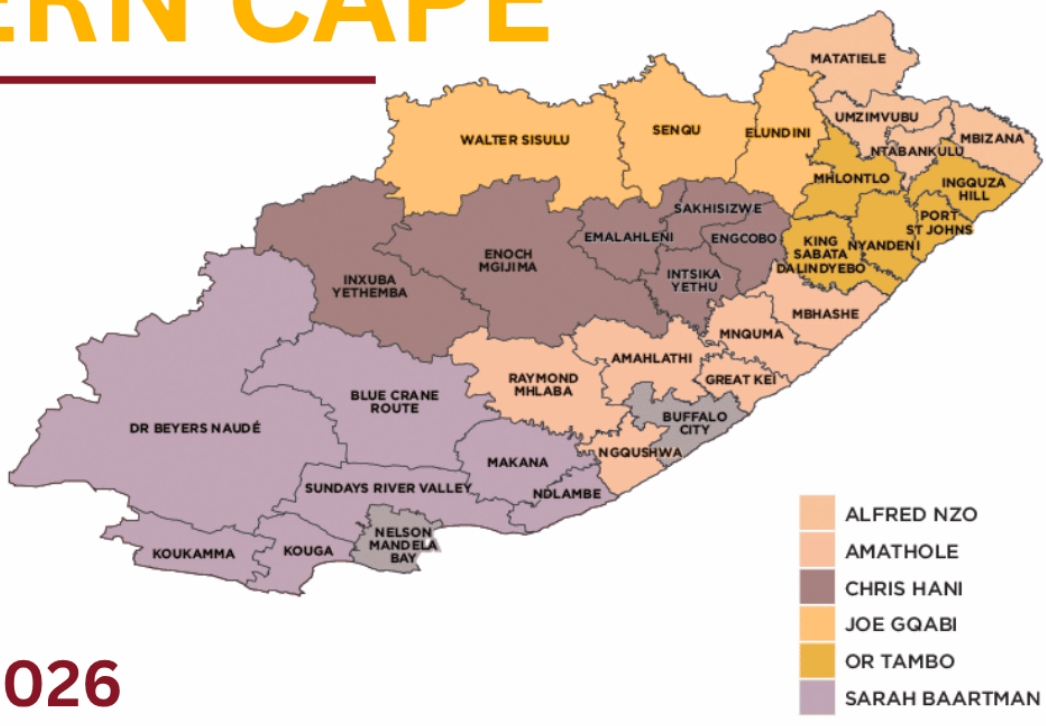


WATER RIGHTS TRACKER

PROVINCIAL REPORT FOR

EASTERN CAPE



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

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Abbreviations

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

Introduction

Water Services in South Africa: A Sector in Crisis

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

A constitutional promise

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

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

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

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

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

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

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

But behind the scenes, the government is also struggling.

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

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

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

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

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

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

A Mountain of Data

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

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

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

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

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

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

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

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

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

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

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

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

The South African Water Rights Tracker: A Formal Collaboration

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

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

The WRT has five key aims:

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

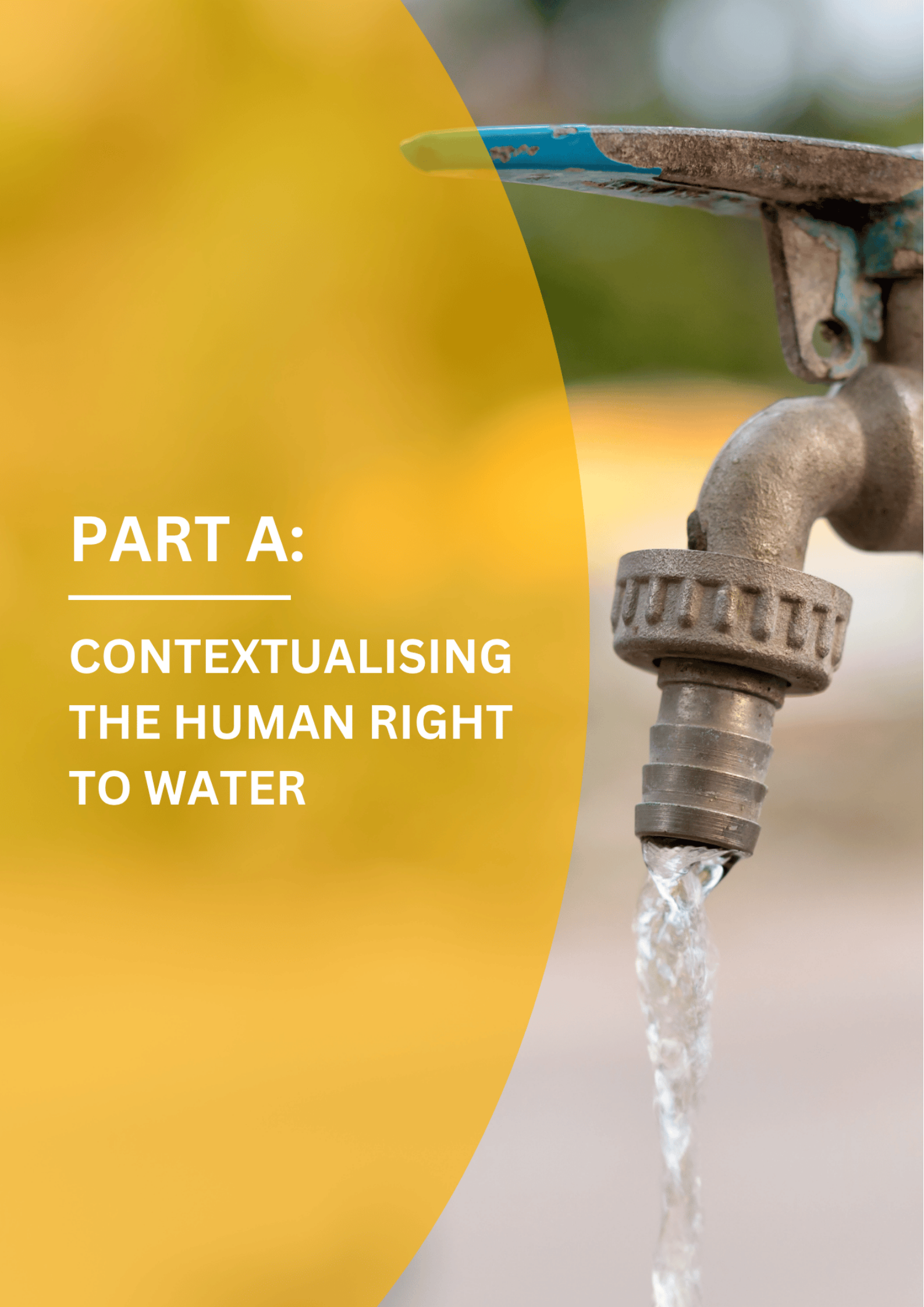
The intent underlying the WRT is to give government and the public practical, evidence-based recommendations that are tailored to each province. In simple terms, this project helps us take a step back, look at the full picture of water services in South Africa, and answer a simple but powerful question: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

Structure of the Report

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

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

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



PART A:

CONTEXTUALISING THE HUMAN RIGHT TO WATER

Elements of the Human Right to Water

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

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

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

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

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

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

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

Element	International Law (General Comment 15, WHO Guidelines)	South African Law
Availability	The water supply for personal and domestic uses[17] must be *sufficient* and *continuous*. "Continuous" means that the *regularity* of the water supply is sufficient for personal and domestic uses.	Everyone has a right of access to *sufficient* water[19] The minimum standard for basic water services consists of a minimum quantity of drinking water of 6kl/household per month (25 litres per person per day) with an effectiveness that water is made available for at least 358 days per year.[20]

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

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

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

In summary, access to water must be adequate for human dignity. This means that enough water must be available for personal and domestic use. The water must be free from contaminants and safe for human consumption in addition to being of acceptable colour, odor 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 Realization of the Human Right to Water

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

Meaning of Progressive Realisation

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

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

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

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

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

Reasonable Measures to Ensure Realisation of the Right to Water

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

Policy and Legislation

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

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

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

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

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

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

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

Financial Resources

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

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

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

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

Infrastructure Resources

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

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

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

Human and Skills Resources

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

Rights Holders and Duty Bearers

Bringing Rights Holders into View

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

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

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

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

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

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

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

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

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



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

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

The critical role of local government

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

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

A whole-of-government approach

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

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

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

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

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

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

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

A whole-of-society responsibility

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

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

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

Using Indicators to Measure Progressive Realisation of the Right to Water

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

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

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

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

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

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

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

Systemic Drivers Undermining Progressive Realisation

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

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

Leadership

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

Planning

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

Infrastructure

Potable water is not an "ecological gift". Local WSAs can also only provide it if there is bulk and reticulation infrastructure to extract, store, treat, and distribute water to households and businesses. Many of the investments in water services infrastructure were made in the colonial and apartheid eras, but these were skewed, leaving millions without access to services. For the last thirty years, WSAs have had the unenviable task

of managing the trade-off between servicing previously unserved areas and maintaining the existing aging infrastructure that serves as the WSA's shrinking revenue base. The law requires WSAs to prioritise investments in the provision of basic water supply, but in many of these new areas of supply consumers are unable or unwilling to pay. Meanwhile, the existing aging infrastructure deteriorates from deferred maintenance and poor management. This drives a vicious cycle: Increased levels of non-revenue water, a dissatisfied customer base, and further shrinkage of the revenue base. Officials across all nine provinces consistently emphasised aging infrastructure as a significant driver of dysfunctional water services.

Funding

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

Retaining Scarce Skills

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

Electricity Issues

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

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

Physical and Ecological Issues

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

Consumer Issues

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

Third Party Interference

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

Intergovernmental Coordination

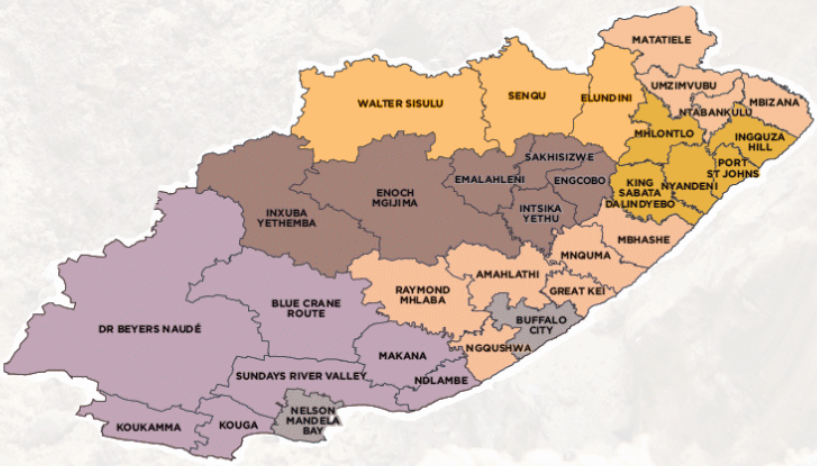
Poor intergovernmental coordination hampers progressive realisation of the right to water. Instances of poor coordination include the relationships between the municipal WSAs and StatsSA, Home Affairs, SAPS, the DWS, and the ministries responsible for housing, electricity, minerals, trade and Industry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

Scale

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

PART B:

PROGRESSIVE REALISATION OF THE RIGHT TO WATER IN EASTERN CAPE



Eastern Cape Overview

Total Population for the Eastern Cape: 7.2 million (2022) Census; 7.1 million (2024 mid-year population estimates)

Number of Households in the Eastern Cape (2022 Census): 1.8 million

The Eastern Cape is situated on the east coast of South Africa, bordering the Western Cape, Northern Cape, KwaZulu-Natal, the Free State, and Lesotho. It has two metropolitan municipalities (Nelson Mandela Bay and Buffalo City), six district municipalities which are divided into 31 local municipalities (see **Figure 1**).[44]

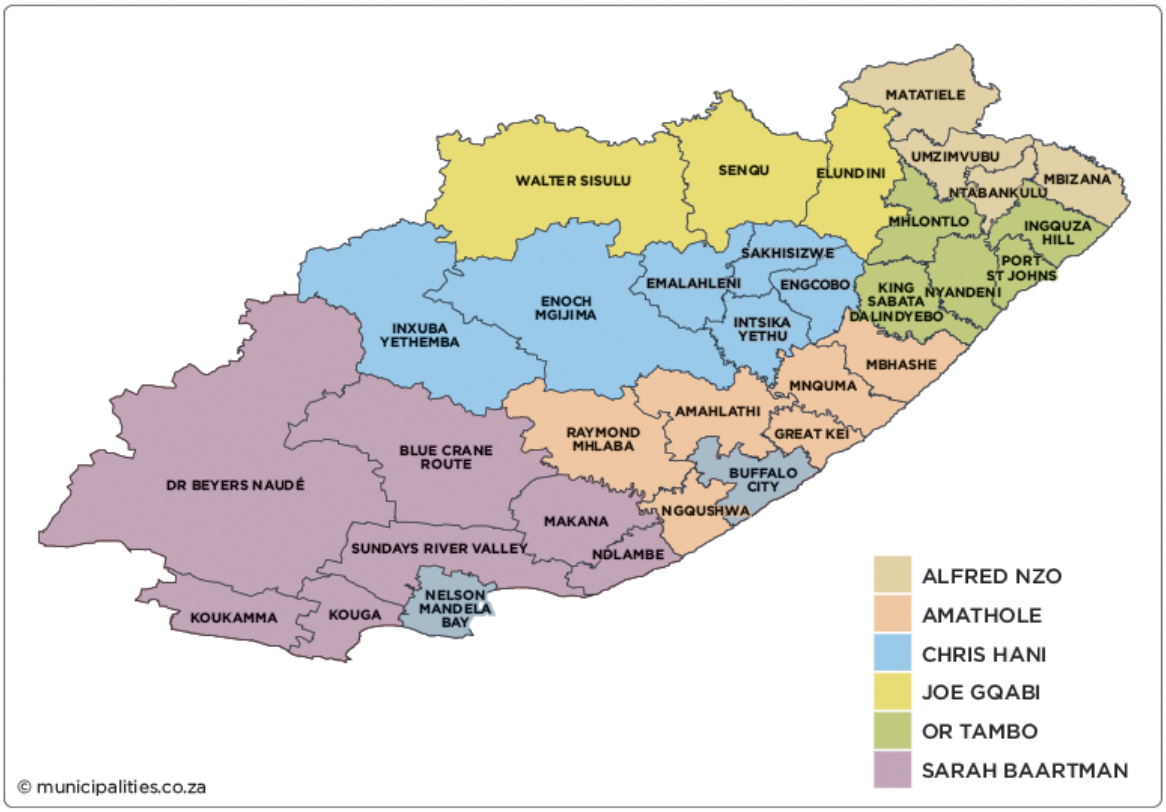


Figure 1: Local and District Municipalities, Eastern Cape Province *(Source: Municipalities of South Africa)*

The province comprises 14 Water Service Authorities (WSAs), 154 water supply systems, and one Water Boards (Amatola Water)[45] all of which deliver potable water to more than 7 million residents. The Eastern Cape is the fourth-most populated province in South Africa with more than half of the population still living in rural (under traditional authority or on farms) areas. The province is also the hub of south Africa's automative industry, centred in the two metropolitan municipalities.[46]

The Eastern Cape's real economy accounted for 20% of provincial GDP in 2023, compared with 27% nationally. Manufacturing is the largest real economic sector,

contributing 15% of provincial GDP, followed by construction at 3%, and mining making a very small contribution (0.2%). Agriculture also forms part of the province's real economy, but many households only produce for their own needs. The services economy is also important, with education accounting for the largest share of service-sector value added, at R77 billion in 2023. In terms of employment in the real economy, construction is the largest employer (132,000 workers in 2023), followed by manufacturing (126,000 workers), and agriculture (111,000 workers). The province faces a severe employment challenge: its unemployment rate reached 40% in 2023, up from 27% in 2010.[47]

In more than half of the Eastern Cape's WSAs, females outnumber men. This is an important consideration for service planning, as water access is closely linked to household management, care responsibilities, and community health outcomes. Based on 2022 Census figures, 26.8% of the population is under 15 (32% according to Stats SA's 2024 mid-year population estimates)[48], which is higher than the national average of 26.2%.[49] In OR Tambo and Alfred Nzo District Municipalities, the population under 15 exceeds 35%. In most municipalities, the dependency ratio also far exceeds the national average. 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 – exceeding 50% in some WSAs – contribute to widespread defaults on water service payments, thereby complicating revenue collection. Additionally, theft of electrical cables, vandalism, and general theft are identified as the primary obstacles to service reliability and asset security in the province.

Most municipalities within the province have enacted policies (water service by-laws, water service development plans, and indigent policies) to foster efficient and transparent service delivery. However, certain regulatory instruments must be reviewed and updated to ensure their continued relevance in the contemporary context. Despite the availability of policies, financial sustainability remains a substantial challenge. At least six WSAs do not have a sufficient budget to cover operational expenditure on water services. however, with capital and intergovernmental transfers all WSAs, with the exception of De Beyers Naude Local Municipality, have sufficient revenue. The revenue collection rate for the 2023/24 FY was mixed: Ten of the 14 WSAs in the Eastern Cape have collection rates above 80%, including Joe Gqabi at 100% and Makana at 113%, but in four WSAs the revenue collection rate falls below 80%. In the same year 21% of the WSAs spent no money on infrastructure renewal. Almost 80% of WSAs spent between only 2 to 5% on infrastructure maintenance.

The outlook for the province's water infrastructure utilisation remains varied. The WTWs in at least four WSAs are operating in excess of their design capacity, with the worst-

affected being Koukamma Local Municipality, operating at 151%. Consequently, long-term planning and infrastructure upgrades are imperative.

Moreover, it is crucial to ensure that the requisite human resources, particularly process controllers, qualified scientists and technicians are sufficiently available. In the Eastern Cape, staffing shortages in these critical technical roles are widespread across small, to mid-level, to large municipalities. At the time of the last *Blue Drop* assessment, every WSA had staff shortages: Across the 14 WSAs, an additional 204 process controllers and 15 qualified scientists are required. Moreover, the ratio of technical staff per work or system (technicians, technologies, engineers and scientists) is below 1 in all but four WSAs.

While progress has been made in providing households access to a communal tap within 200m, in eight WSAs here are still some consumers who only have access to a communal tap more than 200m from their households, with Amathole and Chris Hani District Municipalities having the highest percentages in this regard.

In terms of economic access, none of the WSAs provide Free Basic Water (FBW) as a universal allocation, and the number of households benefiting from FBW on the basis of indigency registration remains extremely limited in most municipalities. For example, in two WSAs (Amathole and Chris Hani District Municipalities), fewer than 4% of households receive FBW.

The province experiences interruptions in water services, restricting access to water for the population. Similar to other provinces, however, records of water interruptions are currently incomplete and unreliable.

Water quality is a critical problem across the provinces. Only one WSA (Kouga Local Municipality) had acceptable microbiological water quality when the last *Blue Drop* assessment was conducted, and three-quarters fell short of the standard for chemical (acute) compliance.

In the case of water efficiency, two WSAs have poor or extremely high Water Use Efficiency (WUE) scores (Nelson Mandela Metro and Kouga Local Municipality). As regards non-revenue water, half of the WSAs fall above the upper National Treasury norm of 30%.

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, but only working adults can contribute to a WSA's revenue base. Further, in a country wracked by inequality and high levels of poverty and unemployment, cost recovery principles cannot be blindly pursued.

Demographics

According to the 2022 census, the Eastern Cape is home to approximately 7.2 million people and 1.8 million households. Statistics South Africa's 2024 mid-year population estimates pitch the total population at 7.1 million people (reflecting high levels of out-migration), which amounts to about 11.4% of South Africa's population.[50] Breaking these figures down in terms of WSAs shows that seven serve smaller populations of fewer than 200,000 residents, only one WSA (Joe Mqabi DM) serves a population in the mid-tier range (between 200,000 and 400,000 residents), and the remaining six service populations of more than 800,000 residents (see **Figure 2** below). OR Tambo District Municipality is the largest WSA in the province, servicing a population of more than 1.5 million.

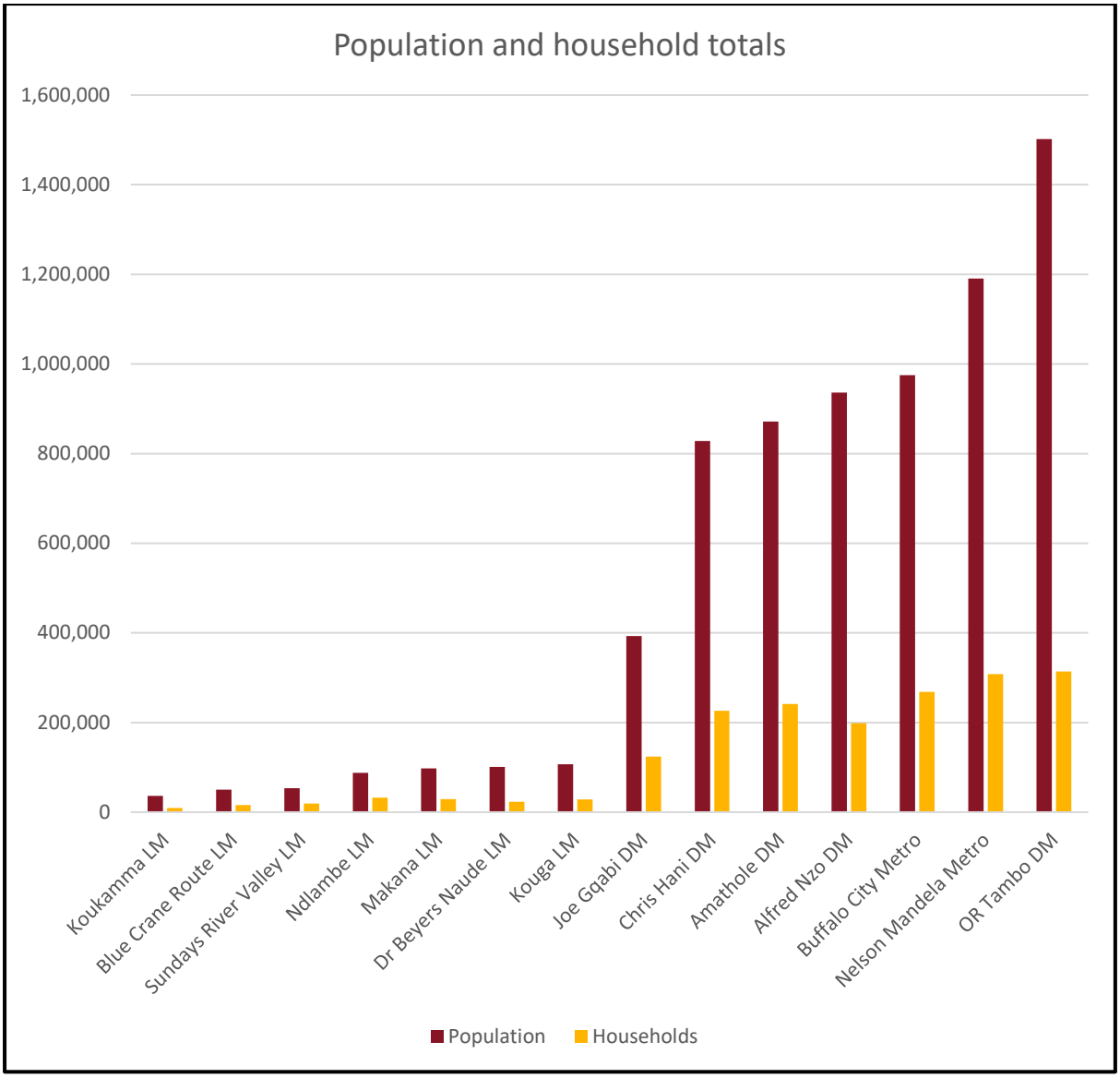


Figure 2: Breakdown of population and households per WSA, Eastern Cape *(Source: 2022 Census)*

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

In terms of the number of households, the smaller municipalities in the province service households of between approximately 9,500 (Koukamma Local Municipality) and 28,600 (Kouga Local Municipality) units. Joe Mqabi District Municipality services approximately 124,00 units. In the larger WSAs, total households range from 226,000 (Chris Hani District Municipality) to 313,500 (OR Tambo District Municipality) units.

Based on the 2022 Census Data, household size ranges from 3.8 (Koukamma) to 4.79 members per household (OR Tambo) (see **Figure 3**). Household size generally tends to increase with population size, with the average household size for the lower third of WSAs at 3.4. The average household size of municipalities servicing populations in excess of 800,000 households is 4.04.

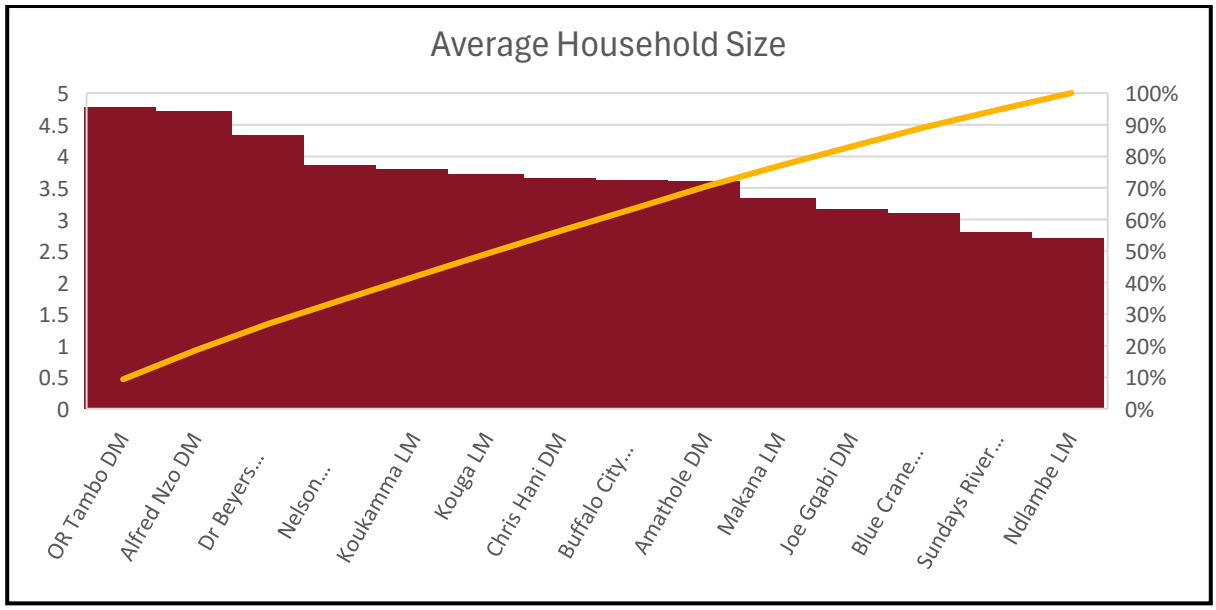


Figure 3: Average household size per WSA, Eastern Cape *(Source: 2022 Census)*

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 the Eastern Cape, 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 two instances, the discrepancies were as high as 800,000 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 mid- and upper band of WSAs with Alfred Nzo District Municipality and OR Tambo District Municipality particularly badly affected.

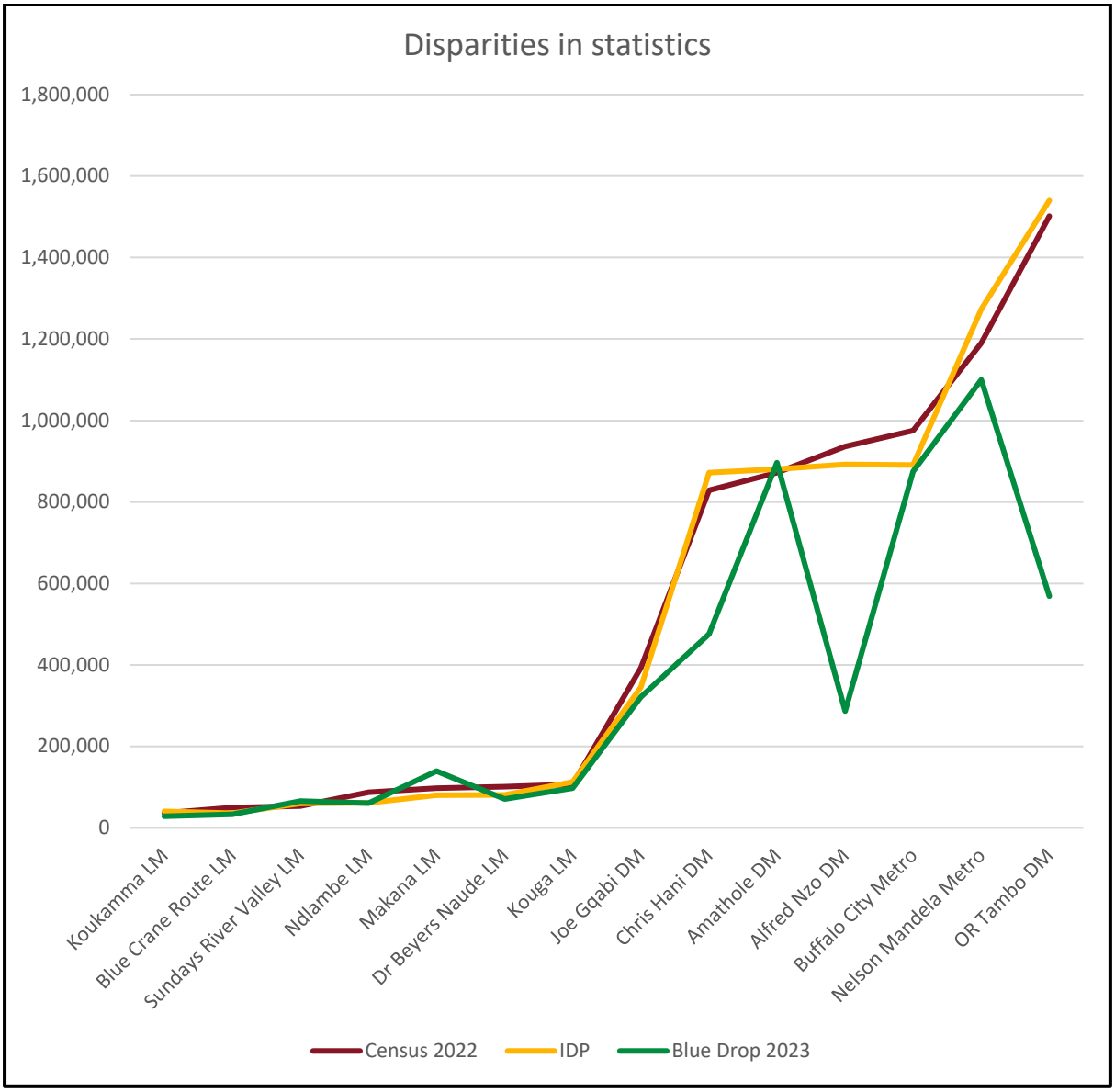


Figure 4: Discrepancies in population size reporting *(Sources: 2022 Census, 2023 Blue Drop report, municipal IDPs)*

One possible explanation for the disparities is that the *Blue Drop* figures may reflect the population actually supplied through municipal water supply systems rather than the total population residing within the geographical jurisdiction of the WSA. However, the direction of the discrepancies is also noteworthy. In 11 of the 14 WSAs, the *Blue Drop* population is lower than the Census population. However, this is not consistent across the province: the *Blue Drop* figures for Sundays River Valley, Makana and Amathole are higher than their respective Census populations. The differences therefore cannot simply be treated as a uniform downward adjustment of Census populations.

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

For water planning purposes, WSAs must also take population growth into account. Population growth trends add another dimension to this uneven planning environment. Nine of the 14 water WSAs recorded growth below the national average of 1.3%, including Koukamma and Sundays River Valley, which recorded negative growth (see **Figure 5**). Several of the province's larger authorities are also experiencing comparatively low growth: Amathole recorded 0.19%, Chris Hani 0.26%, Nelson Mandela Bay 0.32% and OR Tambo 0.92%.

At the same time, growth is concentrated much more strongly in particular parts of the province. Alfred Nzo recorded growth of 1.51%, Makana 1.9%, Buffalo City 2.15%, Dr Beyers Naude 2.35% and Ndlambe 3.51%. Ndlambe's growth rate is approximately 2.7 times the national average. The Eastern Cape therefore does not display a uniform demographic trajectory. While much of the province is experiencing negative, marginal or relatively slow population growth, a smaller group of municipalities faces considerably stronger population pressures. 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.

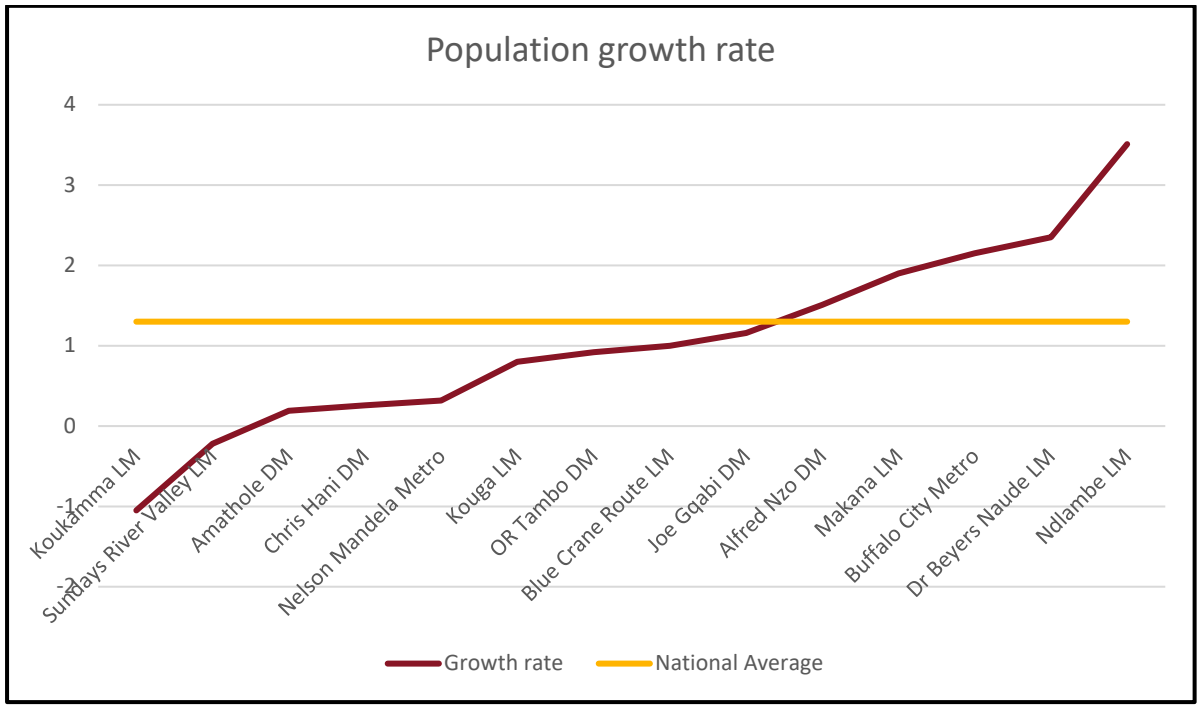


Figure 5: Population growth rate *(Source: Census 2022)*

Across the Eastern Cape, there are slightly more women than men, but in several WSAs the gender split is more pronounced than the provincial average (see **Figure 6**). The proportion of women ranges from approximately 50.9% in Sundays River Valley to 53.1% in Alfred Nzo and Makana, with a provincial municipal average of approximately 52.4%.

There are therefore no substantial differences in gender composition between the WSAs. Gender is relevant to water services planning because access to water intersects with household management, care responsibilities and community health outcomes.

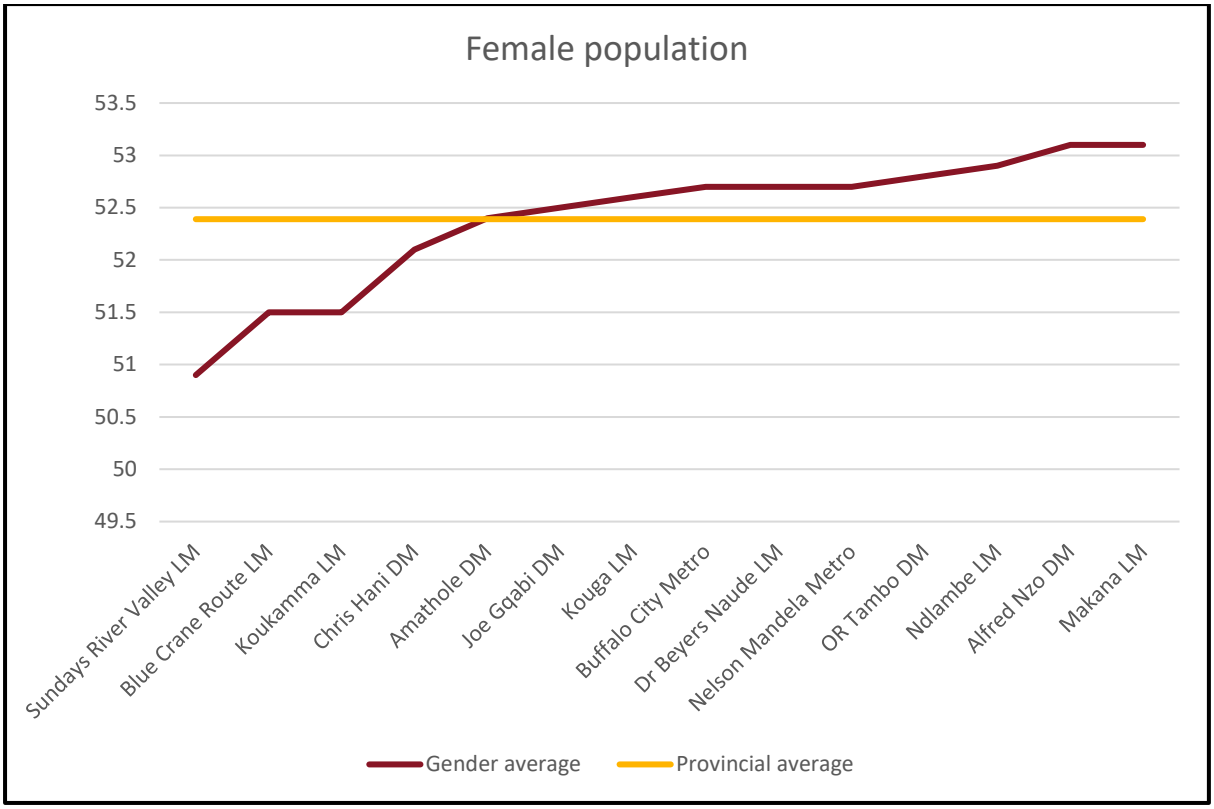


Figure 6: Gender Split (Female Population) *(Source: Census 2022)*

The proportion of the population under the age of 15 is more moderate, averaging approximately 26.9% across the province (see **Figure 7**). Most WSAs fall relatively close to this average. However, OR Tambo and Alfred Nzo stand out, with children under 15 accounting for 35.1% and 35.8% of their populations respectively. At the other end of the spectrum, Kouga and Ndlambe both record 21.3%, while Makana records 21.9%.

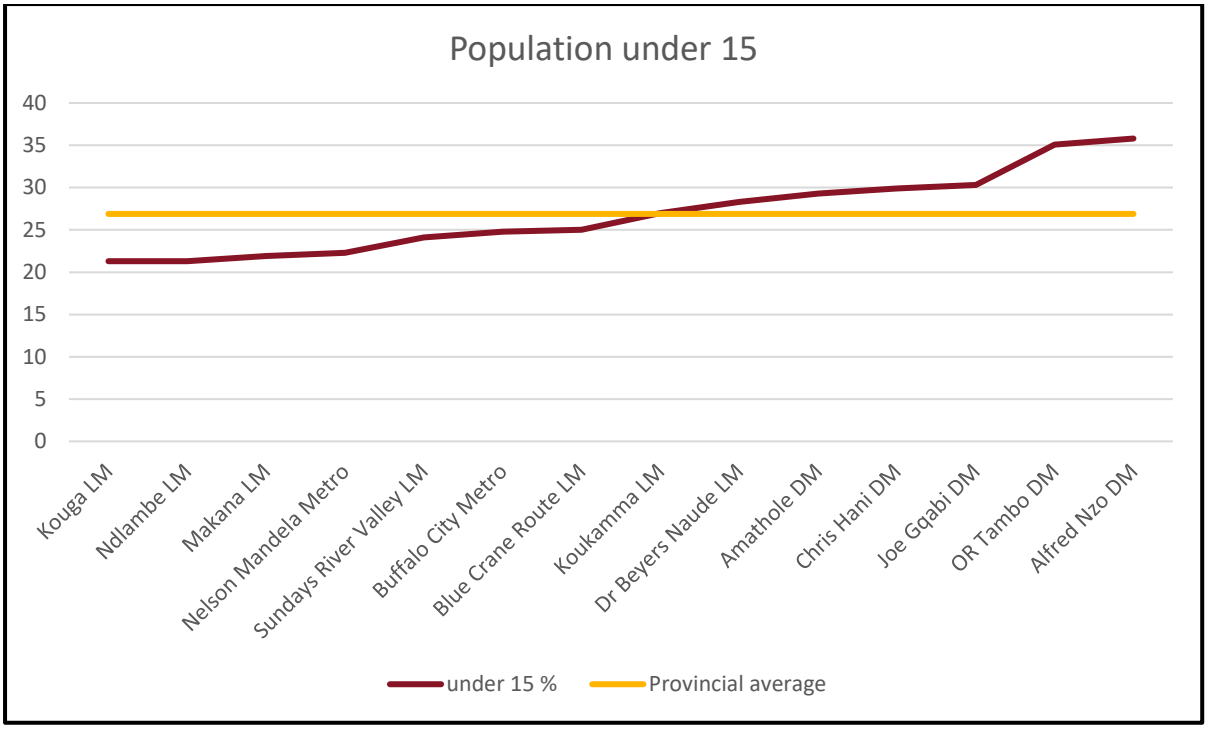


Figure 7: Percentage of Population under 15, WSAs in the Eastern Cape *(Source: Census 2022)*

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 from the national government.

Unemployment is particularly high in parts of the Eastern Cape (see **Figure 8**). The provincial municipal average is approximately 38%, although there are considerable differences between municipalities. Seven of the 13 municipalities for which unemployment data is available have unemployment rates of 40% or higher. Buffalo City records unemployment of 42.7%, Makana 45.5%, and both Amathole and Chris Hani 46.2%. The position is even more severe in Sundays River Valley, Alfred Nzo and OR Tambo, where unemployment reaches 50%, 50.2% and 55.6% respectively. By contrast, Kouga records unemployment of only 14.75%, followed by Dr Beyers Naude at 18% and Koukamma at 21.9%. No unemployment figure was available for Blue Crane Route.

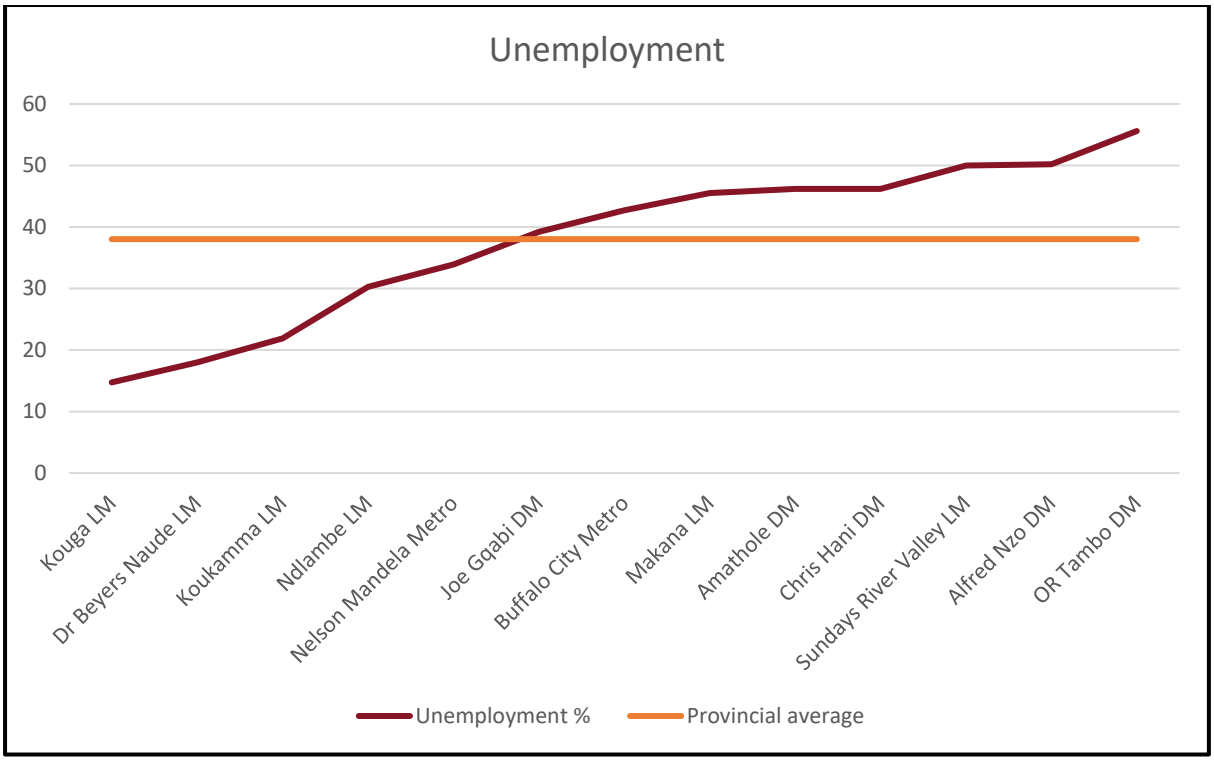


Figure 8: Unemployment Rates, Eastern Cape WSAs *(Source: Municipal IDPs)*

These figures indicate significant differences in the potential revenue bases of the province's water services authorities. Particularly in municipalities where between approximately 40% and 56% of the population is unemployed, a substantial proportion of residents may have limited ability to pay consistently for municipal services. This is

likely to increase pressure on municipal indigent support and free basic services while simultaneously constraining the revenue available to fund water services.

The variation between municipalities is particularly significant. The unemployment rate in OR Tambo, at 55.6%, is almost four times that of Kouga, at 14.75%. The provincial average therefore masks substantially different economic circumstances across individual water services authorities. As with population growth, the financial conditions within which water services must be provided cannot be assumed to be uniform across the province.

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

The dependency ratio in the Eastern Cape provides further insight into the economic pressures facing households and municipalities (see **Figure 9**). Ten of the 14 water services authorities have dependency ratios above the national average of 48.4. Eight also exceed the global average of 54.74. The highest dependency ratios occur in Alfred Nzo at 73.7 and OR Tambo at 70, followed by Amathole at 65.7, Chris Hani at 65.3 and Joe Gqabi at 63.8. In practical terms, these figures indicate that a comparatively smaller economically active population must support a larger dependent population.

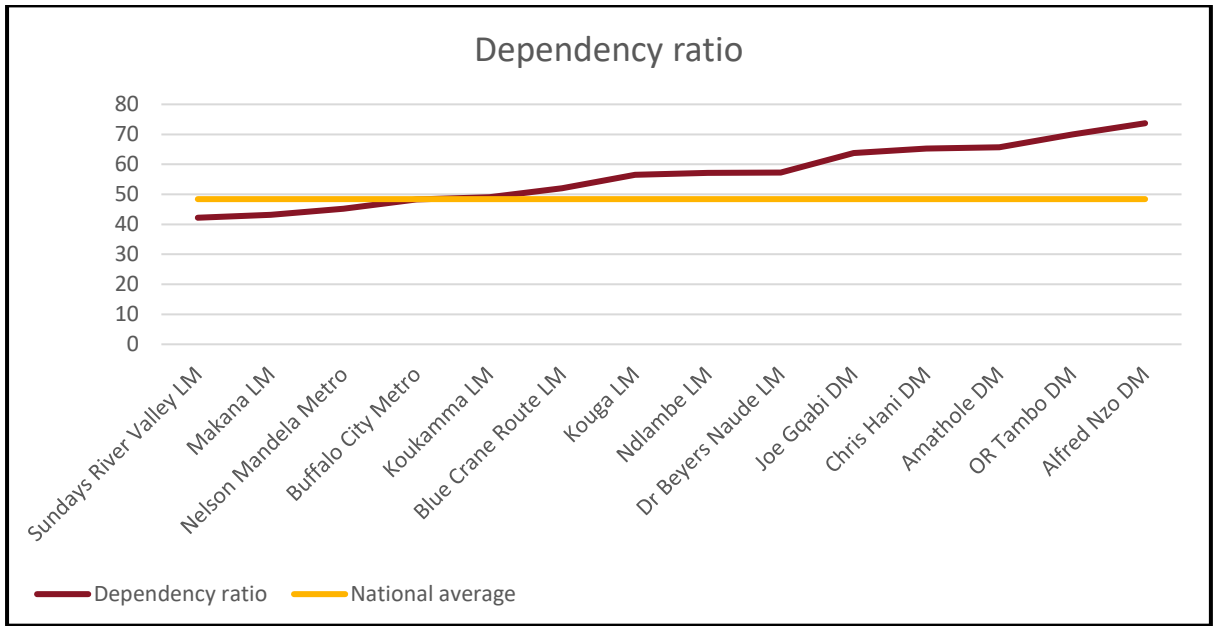


Figure 9: Dependency ratio, Eastern Cape WSAs *(Source: Census 2022)*

The indicators become particularly significant when considered together. OR Tambo and Alfred Nzo have the two highest proportions of children under 15, the two highest dependency ratios, and unemployment rates exceeding 50%. These water services authorities therefore face several overlapping demographic and economic pressures on

their potential revenue bases. Amathole and Chris Hani display a similar, although less severe, combination of high unemployment and high dependency ratios.

There is also a notable contrast between these predominantly high-pressure areas and municipalities such as Kouga. Kouga combines the lowest unemployment rate in the dataset, at 14.75%, with a comparatively low proportion of children under 15, although its dependency ratio of 56.5 remains above both the national and global averages. This illustrates why no single demographic indicator is sufficient to assess the potential strength of a municipality's revenue base.

Taken together, these indicators point to significant revenue pressures across substantial parts of the Eastern Cape. But they also demonstrate considerable variation within the province. High unemployment reduces the proportion of residents likely to be able to pay consistently for municipal services, while high dependency levels place additional pressure on household income. In municipalities where these conditions overlap, the capacity to generate own revenue from service charges is likely to be particularly constrained, increasing the importance of free basic services, subsidies and intergovernmental transfers in sustaining water services.

Reasonable Measures

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

Policy and Legislation

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

Most water services authorities in the Eastern Cape have the required instruments in place. Ten of the 14 municipalities have a Water Services By-law, WSDP and Indigent Policy. All 14 municipalities have an Indigent Policy, while 13 have a Water Services By-law.

Municipality	By-law	WSDP	Indigent Policy
Alfred Nzo District Municipality	x	x	x
Amathole District Municipality	x	x	x
Blue Crane Route Local Municipality	x	x	x
Buffalo City Metropolitan Municipality	x	x	x
Chris Hani District Municipality	x	x	x
Dr Beyers Naude Local Municipality	x	x	x
Joe Gqabi District Municipality	x	x	x
Kouga Local Municipality	x	x	x
Koukamma Local Municipality	x	x	x
Makana Local Municipality	x	o	x
Ndlambe Local Municipality	x	o	x
Nelson Mandela Metropolitan Municipality	x	x	x
OR Tambo District Municipality	x	o	x
Sundays River Valley Local Municipality	o	o	x

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

The principal gap relates to WSDPs. Makana, Ndlambe, OR Tambo and Sundays River Valley do not have a WSDP. Sundays River Valley is the only WSA that also does not have a Water Services By-law, meaning that it has only one of the three instruments assessed.

The absence of a WSDP in four municipalities is particularly relevant because the earlier indicators show that these municipalities face very different water services challenges. Ndlambe is experiencing the highest population growth rate in the province, at 3.51%,

while OR Tambo serves the largest population, at approximately 1.5 million residents. Sundays River Valley, meanwhile, is operating at 139% of its recorded water treatment capacity and has non-revenue water of 66%. The absence of a WSDP in these municipalities therefore coincides with circumstances that require careful planning for water demand, infrastructure and resource management.

Overall, the Eastern Cape performs relatively well in having the basic governance instruments for water services in place. However, the absence of WSDPs in four WSAs remains an important planning gap, while Sundays River Valley stands out as the only municipality without both a Water Services By-law and a WSDP.



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.

Six of the 14 WSAs do not have sufficient funding to fully cover their planned water services budgets (see **Figure 10**). Dr Beyers Naude records the lowest budget sufficiency at 84%, followed by Blue Crane Route at 88%, Amathole at 90%, Kouga at 93%, Koukamma at 97% and Ndlambe at 99%. The remaining eight municipalities have budget sufficiency of at least 100%, with Chris Hani recording the highest level at 129%.

The position is considerably stronger when the revenue generated from water services is compared with operating expenditure. Thirteen of the 14 WSAs generate sufficient revenue to cover their operating costs (see **Figure 11**). Dr Beyers Naude is the only exception, with revenue sufficient to cover approximately 95% of its operating expenditure. At the other end of the spectrum, OR Tambo records revenue sufficiency of 175%, followed by Chris Hani at 161% and Alfred Nzo at 155%.

These figures also provide important context to the earlier socioeconomic indicators. High unemployment and dependency within a municipality do not necessarily mean that the WSA itself has insufficient financial resources to operate its water services. OR Tambo, for example, records the highest unemployment rate in the province at 55.6% and a dependency ratio of 70, yet also records the highest revenue sufficiency at 175%. Alfred Nzo similarly combines unemployment of 50.2% and the highest dependency ratio in the province, at 73.7, with revenue sufficiency of 155%. Socioeconomic vulnerability among residents and the financial position of the water services authority should therefore be considered as distinct indicators.

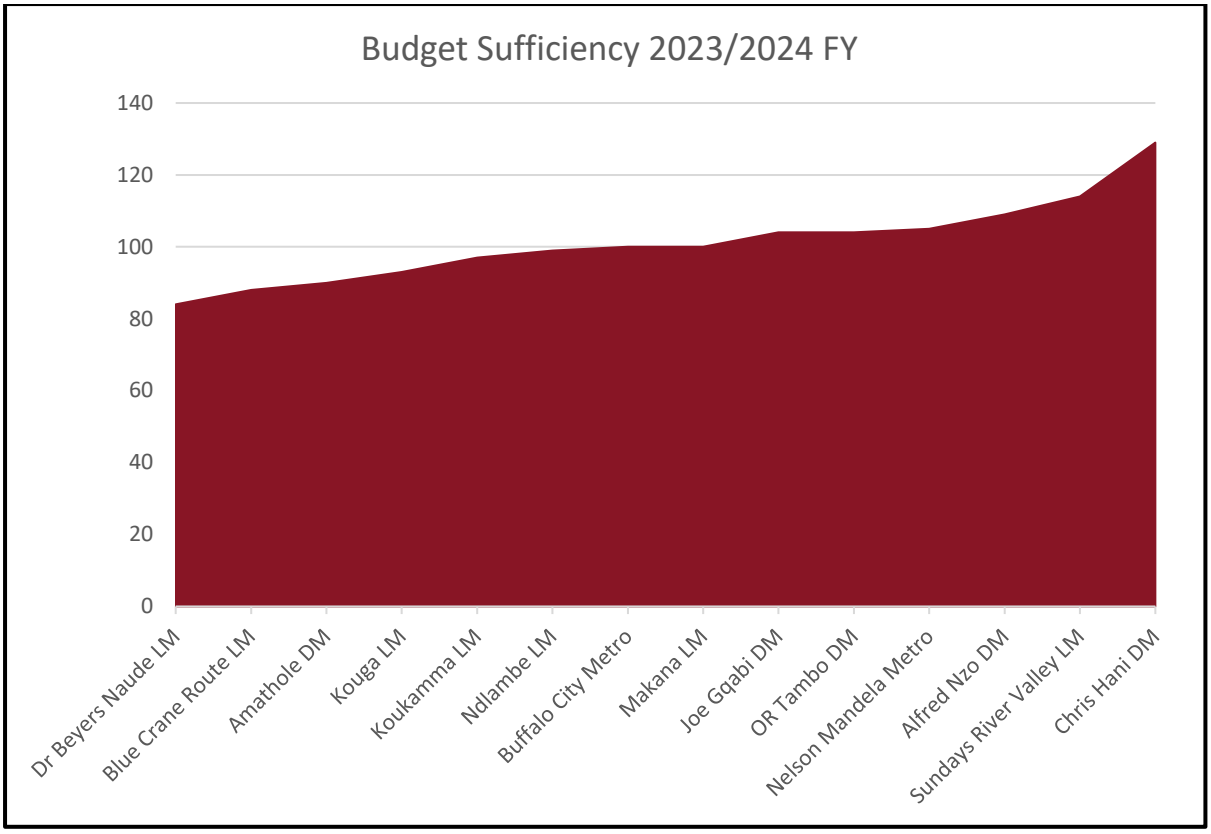


Figure 10: Total budgeted revenue/total budgeted expenditure (excl. capital transfers and contributions), WSAs in the Eastern Cape *(Source: Table C1, MFMA Schedules)*

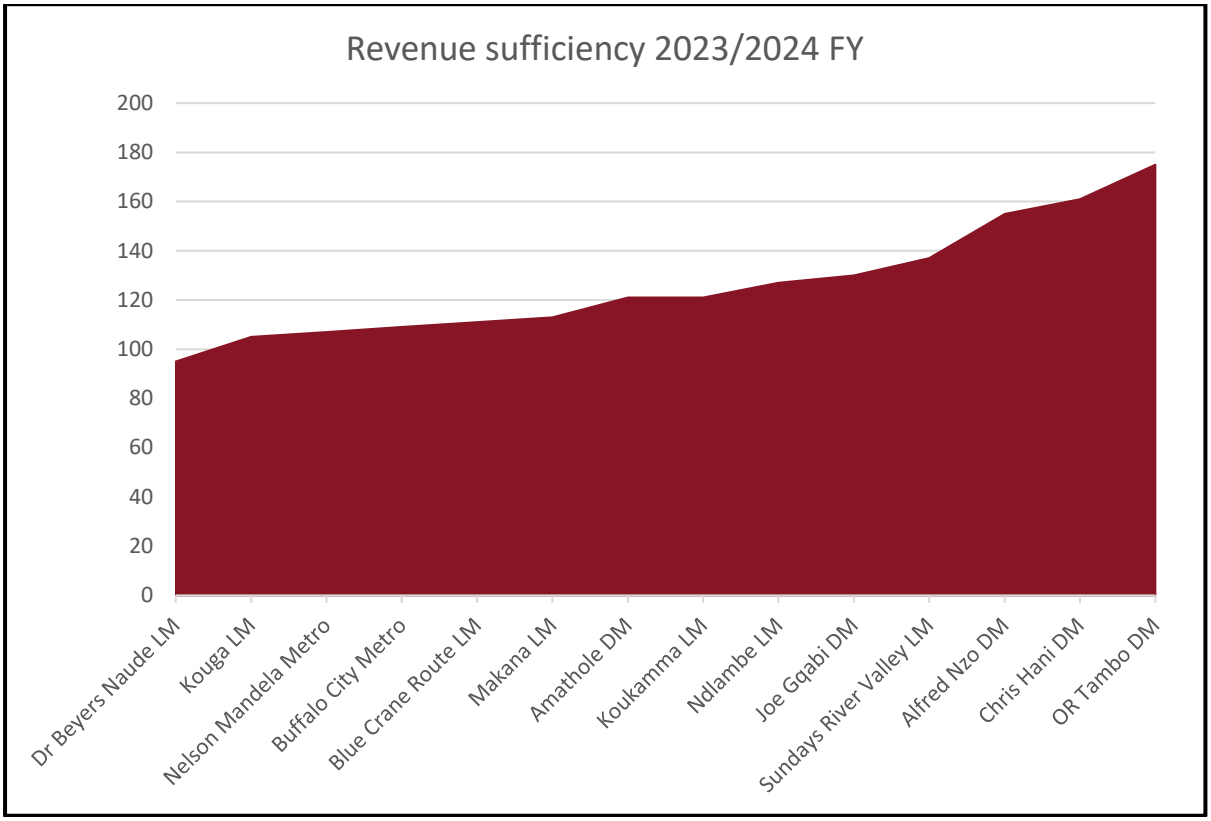


Figure 11: Total budgeted revenue (incl. capital transfers)/total budgeted CAPEX+OPEX, WSAs in the Eastern Cape *(Source: Table C2, MFMA Schedules)*

Infrastructure renewal expenditure varies substantially across the province (see **Figure 12**). In FY 2023/24 Chris Hani, Dr Beyers Naude and OR Tambo allocated no expenditure to infrastructure renewal, while Ndlambe allocated only 1% and Sundays River Valley 2%. At the opposite end, Koukamma allocated 43%, followed by Buffalo City and Joe Gqabi at 27% each and Makana at 26%.

The absence or very low level of renewal expenditure is noteworthy when considered alongside some of the infrastructure pressures identified earlier. Sundays River Valley is operating at 139% of its recorded water treatment capacity but allocated only 2% to infrastructure renewal. OR Tambo allocated no expenditure to renewal despite serving the largest population in the dataset. Ndlambe, which records the highest population growth rate in the province at 3.51%, allocated only 1%. These figures do not establish whether additional renewal expenditure would address the particular infrastructure challenges identified, but they indicate limited investment in replacing or renewing existing water infrastructure.

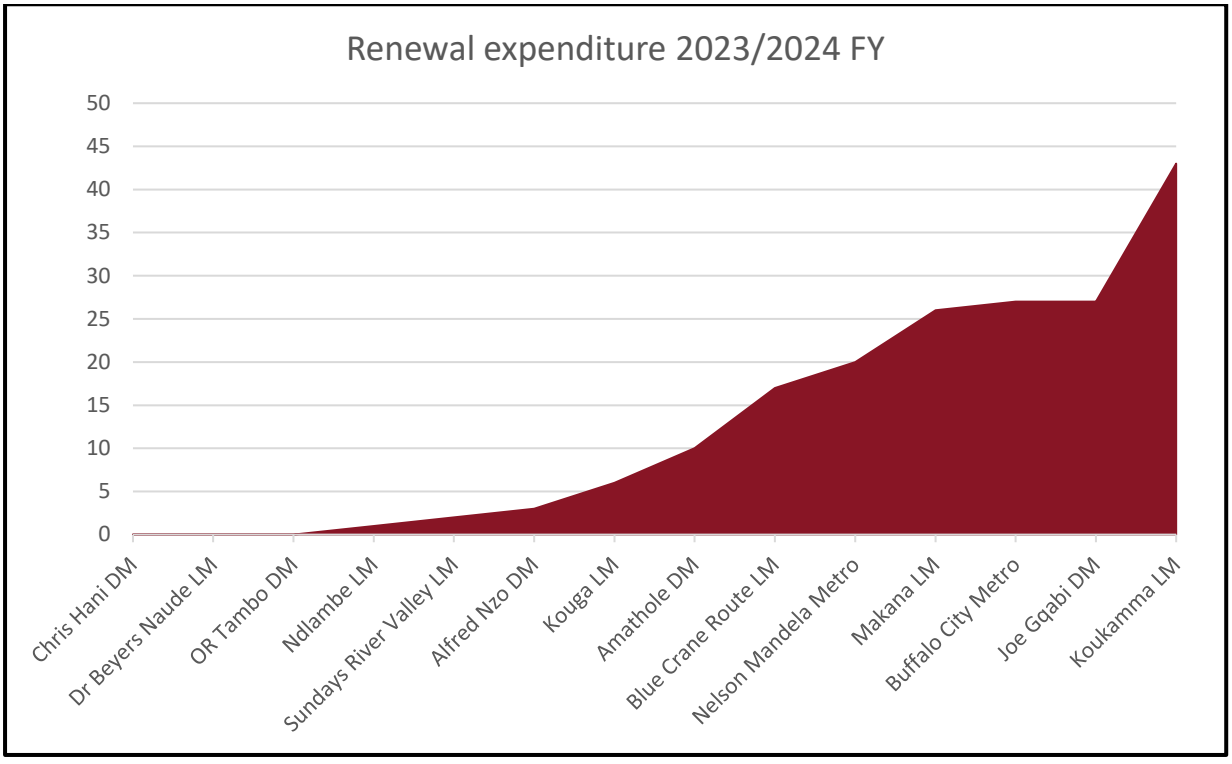


Figure 12: Amount allocated to asset renewal/total capital budget, WSAs in the Eastern Cape
(Source: Table SC13a and Table C5, MFMA Schedules)

Maintenance expenditure varies less dramatically but remains relatively low across most WSAs (see **Figure 13**). Nine of the 14 municipalities spend 5% or less on maintenance. Blue Crane Route, Makana and OR Tambo record the lowest expenditure at 2%, followed by Amathole and Sundays River Valley at 3%. Kouga stands out with maintenance expenditure of 18%, substantially above the remainder of the province, followed by Alfred Nzo at 9% and Dr Beyers Naude at 8%.

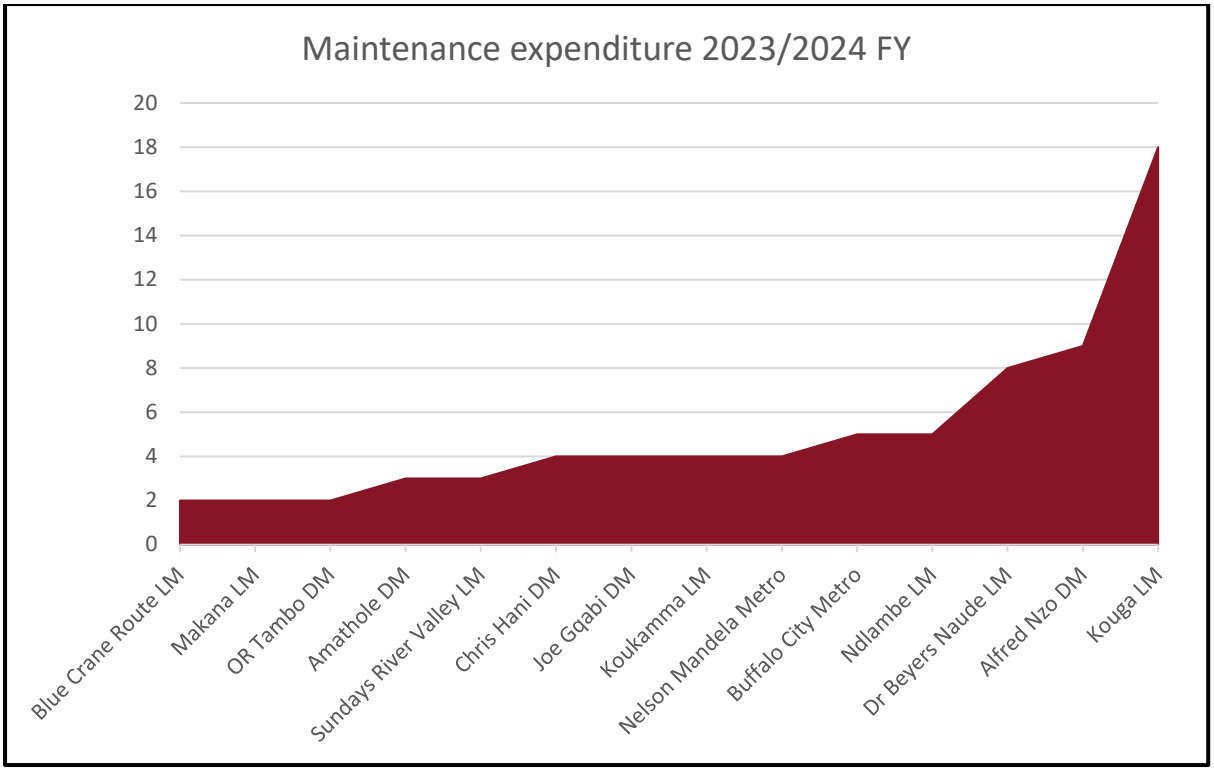


Figure 13: Total maintenance expenditure/total revenue collected, WSAs in the Eastern Cape
(Source: Table SC13a and Table C2, MFMA Schedules)

Revenue collection is comparatively strong in most of the province (see **Figure 14**). Ten of the 14 WSAs in the Eastern Cape have collection rates above 80%, including Joe Gqabi at 100% and Makana at 113%. Four fall below 80%: Sundays River Valley at 79%, Blue Crane Route at 76%, Koukamma at 67% and OR Tambo at only 54%.

OR Tambo illustrates the distinction between revenue sufficiency and actual revenue collection particularly clearly. Its revenue sufficiency is the highest in the province at 175%, indicating that the revenue associated with water services substantially exceeds operating expenditure, while its collection rate is the lowest at only 54%. Having a potentially sufficient revenue base therefore does not necessarily mean that the municipality successfully collects that revenue.

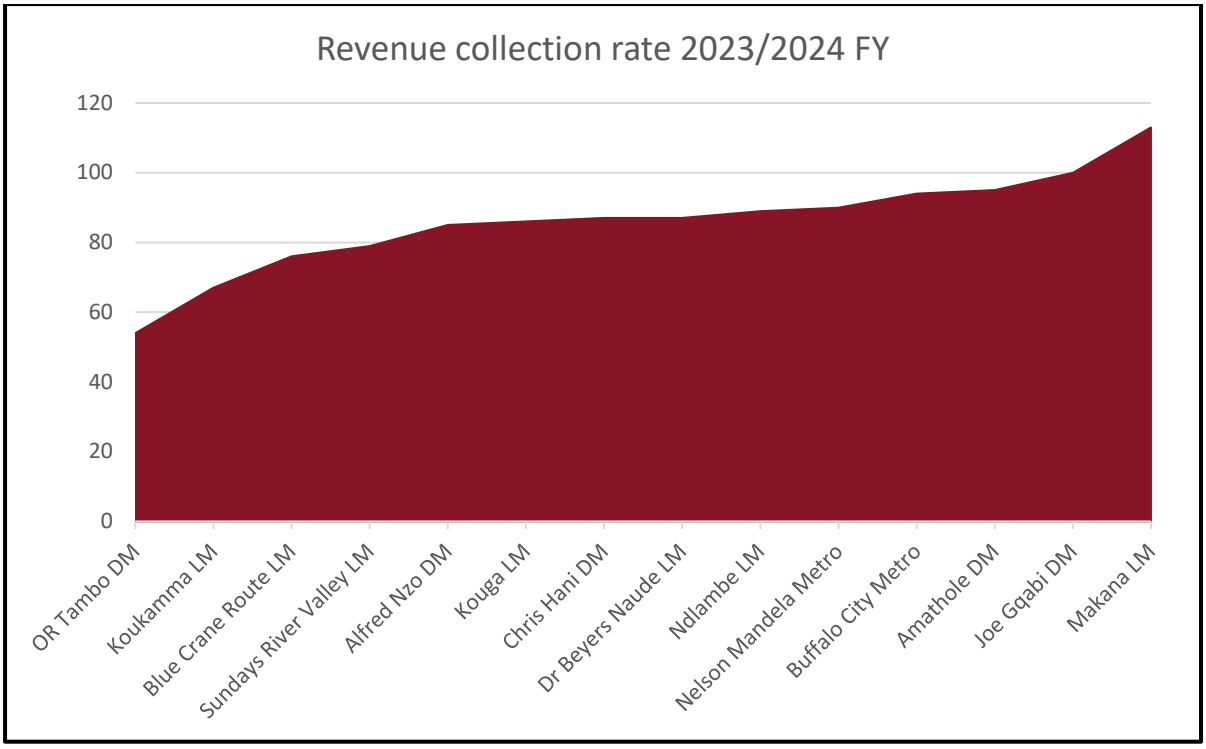


Figure 14: Actual revenue collected/budgeted revenue, WSAs in the Eastern Cape *(Source: Table C2, MFMA Schedules)*

When revenue collection is considered alongside drinking-water quality, WSAs with stronger collection rates tend to have somewhat better compliance results, but the relationship is not sufficiently consistent to suggest that collection performance alone explains water quality outcomes. This indicates that the financial capacity to collect revenue is only one of several factors likely to influence the ability to provide safe drinking water.

Taken together, the financial indicators present a mixed picture. Most Eastern Cape WSAs generate sufficient revenue to cover their operating costs, and revenue collection exceeds 80% in ten municipalities. However, six municipalities do not have sufficient funding to cover their full planned water services budgets. Investment in infrastructure renewal and maintenance is also uneven, with several municipalities allocating very little or no funding to renewal despite infrastructure and demographic pressures. Financial sustainability therefore depends not only on whether sufficient revenue exists, but also on whether it is collected and whether adequate resources are directed towards maintaining and renewing the infrastructure required to sustain water services over time.

Infrastructure Resources

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

Water treatment works (WTWs) are facilities where raw water from either surface or underground sources is treated to potable standards. In the Eastern Cape, there are 222 WTWs producing an average daily treatment volume of 785 Ml.[52] Available design capacity is almost double this figure, at 1,361 Ml.[53]

Four WSAs are operating at more than 90% of their recorded water treatment capacity. Blue Crane Route Local Municipality and Buffalo City Metropolitan Municipality are both operating at approximately 92%. At this level, very little spare treatment capacity remains available. Sustained operation at such high levels also limits the flexibility available to accommodate increases in demand or periods during which infrastructure must be taken offline for maintenance or repairs.

The position is considerably more severe in Sundays River Valley and Koukamma local municipalities. Sundays River Valley is operating at approximately 139% of its recorded treatment capacity, while Koukamma is operating at approximately 151%. These figures indicate that recorded treatment requirements exceed the stated capacity of the existing infrastructure and point to a clear need to investigate and increase available treatment capacity.

Koukamma is particularly noteworthy when these figures are considered alongside the demographic data. It is the smallest WSA in the dataset, with fewer than 10,000 households and approximately 36,500 residents, yet it records the highest utilisation of water treatment capacity in the province. High infrastructure pressure is therefore not confined to the province's large population centres.

Kouga Local Municipality is also approaching the upper limits of its existing capacity, operating at approximately 89%. Although it falls below the 90% threshold, it has considerably less spare capacity than most of the remaining water services authorities and should therefore be distinguished from municipalities operating at substantially lower levels.

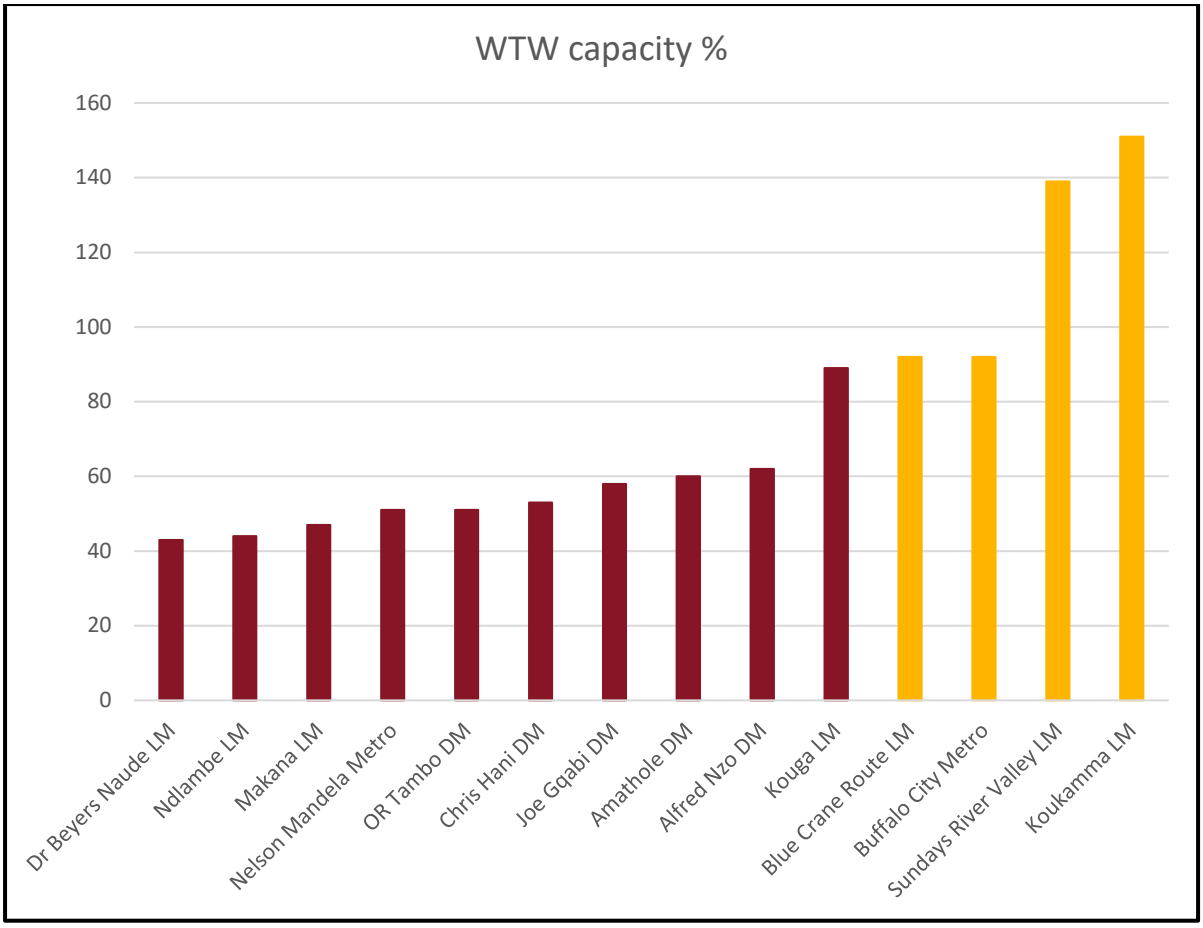


Figure 15: Percentage of used WTW capacity, Eastern Cape WSAs *(Source: 2023 Blue Drop Watch Report)*

The provincial picture is highly uneven. While four WSAs are operating above 90% and Kouga is approaching that level, nine authorities are operating between 43% and 62% of their recorded capacity. This suggests that infrastructure pressure is concentrated in particular parts of the province rather than reflecting a province-wide shortage of treatment capacity.

There is also an important relationship between current capacity and the population growth figures. Ndlambe, which has the highest population growth rate in the dataset at 3.51%, is currently using only 44% of its treatment capacity. By contrast, Blue Crane Route has a growth rate below the national average but is already operating at 92%, while Koukamma is experiencing negative population growth but is operating at 151%. Current infrastructure pressure therefore does not correspond neatly with population growth. This reinforces the need for water infrastructure planning to consider the circumstances and capacity constraints of individual WSAs rather than relying on demographic trends alone.

Taken together, the figures indicate that most Eastern Cape WSAs currently have some spare water treatment capacity, but a smaller group faces significant infrastructure pressure.

In addition to WTWs, WSAs across South Africa must manage borehole schemes, reservoirs, bulk pipelines and a pipeline distribution network. There are vast differences in the infrastructure assets each WSA must manage. Makana Local Municipality doesn't manage any reservoirs and seven WSAs manage fewer than 20 (see **Figure 16**). At the other end of the spectrum. Chris Hani District Municipality manages 113 reservoirs. The number of reservoirs does not necessarily correlate with population size. For example, OR Tambo District, with the largest population in the provinces, only manages 35 reservoirs – though whether this is sufficient will also depend on capacity.

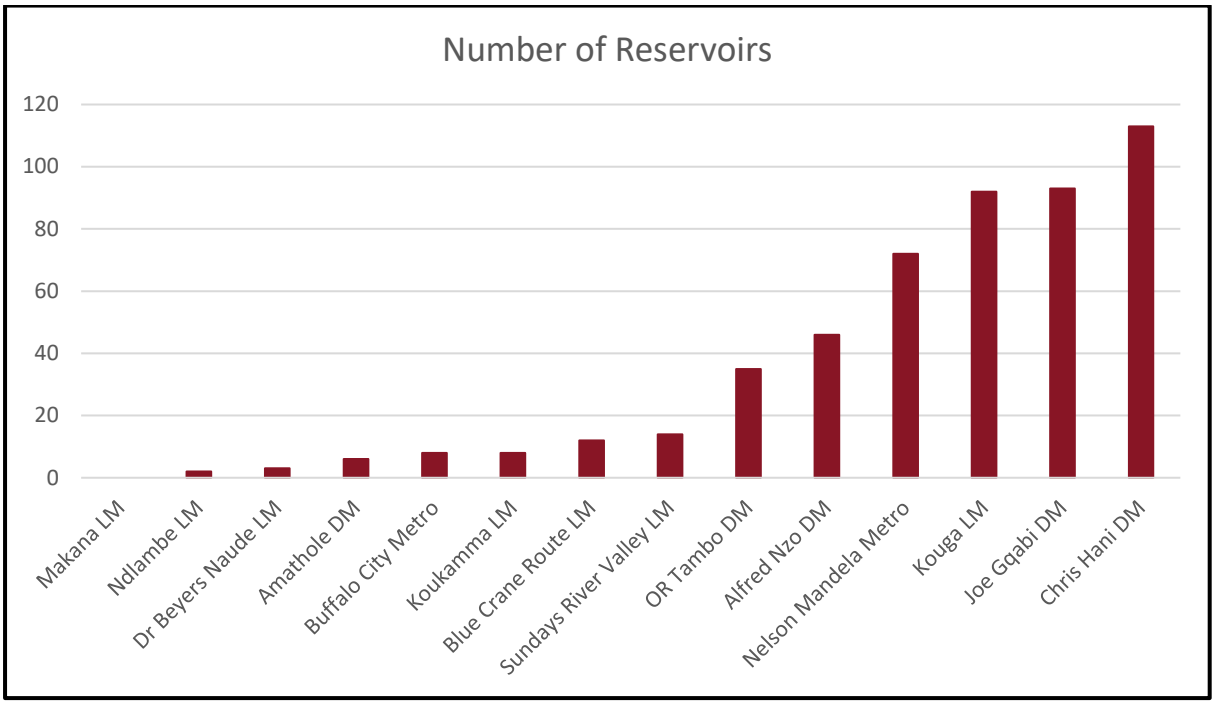


Figure 16: Number of reservoirs WSAs, Eastern Cape *(Source: 2023 Blue Drop Watch Report)*

The Blue Drop data provides an overview of the scale and composition of water services infrastructure in the Eastern Cape, including water treatment works, bulk pipelines, distribution pipelines and reservoirs. However, significant gaps in the reported infrastructure data limit comparisons between WSAs.

The most notable gap relates to pipeline infrastructure. Distribution pipeline lengths are not reported for 11 of the 14 municipalities, while bulk pipeline information is unavailable for six (see **Figure 17**). In some cases, the absence of information appears difficult to reconcile with the scale of the water services system. Chris Hani District Municipality, for example, extends across 36,406 km^2 and reports 22 water treatment works and 113 reservoirs, but only 36 km of bulk pipeline and no distribution pipeline length. Dr Beyers Naudé Local Municipality covers 28,653 km^2 and reports 10 treatment works, but no information on either bulk or distribution pipeline length. Similarly, Amathole District Municipality covers 21,114 km^2 and reports 30 treatment works, but no pipeline lengths.

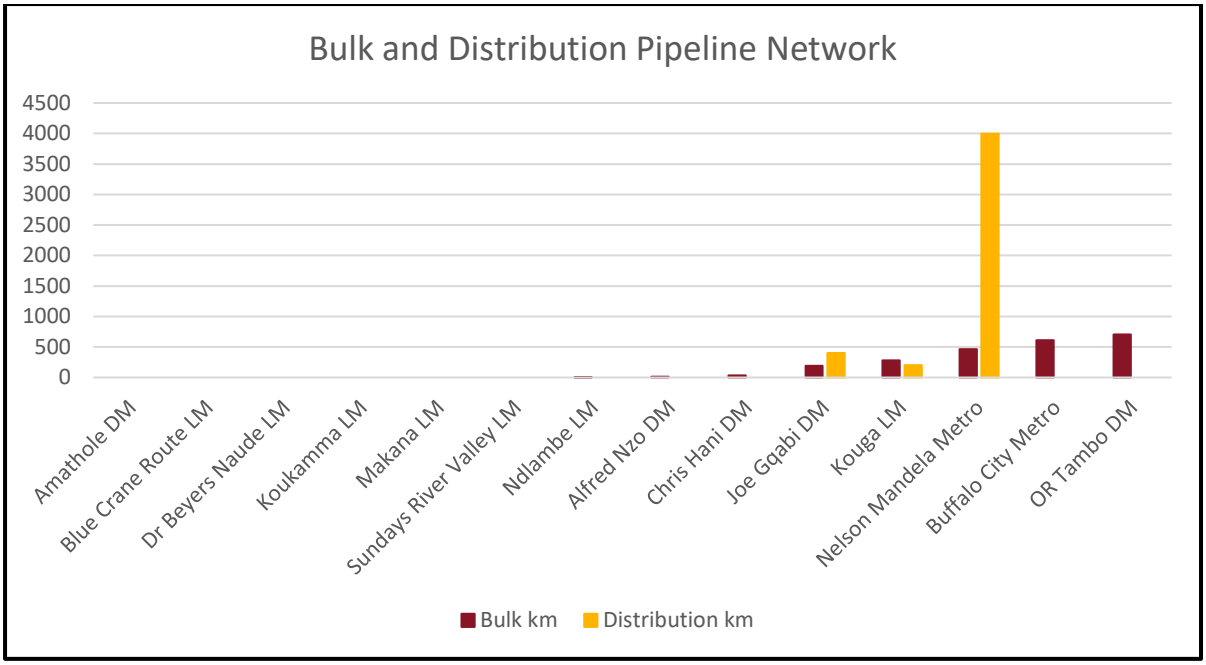


Figure 17: Extent of bulk and distribution pipeline networks, Eastern Cape WSAs *(Source: 2023 Blue Drop Watch Report)*

This does not necessarily mean that the infrastructure does not exist or that all unreported infrastructure should appear on municipal asset registers. Amatola Water provides bulk water services to a number of municipalities in the province, including Buffalo City, Amathole and parts of Ndlambe, and infrastructure forming part of these arrangements may therefore be owned or operated by the water board rather than the municipality. Nevertheless, the extent of the missing information raises concerns about the completeness and transparency of infrastructure records available for water services planning. Where municipal infrastructure is not properly recorded, municipalities may have difficulty planning for its maintenance, renewal and replacement and making appropriate budgetary provision.

The geographical scale of water services authorities also differs substantially from their population size. Nelson Mandela Bay serves approximately 1.19 million people across only 1,957 km^2 and reports 462 km of bulk pipeline and 3,999 km of distribution pipeline. By comparison, Dr Beyers Naudé covers 28,653 km^2 while serving approximately 101,000 people, but pipeline lengths are not reported. These differences demonstrate why population alone is an inadequate measure of infrastructure requirements: geographically dispersed municipalities may require extensive networks to serve comparatively small populations.

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.

The Eastern Cape has a substantial shortage of these technical skills. Across the 14 WSAs, an additional 204 process controllers and 15 qualified scientists are required (see **Figure 18**). Thirteen of the 14 municipalities require additional process controllers, while nine require additional scientists. Makana Local Municipality is the only municipality with no recorded process-controller shortfall, although it requires two additional scientists. Five municipalities – Amathole, Buffalo City, Chris Hani, Kouga and Nelson Mandela Bay – have no recorded shortage of qualified scientists.

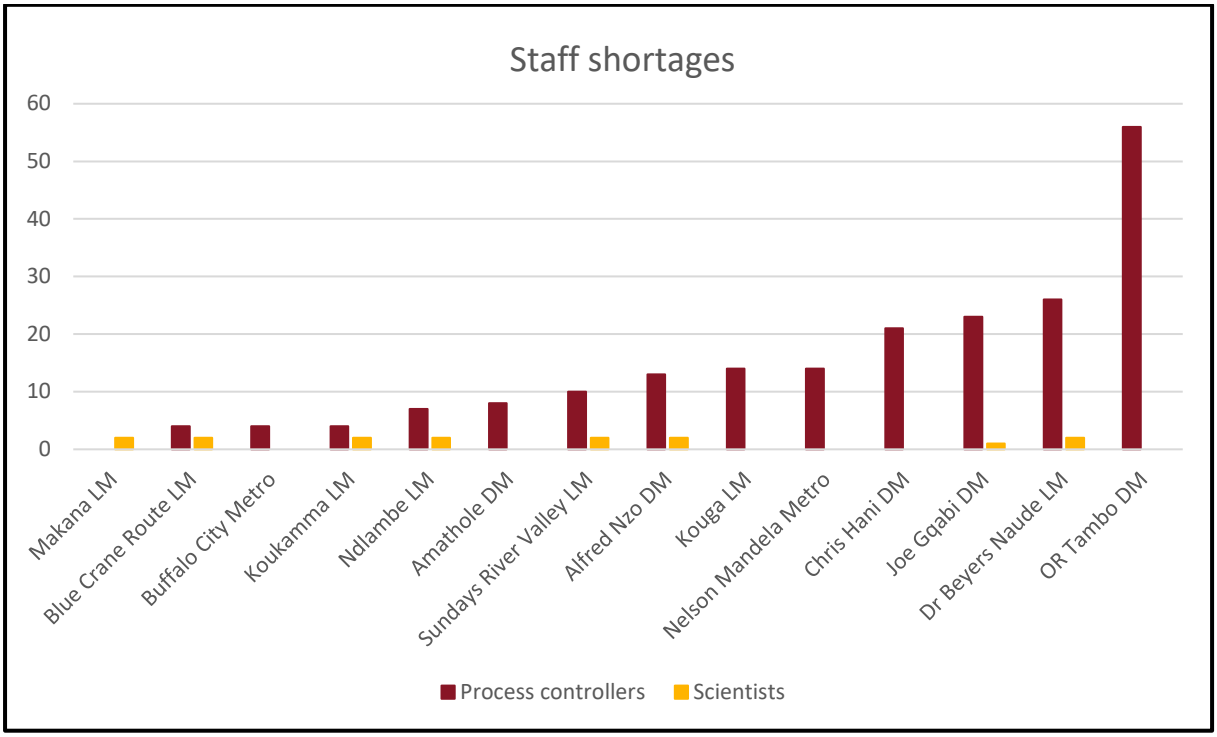


Figure 18: Shortages of process controllers and scientists, Eastern Cape WSAs *(Source: 2023 Blue Drop Watch Report)*

Quantitatively, staff shortages are linked to the number of water treatment works (WTW) or water supply systems (WSS) each WSA operates. A better comparative indication of

skills shortages across WSAs is provided by the Supervisor/WTW and Technical Staff/WTW ratios measured in the 2023 *Blue Drop* report (see **Table 5**). The ratios show the nominal number of staff per WTW or WSS. the ratio of supervisory staff across the province exceeds a 1:1 ratio in all WSAs with the exception of Dr Beyers Naude and Sundays River Local Municipalities. But in a similar vein to other provinces, in the majority of WSAs, the ratio of technical staff per work or system (technicians, technologies, engineers and scientists) is below 1.

Municipality	Supervisor/WTW Ratio	Technical Staff /WTW Ratio
Alfred Nzo DM	1.9	0.6
Amatole DM	4.6	0.1
Blue Crane Route LM	3.0	0.7
Buffalo City LM	3.2	1.3
Chris Hani DM	1,2	0.7
Dr Beyers Naude LM	0.5	0.4
Joe Gqabi DM	5.1	0.1
Kouga LM	0.4	1.0
Koukamma LM	2.7	0.2
Makana LM	4.3	1.3
Ndlambe LM	3.2	0.6
Nelson Mandela Metro	6.0	9.0
OR Tambo DM	1.2	0.3
Sundays River Valley LM	0.3	0.7

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

Overall, the data points to a widespread technical skills constraint in the Eastern Cape. The scale of these shortages is important for the sustainability of water services, even though the available data does not establish a direct relationship between the size of a municipality's staffing shortfall and its drinking-water quality results. Staffing capacity should therefore be understood as one part of the broader institutional and operational environment within which water services are provided.

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 the Eastern Cape meet international and national standards in this regard.

Physical Access

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

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

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

The data shows substantial differences in levels of physical access across the province. Based on the 2021/2022 non-financial census of municipalities, eight of the 14 WSAs still serve some residents through communal taps situated more than 200 meters from their yards, which falls below the required national minimum level of service (see **Figure 19**). The proportion ranges from 0.7% in Buffalo City to 28.9% in Chris Hani District Municipality.

Chris Hani performs particularly poorly on this measure. Approximately 28.9% of residents rely on communal taps situated more than 200 meters away. This means that more than one in four residents receive water at a level below the national minimum standard. Amathole District Municipality also records a substantial proportion, at 14.4%, followed by OR Tambo District Municipality at 10.7%. By contrast, Alfred Nzo, Dr Beyers Naude, Joe Gqabi, Kouga, Makana and Nelson Mandela Bay record no residents in this category.

Access to a yard tap also differs considerably across the province. Kouga records 100% access, while Dr Beyers Naude, Koukamma, Makana and Sundays River Valley all record

more than 90%. At the opposite end of the spectrum, only 20% of residents in Amathole have access to a yard tap, followed by Alfred Nzo at 25.5% and Chris Hani at 30%. Consequently, even where residents meet the minimum standard through access to a communal tap within 200 meters, the actual level and convenience of water access remain substantially different between municipalities.

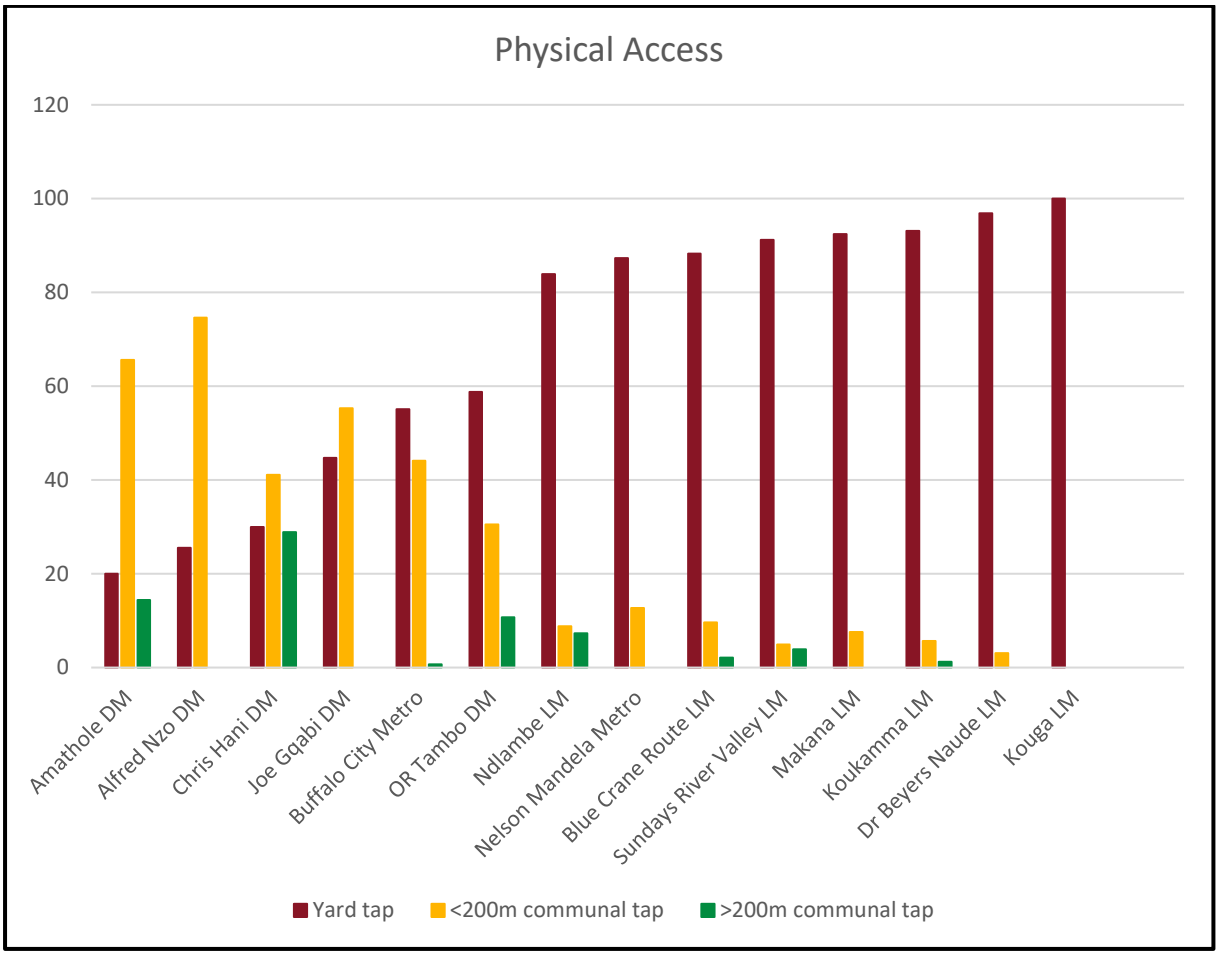


Figure 19: Physical access to a potable water access point, Eastern Cape WSAs *(Source: 2021/22 non-Financial Census of Municipalities)*

Access to water inside the home reveals similar disparities. Koukamma records the highest proportion at 84.2%, followed by Nelson Mandela Bay at 82.3% (see **Figure 20**). At the other end of the spectrum, only 22.1% of residents in Alfred Nzo have access to water inside their homes. This means that fewer than one in four residents have an internal household water connection. OR Tambo follows at 29.3% and Amathole at 34.6%. Four of the five lowest levels of access to water inside the home occur in district municipalities: Alfred Nzo, OR Tambo, Amathole and Joe Gqabi. Chris Hani, another district municipality, records only 45.9%. This indicates that meeting a minimum level of physical access does not necessarily translate into equivalent levels of household water access across the province.

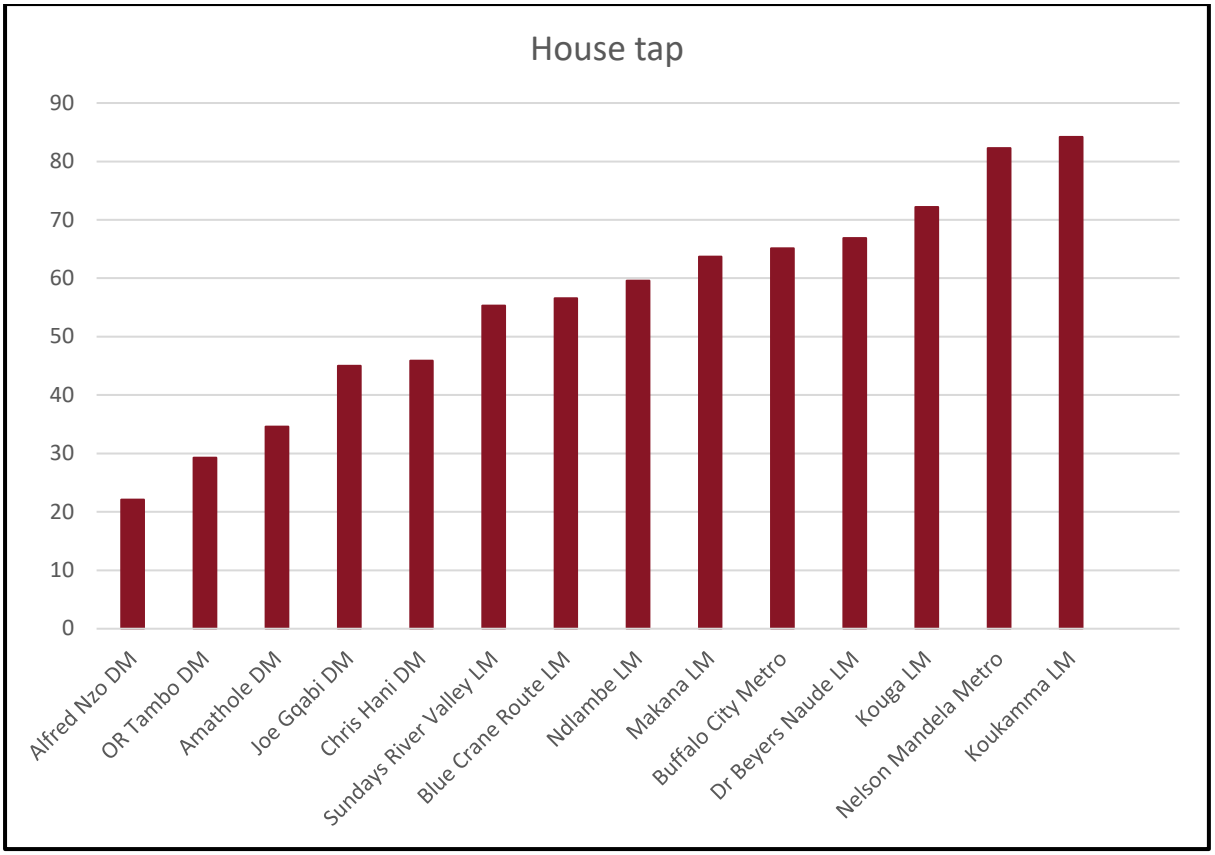


Figure 20: Piped water within a dwelling, Eastern Cape WSAs *(Source: 2022 Census)*

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 0.83, which means that service delivery points on average cover 83% of households.

This means that, on average, 8.3 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.[54] However, in dense informal settlements, a single service point may be serving many more households.[55] OR Tambo records the lowest ratio at 0.44. Blue Crane Route and Joe Gqabi both record 0.60, while Alfred Nzo records 0.63. At the upper end, Koukamma records 1.16, while Amathole and Chris Hani both record 1.17.

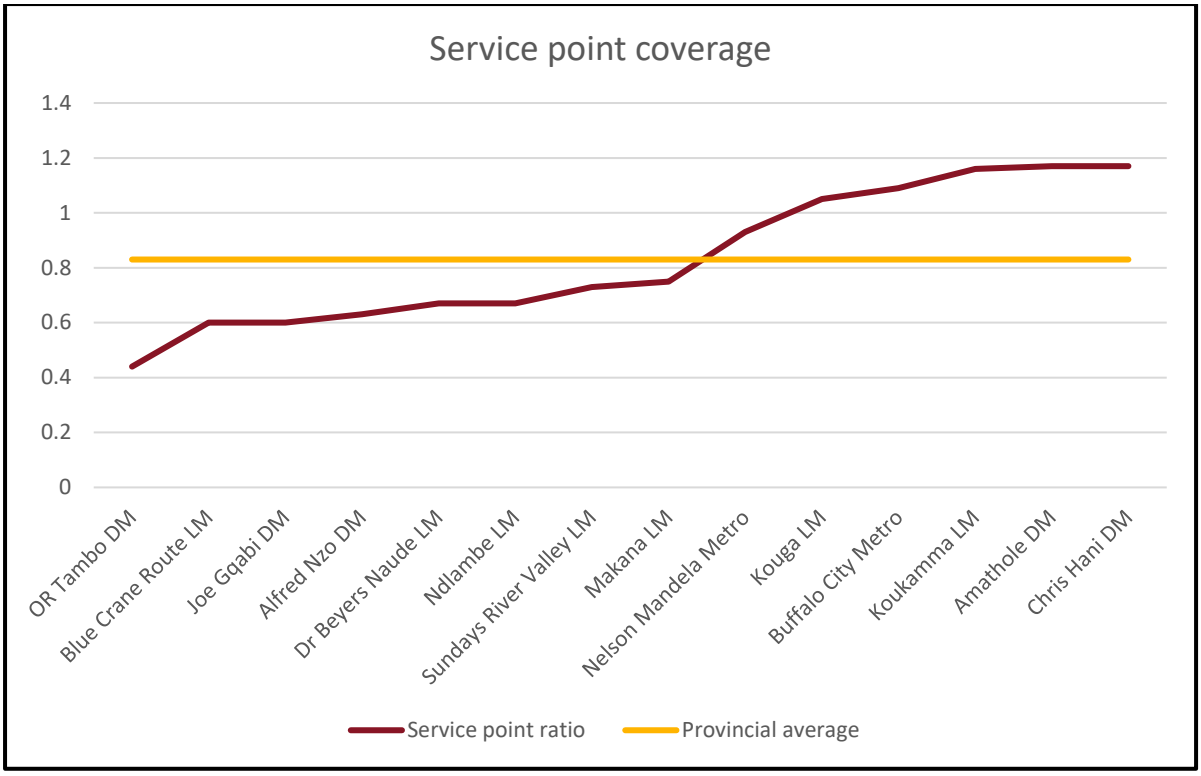


Figure 21: Service point coverage ratio, Eastern Cape WSAs *(Source: 2022 Census, 2021/22 Non-financial census of municipalities)*

Importantly, the service point coverage ratio should not be interpreted in isolation as an indication of adequate physical access. Chris Hani and Amathole provide the clearest examples. Both record the highest service point coverage ratio in the province, at 1.17. However, Chris Hani simultaneously has the highest proportion of residents relying on communal taps situated more than 200 meters away, at 28.9%, while Amathole has the second highest proportion, at 14.4%. Only 30% of residents in Chris Hani and 20% in Amathole have access to a yard tap.

This apparent contradiction demonstrates an important distinction between the availability of water service points and the level of service those points provide. A municipality may have a comparatively high number of service points relative to the population or households served while residents nevertheless travel distances exceeding the national minimum standard to access water. The indicators must therefore be considered together when assessing actual access to water services.

Taken together, the data shows that physical access to water remains highly uneven across the Eastern Cape. In some municipalities, almost all residents have access to at least a yard connection, and a substantial majority have water inside their homes. In others, large parts of the population remain dependent on communal infrastructure, including communal taps situated beyond the prescribed distance. Measuring access therefore requires more than determining whether water infrastructure exists: the location and level of service provided by that infrastructure are equally important.

Economic Access

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

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

None of the 14 WSAs in the Eastern Cape provide universal FBW (see **Table 6** below).

Municipality	All	Indigent
Alfred Nzo District Municipality		x
Amathole District Municipality		x
Blue Crane Route Local Municipality		x
Buffalo City Metropolitan Municipality		x
Chris Hani District Municipality		x
Dr Beyers Naude Local Municipality		x
Joe Gqabi District Municipality		x
Kouga Local Municipality		x
Koukamma Local Municipality		x
Makana Local Municipality		x
Ndlambe Local Municipality		x
Nelson Mandela Metropolitan Municipality		x
OR Tambo District Municipality		x
Sundays River Valley Local Municipality		x

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

The lack of universal FBW allocation is reflected in tariff structures. As **Figure 22** below shows, in 2020/21 the cheapest tariff blocks started at R2.23 per kilolitre in Alfred Nzo to R23.93 per kilolitre in Nelson Mandela Bay. The median tariff was approximately R10.67 per kilolitre. This provides a useful indication of the middle of the range charged for lower levels of consumption in the Eastern Cape.

The two metropolitan municipalities charge the most in the cheapest tariff bracket. In 2020/21 Buffalo City charged R18.54 per kilolitre, while Nelson Mandela Bay had the highest tariff at R23.93. Only Amathole, at R21.42, fell between the two metros. This means that households paying for lower levels of water consumption in the province's two metropolitan municipalities face tariffs towards the upper end of the provincial range.

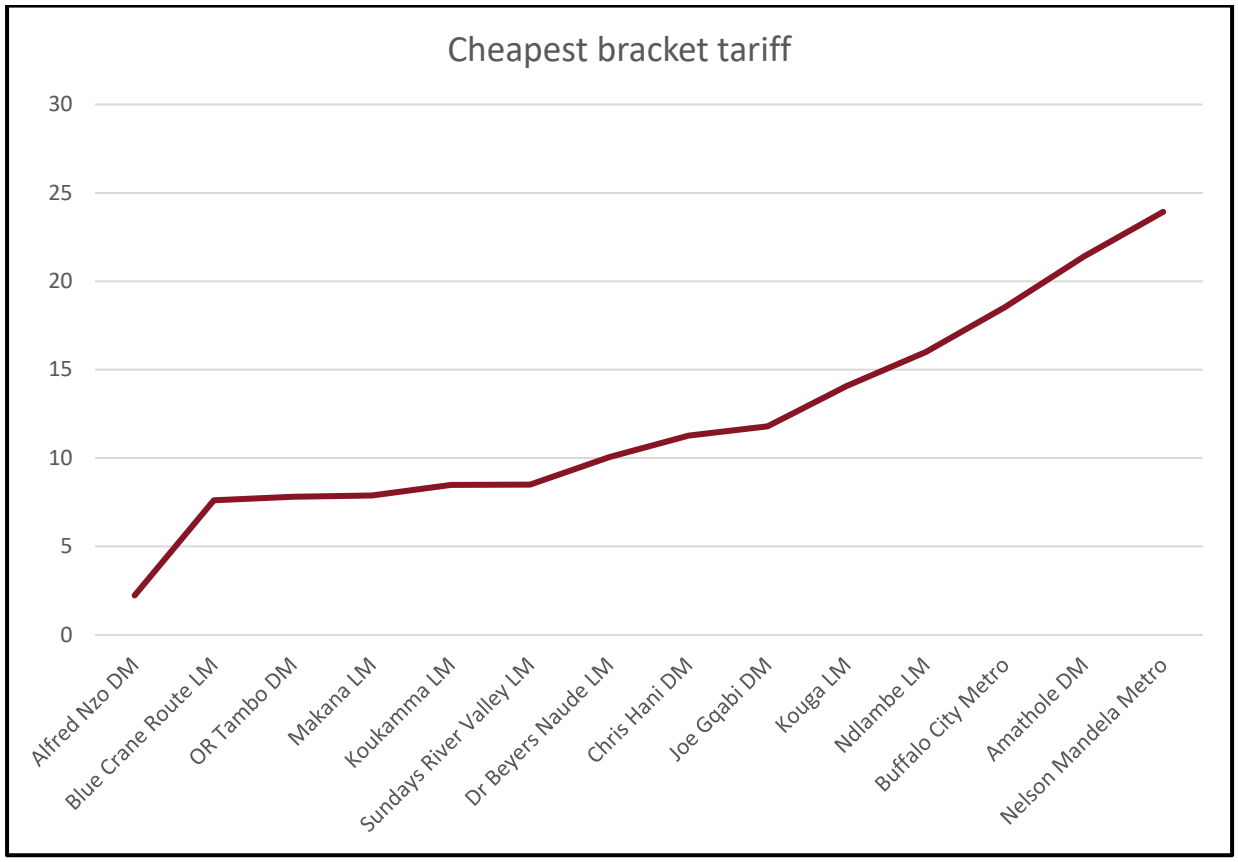


Figure 22: Cheapest tariff block, Eastern Cape WSAs *(Source: 2021/2022 Municipal Tariff Schedules)*

Differences become considerably greater in the most expensive tariff bracket (see **Figure 23**). The median is approximately R24.72 per kilolitre. Sundays River Valley's most expensive tariff was R13.39 per kilolitre, while Joe Gqabi recorded the highest at R179.20. Nelson Mandela Bay had the second-highest tariff at R134.09 per kilolitre. Buffalo City, at R42.71 was also among the more expensive municipalities, although below Kouga and Amathole.

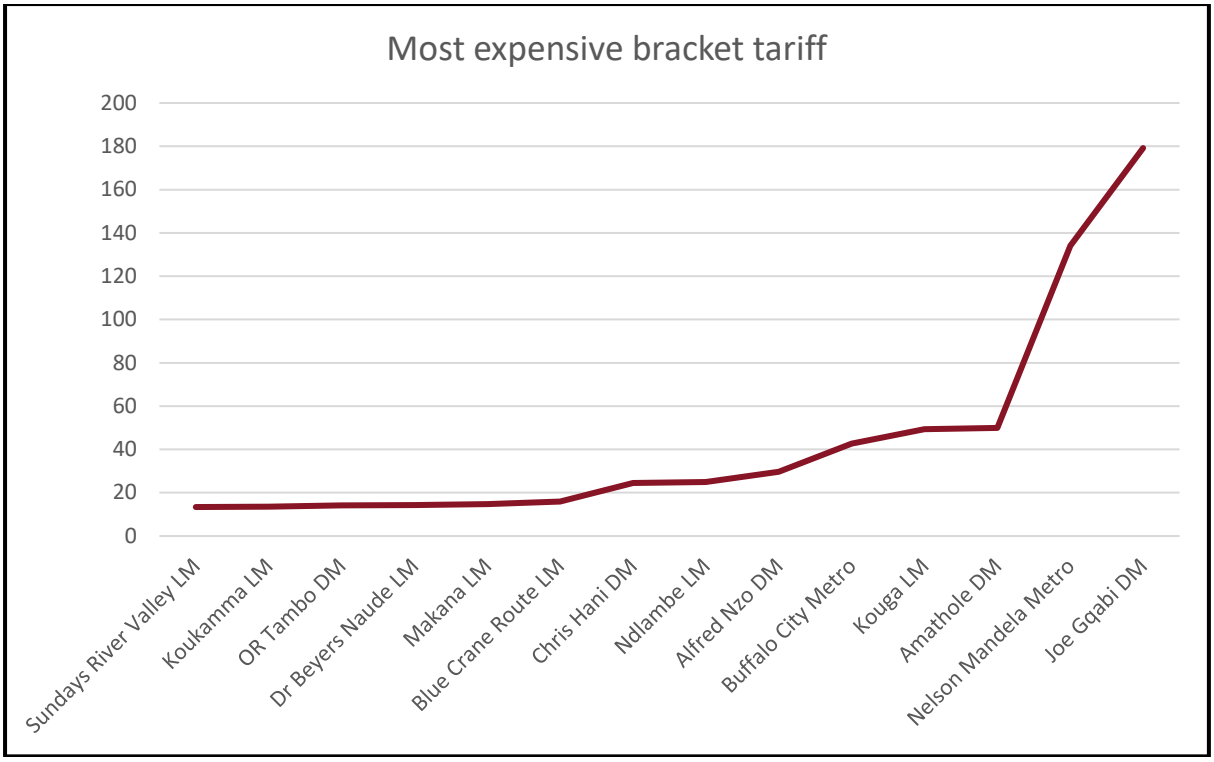


Figure 23: Most expensive tariff block, Eastern Cape WSAs *(Source: 2021/2022 Municipal Tariff Schedules)*

The spread between the cheapest and most expensive brackets differs substantially between municipalities. In several municipalities the increase is relatively modest. In Nelson Mandela Bay, however, the tariff increases from R23.93 in the cheapest bracket to R134.09 in the most expensive bracket, while Joe Gqabi increases from R11.79 to R179.20. This indicates substantial differences not only in the price of water between municipalities, but also in how strongly tariff structures increase the cost associated with higher levels of consumption.

Free Basic Water

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

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

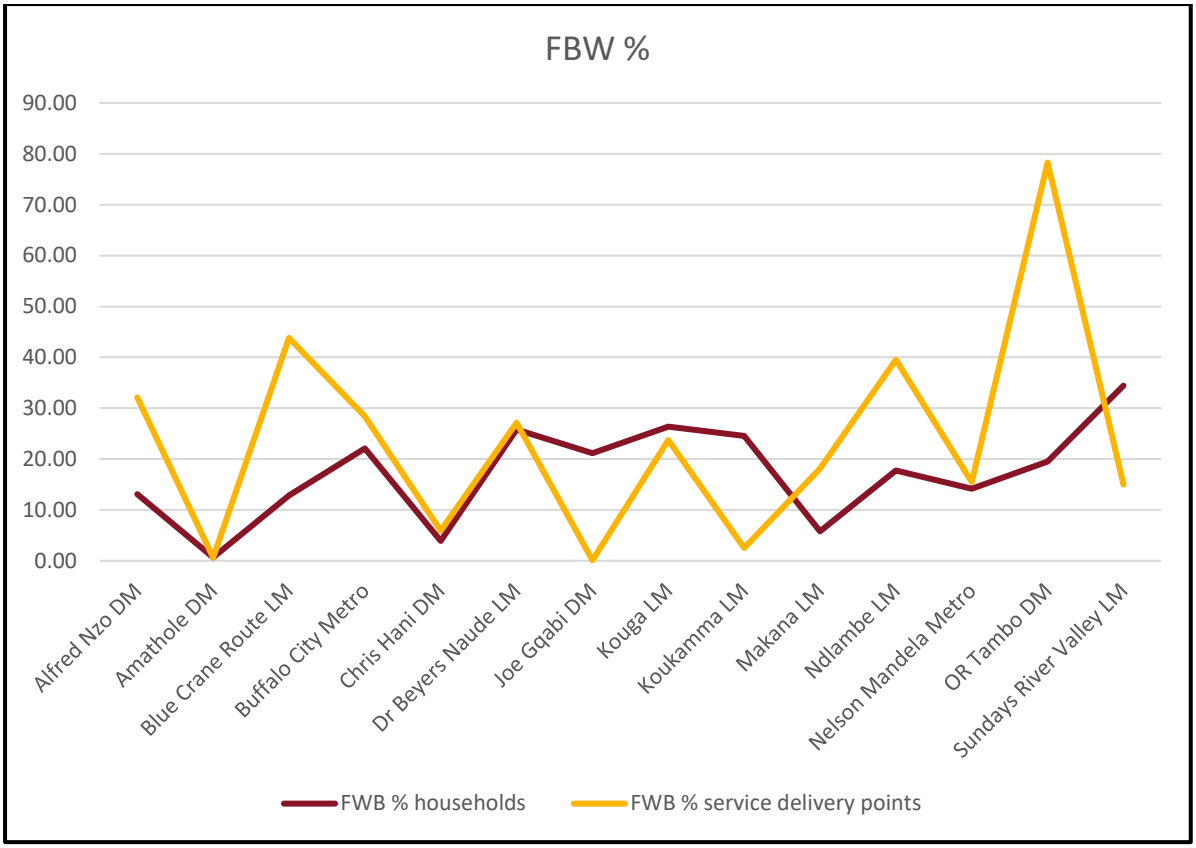


Figure 24: Percentage of FBW per number of households and service delivery points, Eastern Cape WSAs *(Source: 2022 Census, 2021/2022 Non-Financial Census of Municipalities)*

There are substantial differences in the proportion of households receiving FBW across the province. Amathole District Municipality has the lowest coverage, with only 0.66% of households receiving FBW, followed by Chris Hani District Municipality at 3.89% and Makana Local Municipality at 5.77%. At the opposite end of the spectrum, Sundays River Valley Local Municipality provides FBW to 34.43% of households. Kouga provides FBW to 26.35%, Dr Beyers Naude to 25.79% and Koukamma to 24.54%.

There are also considerable differences between the percentage of households receiving FBW and the percentage of service delivery points through which FBW is provided. In OR Tambo, for example, 78.3% of service delivery points provide FBW, while only 19.53% of households receive it. Blue Crane Route similarly records 43.8% of service delivery points compared with 12.84% of households, while Ndlambe records 39.5% compared with 17.76%. The opposite pattern occurs in municipalities such as Joe Gqabi, where 21.13% of households receive FBW despite only 0.1% of service delivery points being recorded as providing it, and Koukamma, where the respective figures are 24.54% and 2.5%.

These differences demonstrate that the two indicators cannot be used interchangeably when assessing affordability or household access to Free Basic Water. For purposes of assessing the extent to which households benefit from FBW, the percentage of households receiving the service provides the more direct measure. The service delivery

point indicator may nevertheless provide useful information about the manner in which FBW is delivered.

When FBW coverage is considered together with the earlier unemployment and dependency indicators, there is no clear pattern showing that municipalities experiencing greater socioeconomic pressure necessarily provide FBW to a larger proportion of households. Amathole and Chris Hani are particularly noteworthy. Both record unemployment of 46.2% and dependency ratios exceeding 65, yet only 0.66% and 3.89% of households respectively receive FBW. Alfred Nzo similarly has unemployment of 50.2% and the highest dependency ratio in the province at 73.7, while 13.11% of households receive FBW. By contrast, Sundays River Valley, which has a considerably lower dependency ratio of 42.2, provides FBW to 34.43% of households.

The available data therefore suggests that the extent of household FBW coverage is not determined by socioeconomic need alone. This is important because the municipalities facing the greatest constraints on household ability to pay are not consistently those reaching the largest proportions of households through FBW. The available indicators do not, however, establish the reasons for these differences.

Taken together, the indicators present a complex picture of affordability in the Eastern Cape. High unemployment and dependency ratios constrain the ability of many households to pay for municipal services, yet household access to FBW varies considerably and does not consistently correspond with these indicators of socioeconomic need. At the same time, paying households face substantially different tariff structures depending on where they live. Affordability must therefore be assessed by considering household economic circumstances, access to indigent support and the tariffs charged for water services together.

Adequacy

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

Understanding the frequency, causes and duration of interruptions can assist municipalities to identify infrastructure weaknesses, prioritise maintenance activities and improve service reliability. For this reason, a range of sources were consulted, including the Municipal Strategic Self-Assessment (MuSSA), Water Services Development Plans (WSDPs), Integrated Development Plans (IDPs), annual reports, the 2023 Blue Drop Report, and other publicly available municipal documentation.

Unfortunately, no comparable data on the frequency of household water interruptions could be found for the Eastern Cape WSAs. It was therefore not possible to determine how frequently households experience interruptions, identify which municipalities experience the greatest reliability challenges, or compare reliability across the province.

The absence of this information represents an important limitation in assessing water service delivery in the province. The physical access indicators discussed above can show whether water infrastructure is available to households, but without information on the frequency and duration of interruptions, they cannot establish whether that infrastructure provides households with a reliable and continuous supply of water.

Quality

Everyone has a right to water that is safe, meaning water that is free from micro-organisms, chemical substances and radiological hazards that could threaten a person's health. In South Africa, the drinking water quality standard (SANS 241) prescribes the thresholds for microbiological and chemical (acute and chronic) compliance. WSAs are legally bound to ensure that distributed drinking water complies with SANS 241.[56] They are also required to develop and annually review a water safety plan,[57] and develop and implement a monitoring programme for all potable water distributed through their water supply systems.[58] Samples should only be handled by laboratories that use ISO-accredited methodologies and results must be reported to the DWS.[59]

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 the Eastern Cape.

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

In assessing compliance with microbiological standards, for a population of less than 100,000 people, any score below 96% is unacceptable as microbiological determinants pose an immediate unacceptable health risk if present at counts or values exceeding the numerical limits specified in SANS 241.[60] For a population exceeding 100,000 the standard is even stricter – any score below 98% is unacceptable. The Eastern Cape performs relatively poorly across these indicators, although results differ considerably between municipalities and between the three measures of water quality. It should be noted that in several instances, the DWS has issued directives to address poor microbiological and chemical results (see the section on Oversight below and the WSA profiles for details). Since 2023, the results would have hopefully improved.

The provincial average for microbiological compliance was approximately 86.5%. Five WSAs with populations below 100,000 people (Koukamma, Blue Crane, Sundays River, Ndlambe, and Makana) are required to meet the standard of 96% compliance (see **Figure 25** below). None of them met this standard in the latest *Blue Drop* audit. It should also be

added that given the growth in population since the 2022 census, for some (e.g. Makana Local Municipality), the standard of 98% compliance should now apply. For the remaining WSAs with a population exceeding 100,000, the standard of 98% compliance applies. Of these, only Kouga Local Municipality met the grade, with Nelson Mandela Bay just falling short with a score of 97.5% and Chris Hani at 96.7%. Koukamma performed particularly poorly, with compliance of only 54.5%. Makana, Dr Beyers Naude and Sundays River Valley also recorded compliance below 82%. This means that good microbiological water quality is not consistent across the province.

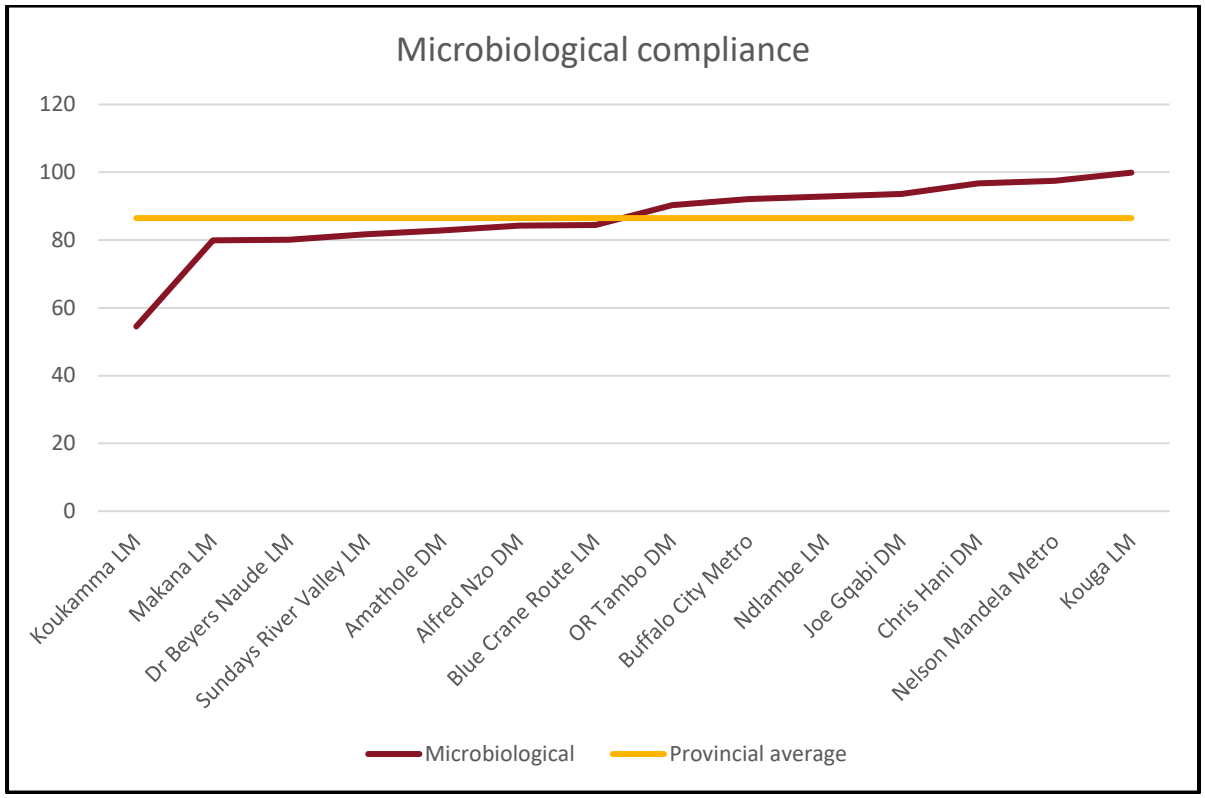


Figure 25: Microbiological compliance, Eastern Cape WSAs *(Source: 2023 Blue Drop Report)*

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.

The results for chemical acute compliance are substantially worse. The provincial average is only approximately 48.5%, and five WSAs – Blue Crane Route, Dr Beyers Naude, Koukamma, Makana and Sundays River Valley – received a score of 0% compliance because they did not have a monitoring programme in place (see **Figure 26** below). For the standard that applies to WSAs with a population less than 100,000, none met the 95% compliance standard. Only four of the larger WSAs achieved compliance: Ndlambe at 98.3%, Buffalo City at 99.8%, and Joe Gqabi and Nelson Mandela Bay at

100%. The chemical acute results reveal a particularly stark divide within the province. The provincial average therefore conceals substantial differences in drinking water quality in different parts of the Eastern Cape.

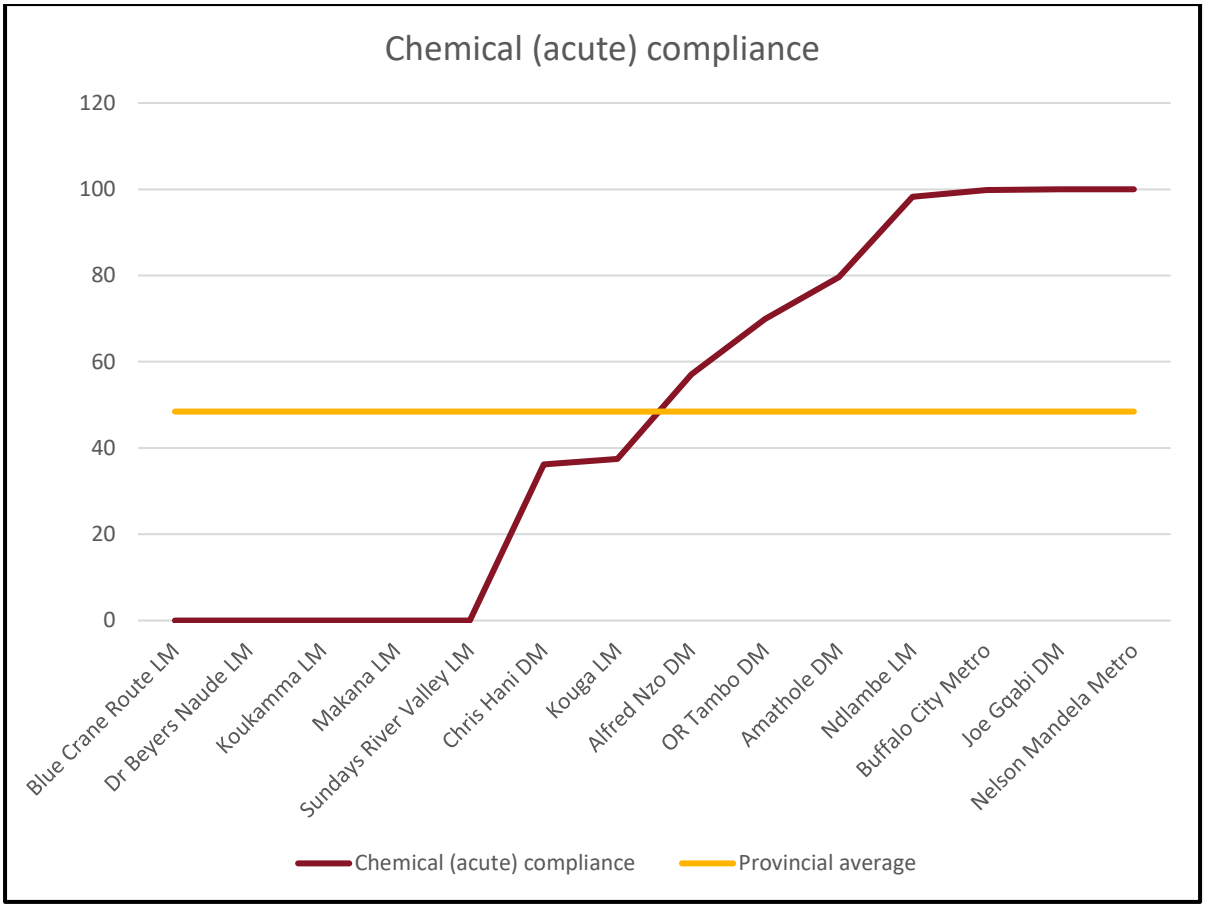


Figure 26: Chemical (acute) compliance, Eastern Cape WSAs *(Source: 2023 Blue Drop Report)*

Chemical chronic compliance performs better than chemical acute compliance, with a provincial average of approximately 73.4% (see **Figure 27** below). In the last *Blue Drop* audit, eight of the 14 WSAs achieved compliance above 90%, including Nelson Mandela Bay at 100%, and Buffalo City and Ndlambe at 99.8%. However, Blue Crane Route and Sundays River Valley both record 0% compliance for failing to have a monitoring programme in place, while Kouga recorded only 34%.

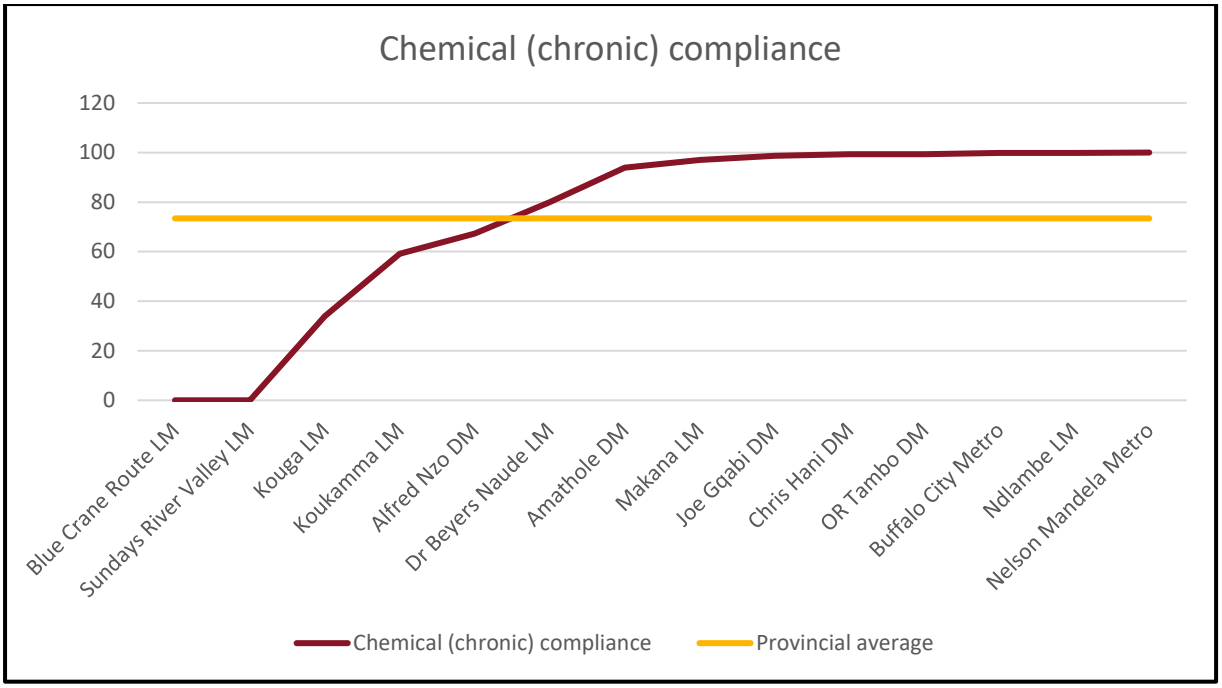


Figure 27: Chemical (chronic) compliance, Eastern Cape WSAs *(Source: 2023 Blue Drop Report)*

Performance is also not necessarily consistent across the different measures of drinking water quality within the same municipality. Kouga, for example, recorded the highest microbiological compliance in the province at 99.9%, but only 37.5% chemical acute compliance and 34% chemical chronic compliance. Sundays River Valley recorded microbiological compliance of 81.7%, but 0% for both chemical measures. Conversely, Nelson Mandela Bay performs consistently well across all three indicators, recording 97.5% microbiological compliance and 100% compliance for both acute and chronic chemical measures.

Koukamma is of particular concern when the different indicators are considered together. It recorded the lowest microbiological compliance in the province at 54.5%, 0% chemical acute compliance and only 59.1% chemical chronic compliance. This means that poor performance is not confined to a single water-quality indicator.

Taken together, the results indicate substantial drinking water quality challenges in the Eastern Cape. While several WSAs achieved very high levels of compliance, particularly for microbiological and chronic chemical quality, these results are not consistent across the province. Chemical acute compliance is of particular concern, with a provincial average below 50% and five municipalities recording 0%. The substantial variation between municipalities and between different measures of water quality means that high performance against one indicator should not be interpreted as demonstrating that drinking water complies equally well across all aspects of water quality.

When the financial information is compared with the earlier drinking-water quality and socioeconomic data, an interesting pattern emerges. There is a moderate positive

relationship between water tariffs and drinking-water quality. In simple terms, municipalities that charge higher water tariffs tend to have better drinking-water quality results, although this is not true in every municipality. The relationship is strongest for acute chemical compliance. Revenue collection also shows a positive relationship with water quality, but this relationship is weaker. In contrast, municipalities serving communities with higher unemployment and dependency levels do not generally have poorer drinking-water quality. This means that higher levels of socioeconomic need within a community do not, on their own, appear to result in poorer-quality drinking water.

The relationship between tariffs and water quality should nevertheless be interpreted cautiously. Municipal water tariffs are required to reflect the costs associated with providing the service, and the available data does not establish how tariff revenue is spent or what proportion is directed towards water treatment and quality management. The relationship therefore does not demonstrate that higher tariffs cause better water quality. Rather, it suggests that the financial characteristics of the water service may be more relevant to quality outcomes than the socioeconomic profile of the community alone. Further information on actual expenditure on water treatment and quality management would be required to explain this relationship.

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.[61]

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.[62] The *Blue Drop* report defines various "performance categories" based on thresholds of use (see **Table 7** below).

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

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

The WUE score is subject to three important caveats.

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

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

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

People in the Eastern Cape use on average 179 litres per person per day. Nine of the 14 WSAs fall below this average. Amathole District Municipality recorded the lowest consumption at 75 litres per person per day, followed by Ndlambe at 110, Joe Gqabi at 111 and Alfred Nzo at 116 litres per person per day (see **Figure 28** below).

At the other end of the spectrum, Kouga Local Municipality recorded the highest consumption by far at 388 litres per person per day, more than double the provincial average. Nelson Mandela Bay followed at 256 litres per person per day, Blue Crane Route at 238 and Buffalo City at 218. Both metropolitan municipalities therefore fall within the four WSAs recording the highest per-capita water consumption in the province.

The difference between the lowest and highest levels of consumption is substantial. Per-capita consumption in Kouga is more than five times that recorded in Amathole. This indicates considerable variation in water-use patterns across the Eastern Cape and means that the provincial average alone provides a limited picture of water consumption within individual water services authorities.

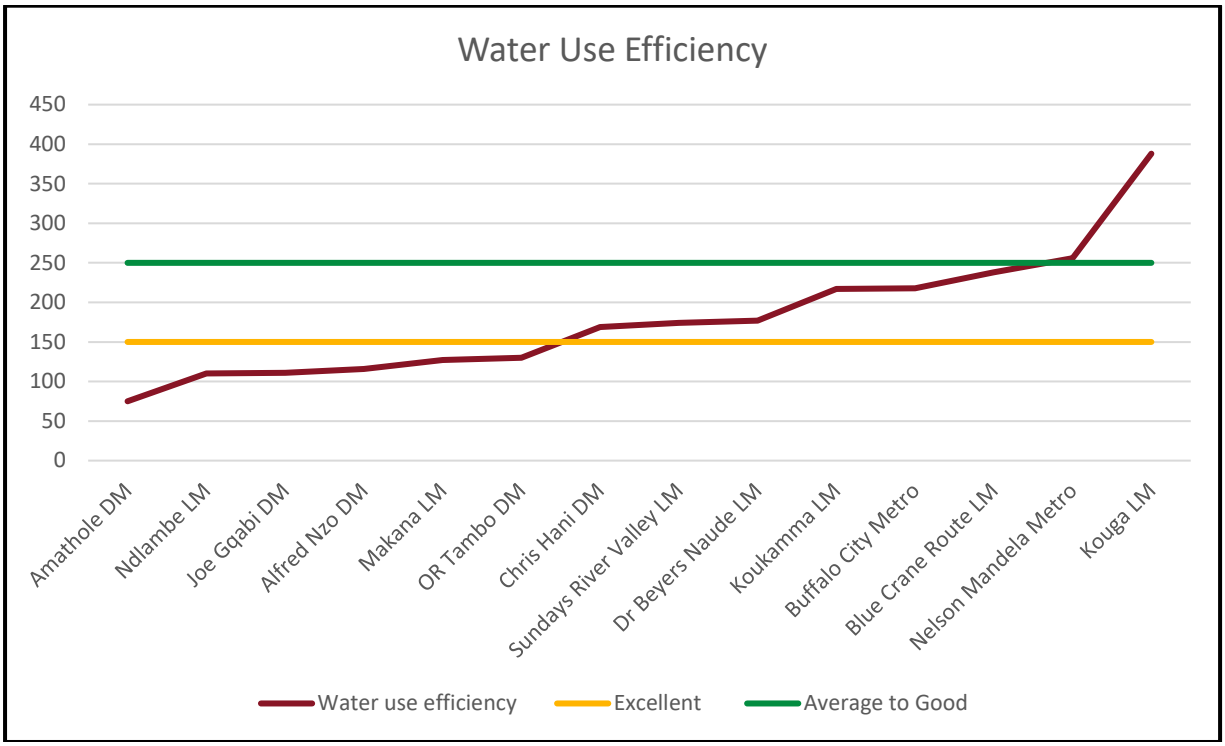


Figure 28: WUE Scores, Eastern Cape WSAs *(Source: 2023 Blue Drop Report)*

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.[63] This marks an increase from an average of 36.8% in 2012.[64] The global average for non-revenue water is estimated at 35%[65] 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.

Of the 13 WSAs for which data is available, six recorded non-revenue water of 30% or less (see **Figure 29** below). Alfred Nzo recorded 16%, OR Tambo 17%, Blue Crane Route 22%, Chris Hani 23% and Koukamma 26%. Amathole record the lowest level at 12%, falling below the indicated range. No non-revenue water figure was available for Makana.

Seven WSAs exceeded the 30% upper guideline. Joe Gqabi is only moderately above it at 34.8%, followed by Buffalo City at 37.7% and Kouga at 39.8%. Higher losses were recorded in Dr Beyers Naude at 45.2%, Ndlambe at 48.5% and Nelson Mandela Bay at 48.7%. Sundays River Valley performed particularly poorly, with non-revenue water of 66%. This means that approximately two-thirds of the water entering its system does not generate revenue.

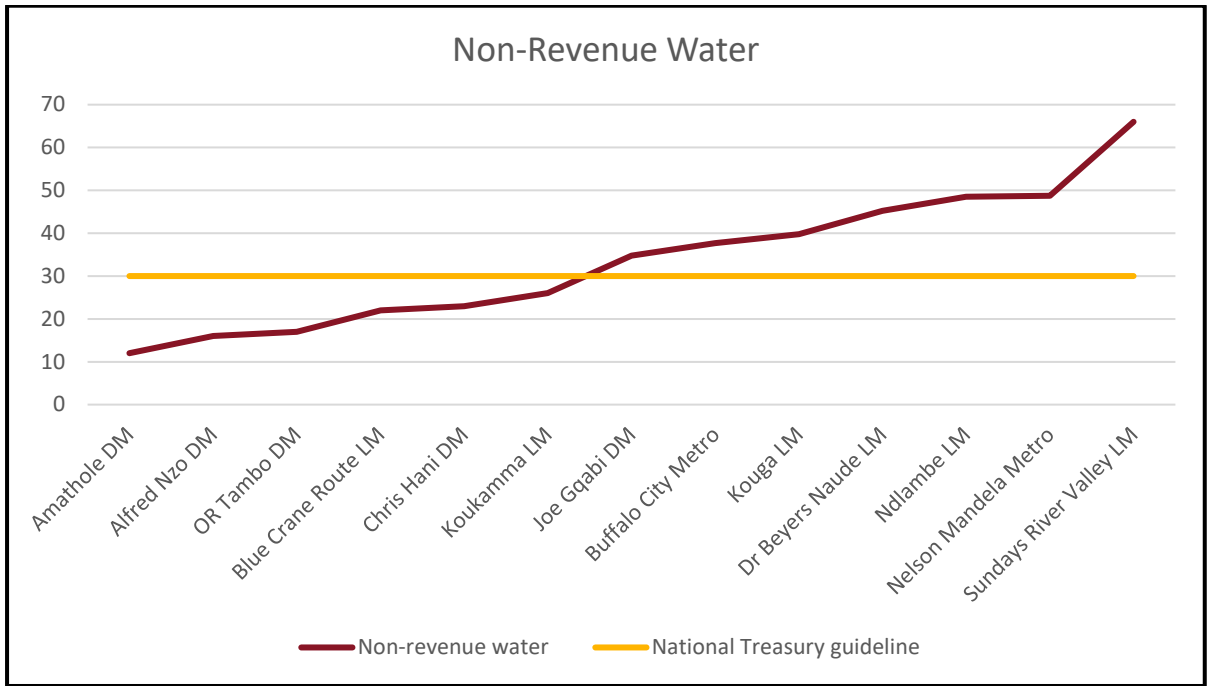


Figure 29: Non-revenue Water, Eastern Cape WSAs *(Source: Auditor-General 2023/24 MFMA Audit)*

The two efficiency indicators also show that high water consumption and high non-revenue water do not necessarily occur together. Ndlambe, for example, has comparatively low per-capita consumption of 110 litres per person per day but records non-revenue water of 48.5%. Conversely, Blue Crane Route has relatively high consumption of 238 litres per person per day but non-revenue water of only 22%. The two measures therefore identify different dimensions of water-resource efficiency and should be considered separately.

Taken together, the figures show substantial variation in the efficiency with which water is used and managed across the Eastern Cape. Per-capita consumption is below the

provincial average in most water services authorities, although a smaller group – including both metropolitan municipalities – records considerably higher consumption. Non-revenue water remains a concern in parts of the province, with more than half of the municipalities for which data is available exceeding the upper National Treasury guideline. Sundays River Valley stands out in particular, with non-revenue water of 66%.

Systemic Drivers of Non-Compliance

The fourth set of indicators focuses on the systemic drivers that are undermining progressive realisation of the right to sufficient water in South Africa. Several systemic and structural factors continue to limit the ability of water services authorities in the Eastern Cape 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 the Eastern Cape's WSAs, it can be seen that with the exception of intermediaries, these issues are widespread and entrenched (see **Table 8** below).

Municipality	Leadership	Planning	Funding	Infrastructure	Electricity	Ecological	Consumer	Intermediaries	Third Party
Alfred Nzo DM		x	x	x	x		x	x	x
Amathole DM		x	x	x		x	x		x
Blue Crane Route LM		x	x	x	x	x	x	x	x
Buffalo City Metro		x	x	x	x		x		x
Chris Hani DM		x	x	x	x	x	x		
Dr Beyers Naude LM		x	x	x	x		x		x
Joe Gqabi DM		x		x			x		
Kouga LM		x	x	x	x		x		
Koukamma LM		x	x	x	x		x		
Makana LM	x	x	x	x	x		x		
Ndlambe LM		x	x	x	x		x		x
Nelson Mandela Metro		x	x	x	x		x		x
OR Tambo DM		x	x	x	x		x		
Sundays River Valley LM		x		x	x		x		x

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

Several systemic and structural challenges limit the ability of WSAs in the Eastern Cape to provide sustainable water services. The challenges are not confined to a small number of poorly performing municipalities. Planning, infrastructure and consumer-related challenges were identified in all 14 WSAs assessed, while funding and electricity-related challenges were identified in 12. Third-party interference was identified in nine municipalities, ecological pressures in five and reliance on water services intermediaries in four. While leadership problems were only flagged in one municipal IDP (Makana Local Municipality), media reports document political instability in Nelson Mandela Bay Metropolitan Municipality alongside Amathole and OR Tambo District Municipalities (see below).

Water services planning is the most consistent challenge across the province. All 14 municipalities experience planning-related difficulties. A particularly widespread

problem is the availability and reliability of information needed for water services planning. This corresponds with the substantial differences between Census, municipal IDP and Blue Drop population figures identified earlier in this report. Municipal documents also identify inadequate bulk supply, water losses, poor metering, ageing infrastructure and infrastructure backlogs as recurring planning challenges. In some municipalities these problems are particularly acute. OR Tambo, for example, reports a lack of capacity to monitor water losses, inadequate bulk metering and outdated policies, while Ndlambe identifies incomplete bulk infrastructure and inadequate raw-water sources.

Infrastructure challenges are similarly universal. All 14 municipalities report infrastructure-related problems, including ageing or dilapidated infrastructure, insufficient bulk infrastructure, maintenance and renewal backlogs, leaks and repeated breakdowns. In Alfred Nzo, infrastructure is described as dilapidated and, in some instances, exceeding its design capacity, while Sundays River Valley reports old, dilapidated and irreparable infrastructure as well as infrastructure that is poorly designed, installed or undersized. These problems are significant when read together with the treatment-capacity data discussed above: Koukamma and Sundays River Valley are already operating their water treatment works above stated design capacity, at 151% and 139% respectively.

Financial constraints affect 12 of the 14 municipalities. These challenges take different forms but commonly include grant dependency, inadequate revenue collection, billing and metering problems and insufficient funding for infrastructure maintenance and renewal. Amathole reports financial distress, a low revenue base and dependence on grant funding, while Makana identifies grant dependency, inadequate revenue collection, poor spending of conditional grants and the cost of providing water through tankers. These financial constraints are compounded by the socioeconomic conditions discussed earlier in this report: seven of the 13 municipalities for which unemployment data was available have unemployment rates of 40% or higher, while ten of the 14 have dependency ratios above the national average. Municipalities therefore face the simultaneous challenge of financing water infrastructure and services while serving communities with limited capacity to contribute to the municipal revenue base.

Electricity-related challenges were identified in 12 municipalities. These include electricity supply interruptions, ageing electrical infrastructure, high electricity costs, illegal connections, cable theft and vandalism. Kouga reports electricity disruptions and vandalism, while Dr Beyers Naudé identifies limited electricity supply together with ageing and vandalised electrical infrastructure. Although the nature and severity of these challenges differ between municipalities, the prevalence of electricity-related problems

is significant because water treatment, pumping and distribution depend on a reliable electricity supply.

Consumer behaviour and third-party interference further place pressure on water services. Consumer-related challenges were identified in every municipality and include non-payment, water wastage, high consumption, inaccurate billing, illegal connections and difficulties maintaining indigent registers. Third-party interference was identified in nine municipalities and predominantly involves illegal connections, theft and vandalism of infrastructure or competition for available raw-water resources. For example, Alfred Nzo reports illegal water connections causing water losses, while Buffalo City identifies both illegal connections and competition for water with other users.

Ecological pressures were expressly identified in five municipalities. These include drought, flooding, invasive vegetation, degradation of water sources and other environmental conditions affecting water availability or infrastructure. Chris Hani reports both drought and flooding as pressures on the district, while Blue Crane Route identifies drought as well as high-velocity winds capable of damaging infrastructure. Four municipalities also rely on water services intermediaries, principally contracted water tankers or carriers, illustrating the continued use of alternative mechanisms where conventional water supply systems are unable to meet demand.

Taken together, the evidence suggests that the Eastern Cape's water services challenges cannot be attributed to a single systemic weakness. Rather, municipalities are operating within an interconnected set of pressures: unreliable planning information complicates infrastructure planning; ageing and insufficient infrastructure increases maintenance and funding requirements; weak revenue bases constrain the resources available to respond; and electricity failures, vandalism, illegal connections and environmental pressures place further strain on already vulnerable systems. The recurrence of these challenges across municipalities of very different sizes and types indicates that many of the obstacles to sustainable water service delivery are province-wide rather than isolated municipal problems.

Leadership instability, corruption, and political interference

Based on media reports and statements in WSA's IDPs, leadership instability, corruption, and political interference continue undermine effective water service delivery in some WSAs across the Eastern Cape. Compared to other provinces, there were few reports of political intimidation or violence, although this may simply be due to underreporting. In a number of WSAs, there were reports of mayoral resignations or the tabling of motions of no-confidence by rival political parties.[66] In the four WSAs detailed below, however, leadership instability has been more serious and long-lasting, impacting the delivery of water services to the populace.

Between 2022 and 2024, the entire top leadership of Amathole District Municipality, including the administration, was in turmoil. In August 2022, the election of the new troika followed the recall of former mayor Ndikinda, former council speaker Nondumiso Mgidlana and former chief whip Nonceba Mfecane by the ANC for defying party orders.[67] Around May 2023 Ntsangani was re-elected as mayor.[68] The WSA operated without a registered Speaker for a period around September 2023, which meant that some decisions taken by the council were invalid.[69] A new Municipal Manager was appointed for the WSA in March 2023.[70] A new CFO was also recently appointed in November 2023, but there is some controversy to this appointment, so much so that the mayor distanced himself from the debacle.[71]

In Nelson Mandela Bay Metro, there are several media accounts of leadership instability and power struggles affecting the mayor, deputy mayor and city manager positions.[72] There are also well-documented academic sources on the 'politics of patronage' in this particular WSA.[73]

In Makana Local Municipality and OR Tambo District Municipality[74] there have been party political calls for either the National Assembly or the provincial government to dissolve the municipal councils concerned. Following years of media reporting on dysfunctional and toxic governance in Makana,[75] the MEC for CoGTA reportedly appointed fraud and corruption investigators to probe the WSA's governance.[76] In April 2024, media reported that the DA would approach the National Assembly and request the WSA's council to be dissolved.[77]

Geographical Scale

No consistent relationship between geographical extent, population size and reported infrastructure could, however, be established from the available data (see **Figure 30** below). This appears to be partly a consequence of the extent of missing infrastructure information itself. The available figures therefore provide a useful indication of the scale of municipal water systems but are not sufficiently complete to support reliable comparisons of infrastructure density or infrastructure provision between municipalities.

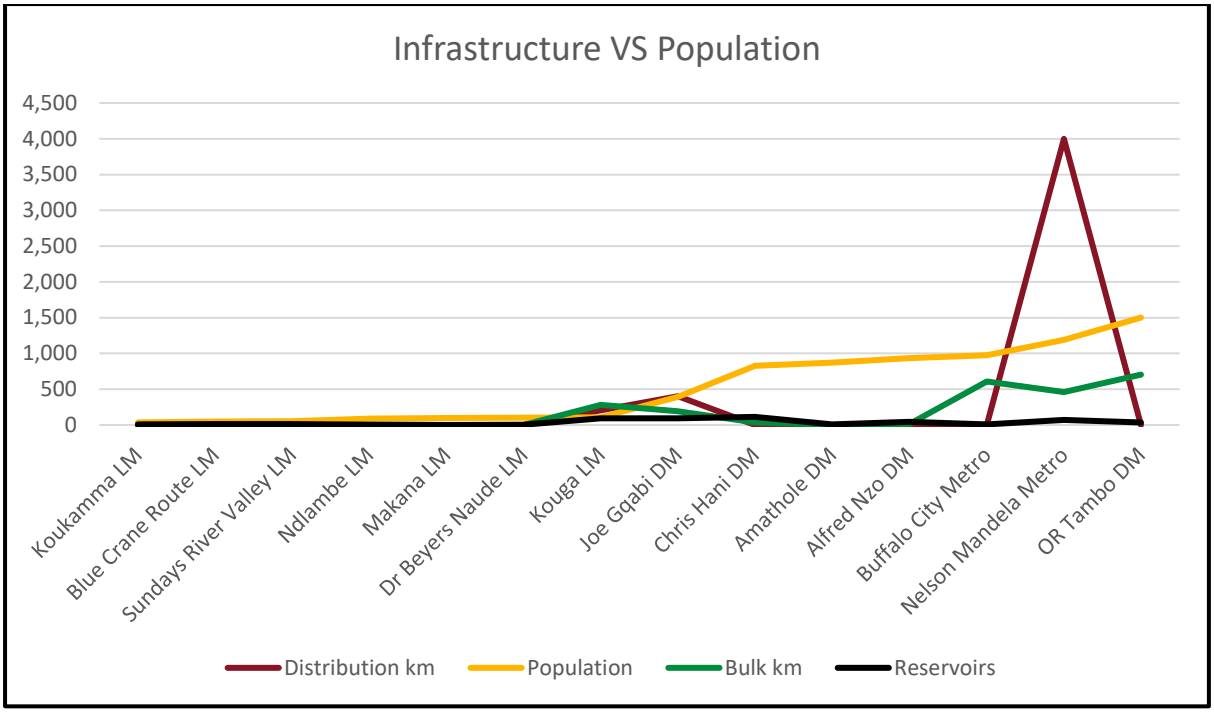


Figure 30: Relationship between infrastructure extent and population size *(Source: 2023 Blue Drop Report)*

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 the Eastern Cape, water and sanitation failures triggered strong oversight and corrective action by different institutions (see **Table 9**). These interventions reflect both the seriousness of service delivery breakdowns and the increasing reliance on external oversight to compel compliance with legal and constitutional obligations.

Oversight Institution	Scope of Intervention
Department of Water and Sanitation	4 Municipalities
SAHRC	1 Intervention
Public Protector	13 interventions
Parliament	1 oversight action
Provincial COGTA	1 oversight action
High Court	2 Judgments

Table 9: Summary of Water and Sanitation Oversight, Eastern Cape *(Source: 2023 Blue Drop Report, SAFLII, South African Human Rights Commission)*

Oversight of water services in the Eastern Cape has taken several forms, including intervention by the Public Protector, the Department of Water and Sanitation (DWS), the South African Human Rights Commission (SAHRC), Parliament and the High Court. However, these mechanisms have not been used evenly across the province. The most extensive intervention has been undertaken by the Public Protector, while regulatory, judicial and other institutional interventions have been considerably more limited.

Regulatory Enforcement by the Department of Water and Sanitation

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

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

- **Blue Drop Report:** This report evaluates the country's drinking water quality management systems and local municipal water distribution networks. It assesses the delivery, treatment, and distribution of potable water across five Key Performance Areas (capacity management, drinking water quality risk management, financial management, technical management, and drinking water quality compliance). Each WSA receives a *Blue Drop* score and risk rating. WSAs with a *Blue Drop* score below 31% are placed under the DWS' regulatory surveillance and are required to submit a detailed corrective action plan within 20 days after the publication of the *Blue Drop* report. WSAs and associated water treatment systems categorised as "high" or "critical risk" (posing a serious risk to public health) must assess their risk contributors and provide corrective measures in their action plans.[78] Many of the verified indicators from the 2023 *Blue Drop* report were used in this report to measure progressive realisation of the right to water.
- **Green Drop Report:** This report evaluates South Africa's municipal wastewater treatment systems against five KPAs (Capacity Management, Environmental Management, Financial Management, Technical Management, and Effluent and Sludge Compliance). Similarly to the *Blue Drop*, each WSA receives a *Green Drop* score and risk rating. Regulatory surveillance is triggered when a system achieves a score of be low 31%.
- **No Drop Report**: This report is focused on water use targets, non-revenue water, water losses and water use efficiency. WSAs across the whole country are assessed against four criteria (Water Conservation/Water Demand Management (WC/WDM) plans, asset management of meters, technical skills of the WC/WDM team, and compliance and performance based on year-on-year improvements against KPIs). Participating WSAs achieve a *No Drop* score. The 2023 *No Drop* report contains national and provincial recommendations.

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

In the 2023 *Blue Drop* audit, 27 Water Supply Systems in the Eastern Cape achieved scores below 31% and were hence placed under regulatory surveillance. Municipalities including Alfred Nzo District Municipality, Chris Hani District Municipality, Dr Beyers Naude Local Municipality (average score of 24.2%), Koukamma Local Municipality (average score of 24.1%), and Sundays River Valley Local Municipality (average score of 25.6%) were required to submit detailed corrective action plans within 20 days of the publication of regulatory reports. These plans were required to identify specific activities, responsible officials, timelines, and expected improvements in water quality

compliance. The use of regulatory surveillance reflects escalating enforcement where routine monitoring failed to secure compliance.

The intervention is particularly relevant when considered alongside the water-quality findings discussed earlier in this report. Koukamma recorded microbiological compliance of only 54.5%, acute chemical compliance of 0% and chronic chemical compliance of 59.1%, while Sundays River Valley recorded 0% for both acute and chronic chemical compliance. The municipal profiles confirm that DWS took Blue Drop action in both municipalities.

South African Human Rights Commission Oversight

Amathole District Municipality was the only WSA for which specific SAHRC oversight was identified. The Commission conducted monitoring activities relating to water services in the municipality.

Parliamentary and Legislative Oversight

Amathole was also the only municipality for which specific parliamentary oversight was recorded, with the relevant parliamentary committee considering the municipality's difficulties and emphasising both municipal responsibility and the need for the different organs of state to fulfil their respective support and oversight role.

Public Protector Oversight

The Public Protector undertook a systemic investigation into allegations of inadequate or absent essential services and basic infrastructure in communities across the Eastern Cape. The investigation is relevant to 13 of the 14 WSAs assessed in this report, making it by far the most widespread form of external oversight identified. Blue Crane Route Local Municipality is the only municipality for which no Public Protector intervention was recorded.

The investigation considered the provision of municipal services, including water and sanitation, in affected communities and, in several municipalities, resulted in specific findings and remedial action. In Buffalo City, for example, the allegation that municipal services in certain villages were not being rendered progressively and effectively was substantiated. The Public Protector required the municipality to assess basic service requirements and develop an implementation plan to address identified shortcomings. In Amathole, the investigation found inadequate water services and infrastructure in several communities, including areas where residents relied on rivers and streams for domestic water. The Public Protector acknowledged interventions being undertaken by the municipality but found that inadequate water supply continued to pose a health risk. Similar remedial action in Joe Gqabi required an assessment of water and sanitation

needs and the development of an implementation plan to address identified service-delivery shortcomings.

Auditor-General Investigations

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

The Office of Auditor-General tracks the status of response to material irregularities, flagging areas of concerns. While such material irregularities do not necessarily relate to water services, they draw attention to financial mismanagement in particular WSAs. The status of material irregularities as of 1 July 2026, in WSAs in the Eastern Cape is set out in **Table 10** below.

Auditor-General Action to resolve material irregularities (MI)	WSAs in the Eastern Cape flagged for further remedial action
Recommendations in audit report as accounting officer to little or no action to address MI	Amathole DM Sundays River LM
Remedial action taken as recommendations were not implemented	None
Further action taken as remedial action was not implemented	None
Recommendations in audit report and referral to public bodies	None
Referral to public bodies for further investigation	Chris Hani DM
Referral and remedial action	None
Notice of certificate-of-debt process	None

Table 10: Summary of remedial action taken in relation to material irregularities in WSAs in the Eastern Cape *(Source: Auditor-General, South Africa)*[79]

Judicial Oversight

In *Unemployed Peoples Movement v Eastern Cape Premier* 2020 (3) SA 562 (ECG), the litigation concerned the deteriorating state of Makana Local Municipality. The municipality had experienced financial distress that adversely affected its ability to provide services, including water services, while drought, water leaks and poor

maintenance of water infrastructure compounded the problem. The High Court ultimately ordered the provincial government to intervene and dissolve the municipal council after previous provincial interventions and financial recovery measures had failed. The case therefore represents a particularly severe form of judicial intervention, extending beyond an order addressing an individual water-service failure to the municipality's broader institutional inability to fulfil its obligations.

In the recent case of *Khetshemiya & others v Minister of Water and Sanitation & others* [2021] ZAECM (15 May 2026), the Mthatha High Court found that the Amatole District Municipality and Amatola Water Board had egregiously infringed the section 27(1)(b) right of access to sufficient water by failing to provide the applicants with basic water since 2017. Significantly, it also found that the Minister and Premier had failed to monitor and intervene to remedy the situation, as dictated by their statutory responsibilities and mandate.

Overall Assessment of Oversight

The Eastern Cape presents an unusual oversight pattern. External oversight is widespread when measured by the number of municipalities reached, largely because the Public Protector's systemic investigation extended to 13 of the 14 water services authorities. However, oversight by other institutions is much less extensive: DWS took Blue Drop action in four municipalities, while only one municipality was subject to relevant judicial intervention, one to SAHRC monitoring and one to specific parliamentary oversight. No specific oversight action by the provincial legislature or MEC was identified.

The available evidence therefore shows that oversight of water services in the Eastern Cape has relied heavily on a single province-wide Public Protector investigation, rather than sustained intervention by multiple oversight institutions across municipalities. While this investigation substantially broadens the reach of external scrutiny, the comparatively limited use of regulatory, human-rights, parliamentary and judicial mechanisms suggest that the breadth of oversight should not be confused with the diversity or intensity of oversight.

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 Eastern Cape province. 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 the Eastern Cape by selecting **one representative indicator** from each of the main outcomes-based or procedural/structural (enabling) indicator sets. As outlined in **Table 11** 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.[80] Although it is unacceptable that even 7% of households have no physical access point less than 200m from their households, this red flag indicator draws attention to WSAs that exceed this percentage.
	Economic Access	Less than 22% of the population have access to Free Basic Water (FBW)	In principle, every household in South Africa should have access to 6kl per household per month provided either as a universal allocation or in terms of a WSA's indigency programme. The red flag indicator calls attention to WSAs where less than 22% of the population have access to FBW, this being the national average of people living below the poverty line.
	Quality	Microbiological compliance score below 98% Chemical (acute) compliance score below 97%	In assessing compliance with microbiological standards, for a population of less than 100,000 people, any score below 96% is unacceptable; for a population exceeding 100,000 the standard is any score below 98%. The red flag indicator uses the stricter standard, calling attention to WSAs where microbiological compliance (as per the 2023 *Blue Drop* report) was below 98%. In assessing compliance with chemical (acute) standards, for a population less than 100,000 people any score below 95% is unacceptable; for a population exceeding 100,000 the standard is 97%. The red flag indicator uses the stricter standard, calling attention to WSAs where chemical (acute) compliance (as per the 2023 *Blue Drop* report) was below 97%.
	Adequacy	None	Insufficient baseline data to be able to formulate a red flag indicator. However, when data becomes available the indicator should capture the average frequency and duration of water stoppages in a WSA.
	Efficiency	Water Use Efficiency Score (WUE score) exceeds 250 l/p/d Non-revenue water exceeds 30%	The water use efficiency score captures the average amount of water used per person per day in a WSA, considering the system input value and the population size. The red flag indicator calls attention to WSAs where the WUE score exceeds 250 l/p/d. Non-revenue water refers to water which is produced, treated, and pumped into the distribution system, but which is 'lost', generating no revenue for the water utility. According to National Treasury norms, NRW should lie in the range of 15-30%. The red flag indicator calls attention to WSAs where NWR exceeds 30%.

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

Table 11: Representative indicators (red flags) for monitoring progressive realisation of the right to water

Progressive Realisation Snapshot: Red Flags – Outcomes

Table 12 below provides a snapshot baseline assessment of progressive realisation of the right to sufficient water in the Eastern Cape 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 the Eastern Cape are **water quality** (microbiological and chemic (acute) compliance), **economic access**, and **efficiency** (NRW exceeding the 30% Treasury Guideline standard).

WSA	>200m Physical Access >7%	FBW <22% of population	Microbio-logical Non-Compliance	Chemical (Acute) Compliance	WUE Score >250 l/p/d	NRW >30%
Alfred Nzo DM	No	Yes	Yes	Yes	No	No
Amathole DM	Yes	Yes	Yes	Yes	No	No
Blue Crane Route LM	No	Yes	Yes	Yes	No	No
Buffalo City Metro	No	No	Yes	No	No	Yes
Chris Hani DM	Yes	Yes	Yes	Yes	No	No
Dr Beyers Naude LM	No	No	Yes	Yes	No	Yes
Joe Gqabi DM	No	Yes	Yes	No	No	Yes
Kouga LM	No	No	No	Yes	Yes	Yes
Koukamma LM	No	No	Yes	Yes	No	No
Makana LM	No	Yes	Yes	Yes	No	No info
Ndlambe LM	Yes	Yes	Yes	No	No	Yes
Nelson Mandela Metro	No	Yes	Yes	No	Yes	Yes
OR Tambo DM	Yes	Yes	Yes	Yes	No	No
Sundays River Valley LM	No	No	Yes	Yes	No	Yes

Table 12: Red flag indicators (outcomes), Eastern Cape

Similar to other provinces, microbiological and chemical (acute) compliance rates are very poor in the Eastern Cape. All but one WSA (Kouga Local Municipality) fell short of the compliance standards for microbiological compliance, although two WSAs (Nelson Mandela Metro and Chris Hani District Municipality just fell short. In the case of chemical (acute) compliance, only four WSAs (Buffalo City Metro, Joe Gqabi District Municipality, Ndlambe Local Municipality, and Nelson Mandela Metro) made the grade. As noted above, it is particularly concerning that five WSAs (Blue Crane Route, Dr Beyers Naude, Koukamma, Makana and Sundays River Valley) received a score of 0% in the last *Blue Drop* audit because they are not even monitoring this parameter.

In terms of economic access, none of the WSAs in the Eastern Cape provide FBW of 6 kl per household as a universal allocation. In five WSAs (Buffalo City Metro, and Dr Beyers Naude, Kouga, Koukamma, and Sunday's River Valley Local Municipalities) the FBW

allocation exceeds the national indigency average of 22% of the population. But for remainder, the free allocation is below this bar. In three WSAs (Amathole and Chris Hani District Municipalities and Makana Local Municipality), the percentage of households accessing FBW is particularly low.

In the case of water use efficiency, in more than half of the WSAs in the Eastern Cape non-revenue water exceeds 30% of all water produced. This includes the two metropolitan municipalities. It is concerning that no figures for non-revenue water were available for Makana Local Municipality and that the rate of non-revenue water stands at 66% and 47% in Sundays River Valley and Nelson Mandela Metro respectively. But compared to other provinces, the WUE scores for the Eastern Cape are fair.

No particular WSA stands out as having the most red flags, but five WSAs (Amathole, Chris Hani, and OR Tambo District Municipalities, Nelson Mandela Metro and Ndlambe Local Municipality) had four red flags each. Makana Local Municipality also potentially falls into this category if its levels of non-revenue water are recorded.

Progressive Realisation Snapshot: Red Flags – Enablers

Table 13 provides a snapshot baseline assessment of progressive realisation of the right to sufficient water in the Eastern Cape from the perspectives of enablers, these being the policy, legislative, financial, infrastructural, and human resource reasonable measures necessary to realise the right.

WSA	Political Disruption	Outdated or No WSDP	Revenue Collection Rate <90%	WTW Capacity >90%	Mainten-ance Spending <8%	Technical/ WTW Ratio <1:1
Alfred Nzo DM	No	No	Yes	No	No	Yes
Amathole DM	Yes	No	No	No	Yes	Yes
Blue Crane Route LM	No	No	Yes	Yes	Yes	Yes
Buffalo City Metro	No	No	No	Yes	Yes	No
Chris Hani DM	No	No	Yes	No	Yes	Yes
Dr Beyers Naude LM	No	No	Yes	No	No	Yes
Joe Gqabi DM	No	No	No	No	Yes	Yes
Kouga LM	No	No	Yes	No	No	No
Koukamma LM	No	No	Yes	Yes	Yes	Yes
Makana LM	Yes	Yes	No	No	Yes	No
Ndlambe LM	No	Yes	Yes	No	Yes	Yes
Nelson Mandela Metro	Yes	No	No	No	Yes	No
OR Tambo DM	Yes	Yes	Yes	No	Yes	Yes
Sundays River Valley LM	No	Yes	Yes	Yes	Yes	Yes

Table 13: Red flag indicators (enablers), Eastern Cape

The baseline assessment shows red flags across the board with the most numerous being technical staff, maintenance spending, and revenue collection. The technical staff/WTW ratio is particularly concerning throughout the province. Only four WSAs (Buffalo City and Nelson Mandela Metros and Kouga and Makana Local Municipalities) had technical staff/WTW ratios exceeding 1:1. In the 2023/24 FY maintenance spending across the Eastern Cape was consistently low, with ten of the 14 WSAs recording maintenance spend of below 8% across all their municipal infrastructure. Revenue collection across the province is also a concern, with nine WSAs recording revenue collection rates of below 90% for the 2023/2024 FY. The financial indicators must nevertheless be viewed in the context of the trend analyses contained in each WSA profile.



Recommendations

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Annexures

Annexure A: Methodology

1 Overview of the methodology

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

2 Research Collaboration and Conceptualisation

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

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

3 Design

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

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

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

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

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

3.1 Developing and validating the profile framework

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

Context

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

Policy Efforts

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

Resource Efforts

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

Implementation

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

Oversight

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

3.2 Indicator development, choice and categorisation

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

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

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

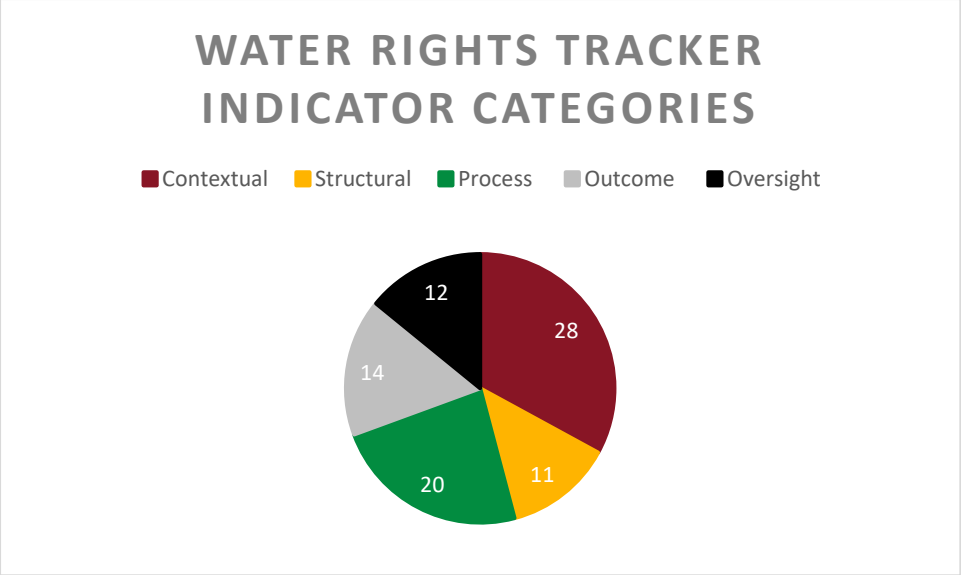


Figure 1: Overview of Indicator Categories, Water Rights Tracker, South Africa

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

Legend

Contextual Indicator	
Structural Indicator	
Process Indicator	
Outcome Indicator	
Oversight Indicator	

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

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

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

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

Table 2: Basic Table of Indicators, Water Rights Tracker

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

a) Ratio of service delivery points to households

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

b) Financial Resources

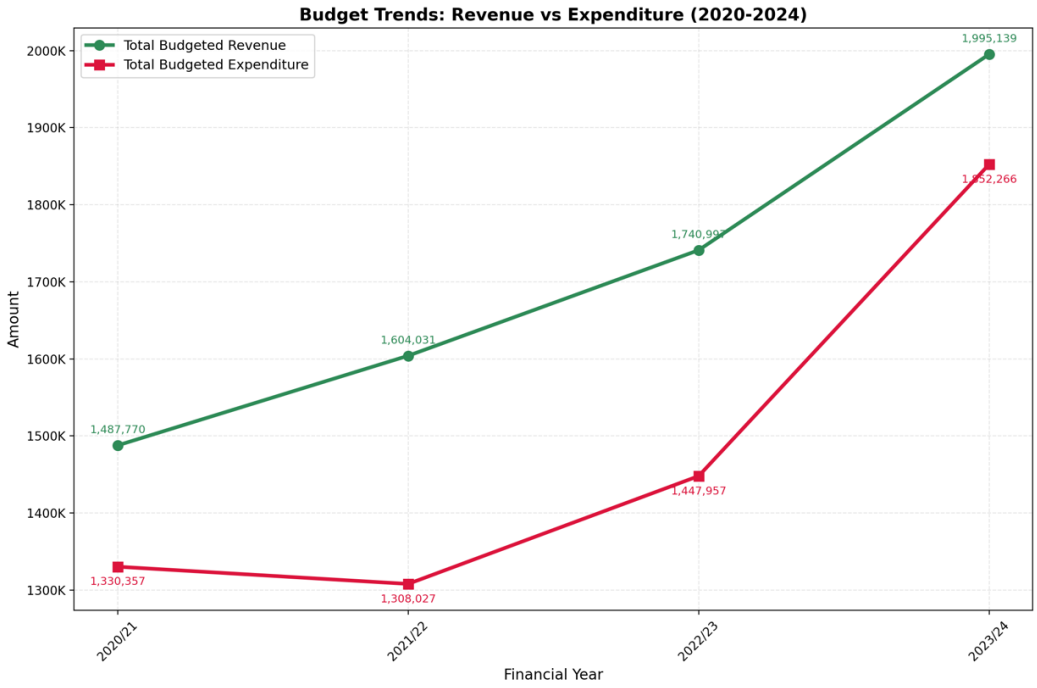
Under financial resources, five key questions were addressed by analysing historical financial data from MFMA Section 71 – Schedule C reports and presenting trends over time, thereby offering greater insight into financial resources and their allocation. Data specific to water services could not be utilised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

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

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

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

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



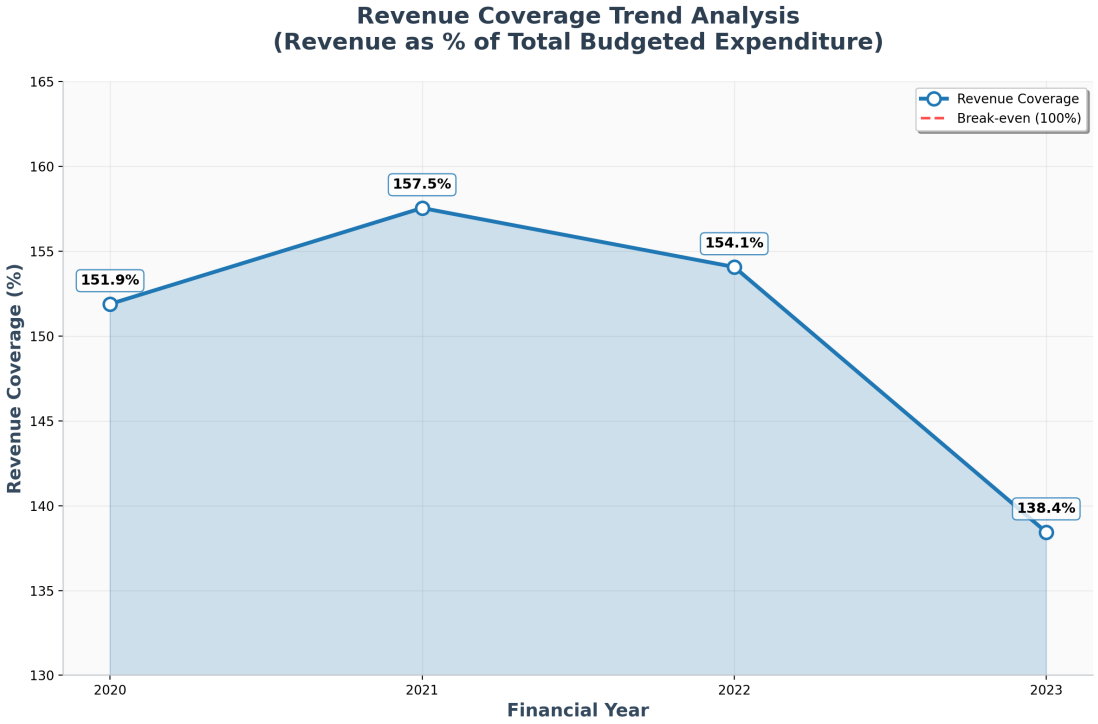
The graph shows that the total budgeted revenue has been consistently growing year over year. It also shows the municipality maintained a budget surplus in all four years, with the largest surplus in 2021/22 (296,004). While the year 2023/24 shows the highest total budgeted revenue and total budgeted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

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

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

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

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

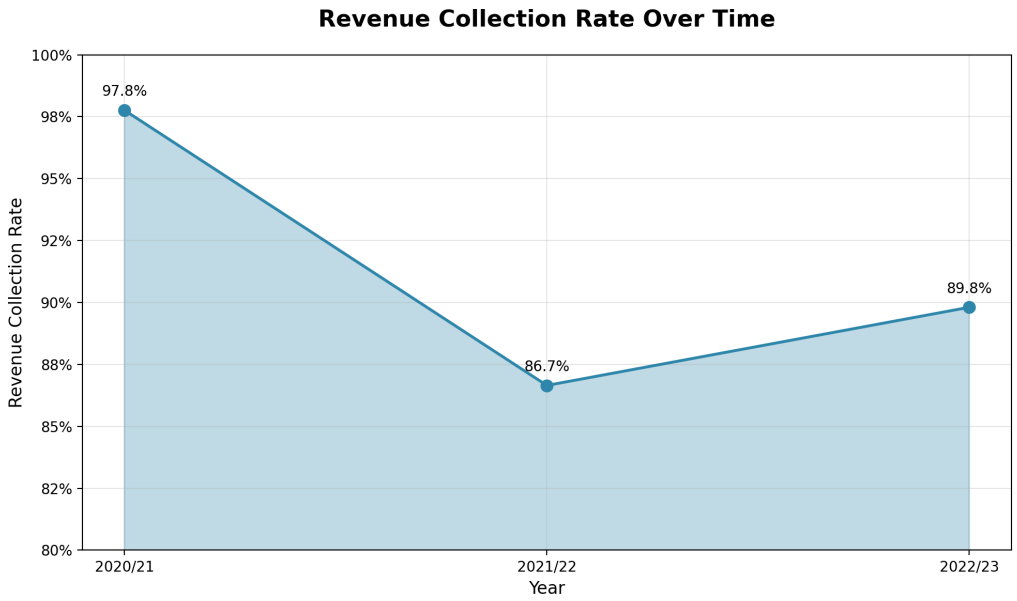


iii) The third question was: how much revenue is collected against the budget? The research team used the revenue collected to date against the adjusted budget shown in Table C2-Financial Performance. To address the question, we used the **revenue collection rate** formula:

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

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

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



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

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

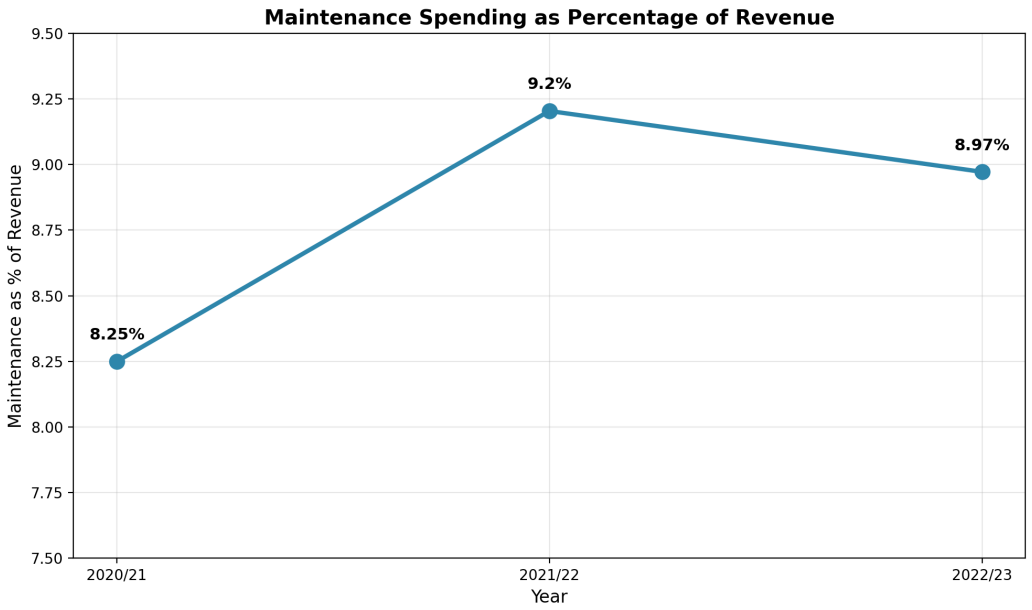
The research team utilised data from the adjusted budget column in Table SC13a as the numerator and data from Table C5 as the denominator. A higher percentage signifies a robust budget allocation towards the renewal of existing assets. Conversely, a lower percentage for asset renewals suggests an inadequate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

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

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

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

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



3.3 Data collection and cataloguing

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

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

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

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

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

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

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

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

3.4 Profile validation and dissemination

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

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

Table 3: Dates of Provincial Information-Sharing Sessions

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

3.5 Data analysis and synthesis

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

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

<table>
<tr><th colspan="2">Rights Holders</th></tr>
<tr><td>Demographics</td><td>Current Population: Population ranges as set out in the Blue Drop, IDP and Census 2022 respectively
Population growth rate:
Sex Ratio:
Dependency: # of consumers under 15; dependency ratio</td></tr>
<tr><td>Unemployment rate</td><td></td></tr>
<tr><th colspan="2">Key Implementation Indicators</th></tr>
<tr><td>Availability</td><td>Sources of supply, including capacity used</td></tr>
<tr><td>Physical Access</td><td><table>
<tr><td>No communal source</td><td>%</td></tr>
<tr><td>Communal source +200m</td><td>%</td></tr>
<tr><td>Communal source – 200m</td><td>%</td></tr>
<tr><td>Water source in yard</td><td>%</td></tr>
<tr><td>Piped water in house</td><td>%</td></tr>
<tr><td>Service delivery point/household coverage ratio</td><td>ratio</td></tr>
</table></td></tr>
<tr><td>Economic Access</td><td>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</td></tr>
<tr><td>Adequacy
Percentage households with water interruptions of at least once a month</td><td>%</td></tr>
<tr><td>Quality</td><td><table>
<tr><td>Microbiological compliance</td><td>%</td></tr>
<tr><td>Chemical (acute) compliance</td><td>%</td></tr>
<tr><td>Chemical (chronic) compliance</td><td>%</td></tr>
</table></td></tr>
<tr><td>Efficiency</td><td>WUE Score: l/p/d
Non-revenue water: %</td></tr>
<tr><th colspan="2">Reasonable Measures</th></tr>
<tr><td>Policy Efforts</td><td>Whether WSDP, by-law or indigent policy in place</td></tr>
<tr><td>Financial Resources (2024/25)</td><td>Budget sufficiency: %
Revenue coverage: %
Renewal spending: %
Maintenance spending rate: %
Revenue collection rate: %</td></tr>
<tr><td>Human Resources</td><td>Blue Drop shortfall: # Process Controllers, Supervisors, Technicians</td></tr>
<tr><th colspan="2">Systemic Drivers of Human Rights Non-Compliance</th></tr>
<tr><td>Leadership issues</td><td>As identified in IDP or apparent from indicators</td></tr>
<tr><td>Water planning issues</td><td>As identified in IDP or apparent from indicators</td></tr>
<tr><td>Funding model</td><td>As identified in IDP or apparent from indicators</td></tr>
<tr><td>Infrastructure issues</td><td>As identified in IDP or apparent from indicators</td></tr>
<tr><td>Electricity issues</td><td>As identified in IDP or apparent from indicators</td></tr>
<tr><td>Ecological drivers</td><td>As identified in IDP or apparent from indicators</td></tr>
<tr><td>Consumer issues</td><td>As identified in IDP or apparent from indicators</td></tr>
<tr><td>Water services intermediaries</td><td>As identified in IDP or apparent from indicators</td></tr>
</table>

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

Table 4: Assessment Table, Water Rights Tracker

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

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



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

Municipality's own revenue

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

Local Government Equitable Share

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

Municipal Infrastructure Grant

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

Regional Bulk Infrastructure Grant

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

Water Services Infrastructure Grant

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

Integrated Urban Development Grant

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

Urban Settlements Development Grant

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

Integrated City Development Grant

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

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

Infrastructure Skills Development Grant

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

Expanded Public Works Programme Integrated Grant for Municipalities

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

Municipal borrowing

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

Funding from the private sector

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

International and other funding sources

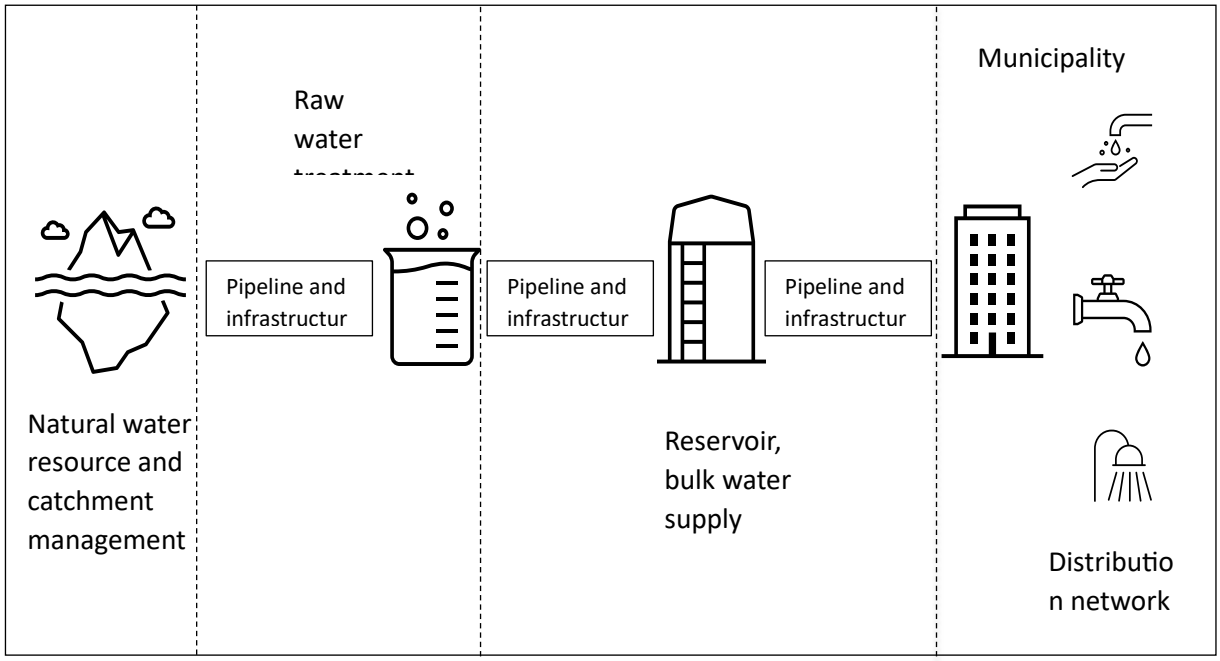
Municipalities are also allowed to access funding through international, multilateral and bilateral development agencies such as the World Bank. These institutions often offer grants, concessional loans and capacity building schemes to cities. Funding is governed on an *ad hoc* basis, often through a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

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

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

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

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



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

Municipalities as Water Services Authorities

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

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

Water Services Providers

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

Water Boards

Water boards[1] are institutions that provide water services to other water services institutions within a determined geographical area. The Water Services Act further gives water boards the power to fulfil a range of other functions. A water board can provide management, training, and other support to water institutions with the aim of promoting cooperation in the provision of water services. They may supply raw water for industrial purposes. Water boards can also provide catchment management services on behalf of the other spheres of government. Furthermore, they may perform water conservation functions. The water board may also establish advisory forums or water committees. Depending on how the water board is established they may be responsible for all the segments of domestic water supply. In practice however, water boards are mostly concerned with providing bulk water services and maintaining bulk water services infrastructure, thus the 2nd and 3rd segments of the water supply chain.

Water Service Intermediaries

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

Water Service Committees

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

Water Service Agents

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

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

National Department of Water and Sanitation

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

Other National Departments

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

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

Provincial Government

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

South African Human Rights Commission

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

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

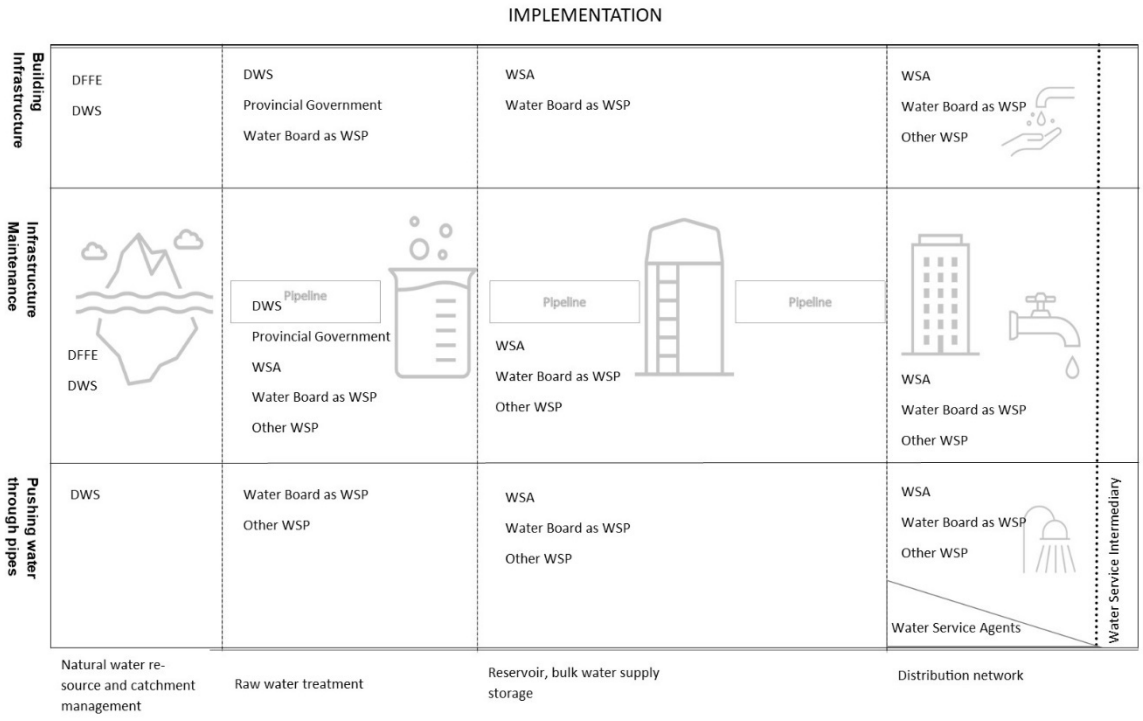
The Auditor-General is constitutionally mandated to audit and report on the general public financial management of all organs of state. Included in this mandate is to audit and report on any material irregularities that may take place in the scope of public management or governance where material irregularity 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.

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.

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



* Other WSPs include public private partnerships, water services outsourced to a private entity or water services provided by a municipal owned entity.
* Although some water boards can take responsibility of the 4th stage in water services delivery, it is not common.
* Water service committees replace WSA where a WSA is no longer capable of providing water services.
* Water service agents only do one or few activities that relate to pushing water through pipes in the distribution network.
* Water service intermediary is only responsible for pushing water through pipes on a specific property from directly after the municipal water meter.

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[1] ***Introduction***

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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[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.

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[44] Municipalities of South Africa, Eastern Cape Municipalities, available at https://municipalities.co.za/provinces/view/1/eastern-cape.

[45] Department of Water and Sanitation *Blue Drop Report* (2023) at 42.

[46] StatsSA 'Eastern Cape home to over 7.2 million people' 2023, available at https://www.statssa.gov.za/?p=16760.

[47] TIPS 'The Real Economy Bulletin Provincial Review 2024: Eastern Cape' (2024).

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

[49] Ibid.

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

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

[52] Department of Water and Sanitation *Blue Drop Report* (2023) at 54.

[53] Ibid.

[54] AFG Fluid Control 'Existing South Africa Standpipe Design Guidelines', available at https://afgfluid.co.za/existing-south-africa-standpipe-design-guidelines/.

[55] Afesis Corplan 'Draft Norms and Standards for Domestic Water and Sanitation', available at https://afesis.org.za/norms-and-standards/.

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

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

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

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

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

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

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

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

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

[65] 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.

[66] See, for example, this account of mayoral instability in the Buffalo Metropolitan Municipality (Malibongwe Dayimani 'DA throws down the gauntlet to new Buffalo City mayor: Act or face no confidence motion' *News24* 28 March 2023, available at https://www.news24.com/southafrica/news/da-throws-down-the-gauntlet-to-new-buffalo-city-mayor-act-or-face-no-confidence-motion-20230328.

[67] Luvo Cakata 'New Amathole District Municipality troika elected' *Mthatha Express* 11 August 2022, available at https://novanews.co.za/mthathaexpress/new-amathole-district-municipality-troika-elected-20220811/.

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