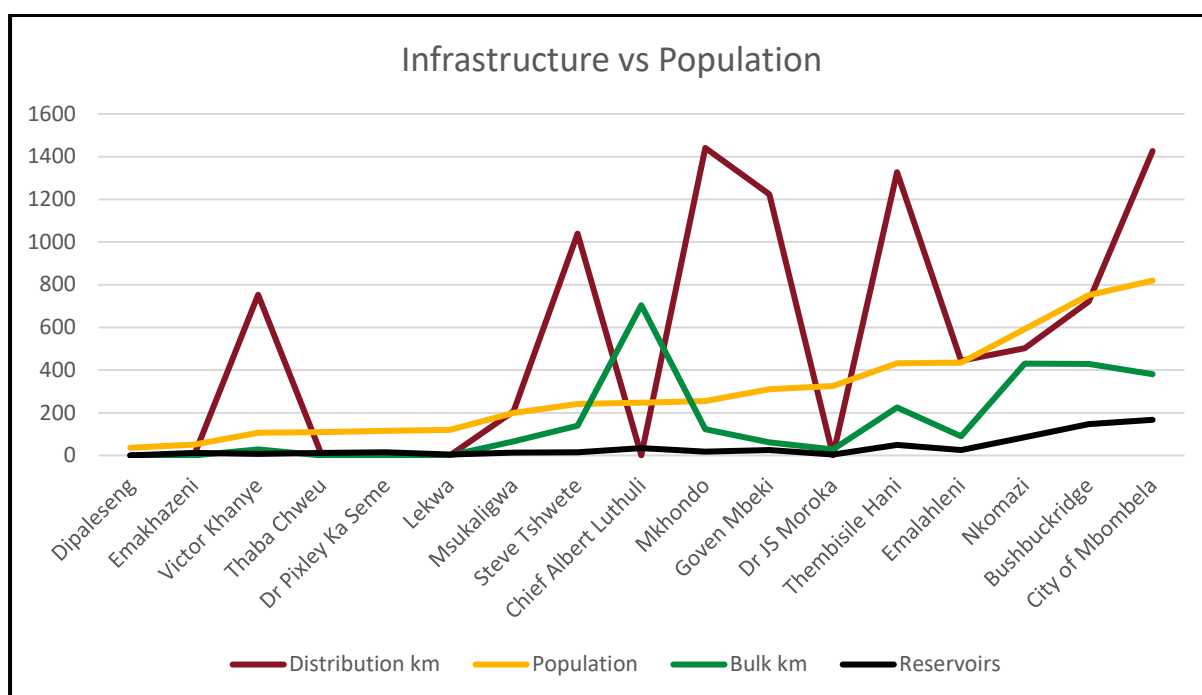


Figure 30: Relationship between infrastructure extent and population size (Source: 2023 Blue Drop Report)

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.

Across Mpumalanga, water and sanitation failures triggered strong oversight and corrective action by different institutions (see **Table 10**).

Oversight Institution	Scope of Intervention
Department of Water and Sanitation	All WSAs through the <i>Blue Drop</i> , <i>Green Drop</i> and <i>No Drop</i> reports; 34 Water Supply Systems under regulatory surveillance following the 2023 <i>Blue Drop</i> audit.
SAHRC	17 Municipalities
Parliament	5 Municipalities (
Provincial COGTA	6 Municipalities (Dr JS Moroka, Lekwa, Govan Mbeki, Dr Pixley Ka Seme, Dipaleseng)
High Court	1 Judgment (Msukaligwa)

Table 10: Summary of Water and Sanitation Oversight, Mpumalanga (Source: 2023 *Blue Drop* Report, SAFLII, South African Human Rights Commission, Mpumalanga Provincial Legislature)

Regulatory Oversight 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 Water Services Authority 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.⁷⁵ 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 below 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 2023 *Blue Drop* audit, 34 Water Supply Systems in Mpumalanga achieved scores below 31% and were hence placed under regulatory surveillance: Albert Luthuli Local Municipality (*BD* score 19.1%); Dipaleseng Local Municipality (*BD* score 7%); Emakhazeni Local Municipality (*BD* score 31.2%); Mbombela Local Municipality (overall *BD* score of 69.3%, but with several WSS falling below the 31% threshold); Mkhondo Local Municipality (overall *BD* score of 54.5%, but with several WSS falling below the 31% threshold); Msukaligwa Local Municipality (*BD* score of 21.6%); Thaba Chweu Local Municipality (*BD* score of 8.2%); and Thembisile Hani Local Municipality (overall *BD* score of 75.3%, but with one WSS falling below the 31% threshold).

South African Human Rights Commission Oversight

The SAHRC also intervened in the province, especially in relation to water and sanitation in schools. It issued an instruction to the provincial education department to supply adequate water and sanitation, upgrade unsafe facilities such as pit latrines, secure unused structures, and provide temporary alternatives while longer-term solutions are put in place. The Commission required a monthly progress report to monitor delivery. It also ran investigations into service delivery failures in municipalities, covering water

shortages, sewage spills, electricity outages, and waste management problems. Complaints included allegations of hospitals without reliable water supply, although outcomes of these probes are not publicly available.

Parliamentary and Legislative Oversight

Parliament also acted through a Select Committee inquiry. The work of the Select Committee is triggered by forensic investigations under section 106 of the Municipal Systems Act. These investigations focused on cases where municipalities were failing to carry out their legal duties or where corruption and maladministration were present, including alleged fraud in water service procurement. The Committee recommended that provincial COGTA, the National Prosecuting Authority, the Hawks, and the Special Investigating Unit fast-track investigations and that prosecutions were needed.

Provincial COGTA undertook several technical and capacity interventions to improve water service delivery. These included repairing treatment plants, supporting municipal project managers, helping with planning, budgeting and asset management, and mobilising private sector investment through the District Development Model. Key bulk water projects were prioritised, including schemes in Emalahleni, DR JS Moroka, Thembisile Hani, Bushbuckridge, and Mbombela. Work focused on stabilising supply, improving infrastructure maintenance, responding to ageing systems, and accelerating grant spending to deliver services on the ground.

Public Protector Oversight

Members of the public also frequently turn to the Public Protector to intervene in their engagement with local officials. Over the past decade, in Mpumalanga the Public Protector has responded to one complaint relating to water services. The complaint alleged improper conduct and maladministration on the part of Dr JS Moroka Local Municipality and failure to provide adequate and clean water to the communities of Ward 1 to Ward 31 of the Municipality. The Public Protector issued an advisory report in 2023/24.⁷⁶

Auditor-General Oversight

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. For example, in the 2015 – 2016 financial year, the Auditor-General noted that Thaba Chweu allocated R16 million received for water infrastructure to roads projects.⁷⁷ 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 Water Services Authorities. The status of material irregularities as of 1 July 2026, in WSAs in Mpumalanga is set out in **Table 11** below.

Auditor-General Action to resolve material irregularities (MI)	WSAs in Mpumalanga flagged for further remedial action
Recommendations in audit report as accounting officer to little or no action to address MI	Emakhazeni LM
Remedial action taken as recommendations were not implemented	Emalahleni LM
Further action taken as remedial action was not implemented	None
Recommendations in audit report and referral to public bodies	Bushbuckridge LM
Referral to public bodies for further investigation	Dipaleseng LM (5) Emalahleni (4) Lekwa LM (2) Thaba Chweu LM
Referral and remedial action	None
Notice of certificate-of-debt process	None

Table 11: Summary of remedial action taken in relation to material irregularities in WSAs in Mpumalanga (Source: Auditor-General, South Africa)⁷⁸

Judicial Oversight

One major intervention was the 2023 High Court judgment against Msukaligwa Local Municipality. After many years of warnings, the court confirmed that the Ermelo Wastewater Treatment Works was operating unlawfully, was poorly maintained, and was discharging raw sewage into local water resources. The court ordered the municipality to stop unlawful water use, apply for proper authorisation, fix operations immediately, and appoint specialists to design and implement a full rehabilitation plan within strict deadlines. It also required reporting to DWS, payment of legal costs, and warned that criminal charges would follow if an action plan with clear timelines and funding was not submitted. This sent a strong message that non-compliance with water legislation will no longer be tolerated.

Overall Assessment of Oversight

Together, these actions show that failures in municipal water services have triggered stronger oversight, enforcement, and support. Municipalities were expected to repair infrastructure, stop pollution, comply with the law, improve planning, and report back

regularly. Where they did not act, oversight bodies escalated matters through court orders, investigations, and potential criminal action. This reflects both the seriousness of service delivery breakdowns in the province and the growing need for firm and coordinated intervention. A concern, however, is that the actions of oversight institutions are not coordinated or tracked.

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 Mpumalanga. 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 Mpumalanga by selecting **one representative indicator** from each of the main outcomes-based or procedural/structural (enabling) indicator sets. As outlined in **Table 12** 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. ⁷⁹ The red flag indicator calls attention to WSAs where the 200m standard exceeds the average.
	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.
	Quality	Microbiological compliance score below 98%	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 and score below 98%. The red flag indicator uses the stricter standard, calling attention to WSAs where microbiological compliance (as per the 2023 <i>Blue Drop</i> report) was below 98%.
		Chemical (acute) compliance score below 97%	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 <i>Blue Drop</i> report) was below 97%.
	Adequacy	None	Insufficient baseline data to be 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	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 exceeds 30%	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%.

<i>Enablers</i>	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 focus 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% was adopted as the red flag indicator.
	Infrastructure Resources	Water Treatment Work (WTW) Capacity >90%	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.
		Percentage maintenance spends <8% of revenue collected	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 spends 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 12: Representative indicators (red flags) for monitoring progressive realisation of the right to water

Progressive Realisation Snapshot: Red Flags – Outcomes

Table 13 below provides a snapshot baseline assessment of progressive realisation of the right to sufficient water in Mpumalanga 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 Mpumalanga are **water quality, economic access, and efficiency**.

WSA	>200m Physical Access >7%	FBW <22% of population	Microbio- logical Compliance <98%	Chemical (Acute) Compliance <97%	WUE Score >250 l/p/d	NRW >30%
Bushbuckridge	No	No	No	Yes	No	No
Chief Albert Luthuli	Yes	Yes	Yes	Yes	No	Yes
City of Mbombela	No	No	Yes	Yes	No	No
Dipaleseng	No	Yes	Yes	Yes	No	Yes
Dr JS Moroka	Yes	No	Yes	Yes	No	No
Dr Pixley Ka Seme	No	No	Yes	Yes	No	Yes
Emakhazeni	No	No	Yes	Yes	Yes	Yes
Emalahleni	Yes	Yes	Yes	No	Yes	No
Goven Mbeki	No	Yes	No	No	Yes	Yes
Lekwa	No	Yes	Yes	No	Yes	No info
Mkhondo	Yes	Yes	Yes	No	No	No
Msukaligwa	No	Yes	Yes	No	No	Yes
Nkomazi	No	No	Yes	No	No	No
Steve Tshwete	No	No	Yes	No	No	No
Thaba Chweu	No	Yes	Yes	Yes	Yes	No
Thembisile Hani	Yes	No	Yes	No	No	No
Victor Khanye	No	Yes	No	No	Yes	Yes

Table 13: Red flag indicators (outcomes), Mpumalanga

That almost all WSAs in the province failed to meet the standard of 98% compliance with microbiological standards is a matter of grave concern. Half of Mpumalanga's WSAs also failed to comply with the standard for chemical (acute) compliance.

In terms of economic access, while seven WSAs provide the FBW allocation of 6kl as a universal allocation, in the remaining authorities the percentage of the population with access to FBW on the basis of indigency falls far below the national indigency average. In almost all these WSAs only a very small percentage of the population accesses this service, with many WSAs also exhibiting a decreasing trend.

In the case of efficiency, in seven of the WSAs in the province, non-revenue water exceeds 30% of all water produced. These WSAs serve populations in the lower and middle band

in terms of household and population size. WUE scores exceed 250l/p/d in six WSAs. In two WSAs (Emakhazeni LM and Govan Mbeki LM) water use efficiency and non-revenue water are a problem.

While progress has certainly been made in terms of physical access, in five WSAs more than 7% of the population still lacks access to an improved water source within 200m from their households.

The WSA with the most red flags across outcome indicators are Chief Albert Luthuli (home to about 250,000 people), followed by Dipaleseng, Emakhazeni, Emalahleni, and Thaba Chweu.

Progressive Realisation Snapshot: Red Flags – Enablers

Table 14 provides a snapshot baseline assessment of progressive realisation of the right to sufficient water in Mpumalanga from the perspectives of enablers, these being the policy, legislative, financial, infrastructural, and human resources reasonable measures necessary to realise the right.

The baseline assessment shows red flags across the board with the most numerous being political disruption, the lack of or an outdated WSDP, revenue collection, 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
Bushbuckridge	No	No	Yes	No	No	Yes
Chief Albert Luthuli	No	Yes	Yes	No info	Yes	Yes
City of Mbombela	No	Yes	Yes	No	Yes	Yes
Dipaleseng	Yes	Yes	Yes	No info	Yes	Yes
Dr JS Moroka	Yes	No	Yes	No	No	No
Dr Pixley Ka Seme	Yes	Yes	Yes	Yes	Yes	No
Emakhazeni	No	Yes	Yes	Yes	Yes	No
Emalahleni	Yes	No	No	No	No	No
Govan Mbeki	Yes	No	Yes	NA	Yes	No
Lekwa	Yes	Yes	No	No info	Yes	No
Mkhondo	Yes	Yes	Yes	Yes	No	Yes
Msukaligwa	Yes	No	Yes	No info	No	Yes
Nkomazi	Yes	Yes	No	No	Yes	Yes
Steve Tshwete	Yes	Yes	No	No	Yes	No
Thaba Chweu	Yes	No	No	Yes	No	Yes
Thembisile Hani	No	Yes	No	No	Yes	Yes
Victor Khanye	Yes	Yes	Yes	No info	Yes	No

Table 14: Red flag indicators (enablers), Mpumalanga

From the perspective of enabling indicators, Dipaleseng, Dr Pixley ka Seme, and Mkhondo have the most red flags, followed by Chief Albert Luthuli, City of Mbombela, Emakhazeni, Nkomazi, and Victor Khanye.



Recommendations

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.

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. In the case of Mpumalanga Province, these include Bushbuckridge, Dr JS Moroka, Nkomazi, Pixley ka Seme, Chief Albert Luthuli and Dipaleseng.

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 non-compliance, in particular, is 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 Rights 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 Rights 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.

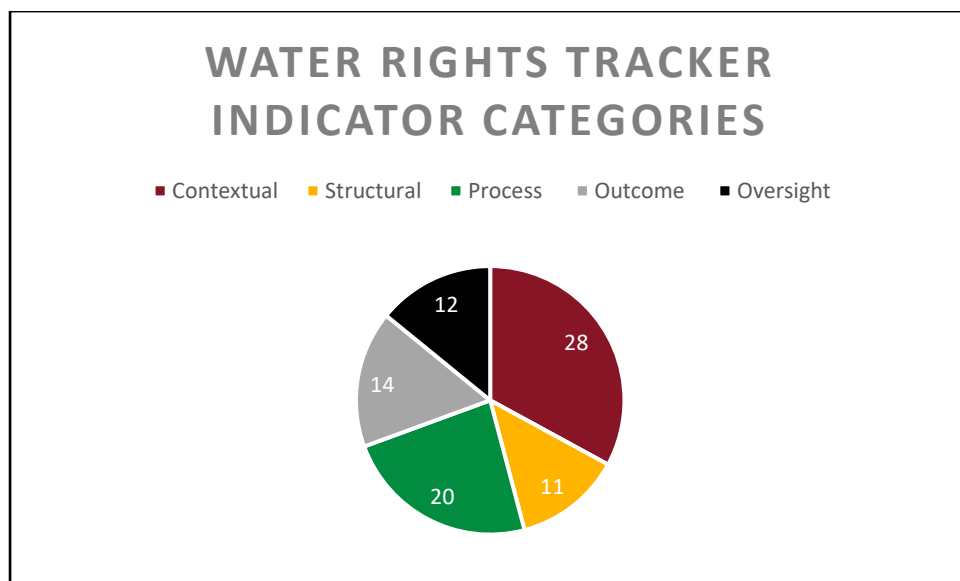


Figure 1: Overview of Indicator Categories, Water Rights Tracker, South Africa

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 (<i>Non-financial census</i>)	
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?	
<i>Green Drop</i> Risk Rating	
<i>Efficiency</i>	
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	
<i>Department of Water and Sanitation</i>	
<i>Blue Drop</i> actions	
<i>Green Drop</i> actions	
<i>Judicial Oversight</i>	
Where were any judgements delivered that involved water services delivery?	
Full citation of judgement.	
SAHRC Reports	
Where were any reports received and investigated on the right to water by the SAHRC?	
<i>Legislature Oversight</i>	
<i>Other Oversight Institutions</i>	

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 ratio 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

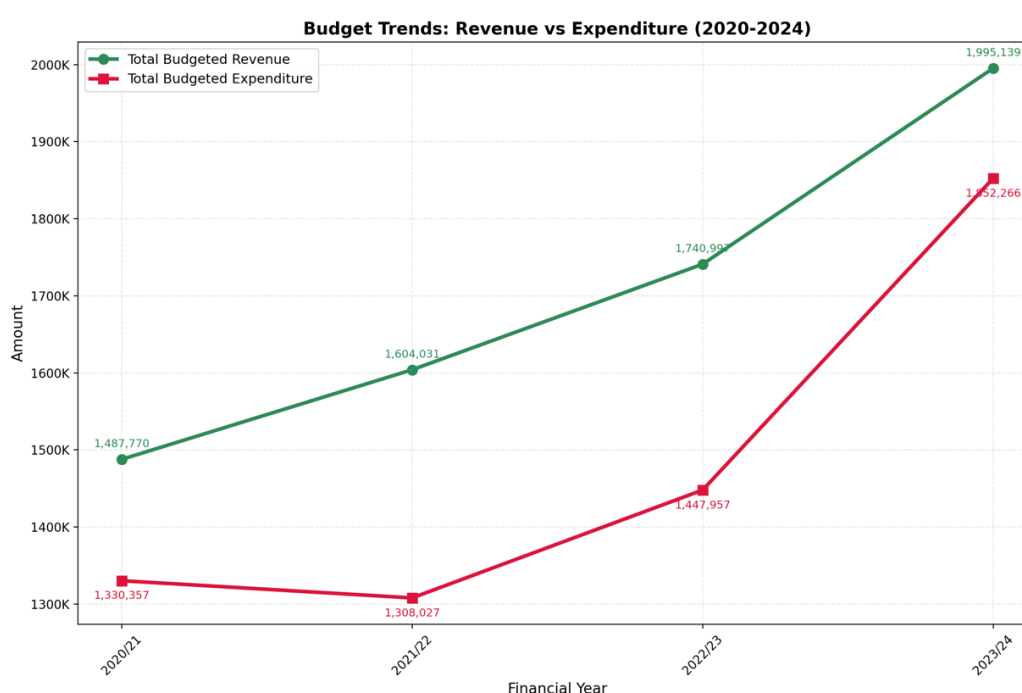
Under financial resources, five key questions were addressed by analysing historical financial data from MFMA Section 71 – Schedule C reports and presenting trends over time, thereby offering greater insight into financial resources and their allocation. Data specific to water services could not be utilised 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:

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

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:



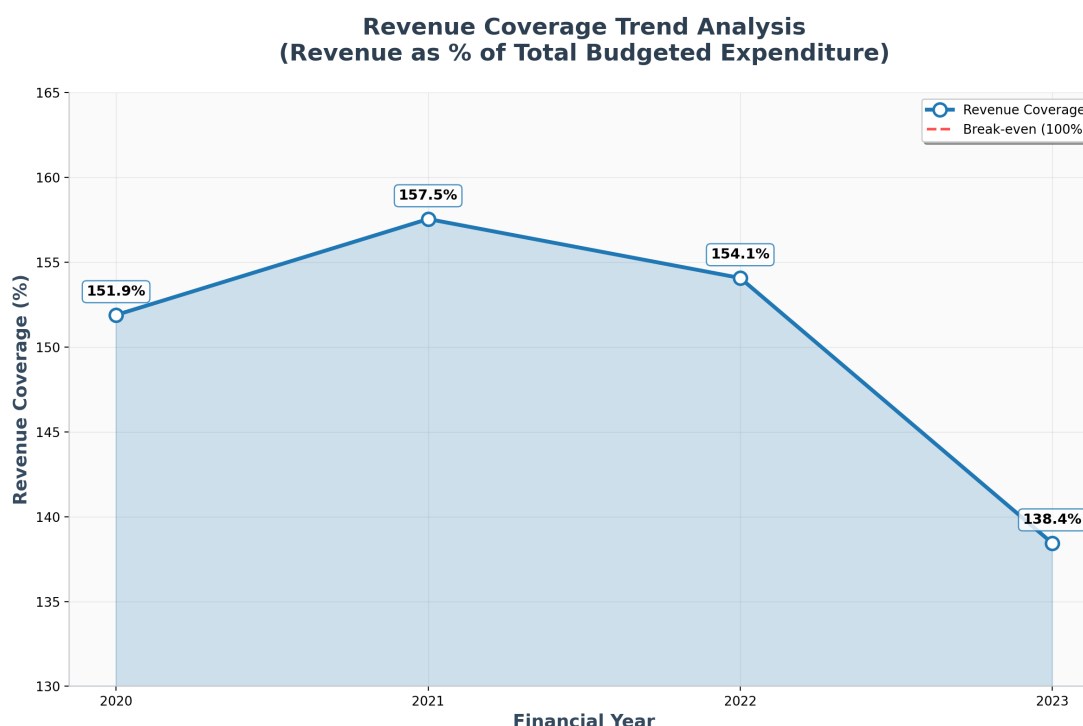
The graph shows that the total budgeted revenue has been consistently growing year over year. It also shows the municipality maintained a budget surplus in all four years, with the largest surplus in 2021/22 (296,004). While the year 2023/24 shows the highest total budgeted revenue and total budgeted 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:

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

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 show 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.

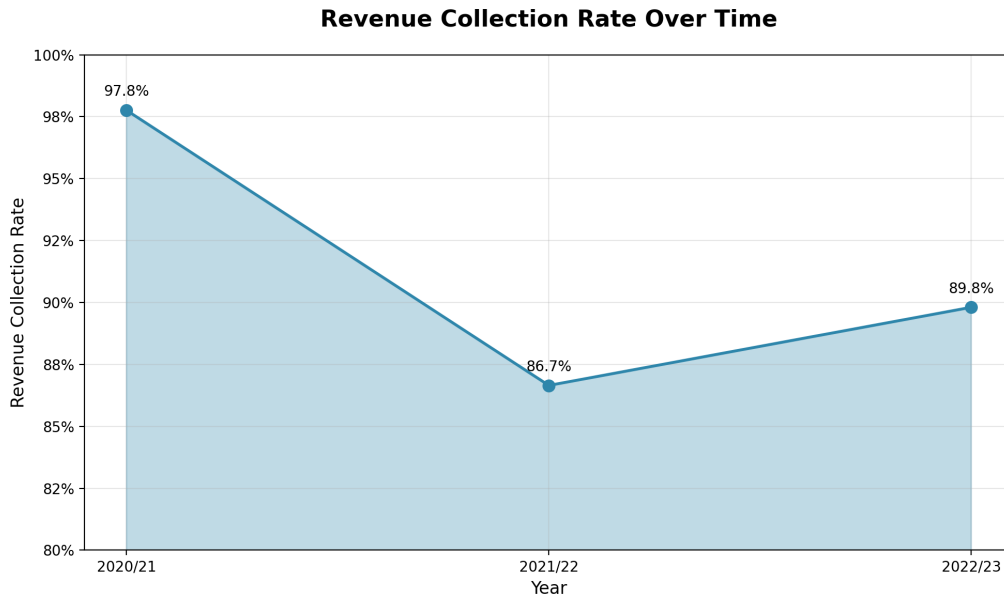


iii) The third question was: how much revenue is collected against the budget? The research team used the revenue collected to date against the adjusted budget shown in Table C2-Financial Performance. To address the question, we used the **revenue collection rate** formula:

$$\text{Revenue Collection Rate} = \frac{\text{Actual Revenue Collected}}{\text{Budgeted Revenue}} \times 100$$

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:

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

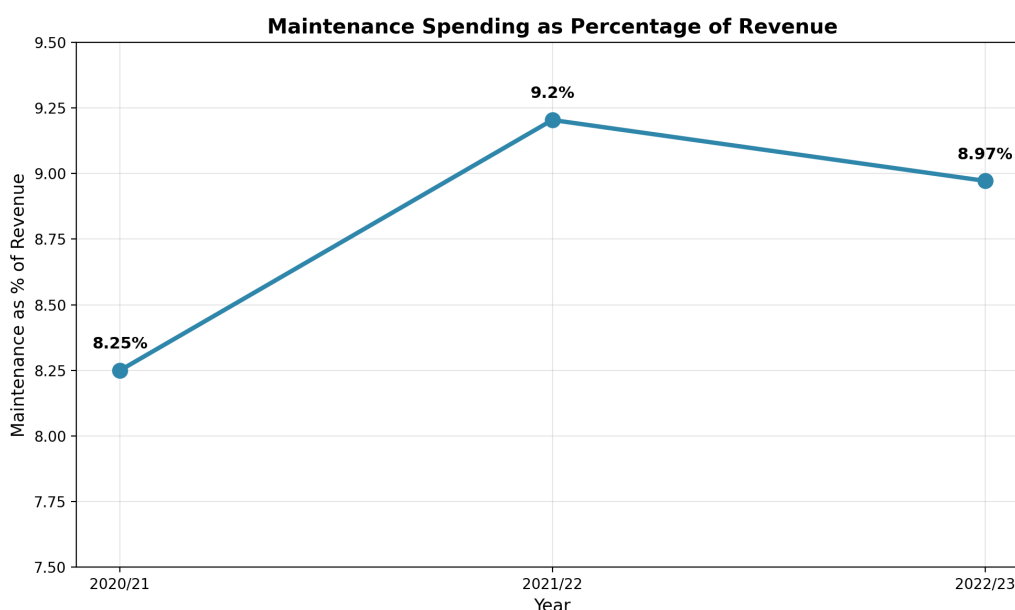
The research team utilised data from the adjusted budget column in Table SC13a as the numerator and data from Table C5 as the denominator. A higher percentage signifies a robust budget allocation towards the renewal of existing assets. Conversely, a lower percentage for asset renewals suggests an inadequate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

$$\text{Maintenance Spending Rate (\%)} = \frac{\text{Total Maintenance Expenditure}}{\text{Total Revenue Collected}} \times 100$$

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	
Mpumalanga	Mbombela	6 August 2024	
Kwa-Zulu Natal	eThekweni	24 August 2024	
Gauteng	Johannesburg	25 November 2024	
North-West	Rustenberg	26 November 2024	
Eastern Cape	Queenstown	4 February 2025	
Free State	Mangaung	25 February 2025	
Northern Cape	Upington	6 May 2025	
Western Cape	Worcester	26-27 May 2025	

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 <i>Blue Drop</i> , 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	<i>Blue Drop</i> 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

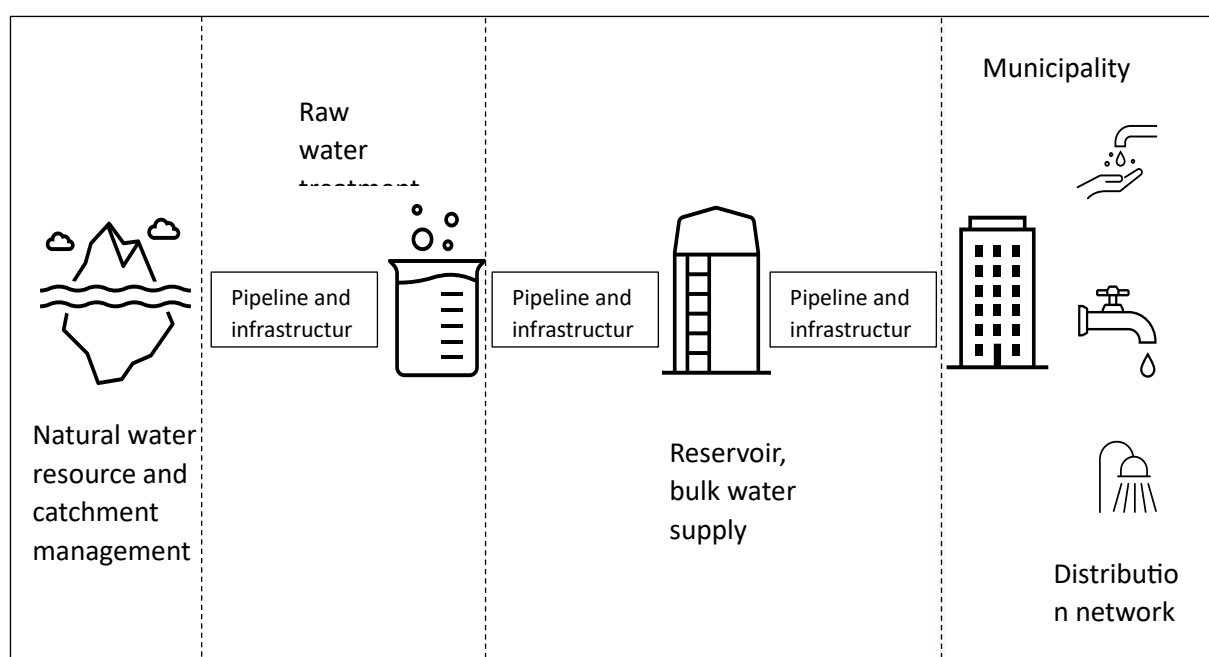
Municipalities are also allowed to access funding through international, multilateral and bilateral development agencies such as the World Bank. These institutions often offer grants, concessional loans and capacity building schemes to cities. Funding is governed on an *ad hoc* basis, often through a 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 boards¹ 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

¹ Rand Water, Umgeni Water, Magalies Water, Bloem Water, Mhlathuze Water, Lepelle Northern Water, Overberg Water, Sedibeng Water.

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.

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 work, 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.”²

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.”³ 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

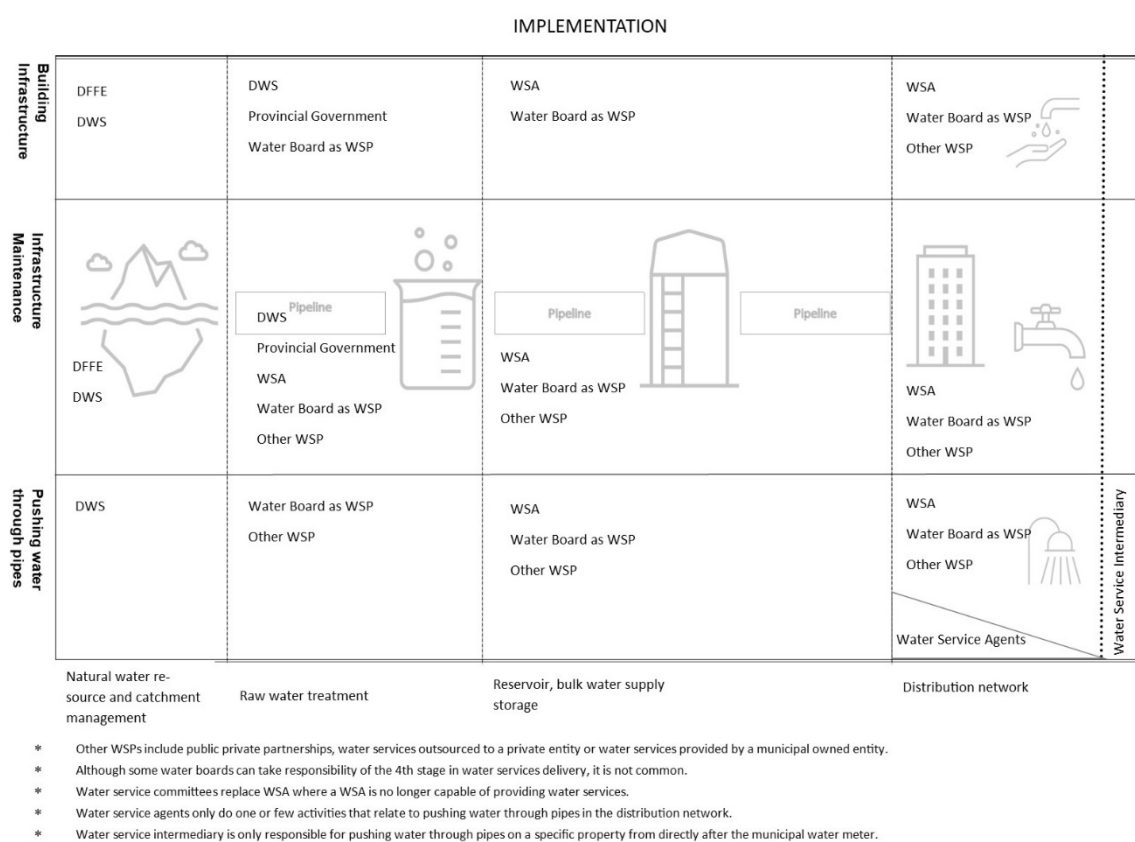
The Public Protector’s constitutional mandate is perhaps the broadest of all Chapter 9 institutions and may investigate (and take appropriate remedial action) any allegation of “maladministration in connection with the affairs of government at any level, the abuse of or unjustifiable exercise of power 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.”⁴ 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.

² Sections 13(3) of the SAHRC Act.

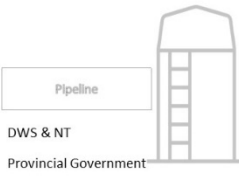
³ Section 1 of the Public Audit Act.

⁴ Hoexter 89.

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.



OVERSIGHT, SUPPORT AND PLANNING

Oversight Planning, Regulation Support	Parliament Judiciary NT Chap 9 institutions*	NT & DWS & CoGTA Provincial Government Chap 9 institutions* WSA	DWS & NT & CoGTA Provincial Government Chap 9 institutions* WSA	DWS & NT & CoGTA Provincial Government Chap 9 institutions* WSA
	 DFFE DWS NT	 Pipeline DWS & NT Provincial Government WSA	 Pipeline DWS & NT Provincial Government WSA	 DWS & NT Provincial Government WSA
	Other national and provincial departments DWS DFFE NT	DWS & NT & CoGTA Provincial Government WSA	DWS & NT & CoGTA Provincial Government WSA	DWS & NT & CoGTA Provincial Government WSA
	Natural water re-source and catchment management	Raw water treatment	Reservoir, bulk water supply storage	Distribution network

* Money allocation is seen as part of support in this context.

* Chapter 9 institutions: The AG oversees all public spending, the Public Protector oversees the exercise of public power, and the SAHRC oversees the fulfilment and respect for human rights.

* WSA should exercise oversight over WSPs.

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 “National Treasury on local government revenue and expenditure for 1 July 2025 to 31 December 2025” 10 March 2026 <https://www.gov.za/news/media-statements/national-treasury-local-government-revenue-and-expenditure-1-july-2025-31>.

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 Mpumalanga

⁴⁴ South African Gateway ‘South Africa’s population’ (2025), available at <https://southafrica-info.com/people/south-africa-population/>.

⁴⁵ 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.

⁴⁶ World Bank Group “Metadata Glossary: Age Dependency Ratio” <https://databank.worldbank.org/metadataglossary/gender-statistics/series/SP.POP.DPND>.

⁴⁷ South Africa’s national dependency ratio was reported at 48.31% in 2024. See Trading Economics “South Africa – Age Dependency Ratio (% of Working-Age Population)” <https://tradingeconomics.com/south-africa/age-dependency-ratio-percent-of-working-age-population-wb-data.html>.

⁴⁸ Department of Water and Sanitation *Blue Drop Report* (2023) at 306.

⁴⁹ AFG Fluid Control ‘Existing South Africa Standpipe Design Guidelines’, available at <https://afgfluid.co.za/existing-south-africa-standpipe-design-guidelines/>.

⁵⁰ Afesis Corplan ‘Draft Norms and Standards for Domestic Water and Sanitation’, available at <https://afesis.org.za/norms-and-standards/>.

⁵¹ Statistics South Africa ‘Four facts about indigent households’ (2018), available at <https://www.statssa.gov.za/?p=11722>. For purposes of this report, indigency was defined as households earning less than R1600 per month.

⁵² Regulation 5(1), Revised Compulsory National Water and Sanitation Services Standards, 2025.

⁵³ Regulation 5(2) and (3) Revised Compulsory National Water and Sanitation Services Standards, 2025.

⁵⁴ Regulation 5(4)-(5), Revised Compulsory National Water and Sanitation Services Standards, 2025.

⁵⁵ Regulation (6)-(7), Revised Compulsory National Water and Sanitation Services Standards, 2025.

⁵⁶ Department of Water and Sanitation *Blue Drop Report* (2023) p. 5.

⁵⁷ Section 11(1) Water Services Act, 1997.

⁵⁸ Department of Water and Sanitation *Blue Drop Report* (2023) p. 5.

⁵⁹ Department of Water and Sanitation *Blue Drop Report* (2023) p. 308.

⁶⁰ Department of Water and Sanitation *National Water Resource Strategy III* p. 22.

⁶¹ R McKenzie, ZN Siqabala & WA Wegelin *The State of Non-Revenue Water in South Africa* (2012).

⁶² 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.

⁶³ Mayor Khethiwe Moeketsi was accused of corruption around March 2022. She allegedly received vehicles in return for tenders in 2020. According to the WSA’s website she is still in office. See <https://www.dailymaverick.co.za/article/2022-03-10-cars-for-contracts-probe-uncovers-alleged-widespread-corruption-in-mpumalanga-municipality/>.

⁶⁴ See Lizeka Tandwa ‘Report reveals how money was siphoned from Dr JS Moroka local municipality’ *News 24* 20 October 2020, available at <https://www.news24.com/news24/southafrica/news/report-reveals-how-money-was-siphoned-from-dr-js-moroka-local-municipality-20201030>; Nomahlubi Sonjica ‘DA says former municipal manager implicated in VBS saga [Monica Mathibela] should not be employed in similar position’ *The Sowetan* 15 March 2022, available at https://www.sowetanlive.co.za/news/2022-03-15-da-says-former-municipal-manager-implicated-in-vbs-saga-should-not-be-employed-in-similar-position/#google_vignette.

⁶⁵ In March 2023, the media reported that the WSA suffered severely from corrupt procurement practices. In 2019, the Zondo Commission investigated the WSA as one of those who had a track record of mismanagement, maladministration and corruption. See Mandla Khoza ‘Six arrested for R34.7m defrauded from municipality’ *The Sowetan* 31 March 2023, available at <https://www.sowetanlive.co.za/news/south-africa/2023-03-30-six-arrested-for-r347m-defrauded-from-municipality/>. This included the former acting municipal manager Phakamile Thwala. See also Sizwe Sama Yende ‘Zondo shifts focus to rotten Mpumalanga municipalities’ *City Press* 24 September 2019,

available at <https://www.news24.com/citypress/news/zondo-shifts-focus-to-rotten-mpumalanga-municipalities-20190924>.

⁶⁶ The mayor passed away and was buried in early January 2022. It was reported in May 2023 that Mayor Conny Nkalitshana (who was in office for only a year) was fired after intense and violent protest action. See Reporter 'ANC in Emalahleni wants mayor recalled after protests' *The Sowetan* 16 May 2023, available at <https://www.sowetanlive.co.za/news/south-africa/2023-05-16-anc-in-emalahleni-wants-mayor-recalled-after-protests/>; Aphiwe Ngwenya 'Emalahleni mayor Connie Nkalintshana sacked; *The South African* 17 June 2023, available at <https://www.thesouthafrican.com/news/emalahleni-mayor-connie-nkalintshana-sacked-17-june-2023/>.

⁶⁷ The Media reported in Dec 2021, that the mayor Mthokozisi Simelane was threatened with removal after three weeks in office after he unilaterally suspended senior executives. During Jan 2023, Ngelosi Ndlovu was elected as new mayor for the WSA. The mayor has allegedly voiced concerns about the municipal council's dissolution in 2022 after the ANC fired six of its councilors for voting with the opposition. Furthermore, in Jan 2023 three ANC members were shot and killed, their murders are suspected to be political killings. See Sizwe Sama Yende 'Mkhondo mayor threatened with removal' *City Press* 19 December 2021, available at <https://www.news24.com/citypress/news/mkhondo-mayor-threatened-with-removal-20211219>; Tshwarelo Hunter Mogokane 'concern as new Mkhondo mayor Ngelosi Ndlovu braves "municipal bloodbath"', *Pretoria News*, available at <https://www.iol.co.za/pretoria-news/news/concern-as-new-mkhondo-mayor-ngelosi-ndlovu-braves-municipal-bloodbath-735e8e4d-f54d-4f78-8b74-ff7dce360fc3>.

⁶⁸ In Jan 2021, mayor Johnathan Tolo tragically died from COVID related complications. During Aug 2022, the media reported that the EFF demanded that mayor Mhlonishwa Masilela and MM Thokozile Zulu be charged with murder of two former municipal officials (see Staff Reporter 'EFF wants Steve Tshwete municipality mayor, municipal manager charged with murder, *Pretoria News*, available at (<https://www.iol.co.za/pretoria-news/news/eff-wants-steve-tshwete-municipality-mayor-municipal-manager-charged-for-murder-570f1e43-1b4c-4a7c-8811-c63328b84daf>). Earlier in Aug it was reported that MM Thokozile Zulu had to employ bodyguards for her safety (Mandla Khoza. 'Municipality spends R3.6 m on manager's bodyguards', *The Sowetan* 5 August 2022, available at https://www.sowetanlive.co.za/news/south-africa/2022-08-05-municipality-spends-r36m-on-managers-body-guards/#google_vignette). Other media reports show that it is the mayor who is being intimidated by other councilors and municipal officials. Media reports that even an arson attempt was made on the mayor's house. It appears that this intimidation is the result of employees demanding salary increases and the mayor refusing them (Estelle Ellis et al, SA local government hit list: Murder of municipal councilors and officials exposes the dark side of politics, *Daily Maverick* 15 October 2022, available at <https://www.dailymaverick.co.za/article/2022-10-15-sa-local-government-hit-list-murder-of-municipal-councillors-and-officials-exposes-the-dark-side-of-politics/>).

⁶⁹ In 2019, media reported that the mayor of Victor Khanye LM feared to fulfil her responsibilities at the office due to intimidation by a so called yellow overall vigilante group (Sizwe Sama Yende, 'Mayor is too scared to go to her office after threats from vigilante group, *City Press* 27 August 2019, available at <https://www.news24.com/citypress/news/mayor-is-too-scared-to-go-to-her-office-after-threats-from-vigilante-group-20190827>). Later in late 2020, it was alleged that the speaker (Khaya Segone) led this yellow overall vigilante group. The speaker was subsequently prosecuted for his involvement. Media reported in June 2023 that the now former speaker (Khaya Segone) was shot in a drive-by shooting and in critical condition (Thia Botha, 'Former VKLM Speaker and driver critical after drive-by shooting in Delmas, *Ridge Times* 25 June 2023, available at <https://www.citizen.co.za/ridge-times/news-headlines/local-crime-news/2023/06/25/former-vklm-speaker-and-driver-critical-after-drive-by-shooting-in-delmas/>).
⁷⁰ In October 2020, it was reported that the mayor (Thandi Ngxonono) resigned shortly before a forensic report was released that implicated her in maladministration. During May 2022, the DA approached the court in an attempt to remove the ANC speaker from council who was voted out with a motion of no confidence in March 2022 (Sizwe Sama Yende, 'DA takes legal action to oust ANC speaker in Mpumalanga municipality, *City Press* 16 May 2022, available at <https://www.news24.com/citypress/politics/da-takes-legal-action-to-oust-anc-speaker-in-mpumalanga-municipality-20220516>).

⁷¹ Media reported that the WSA was run without a mayor and speaker for about 33 days during March 2020. During Feb 2021 the mayor faced criminal charges. In May 2023, the mayor was shot at outside his home in Standerton (Noxolo Sibiya, Lekwa mayor escapes with his life after shots were fired at him, *The Sowetan* 18 May 2023, available at <https://www.sowetanlive.co.za/news/south-africa/2023-05-18-lekwa->

[mayor-escapes-with-his-life-after-shots-were-fired-at-him/](#)). Around October 2023 there were rumors that the existing mayor would be replaced with an ANC candidate, however on November 2023 a previous non-ANC mayor was reinstated (Sizwe Sama Yende, 'Non-ANC Mpumalanga mayor back at the helm, survived the chop', *City Press* 17 November 2023).

⁷² In Jan 2022, after being in office for just three months, the mayor, speaker and chief whip of the WSA were accused of defying resolutions made by the ANC (see Sizwe Sama Yende, 'ANC Mpumalanga's stubborn trio suspended' *City Press* 15 February 2022, available at <https://www.news24.com/citypress/politics/anc-mpumalanga-stubborn-trio-suspended-20220215>).

It is alleged that the three of them spoke out against corruption taking place in the WSA. Media reported in Feb 2022 that the stand-in mayor, speaker and chief whip of the WSA were suspended. In May 2022, the power struggle continued with the trio taking the ANC to court to be reinstated. It would appear that they were unsuccessful in this attempt as other officials currently occupy these positions in the WSA.

⁷³ In Jul 2022, the media reported that mayor Johan Mkhathshwa and five councilors were fired for defying the ANC (see Sizwe Sama Yende, 'Mayor's days are numbered as new PEC purges municipal mutineers', *City Press* 10 April 2022, available at <https://www.news24.com/citypress/politics/anc-mpumalanga-fall-out-mec-set-to-oust-nkomazi-mayor-speaker-20220426>).

⁷⁴ During June 2022, media reports that mayor Friddah Nkadimeng survived a motion of no confidence as a result of allegedly misleading the council on the appointment of the MM (Motsebi Monareng, 'Mayor of Thaba Chweu Municipality in Mpumalanga survives motion of no confidence', *SABC News* 23 June 2022, available at <https://www.sabcnews.com/sabcnews/mayor-of-thaba-chweu-municipality-in-mpumalanga-survives-motion-of-no-confidence/>).

⁷⁵ Department of Water and Sanitation *Blue Drop Report* (2023) p. 22-3.

⁷⁶ Public Protector *Report into allegations of improper conduct and maladministration relating to failure by functionaries of the Dr JS Moroka Local Municipality to provide adequate and clean water to the communities of ward 1 to ward 31 Report No 39 of 2023/2024*. In the report, the PP found that despite efforts to provide water, the municipality was not providing water to all communities, with some villages not having adequate access to water and forced to rely on private water tankers for the supply of water for a fee. The efforts of the municipality to augment water supply through utilisation of alternative means such as boreholes, water storage tanks and water tankers were found to be inadequate. For instance, the number of functioning boreholes had dwindled from 115 in 2021 to 85 in 2023. The 45 water storage tanks distributed to various strategic points and the 10 functional water tankers were found to be wholly inadequate to service all the communities that had no access to water in the municipality. The Public Protector recommended that the municipality (through the Municipal Manager) develop a long-term intervention plan to fund the installation of enough reservoirs and water reticulations systems with the next 5 financial years. The municipality was further instructed to develop a communication strategy to communicate water supply schedules within three months, and that steps to safeguard municipal infrastructure be taken within 6 months.

⁷⁷ Auditor General of South Africa '2015-16 MFMA consolidated general report on the outcomes of the local government', 13.

⁷⁸ Auditor-General of South Africa 'Material irregularities 2023-2024', available at <https://mfma-2024.agsa.co.za/pages/status-of-mis>.

⁷⁹ Sue Matthews, 'Water and sanitation services – how are we doing? *The Water Wheel* Sep/Oct 20 24.